FINAL

Supplemental Environmental Impact Statement

United States Postal Service

Next Generation Delivery Vehicle Acquisitions

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United States Postal Service
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Cover Sheet

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Title: Final Supplemental Environmental Impact Statement for Next Generation Delivery Vehicle (NGDV) Acquisitions

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Final Supplemental Environmental Impact Statement

Abstract: This Final Supplemental Environmental Impact Statement (SEIS) analyzes the environmental impacts of a range of alternatives for the Postal Service's modified proposal to purchase new delivery vehicles to replace our existing end-of-life and high-maintenance delivery vehicles. Specifically, this SEIS considers Alternatives for the purchase and deployment of 106,480 new NGDV and/or commercial-off-the-shelf (COTS) vehicles over six to eight years to replace the same number of existing delivery vehicles. This SEIS was prepared pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA), the President's Council on Environmental Quality Regulations (40 CFR Parts 1500-1508), and the Postal Service's regulations for NEPA compliance set forth at 39 CFR Part 775 to evaluate the environmental impacts of two action alternatives as well as a "No-Action" Alternative.

Timing of Agency Action: The U.S. Environmental Protection Agency's publication of the Final SEIS in the Federal Register begins a 30-day waiting period. Following the waiting period, the Postal Service will make a final decision regarding the Proposed Action and publish a Record of Decision.

Summary: The U.S. Postal Service proposes to modernize our delivery fleet. We previously published a Final EIS and Record of Decision (ROD) analyzing the potential effects of purchasing, over ten years, 50,000 to 165,000 purpose-built, right-hand-drive (RHD) vehicles – the NGDV – to replace existing delivery vehicles nationwide that are beyond the end of their service life. A minimum of 10 percent of those vehicles would be battery electric vehicles (BEVs). Since the Postal Service signed the NGDV ROD, we have identified several additional considerations potentially affecting our vehicle acquisition strategy. Therefore, the Postal Service has prepared this Final SEIS to analyze the potential environmental impacts of modifying the Proposed Action in three primary ways: (1) substantially increase the minimum BEV commitment to 62 percent, (2) reduce the total number of vehicles proposed for purchase at this time to 106,480, and (3) include a mix of both NGDV and COTS vehicles to be purchased. In this SEIS, Alternative 1, the Preferred Alternative, includes purchasing a mixed fleet of 106,480 NGDV and COTS vehicles (62 percent BEV overall) to replace an equal number of existing end-of-life delivery vehicles over six years. Alternative 2 includes purchasing 106,480 NGDV (62 percent BEV overall) to replace an equal number of existing delivery vehicles over eight years. The No-Action Alternative is to proceed with the decision from the NGDV ROD, which is to purchase 50,000 to 165,000 NGDV (minimum 10 percent BEVs) to replace an equal number of existing delivery vehicles over ten years.

In terms of potential environmental effects, both the Preferred Alternative and Alternative 2 would result in beneficial effects on transportation safety, traffic noise, most air pollutant and greenhouse gas emissions, community emergency services, fuel (gasoline) consumption, hazardous waste generation, and environmental justice communities both near the major vehicle deployment sites and nationwide. The Preferred Alternative generally provides greater benefits than Alternative 2 by accelerating vehicle replacements, thus accruing the expected benefits sooner (e.g., reduced air emissions, quieter vehicles, reduced gasoline usage). Both Alternatives would result in no to negligible impact on community economics, employment, traffic, accessibility, parking, public transportation, noise around Vehicle Maintenance Facilities (VMFs) and BEV charging stations, sulfur dioxide emissions, community utility services, utility availability and capacity (including the electric grid), and solid and hazardous waste

treatment and disposal. The Preferred Alternative could also have a minor to moderate adverse effect on any communities, including environmental justice communities, immediately adjacent to Candidate Sites due to the externally audible back-up alarms of certain COTS vehicle models, the degree of which would vary depending on vehicle quantities, site layouts, and required maneuvering times.

As the Preferred Alternative, Alternative 1 best meets the Purpose and Need by providing a purpose-built RHD vehicle capable of meeting performance, safety, and ergonomic requirements for efficient carrier deliveries to businesses and curb-line residential mailboxes over the entire nationwide system. It also fully leverages the recently appropriated Inflation Reduction Act funding for zero-emission vehicles and supporting infrastructure. Finally, and in contrast to Alternative 2, it enables the Postal Service to accelerate our vehicle acquisition strategy through the purchase of COTS vehicles, which would result in significantly fewer air emissions and less gasoline use over the next eight years compared to Alternative 2. For these reasons, Alternative 1 is also designated as the Environmentally Preferable Alternative which would best promote the national environmental policy as expressed in Section 101 of NEPA.

While the No-Action Alternative, or status quo, would meet the Postal Service's Purpose and Need by implementing the selected alternative from the NGDV ROD, it would not allow the Postal Service to accelerate our replacement schedule by supplementing NGDV purchases with COTS vehicles in the near-term, thus prolonging the time the Postal Service must use end-of-life and high-maintenance delivery vehicles to achieve our Universal Service Mission. It would also include a minimum of 10 percent BEVs, as opposed to a 62 percent BEV commitment under the Preferred Alternative and Alternative 2. Therefore, while the No-Action Alternative would reduce environmental effects relative to existing conditions, it would have significantly less environmental benefits than the Preferred Alternative and Alternative 2, particularly in terms of gasoline consumption and air emissions.

EXECUTIVE SUMMARY

This Final Supplemental Environmental Impact Statement (SEIS) to the Next Generation Delivery Vehicles (NGDV) Acquisitions Final EIS[1] assesses the existing environmental conditions and potential impacts of the proposed delivery vehicle replacement of existing aged and end-of-life vehicles for the Postal Service. The Postal Service proposes to purchase and deploy over a six- to eight-year period 106,480 vehicles to replace existing delivery vehicles nationwide that either are approaching or are past the end of their service lives. These replacement delivery vehicles would be purpose-built, right-hand drive (RHD) NGDV or commercial-off-the-shelf (COTS) vehicles, consisting of 38 percent internal combustion engine (ICE) vehicles and 62 percent battery electric vehicles (BEV). The actual timeline and quantities of NGDV or COTS vehicles purchased, and delivery vehicle types replaced, would be contingent upon the suppliers' production and delivery capabilities and the Postal Service's operational needs, including individual carrier route needs, and the Postal Service's financial position.

The Postal Service is an independent federal establishment, mandated to be self-financing and to serve every American community through the affordable, reliable, and secure delivery of mail and packages to nearly 165 million addresses six and often seven days per week. The Postal Service is steadfastly committed to the fiscally responsible and mission-capable roll-out of electric-powered vehicles for America's largest and oldest federal fleet. The Preferred Alternative (described below) accounts for the Postal Service's operational needs, including the roll-out of new vehicles in a manner that will not disrupt our service mission; market realities, including the supplier capability and vehicle availability for both purpose-built and COTS vehicles; and the financial condition of the Postal Service. We are grateful for the $3 billion in Inflation Reduction Act funding that represents the confidence that Congress and the Administration have placed in us to build and acquire what has the potential to become the largest electric vehicle fleet in the nation, but it is also important to note that most of the electric vehicle funding to support this approach will continue to come from Postal Service revenues. For the reasons described in this SEIS, we are confident that the approach proposed in the Preferred Alternative is the correct approach.

Purpose and Need (Section 2): The Purpose of and Need for the Proposed Action remain the same as originally detailed in Section 2 of the NGDV Acquisitions Final EIS. The purpose of the Proposed Action is to replace the end-of-life and high-maintenance Long-Life Vehicles (LLV) and Flexible Fuel Vehicles (FFV) with vehicles with more energy-efficient powertrains, updated technology, reduced emissions, increased cargo capacity and improved loading characteristics, improved ergonomics and carrier safety, and reduced maintenance costs.

The need for the Proposed Action is that the Postal Service's existing purpose-built LLV/FFVs are now outdated (averaging 31 years in age), inefficient, increasingly unreliable, costly to maintain, and lack certain modern safety and operational features needed for mail carriers. These vehicles are near or at the end of their useful life and are no longer effective in enabling the Postal Service to meet our Congressional mandate to maintain efficient nationwide delivery of the mail and to provide prompt, reliable, and efficient services to our customers at least six days per week.

Alternatives Evaluated (Section 3): This Final SEIS analyzes two Action Alternatives along with the No-Action Alternative to consider the full range of potential environmental impacts:

- Alternative 1: Mixed Fleet (NGDV and COTS Vehicles) with 62 Percent BEV Commitment (within Six Years),
- Alternative 2: NGDV Only Fleet with 62 Percent BEV Commitment (within Eight Years), and

[1] The NGDV Final EIS can be viewed at: https://uspsngdveis.com/.

- No-Action Alternative: Maintain Decision from 2022 NGDV Record of Decision (ROD) (i.e., Purchase 50,000 to 165,000 NGDV over Ten Years, with 10 Percent BEV Minimum).

Environmental Consequences (Section 4): Alternatives 1 and 2 would result in beneficial effects on transportation safety, traffic noise, most air pollutant and greenhouse gas (GHG) emissions, community emergency services, fuel (gasoline) consumption, hazardous waste generation, and environmental justice communities both near the vehicle deployment sites and nationwide. Alternative 1 generally provides greater benefits than Alternative 2 by accelerating vehicle replacements, thus providing the expected benefits sooner (e.g., reduced air emissions, quieter vehicles, reduced gasoline usage) and therefore significantly reducing the total quantity of air contaminants produced over the full implementation period.

Alternatives 1 and 2 would result in no to negligible effect on community economics, employment, traffic, accessibility, parking, public transportation, noise around Vehicle Maintenance Facilities and BEV charging stations, sulfur dioxide (SO_2) emissions, community utility services, utility availability and capacity (including the electric grid), and solid and hazardous waste treatment and disposal. Alternative 1 could also have a minor to moderate adverse effect on communities, including environmental justice communities, immediately adjacent to vehicle deployment sites depending on number of delivery vehicles with back-up alarms, facility layout, and the times required for maneuvering.

The No-Action Alternative would generally have the same effects as Alternatives 1 and 2. However, beneficial effects associated with BEVs, such as reduced air emissions, traffic noise, and gasoline use, would be less than Alternatives 1 and 2. Further, the No-Action Alternative would decrease SO_2 emissions (rather than slightly increasing them), and require less electricity from the grid.

Cumulative Effects (Section 6): Effects from Alternatives 1 and 2 would not have the potential for significant adverse cumulative effects on nationwide environmental resources when considered in combination with other actions nationwide. Because existing delivery vehicles would be replaced with newer, less-polluting delivery vehicles, including under the No-Action Alternative, effects on environmental resources generally are expected to be less than current impacts.

Mitigation (Section 7): While the No-Action Alternative (i.e., continued implementation of vehicle replacements in accordance with the NGDV ROD) would already serve to mitigate the existing impacts on environmental resources from the Postal Service's existing delivery vehicles, implementation of Alternatives 1 or 2 would further mitigate these effects. No further mitigation measures would be necessary or appropriate.

Preferred Alternative (Section 4-12.2): The Postal Service's Preferred Alternative is Alternative 1, which is the purchase and deployment of a mixed fleet of NGDV and COTS vehicles over six years, with an increased BEV commitment of 62 percent.

Alternatives 1 and 2 would both provide a purpose-built RHD vehicle that meets the Postal Service's Purpose and Need by providing the performance, safety, and ergonomic requirements for efficient Postal Service carrier deliveries to businesses and residences over the entire nationwide system. Both Alternatives would also leverage Inflation Reduction Act funding to accelerate the electrification of the Postal Service's delivery fleet. However, Alternative 1 would include the strategic purchase and deployment of COTS vehicles to supplement the purpose-built NGDV, thus allowing us to accelerate the overall replacement of the existing end-of-life and high-maintenance LLVs (as well as cost-ineffective delivery vehicles that are personally owned) to ensure we continue to meet our Universal Service Mission. Notably, Alternative 1 would enable the Postal Service to purchase and deploy nearly 31,000 more delivery vehicles in the next two years than under Alternative 2, and enable the Postal Service to purchase all 106,480 vehicles in six years rather than eight years.

By accelerating the Postal Service's delivery vehicle replacement schedule, including purchasing more BEVs sooner, Alternative 1 would use significantly less gasoline than Alternative 2 (i.e., by about 73 million gallons over the next eight years) and would more than double the gasoline savings as compared with the No-Action Alternative (i.e., by about 158 million gallons over the next eight years). Similarly, Alternative 1 would significantly decrease the estimated cumulative GHG emissions over the next eight years by about 1.19 million metric tons (MT) of carbon dioxide equivalents (CO_2e) as compared with Alternative 2 and by about 1.99 million MT as compared with the No-Action Alternative. Additionally, using the most conservative social cost of greenhouse gas (SC-GHG) scenario, Alternative 1 would increase cumulative savings (present value) in climate change impacts by at least $12 million by 2050 compared to Alternative 2 and by at least $86 million by 2050 compared to No-Action Alternative. Alternative 1 would result in greater cumulative reductions of most criteria pollutants by 2030 as well. Potential effects of Alternative 1 on other resource areas would be comparable to those from Alternative 2.

The No-Action Alternative, or status quo, would meet the Postal Service's Purpose and Need by implementing the selected alternative from the NGDV ROD. However, it would not allow the Postal Service to accelerate our replacement schedule by supplementing NGDV purchases with COTS vehicles in the near-term, thus prolonging the time the Postal Service must use end-of-life and high-maintenance delivery vehicles to achieve our Universal Service Mission to deliver to over 165 million addresses at least six days per week. It would also include a minimum of 10 percent BEVs, as opposed to the 62 percent BEV commitment under Alternatives 1 and 2. Therefore, while the No-Action Alternative would reduce environmental effects relative to existing conditions, it would have significantly less environmental benefit than Alternatives 1 and 2, particularly in terms of gasoline consumption and air emissions.

Compliance Statement: This SEIS has been developed in compliance with the National Environmental Policy Act (NEPA); the Council on Environmental Quality's regulations implementing NEPA (Title 40 Code of Federal Regulations [CFR] Parts 1500–1508); and the Postal Service's regulations for NEPA compliance set forth at 39 CFR Part 775.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1 INTRODUCTION

The United States (U.S.) Postal Service (herein, Postal Service), an independent establishment of the executive branch of the U.S. Government, has prepared this Final Supplemental Environmental Impact Statement (SEIS) pursuant to the National Environmental Policy Act (NEPA) to evaluate the potential environmental impacts of the Proposed Action – the modernization of the Postal Service delivery fleet. The SEIS analyzes the potential environmental impacts associated with the Proposed Action and Alternatives, including the No-Action Alternative.

This SEIS is a supplement to the Postal Service's recent Next Generation Delivery Vehicles (NGDV) Acquisitions Final EIS (hereafter, the NGDV FEIS) (USPS, 2021a). The NGDV FEIS is referenced as appropriate throughout this SEIS and is publicly available on the following website: https://uspsngdveis.com/. This is also the official project website for this SEIS, including project updates and resources.

1-1 National Environmental Policy Act Regulatory Background

The SEIS has been developed in compliance with NEPA; the Council on Environmental Quality's (CEQ) regulations implementing NEPA (Title 40 Code of Federal Regulations [CFR] Parts 1500–1508); and the Postal Service's regulations for NEPA compliance set forth at 39 CFR Part 775.

1-2 Overall Vehicle Acquisition Strategy

The Postal Service operates a delivery fleet of over 210,000 active vehicles consisting of purpose-built vehicles, commercial-off-the-shelf (COTS) vehicles, and personally owned vehicles (POVs). The purpose-built vehicles, which comprise approximately 153,000 of the over 210,000 delivery vehicles (over 70 percent), include Long-Life Vehicles (LLVs) and Flexible Fuel Vehicles (FFVs) and were built specifically for the purpose of delivering mail. COTS vehicles (e.g., Ram ProMaster, Mercedes Metris, minivans) are publicly available and purchased directly from the vehicle manufacturer with minor modifications. Delivery POVs are owned by mail carriers who typically serve rural routes and are reimbursed for their POV use through the Postal Service's Equipment Maintenance Allowance. An overview of the basic vehicle types that comprise the Postal Service's delivery fleet is included in Section 1-2 of the NGDV FEIS.

The Postal Service's constrained financial condition since the 2006 Postal Accountability and Enhancement Act resulted in years of underinvestment in the vehicle fleet, requiring these vehicles to continue to operate, at increasingly high costs, well past their originally intended replacement dates. As a result, and as discussed in Section 2 below, the LLVs have far exceeded their planned life. The Postal Service is currently in a multi-year planning and acquisition process of replacing our aging fleet of mail delivery vehicles.

1-2.1 Acquisition Process to Date

As discussed in Section 1-3 of the NGDV FEIS, the Postal Service is in the process of developing and acquiring a new class of purpose-built delivery vehicles. While this longer-term solution to our vehicle needs was in prototype development and testing, the Postal Service conducted a Programmatic Environmental Assessment (PEA) in 2017 (USPS, 2017) and Records of Environmental Consideration (REC) in 2020 and 2023 for the acquisition and deployment of a combined approximately 62,200 new COTS delivery vehicles over a seven-year period through fiscal year (FY) 2023. These vehicles were intended to stabilize the Postal Service's delivery fleet and provide for continued achievement of our statutory Universal Service Mission (39 U.S. Code [USC] 101) to deliver to over 165 million addresses at least six days per week. These COTS vehicles have replaced accident-damaged, end-of-life, high-

maintenance, energy-intensive, high-polluting delivery vehicles that lack many modern safety features; provided Postal Service-owned vehicles to replace delivery POVs; and accommodated increases in delivery points and route growth.

The Postal Service published the NGDV FEIS Notice of Availability (NOA) on January 7, 2022, and the associated Record of Decision (ROD) on February 23, 2022. In the NGDV ROD, the Postal Service determined that we would purchase and deploy, over a ten-year period, 50,000 to 165,000 purpose-built, right-hand drive (RHD) NGDV consisting of a mix of internal combustion engine (ICE) and battery electric vehicle (BEV) powertrains, with at least 10 percent BEVs. Initially, the Postal Service ordered 50,000 NGDV, including 10,019 BEVs (approximately 20 percent of the total order), which were anticipated to be deployed for mail delivery service between FY 2024 and FY 2028. In March 2023, and in accordance with our ROD, the Postal Service issued a contract modification that changed the initial delivery order mix to 70 percent BEV NGDV (35,000 vehicles), 20 percent ICE two-wheel drive NGDV (10,000 vehicles), and 10 percent ICE all-wheel drive NGDV (5,000 vehicles). Like the LLV/FFVs in decades past, this fleet of NGDV will comprise a new class of purpose-built vehicles designed to meet the Postal Service's unique mail delivery requirements. The flexibility in the Postal Service's NGDV contract and delivery order for the 50,000 NGDV enabled the Postal Service to increase the number of BEVs above the initial commitment of 10,019 BEVs to 35,000 BEVs.

1-2.2 Rationale for Preparing This SEIS

Since the Postal Service signed the NGDV ROD, we have identified three additional considerations potentially affecting our vehicle acquisition strategy. First, the Postal Service anticipates that our longer-term efforts to fully replace our aging delivery fleet will likely take ten or more years. This timeframe can be challenging to forecast realistically, particularly when emerging technologies and evolving industries are involved. Therefore, the Postal Service proposes to adjust our vehicle procurement strategy to pursue a multiple-step acquisition process. This revised procurement strategy would increase the initial NGDV purchase quantity of 50,000 to 60,000, including a total of 45,000 BEV NGDV (75 percent of the purchase quantity). Future additional NGDV purchases would be made pursuant to a separate ROD only after additional NEPA analysis. The Postal Service believes this would be more responsive to our evolving operational strategy, technology improvements, and changing market conditions (e.g., the expected increased availability of BEV options in the future).

Second, the Postal Service aims to accelerate the replacement of LLVs in order to ensure we continue to meet our Universal Service Mission. As noted in Section 1-2.1, the already-ordered NGDV will not be available to begin replacing LLVs until FY 2024 through FY 2028. To provide the Postal Service greater flexibility to replace end-of-life and high-maintenance LLVs in the near-term, the Postal Service would expand the scope of vehicle types being considered for acquisition to include COTS vehicles to supplement the forthcoming NGDV already ordered. Additionally, by incorporating COTS vehicles into the vehicle mix, the Postal Service would also be able to accelerate fleet electrification through COTS BEV deployments.

Third, during the early stages of preparing this SEIS, the Postal Service was provided $3 billion from the Inflation Reduction Act of 2022 (P.L. No. 117-169 (Aug. 16, 2022)) (IRA) to fund the purchase of zero-emission delivery vehicles (e.g., BEVs) and the acquisition of the requisite infrastructure (e.g., BEV charging stations) at Postal Service facilities. While most of the electric vehicle funding would continue to come from Postal Service revenues, this additional funding enables the Postal Service to consider increasing and accelerating the ratio of BEV to ICE vehicles in our acquisition plan.

Accordingly, the Postal Service has prepared this Final SEIS to analyze potential vehicle acquisition options (see Section 3) to continue our vehicle acquisition strategy in light of these considerations.

1-3 Limits of Environmental Impact Assessment

This Final SEIS analysis is limited to the actions and alternatives described in Section 3. The timing, type, and number of new vehicles and their deployment are based on the best available current information for preparation of this Final SEIS. The ultimate number, configuration, and timing of the vehicles procured would depend upon the final needs of the Postal Service and the suppliers' production and delivery capabilities. The Postal Service will prepare another SEIS if we deem any deviation from the analysis herein to be significant.

1-4 Actions Not Included in the Proposed Action

The Postal Service is continuously assessing our fleet of delivery vehicles in order to identify and replace vehicles that have reached or exceeded their scheduled life expectancy, as well as those that are too costly to maintain due to major accident repair or significant mechanical repair. As a result of this ongoing fleet management process the Postal Service has made other minor purchases for replacement of fleet vehicles. These vehicle replacements are regular, on-going activities that have continued over many years and are represented in the baseline conditions.

The Postal Service maintains our current fleet of delivery vehicles through Vehicle Maintenance Facilities (VMFs) located nationwide throughout our network of facilities. Vehicle acquisitions included in the Alternatives would replace aging, high-maintenance, existing vehicles on a one-for-one basis with new vehicles, likely reducing the maintenance effort required. This SEIS covers primarily replacement vehicles for existing LLVs. Because the SEIS covers only a small number of additional vehicles that are not replacement vehicles for existing LLVs (see Section 3), and those additional vehicles will be deployed throughout the nation, the Postal Service does not anticipate a need for additional VMFs to maintain them. Therefore, this SEIS does not address new VMF construction.

Similarly, the Postal Service does not currently anticipate significant expansion of our existing VMFs. The Postal Service may need to make interior and exterior alterations of some Postal Service facilities as a result of the selected Alternative, for activities such as replacement of VMF bay doors and vehicle lifts, and installation of charging stations for BEVs where needed. For any construction or modification of Postal Service facilities necessary as a result of the Proposed Action, the Postal Service would conduct appropriate environmental reviews at the local level per Postal Service Handbook RE-6 (2015). The Postal Service will employ Postal Service environmental checklists, screening analyses, and stand-alone, project-level Environmental Assessments on a facility-specific basis to assess the extent of impacts from any facility-related actions.

The Postal Service recently announced plans to repurpose underutilized existing processing and other facilities to create larger centralized delivery units that will accommodate many more letter carriers. As these plans are still under development and are independent of the vehicle replacement program, this SEIS does not address the environmental impacts from this delivery facility network optimization, which the Postal Service will consider in a separate NEPA assessment if deemed appropriate. For purposes of this SEIS, the Postal Service will consider potential air quality impacts from the Alternatives due to potential delivery route changes post-delivery facility network optimization through the use of a sensitivity analysis (see Section 4-6.3.2).

Finally, this SEIS does not address the environmental impacts associated with the manufacture of the vehicles proposed for acquisition, or production of the parts thereof (e.g., BEV batteries). The Postal Service has no control or responsibility over the location or manner of vehicle or part production, or detailed information about supplier operations. These considerations would not meaningfully inform the Postal Service's decision-making or aid us in distinguishing among alternatives. The Postal Service also is not funding the construction of any new supplier facilities under any of the Alternatives. The Postal Service negotiates vehicle unit price, and otherwise would only pay the supplier for certain

vehicle design and manufacturing tooling costs. Although the Postal Service prefers to purchase domestically manufactured vehicles and sometimes contractually requires domestic manufacturing, the supplier, not the Postal Service, decides where to manufacture the vehicles and whether to do so at new or existing facilities, or some combination thereof. Therefore, this SEIS does not analyze vehicle-related environmental impacts besides those related to our operations after acquiring the new vehicles, including their ultimate disposal.

1-5 Public and Stakeholder Involvement

The Postal Service's Notice of Intent (NOI) to prepare this SEIS was published in the Federal Register (FR) on June 10, 2022 (87 FR 35581), and announced on the project website (https://uspsngdveis.com/). The Postal Service subsequently published another FR notice on July 21, 2022 (87 FR 43561) to adjust the scope of the SEIS. The public and agency scoping and comment period were accordingly extended through August 15, 2022. In addition, the Postal Service mailed and emailed the NOI directly to various stakeholders, including the U.S. Environmental Protection Agency (EPA), the CEQ, and other governmental agencies and non-governmental organizations that had commented on the NGDV FEIS.

On August 8, 2022, the Postal Service hosted a virtual public hearing to provide an overview of the Proposed Action and solicit comments from interested stakeholders. The public hearing was advertised in the FR and on the project website. In total, 205 entities registered for the public hearing, and 114 unique entities called in to attend the hearing. A video recording of the hearing was subsequently published on the project website.

During the scoping and comment period, including the public hearing, the Postal Service timely received 88,501 comments from interested parties, including the EPA, the California Air Resources Board, the Natural Resources Defense Council, the University of Michigan School for Environment & Sustainability, and the Elders Climate Action group, among others, with the majority being form letters. These comments were carefully considered by the Postal Service during preparation of the SEIS. The Postal Service also provided a detailed outline of the Draft SEIS to the EPA in February 2023 to solicit more specific input, which was similarly considered during Draft SEIS preparation.

The Postal Service's Notice of Availability (NOA) of the Draft SEIS was published in the FR on June 30, 2023 (88 FR 42401), and the NOA and Draft SEIS were made available on the project website. In addition, the Postal Service mailed and emailed the NOA directly to various stakeholders, including governmental agencies and non-governmental organizations and individuals that were sent the NGDV SEIS NOI or that provided scoping comments on the NGDV SEIS.

The Postal Service advertised on the project website and hosted a second virtual public hearing, on July 26, 2023, to present findings of the Draft SEIS, and discuss next steps. In total, 43 entities or individuals registered for this public hearing, 28 unique entities called in to attend the hearing, and 11 entities provided comments (American Lung Association; Center for Biological Diversity; Coltura; Earth Justice; Interfaith Power and Light; Natural Resources Defense Council; Pedal Bikes; Sierra Club; Save the Post Office/Americans for Financial Reform; Union of Concerned Scientists; and an interested citizen). A video recording of the hearing was subsequently published on the project website, which has been viewed over 3,000 times.

The comment period for the Draft SEIS ended on July 14, 2023. During the Draft SEIS comment period, including the public hearing, the Postal Service timely received 45,127 comments from interested parties, including the EPA; California Air Resources Board; United Automobile, Aerospace and Agricultural Implement Workers of America; multi-State and other entity Attorneys General; U.S. Representatives Emanuel Cleaver II (MO-5) and Sharice Davids (KS-3); Union of Concerned Scientists; Natural Resources Defense Council (including 10,694 petition comments); Sierra Club (including 6,027

petition comments); and others. These comments were carefully considered by the Postal Service during preparation of this Final SEIS.

Copies of the NOIs, an example NOI letter, and a list of the NOI letter recipients are included in Appendix B1- Notice of Intent. Documentation regarding the scoping public hearing is included in Appendix B2 - Scoping Public Hearing Documentation. A summary of comments received during the scoping and comment period, as well as responses to those comments not otherwise reflected in the SEIS, is included in Appendix B3 - Public and Agency Scoping Comments and Responses.

A copy of the NOA for the Draft SEIS, an example of the NOA letters, and a list of NOA recipients are included in Appendix B4 - Notice of Availability of Draft SEIS. Documentation associated with the Draft SEIS virtual public hearing is presented in Appendix B5 - Draft SEIS Public Hearing Documentation. A summary of public and agency comments received during the Draft SEIS public review and comment period and representative copies of the comment emails and letters received are presented in Appendix B6 - Public and Agency Draft SEIS Comments and Responses.

Copies of the NOA for the Final SEIS, an example NOA letter, and a list of the Final SEIS NOA letter and email recipients are included in Appendix B7 - Notice of Availability of Final SEIS.

2 PURPOSE OF THE PROPOSED ACTION

The Purpose of and Need for the Proposed Action remain the same as originally detailed in Section 2 of the NGDV FEIS, which is incorporated herein by reference and summarized as follows.

The **Purpose** of the Proposed Action is to replace the end-of-life and high-maintenance LLVs and FFVs with vehicles with more energy-efficient powertrains, updated technology, reduced emissions, increased cargo capacity and improved loading characteristics, improved ergonomics and carrier safety, and reduced maintenance costs.

The **Need** for the Proposed Action is that the Postal Service's existing purpose-built LLV/FFVs are now outdated (averaging 31 years in age), inefficient, increasingly unreliable, costly to maintain, and lack certain modern safety and operational features needed for mail carriers. These vehicles are near or at the end of their useful life and are no longer effective in enabling the Postal Service to meet our Congressional mandate to maintain efficient nationwide delivery of the mail and to provide prompt, reliable, and efficient services to our customers at least six days per week.

3 DESCRIPTION OF ALTERNATIVES

3-1 Summary of Alternatives Considered in Detail

The Postal Service is considering two action alternatives to be analyzed in detail, as well as a No-Action Alternative. These three alternatives, in terms of the numbers and types of vehicles proposed for acquisition and deployment, are summarized in Table 3-1.1 and discussed in detail in Sections 3-3 through 3-5. Alternatives which were considered but eliminated from detailed study are discussed in Section 3-6.

Table 3-1.1
Summary of Alternatives

Alternative	Description
Alternative 1 (Preferred) **Mixed Fleet (NGDV & COTS) with Increased BEV Commitment (w/in Six Years)** **BEV Commitment: 62%**	1. 60,000 NGDV (75% BEV) 2. 14,500 RHD COTS ICE Vehicles 3. 31,980 LHD/RHD COTS Vehicles or NGDV (66% BEV) **Total Vehicles: 106,480 (62% BEV)**
Alternative 2 **NGDV Only with Increased BEV Commitment (w/in Eight Years)** **BEV Commitment: 62%**	1. 106,480 NGDV (62% BEV) **Total Vehicles: 106,480 (62% BEV)**
No-Action Alternative **NGDV Only with Existing BEV Minimum Commitment per Current ROD (w/in Ten Years)** **BEV Commitment: At Least 10%**	1. 165,000 NGDV Cap (at least 10% BEV) *A subset of 106,480 NGDV (with 10% BEV) over eight years is analyzed herein to ensure a fair comparison against the vehicle quantities proposed under Alternatives 1 and 2.* *The environmental impacts for the full 165,000 vehicles are analyzed in Section 4 of the NGDV FEIS, which is incorporated by reference in full.* **Total Vehicles: 165,000 (at least 10% BEV)**

3-2 Consideration Factors for Alternatives

In developing Alternatives capable of meeting our Purpose and Need – plans capable of being readily executed without risk to operational performance – the Postal Service considered multiple mission-critical factors, including our urgent need to replace our aging vehicles, route suitability for BEVs, upfront acquisition costs, and our evolving vehicle procurement strategy:

3-2.1 Urgent Need

As discussed in Section 2 of the NGDV FEIS, the LLVs currently in service are on average eight years beyond their 24-year service life. The Postal Service has an urgent need to replace these high-maintenance and increasingly unreliable vehicles in a cost- and time-efficient manner in order to meet our mission to deliver to over 165 million addresses at least six days per week (Universal Service Mission). Given the time needed to install necessary infrastructure, the fact that over the near-term COTS vehicles can be obtained at a faster pace than the purpose-built NGDV, and that the COTS BEV

market is currently limited, the Postal Service has determined it necessary to consider only Alternatives that include the procurement of some ICE vehicles. These ICE vehicles are necessary for situations where the Postal Service determines that waiting for an available BEV or the installation of charging infrastructure risks significantly impairing operational performance and thus fulfillment of our Universal Service Mission.

3-2.2 Route Suitability

As discussed in Section 3-1.1 of the NGDV FEIS, the Postal Service requires the BEVs we purchase to be capable of driving at least 70 miles on a single charge. This range was developed after extensive vehicle testing, using drive cycles unique to the Postal Service which require a repeated and sustained series of abrupt starts, short forward motion (house to house), and abrupt stops, occurring on average 500 to 600 times per day, over a sustained driving period of between eight to twelve hours, at least six days per week. In contrast, according to the Census Bureau, an average commuter in the United States commutes 55 minutes per day, for 41 miles, requiring approximately 15 to 20 stops. Moreover, even other delivery organizations use vehicles in much more of an "urban" drive cycle, where the vehicle traverses much greater average distances between stops and, often, requires several hundred fewer stops per day. The drive cycle that the Postal Service delivery vehicles experience and must support is much harsher and more demanding than that required of personal vehicles and other commercial delivery organizations. This harsher drive cycle exacts a toll on battery usage as well, since there is significantly less opportunity to reap the benefits of regenerative braking.

The Postal Service's vehicle testing also accounted for battery use in all climates where the batteries will be used for heat, ventilation, air conditioning (HVAC), and defrosting while doors and windows are opening and closing repeatedly throughout the operational day (for mail and package delivery) as well as for powering electronics and vehicle accessories (lights, strobes, flashers). In short, even if a BEV's energy demand for propulsion to drive an average Postal Service delivery route was similar to that of a BEV for a typical commuter or commercial delivery vehicle – which it is not – the HVAC and accessory demand for a Postal Service delivery vehicle would significantly differentiate the Postal Service's usage given the fact that windows and doors are constantly opening and closing as we make deliveries. Approximately 60 percent of battery usage on a Postal Service drive cycle would be for HVAC and accessories alone in average climates. In severe weather, particularly severe cold, HVAC and accessory usage could be up to one-third higher.[2]

Furthermore, the Postal Service determined that a 70-mile minimum range capability would provide the Postal Service the flexibility to account for vehicle transfers to different routes and the need to conduct second trips should circumstances (e.g., accidents, employee unavailability, peak volumes, and weather) require it. While the Postal Service expects that our BEV range requirements will change over time as battery technology improves and we gain experience using and maintaining BEVs, at this time, to ensure a mission-capable rollout, new BEVs will generally not be deployed to routes that exceed 70 miles (the minimum BEV driving range) to avoid the risk of BEVs running out of power mid-route. For the quantity of vehicles that would be acquired under Alternatives 1 and 2, fewer than 10 percent of routes fall outside this 70-mile BEV-compatible range. Finally, while no BEVs would automatically be excluded from any deployment site on account of climate, routes with significant snowfall, cold weather, or challenging terrain will be prioritized for deployment of all-wheel drive vehicles, which are likely to have ICE powertrains. Therefore, the Postal Service is only considering Alternatives that will include some percentage of ICE vehicles for use on routes where BEVs are not currently suitable.

[2] For more information regarding the Postal Service's unique operational requirements as they relate to vehicle suitability, see Appendix H, pp. 6-8.

3-2.3 Financial Considerations

In the NGDV FEIS, to demonstrate the significant cost differential between ICE and BEV NGDV, the Postal Service provided the Total Cost of Ownership (TCO) analysis used to determine "best value" at the time offerors' submissions were considered for the NGDV procurement. However, given the Postal Service's improving financial condition and the provision of $3 billion from the IRA to fund the purchase of zero-emission vehicles and the acquisition of the requisite infrastructure (e.g., BEV charging stations) at Postal Service facilities, the percentage of BEV and ICE vehicles considered in Alternatives 1 and 2 is now based on the upfront acquisition costs for the Postal Service (including both vehicle purchase prices and requisite charging infrastructure).

The upfront acquisition cost differential between BEV and ICE vehicles remains significant for both COTS vehicles and NGDV. Currently, BEVs cost approximately 40 percent more than ICE vehicles, not including charging infrastructure, and approximately 86 percent more than ICE vehicles when including charging infrastructure. Therefore, this is another reason why the Postal Service is considering only Alternatives that include the procurement of some ICE vehicles.

For both Alternative 1 (Preferred Alternative) and Alternative 2, the IRA funds would be fully expended. While most of the electric vehicle funding would continue to come from Postal Service revenues, the Postal Service intends to utilize the IRA funding to accelerate our development of electric vehicle charging infrastructure in order to ensure that the necessary charging stations are pre-positioned and installed so that we are fully ready and mission capable as soon as electric vehicles roll off the production lines or are otherwise available for our use. In addition, IRA funding would be utilized not only to increase our purchasing and therefore the proportion of BEVs acquired, but it will also enable the Postal Service to mitigate our pricing risk, and stabilize our acquisition, implementation planning, and execution. Each of these factors represents a vital element in our decision-making process and in our ability to move forward in the manner described herein.

3-2.4 Vehicle Procurement Strategy

As discussed in Section 1-2.2 above, the Postal Service is considering Alternatives in light of a revised vehicle procurement strategy that pursues a multiple-step acquisition process. Under this revised procurement strategy, the quantity of NGDV to be procured in both action Alternatives would be capped at a quantity lower than the 165,000-vehicle cap in the current NGDV ROD. Thus, future additional significant quantities of NGDV purchases would be made pursuant to a separate ROD only after supplemental NEPA analysis. The Postal Service believes this would be more responsive to our evolving operational strategy, technology improvements, and changing market conditions (e.g., the expected increased availability of BEV options in the future).

3-3 Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment

The Preferred Alternative, Alternative 1, includes the following components, which would be deployed over six years:

- Purchasing 60,000 NGDV, with 75 percent being BEVs;
- Purchasing 14,500 RHD COTS ICE vehicles; and
- Purchasing an additional 31,980 COTS vehicles (left-hand drive [LHD] or RHD) or NGDV, with 66 percent being BEV.

These components of the Preferred Alternative are detailed in the subsections below. Proposed new vehicles would replace existing delivery vehicles nationwide that either are approaching or past the end

of their service lives (i.e., LLVs) or are otherwise cost-ineffective (i.e., delivery POVs), although some of the newly purchased vehicles would be deployed on new delivery routes which would otherwise be serviced by existing delivery vehicles or POVs due to our Universal Service Mission.[3] The replaced Postal Service delivery vehicles would be scrapped or sold for parts, similar to how we currently dispose of replaced vehicles.

The Postal Service is firmly committed to a future that includes electric vehicles in our delivery vehicle fleet, which is why we are committing to acquiring 62 percent BEVs overall in our Preferred Alternative. For the reasons noted in Section 3-2 above, we have also determined it necessary to procure some ICE vehicles.

The Postal Service anticipates that a large portion of these 106,480 vehicles would be deployed to several hundred of our larger existing facilities nationwide. Based on preliminary estimates developed for this SEIS, the sites which are considered likely candidates to be major deployment sites (herein, "Candidate Sites") would receive about 100 vehicles on average. These larger existing facilities would enable the Postal Service to consolidate similar vehicle technologies. For example, purchasing and deploying over 66,000 BEVs nationwide would require substantial infrastructure upgrades that are more feasible at scale. At this time, the Postal Service anticipates these Candidate Sites to host predominantly BEVs.

The Postal Service has not yet finalized which existing facilities would comprise these Candidate Sites, but has analyzed them at a programmatic level in this SEIS. As vehicle deployment sites are finalized, the Postal Service would conduct appropriate environmental reviews at the local level per Postal Service Handbook RE-6 (2015) as needed. Postal Service environmental checklists, screening analyses, and stand-alone, project-level Environmental Assessments would be employed on a facility-specific basis to assess the extent of impacts from any facility-related actions.

3-3.1 NGDV Acquisition

Under Alternative 1, the Preferred Alternative, the Postal Service would continue to include NGDV in our acquisition strategy. A detailed description of the NGDV development and acquisition process is provided in Section 1-3.2 of the NGDV FEIS and incorporated herein by reference.

As described in the NGDV FEIS, the NGDV will have a RHD configuration that is optimized to allow for highly efficient curb-line deliveries, with ergonomic design for safe and easy entry on the curb-line side of the vehicle, improved delivery efficiency, a walk-in with larger cargo capacity than current delivery vehicles, ability to access the cargo area without exiting the vehicle, increased ceiling height, and the capability for telematics data and information to enhance vehicle monitoring and predictive maintenance. Safety features will include back-up and 360-degree cameras, blind spot warning, anti-lock braking system, automatic electronic parking brake, front/rear braking, and air bags. The NGDV will also include air-conditioning for the carrier, which is not available in LLVs or FFVs. NGDV are available with either ICE or BEV powertrains, and are purpose-built to meet the unique requirements of the Postal Service's delivery operations.

Following publication of the NGDV ROD, the Postal Service ordered 50,000 of the 165,000 NGDV analyzed (over a ten-year acquisition period) in the NGDV FEIS and ROD. The Postal Service anticipates deploying these vehicles into mail delivery service between FY 2024 and FY 2028. As discussed in Section 3-2.4, the Postal Service's revised vehicle acquisition strategy involves engaging in a multi-step process. Therefore, under the Preferred Alternative, the Postal Service proposes to limit

[3] The increase in the total number of delivery routes anticipated for this SEIS results from the fact that the total number of delivery points (i.e., addresses) served nationally regularly increases each year.

the total quantity of our NGDV procurement under the revised ROD. This would not modify the Postal Service's existing contract with Oshkosh Defense for up to 165,000 vehicles, but would require the Postal Service to prepare additional NEPA analysis and issue an additional ROD in the future prior to ordering additional NGDV through that contract.

After considering the factors discussed in Section 3-2 above, the Postal Service proposes to accelerate our environmentally sustainable technology goal for our fleet by significantly increasing the percentage of BEV NGDV from the 10 percent minimum in the current NGDV ROD to 75 percent. The overall BEV percentage under this Preferred Alternative will be 62 percent. The actual timeline and quantities of NGDV purchased and delivery vehicle types replaced would be contingent upon the Postal Service's operational needs, including individual carrier route needs, infrastructure deployment, and financial position.

The Postal Service would evaluate ICE and BEV NGDV deployment based on existing nationwide delivery route characteristics and other established factors to prioritize potential placement of the two powertrains. BEV NGDV generally would be deployed to operationally significant sites (i.e., Candidate Sites), which tend to be larger sites with numerous routes suitable for BEVs.

3-3.1.1 NGDV Specifications

Current specifications for the ICE and BEV NGDV are provided in Table 3-3.1 below.

Table 3-3.1
NGDV Specifications

Design Specification[1]	**ICE NGDV**	**BEV NGDV**
Curb Weight (pounds [lbs])	5,903	6,604
Gross Vehicle Weight Rating (GVWR) (lbs)	8,700	8,700
Payload (lbs)	2,797	2,096
Engine Size	2.0 liter, 4 cylinder (cyl)	N/A
Mileage[2]	12.63 miles per gallon (MPG; expected on USPS drive cycles)	1.28 miles per kilowatt hour (mi/kWh) (43.14 miles per gallon equivalent [MPGe])[4]; expected on USPS drive cycles
	19.21 MPG (on Urban Dynamometer Driving Schedule [UDDS] drive cycle)	2.0 mi/kWh (on UDDS drive cycle)
Battery Type / Size (kilowatt hour [kWh])	N/A	Lithium-ion battery with Nickel Manganese Cobalt / 94 kWh
Range on Single Charge (miles)	N/A	70[3] (with and without air conditioning)

N/A = Not Applicable
Notes:
(1) Specifications included for the 2-Wheel Drive model, which represents the majority of NGDV planned.
(2) Mileage values were determined assuming a mix of HVAC use. ICE vehicles consume fuel when the air conditioning (AC) is operating, which is assumed to be 34 percent of the time. BEVs consume power to heat and cool the vehicle, which is assumed to be 68 percent of the time.
(3) This range is based on the NGDV battery at end of the battery's projected ten-year life, with full accessory load.
(4) Miles per gallon of gasoline-equivalent (MPGe) is an EPA-created metric that represents the number of miles a vehicle can travel using the same amount of energy as contained in a gallon of gasoline. This allows for a simpler comparison of fuel efficiency between vehicles using different fuels, such as BEVs and ICE vehicles. For example, one gallon of gasoline is equivalent to 33.7 kWh of electric power; thus, 1.28 mi/kWh x 33.7 kWh/gallon of gasoline equals 43.14 MPGe.

The Postal Service's BEV NGDV requirements include the ability to charge to a minimum driving range of 70 miles within eight hours. The BEV NGDV could fully recharge during non-business hours. For

more information on battery usage and the minimum driving range of 70 miles, see Responses to Comments 10 and 11 in Appendix B of the NGDV FEIS.

3-3.2 RHD COTS ICE Vehicle Acquisition

The Preferred Alternative also includes acquisition of 14,500 RHD COTS ICE vehicles to supplement the Postal Service's NGDV purchases. The 14,500 total was chosen because the Postal Service's outreach to potential suppliers indicated that this would likely be the last remaining quantity of RHD COTS vehicles for sale in the U.S. for the foreseeable future. As discussed in Sections 4-1.1.1 and 4-1.1.2 of the NGDV FEIS, RHD vehicles are generally superior to LHD vehicles in terms of efficiency, performance, and safety for Postal Service routes. Additionally, as discussed in Section 3-2.1 above, COTS vehicles can be obtained at a faster pace than the purpose-built NGDV, which would enable the Postal Service to more rapidly replace LLVs currently in service and better meet our Universal Service Mission. Thus, the Postal Service determined it necessary to include this limited quantity of RHD ICE vehicles in our Preferred Alternative. There are currently no RHD BEVs available in the market.

Specifications and performance data for the proposed RHD COTS ICE vehicle model are shown in Table 3-3.2.

3-3.3 Additional COTS Vehicle or NGDV Acquisition

In addition to the 60,000 NGDV (45,000 BEV) and 14,500 RHD ICE vehicles discussed above, the Preferred Alternative also includes acquisition of an additional 31,980 vehicles that can be LHD or RHD COTS vehicles or NGDV, of which 66 percent will be BEV. The Postal Service anticipates that at least a portion of these vehicles will likely be LHD COTS vehicles and will continue to evaluate the rapidly evolving COTS market for both RHD and LHD COTS delivery vehicles capable of meeting the Postal Service's demanding operational requirements.

As discussed above, procuring COTS vehicles would accelerate the replacement of LLVs by providing new vehicles that are both more immediately available than the NGDV (i.e., while the Postal Service waits for the ordered NGDV) and supplemental to the NGDV (i.e., in excess of the total number of NGDV that the Postal Service can order in any particular year). This would improve environmental impacts by accelerating the replacement of higher-emitting LLVs and the overall electrification of the fleet.

While the Postal Service would likely procure RHD vehicles should more become available than the 14,500 discussed above, the Postal Service can efficiently use LHD vehicles for some delivery routes, such as those with no or relatively few curb-line delivery points. For example, city routes often do not have curb-line mailboxes, and many neighborhoods have cluster box units ("community mailboxes") rather than individual curb-line mailboxes.

For this category of 31,980 vehicles, the Postal Service will also retain the flexibility to acquire NGDV in lieu of COTS vehicles. While NGDV might not be as immediately available as COTS vehicles, retaining this flexibility will ensure that the Postal Service can increase our purpose-built vehicle quantity to achieve operational goals and meet our 62 percent BEV commitment in the event that the COTS BEV market proves insufficient. These NGDV would be in addition to the 60,000 NGDV discussed above, and the total limit on NGDV procurement under this Alternative would be increased accordingly.

Specifications and performance data for the proposed COTS vehicle and NGDV models are shown in Tables 3-3.2 and 3-3.1, respectively.

Additionally, to better take advantage of rapid changes in the COTS market and to better ensure access to either RHD or LHD COTS delivery vehicles capable of meeting the Postal Service's demanding operational requirements, the Postal Service is clarifying that Alternative 1 allows for the ICE and BEV

COTS specified in Tables 3-3.2 to be replaced with equivalent or superior COTS delivery vehicles. Alternative 1's total BEV percentage of 62 percent would not be changed by any such replacements. In the event of any COTS replacements, a Record of Environmental Consideration, analyzing any changes to the air emissions analysis, will be prepared and published in the Federal Register. However, if any COTS replacement would result in a substantial adverse effect – for example, due to a significant difference in vehicle specifications or a significant change in the LLV replacement rate – such replacement would only occur following completion of an additional supplement to the EIS, in accordance with 40 CFR 1502.9(d).

3-3.3.1 COTS Vehicle Specifications

Table 3-3.2
COTS Vehicle Specifications

Design Specification	RHD COTS ICE Vehicle (Mercedes Metris)	LHD COTS ICE Vehicle (ProMaster)	LHD COTS BEV (Ford E-Transit)
Curb Weight (lbs)	4,134	4,643	5,872
GVWR (lbs)	6,834	8,900	9,500
Payload (lbs)	2,635	4,150	3,628
Engine Size	2 L, 4 Cyl	3.6 L, 6 Cyl	N/A
Mileage	12.1 MPG[1] (expected on USPS drive cycles)	11 MPG[1] (expected on USPS drive cycles)	1.13 mi/kWh[2] (38.08 MPGe)[4] (calculated)
	19/23 MPG (city/highway) (EPA window sticker rating)	18/26 MPG (city/highway) (EPA window sticker rating)	N/A
Battery Type / Size (kWh)	N/A	N/A	Lithium-ion 68 kWh
Range on Single Charge (miles)[3]	N/A	N/A	77

N/A = Not Applicable
Notes:
(1) Actual Postal Service average fuel economy for each vehicle type.
(2) The Postal Service has not tested COTS BEVs for transit and delivery travel to date. The mi/kWh value is calculated estimate based on manufacturer-provided information (i.e., the expected range on a single charge divided by the total battery size).
(3) Range assumption derived from 70 percent battery capacity (i.e., manufacturer warranty) of a projected total range of 110 miles for the medium roof model with 68 kWh battery.
(4) Miles per gallon of gasoline-equivalent (MPGe) is an EPA-created metric that represents the number of miles a vehicle can travel using the same amount of energy as contained in a gallon of gasoline. This allows for a simpler comparison of fuel efficiency between vehicles using different fuels, such BEVs and ICE vehicles. For example, one gallon of gasoline is equivalent to 33.7 kWh of electric power; thus, 1.13 mi/kWh x 33.7 kWh/gallon of gasoline equals 38.08 MPGe.

3-3.4 Vehicle Maintenance and Support

The discussions of NGDV and COTS vehicle maintenance and support included in Sections 3-1.2 and 3-2.1 of the NGDV FEIS remain relevant and are incorporated herein by reference.

Further, under this Alternative, to support BEV infrastructure, improvements would be made by repurposing existing larger, underutilized processing and other facilities with ample electric power capacity and available parking that can accommodate many more letter carriers at each facility. The NGDV FEIS assumed that infrastructure improvements would be required at a greater number of smaller sites, such as local post offices, that had inferior BEV-compatible infrastructure. Appropriate NEPA analyses would be conducted at the local level in the future, as needed, to support facility-specific projects.

3-4 Alternative 2 – NGDV Only with Increased BEV Commitment

Alternative 2 is the same as the Preferred Alternative with the following differences:

- The up to 106,480 vehicles purchased and deployed would consist entirely of NGDV. No COTS vehicles would be purchased.
- The Postal Service would limit our authorized NGDV purchases to 106,480 for purposes of NEPA, requiring future supplemental NEPA analyses to exceed this quantity.
- The Postal Service would commit to purchasing 62 percent (i.e., 66,230) BEV NGDV.
- The time period to purchase and deploy only NGDV would take an additional two years (i.e., eight years versus six years) and significantly fewer vehicles would be deployed in the first two years.

The vehicle mix proposed in this alternative is consistent with the selected alternative in the 2022 NGDV ROD (which is also the SEIS No-Action Alternative; see Section 3-5), as the Postal Service is already authorized under that ROD to purchase and deploy at least 106,480 NGDV and allocate 66,230 of them to BEV powertrains. In addition to formally committing to limit the quantity of NGDV purchases pending additional future NEPA analysis, Alternative 2 slightly changes how the new vehicles would be deployed. Under the No-Action Alternative, all new vehicles would replace LLVs on a one-for-one basis, whereas under Alternative 2, the new vehicles would replace both existing LLVs and delivery POVs as needed.

As compared to the Preferred Alternative, Alternative 2 would substantially reduce the number of total vehicles purchased and deployed in the next two years (i.e., by nearly 31,000 vehicles; see Appendix C), because the Postal Service would be limited to the NGDV's production capacity and not utilize COTS vehicles available for purchase. This would require the Postal Service to keep end-of-life, high-maintenance, and higher-emitting LLVs in service for a longer period of time while the Postal Service waits for the new, more environmentally beneficial NGDV to be delivered.

The benefits and specifications of the purpose-built NGDV under this Alternative are the same as discussed in Section 3-3.1 above. Vehicle maintenance and support would be the same as for the Preferred Alternative as discussed in Section 3-3.4 above.

3-5 No-Action Alternative

Under the No-Action Alternative, the Postal Service would continue to operate in accordance with the decision from the 2022 NGDV ROD (Section 1 of the NGDV ROD, incorporated herein by reference). That decision was to implement the Preferred Alternative from the NGDV FEIS, which included the purchase and deployment over a ten-year period of 50,000 to 165,000 purpose-built, RHD NGDV consisting of a mix of ICE and BEV powertrains, with at least 10 percent BEVs.

To provide a comparable baseline for Alternatives 1 and 2, the No-Action Alternative analysis in this SEIS assumes that 106,480 NGDV, consisting of 10 percent BEV and 90 percent ICE powertrains, would be purchased and deployed to replace LLVs on a one-for-one basis; no NGDV would replace delivery POVs. The No-Action Alternative, however, would not limit the Postal Service's authorized NGDV purchases to that quantity; the Postal Service would continue to be authorized, under the NGDV ROD, to purchase up to 165,000 NGDV in total (minimum 10 percent BEVs) without any further supplemental NEPA analysis. The NGDV FEIS's consideration of potential environmental impacts for the maximum 165,000 NGDV purchase is incorporated by reference.

Similar to Alternative 2, the No-Action Alternative would not enable the Postal Service to accelerate our vehicle replacement schedule and would require the Postal Service to continue maintaining LLVs, despite their high maintenance costs and higher emissions, longer than would be required under the Preferred Alternative for this SEIS. The benefits and specifications of the purpose-built NGDV under this Alternative are the same as discussed in Section 3-3.1 above. Vehicle maintenance and support would be the same as for the Preferred Alternative as discussed in Section 3-3.4 above.

3-6 Alternatives Eliminated from Detailed Study

3-6.1 Acquisition of a New Purpose-Built Vehicle

On February 23, 2022, the Postal Service announced the contract award to Oshkosh Defense LLC, which had been contingent on the Postal Service's satisfactory completion of NEPA, for production of the NGDV. This award followed an open, competitive, multi-year process that was unrestricted with respect to powertrains and RHD versus LHD. The NGDV solicitation included six offerors and extensive testing of prototype vehicles. The Postal Service believes that initiating another purpose-built vehicle solicitation would neither be an efficient use of the Postal Service's limited time and resources, nor would it guarantee a new purpose-built vehicle that is superior to the NGDV in cost or performance. In addition, in the Postal Service's judgment, a new solicitation so soon after the conclusion of the NGDV solicitation would expose the Postal Service to potential legal risk and reputational harm with our suppliers. Finally, if the Postal Service were to engage in a new solicitation, it would undercut the purpose of the project to expeditiously replace our end-of-life and high-maintenance LLVs and FFVs to meet our Universal Service Mission.

Therefore, while the Postal Service considered an Alternative that would include a new purpose-built vehicle for procurements going forward, we have determined not to consider it in detail for this SEIS.

3-6.2 Import of RHD COTS Vehicles from International Source

As discussed in Section 3-3.2 above, RHD vehicles are optimal for Postal Service operations for multiple reasons, including efficient access to curb-line mailboxes and Postal Service carrier safety. Therefore, the Postal Service considered importing RHD vehicles from countries with larger RHD markets than the U.S., but we determined not to consider such an Alternative in detail for the following reasons.

Vehicles manufactured for foreign markets are not designed or tested to meet EPA emission standards and U.S. Federal Motor Vehicle Safety Standards. Furthermore, it is the Postal Service's determination that obtaining such approvals would be lengthy and costly, with no guarantee that it would ultimately succeed and therefore is neither technically nor economically feasible. These regulatory obstacles aside, the Postal Service would still need to solicit and obtain vehicles that could meet our demand in terms of price (including any applicable tariffs and shipping costs), quantity, size and operational capabilities, rate of production, and delivery schedule on a competitive basis as those vehicles manufactured for the U.S. market.

3-6.3 Acquisition of All COTS Delivery Vehicles

The Postal Service considered but did not analyze in detail procuring only COTS vehicles in this SEIS aside from the 50,000 NGDV already ordered in 2022 pursuant to the NGDV ROD. As discussed in Section 3-3.1 above, the Postal Service has determined that purpose-built NGDV have several advantages over COTS vehicles that make NGDV better suited to satisfy the Postal Service's Purpose and Need. Moreover, under our contract with Oshkosh Defense, the Postal Service may order any percentage of BEV NGDV. As the Postal Service has no similar contractual guarantee of BEV availability in the COTS market – only our best estimates based on outreach to potential suppliers – the Postal Service believes that having a significant proportion of NGDV in our fleet strategy represents the

best guarantee of fleet electrification over the near term. Therefore, while this Alternative would be at least marginally capable of meeting our Purpose and Need, it would be a significant detriment to the Postal Service's delivery operation, requiring carriers to exit vehicles on the left-hand side (due to the limited supply of RHD COTS vehicles in the U.S.), in traffic, and walk around their vehicle to place mail and packages in every mailbox, thereby eliminating the operational and safety benefits from RHD delivery. Thus, the Postal Service determined to eliminate this Alternative from detailed study.

3-6.4 Leasing and Deployment of COTS Vehicles

Leasing and deployment of COTS vehicles was also considered but not analyzed in detail in Section 3-4.1 of the NGDV FEIS. As noted therein, the existing RHD LLVs purchased from commercial suppliers are purpose-built vehicles to meet Postal Service requirements and are currently not available for lease. It is not an option to replace the RHD LLVs with a leased RHD vehicle of the same type that would meet Postal Service requirements. A new General Services Administration (GSA) solicitation to build and deliver a new purpose-built RHD vehicle for lease would not be cost- or time-effective and was dismissed. Likewise, leasing COTS delivery vehicles would not be cost-effective and was dismissed. In past COTS delivery vehicle procurement actions, the Postal Service determined that leasing costs associated with COTS delivery vehicles exceed a COTS vehicle acquisition scenario by more than three times, with no return on investment (see NGDV FEIS Appendix C). Lastly, leasing vehicles, whether purpose-built or COTS, would inhibit any flexibility the Postal Service might have should we elect to maintain the vehicles over a longer period of time.

3-7 Resource Areas Affected

Alternatives 1 and 2 could affect the following resources and topics due to the replacement of high-maintenance and end-of-life delivery vehicles with new delivery vehicles: socioeconomics, transportation, noise, air quality, community services, utilities and infrastructure, energy requirements and conservation, solid and hazardous materials and waste, and environmental justice (EJ). These resource areas and related topics are addressed for the action alternatives and the No-Action Alternative in the detailed analysis herein.

4 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

4-1 Introduction

This section describes the affected (existing) environment for each resource and then describes the potential environmental consequences due to implementation of Alternative 1, Alternative 2, and the No-Action Alternative. It is important to note that the Proposed Action is national in scope, with vehicles to be distributed across the Postal Service's nationwide delivery network.

Discussion of potential effects focuses on direct and indirect effects and whether the effects are significant. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Potential effects are addressed for each resource in terms of the significance of potential effects in relation to baseline conditions or the No-Action Alternative.

Cumulative effects, which are the effects on the environment that result from the incremental effects of an action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such actions, are addressed in Section 6.

The Proposed Action, being national in scale and scope, has the potential to affect resources throughout the U.S. The specific actions that the Postal Service would take as part of the initiative are located in geographically diverse areas (urban, suburban, and rural). Because of the wide variety of natural and manmade environments and the complexity of resources potentially affected, this section characterizes resource effects in general terms.

This SEIS examined potential effects in terms of the significance of the effect. To assess the significance of an effect, the Postal Service first identified the potentially affected environment and the degree of the effects of the action. The Postal Service then determined whether the effect was significant, based on the requirements in 40 CFR 1501.3(b). Four types and levels of effect were considered during the analysis:

- Beneficial Effect – The effect would be beneficial in nature.
- No or Negligible Effect – No effect is anticipated, or the effect is barely perceptible or measurable.
- Moderately Adverse Effect – An effect is anticipated, but the effect does not meet the context/intensity significance criteria for the specified resource.
- Significant Effect – An effect is anticipated that meets the context/intensity significance criteria for the specified resource.

The Postal Service also used this approach to evaluate cumulative effects.

4-1.1 Existing Vehicle Fleet

The Postal Service currently has a combined delivery fleet of over 210,000 active delivery vehicles comprised of approximately 153,000 RHD LLVs and FFVs, and 67,000 COTS vehicles. The majority of

the current delivery fleet (i.e., the purpose-built LLVs and FFVs) has been in operation for over 30 years; these end-of-life vehicles are high-maintenance, energy-intensive, high-polluting, and do not include certain modern safety features nor operational features needed by mail carriers. The Postal Service has been replacing LLVs and FFVs as they reach the end of their lives or begin to incur excessive maintenance costs with COTS vehicles, pending the development of a longer-term solution to our vehicle needs (i.e., the NGDV).

4-1.1.1 Safety and Carrier Conditions

The Postal Service's existing purpose-built delivery vehicles do not have certain modern safety features such as airbags, anti-lock brakes, air conditioning, back-up cameras, back-up alarms, intermittent windshield wipers, blind-spot warning systems, daytime running lights, or seatbelt reminders found on more modern vehicles. The Postal Service's existing delivery vehicles also do not provide optimal conditions for carrier efficiency and comfort. Existing LLVs have a windowless cargo area, have fewer mail trays at the front of the vehicle, have window openings that limit ergonomic movements, and restrict internal access to cargo areas (i.e., they are accessible only from outside the vehicle). They have circulating fans but no air conditioning, limiting carrier comfort during warmer outdoor temperatures. See Section 2-1 of the FEIS.

RHD vehicles are safer for carriers than LHD vehicles, as LHD-configured vehicles require exiting the vehicle into the roadway when delivering to curb-line mailboxes on the right side of the vehicle (see Section 3-3.2). RHD vehicles offer several operational and ergonomic benefits as compared with LHD vehicles on most delivery routes, as LHD vehicles are not configured for optimal safety, ergonomics, and efficiencies for deliveries to curb-line residential mailboxes when compared to RHD vehicles (and particularly, purpose-built RHD vehicles).

4-1.1.2 Vehicle Life Expectancy

The majority of RHD purpose-built vehicles (LLV and FFV) have far exceeded their planned life expectancy of 24 years. The NGDV is designed to provide an effective minimum service life of 20 years. A COTS ICE delivery vehicle such as a well-maintained Ford Transit is expected to last about 12 years. The expected battery lifetime before a battery needs to be replaced is about ten years for the BEV NGDV and eight years for a COTS BEV.

4-1.1.3 Maintenance

The Postal Service conducts ongoing regular and as-needed maintenance of the delivery fleet to ensure the fleet is available for operational needs. The age and maintenance costs of individual vehicles are tracked to support the decision-making process for a continuous vehicle replacement program. Vehicle replacement begins when the vehicle approaches end-of-life.

The LLV all-aluminum body has resisted corrosion exceptionally well over the years, although the main powertrain components have been replaced multiple times and now must be acquired through aftermarket manufacturing. This has significantly increased repair costs, while reducing vehicle performance and reliability. In fact, the Postal Service was required to contract with an alternative supplier to reverse engineer and manufacture the chassis frame to ensure that the LLV could still be kept in service. Existing delivery vehicles, including LLVs as well as FFVs and COTS vehicles, require more maintenance on body components and drivetrains, and thus have higher maintenance costs than newer delivery vehicles. In FY22 the average annual maintenance cost of an LLV exceeded $4,500 with 5 percent of the LLVs exceeding $10,000 in annual maintenance. These costs would have been even higher without the ongoing replacement of a portion of the LLV fleet with COTS vehicles.

The NGDV body, frame, and associated permanently attached structures are designed to maintain design function for 20 years. All vehicle components are repairable/replaceable, including parts availability for replacement over the service life of the vehicle.

COTS ICE vehicles require maintenance similar to existing ICE delivery vehicle routine maintenance requirements. They have, however, been shown to be less reliable in the long run for Postal Service delivery operations compared to the purpose-built vehicles. BEVs are generally more mechanically reliable than ICE vehicles and would require less scheduled maintenance since BEVs have fewer moving parts (no engine or conventional transmission) and fluids to change (USDOE, 2021).

4-1.1.4 Changing Mail Characteristics

In FY 2022, the Postal Service processed 127.3 billion pieces of mail (including 67.1 billion pieces of marketing mail), 7.2 billion packages, and delivered them to 164.9 million delivery points, six (and sometimes seven) days a week (USPS, 2022a). When the LLVs were first purchased in 1987, the mail consisted primarily of letters and flats. Over the last decade a fundamental shift has occurred, resulting in a large decrease in letter and flats volume and large increase in parcel volume as well as an increase in the total number of delivery points. By FY 2030, total mail volume is projected at approximately 75 billion pieces, a 37 percent decrease from FY 2020, and total parcel volume is projected at approximately 6.6 billion pieces, a 7 percent increase from FY 2019 and approximately double the parcel volume of FY 2011 (USPS, 2021b). The LLVs do not support future delivery needs given these projected changes in market demand, parcel mix, and an increasing number of delivery points. Postal Service delivery vehicles now need an increased cargo capacity and better access to the parcels in the cargo area.

4-1.2 Existing Postal Service Facilities

The Postal Service's last-mile delivery fleet operates nationwide from more than 31,000 Post Office locations, Stations, and Branches. Delivery vehicles are parked overnight at various Postal Service facilities that typically have designated parking lots, garages, and spaces for delivery fleet vehicles; however, some facilities must utilize street parking or shared parking with other buildings.

The Postal Service maintains our fleet of vehicles at Postal Service-owned or leased VMFs strategically located throughout the nation and uses local commercial vehicle repair and maintenance shops when needed. These facilities would continue to maintain the replacement vehicles, with less dependence on commercial repair shops due to less required maintenance.

4-1.3 Existing Workforce

The Postal Service currently has over 210,000 active delivery fleet vehicles operated by approximately 248,000 career mail carriers, in addition to part-time carriers, distributed nationwide.

The delivery fleet is maintained by nearly 5,000 automotive technicians, mechanics, body repair personnel, and stockkeepers at more than 300 VMFs. Deployment and maintenance of new NGDV or COTS vehicles would result in minimal to no changes to the total Postal Service vehicle maintenance workforce. The workforce at the Postal Service's existing VMFs, as well as commercial garages for unscheduled repairs throughout the country, is adequate for conducting maintenance on all new delivery vehicles.

4-2 Resources Not Studied in Detail

The Proposed Action involves the acquisition and deployment of NGDV and COTS delivery vehicles primarily to replace end-of-life delivery vehicles, but also to replace delivery POVs. As discussed in

Section 1-4, site-specific facility alterations are not included in the detailed evaluation of the action alternatives that specifically address the purchase and deployment of new Postal Service vehicles.

Therefore, the following resources would not be affected by the nationwide action, and are not evaluated in detail herein, similar to the approach in the NGDV FEIS (USPS, 2021a): water, geology, soils, prime farmland, vegetation, wildlife, threatened and endangered species, wetlands and floodplains, cultural resources, land use, wild and scenic rivers, and the coastal zone. Facility impacts related to construction for needed alterations would comply with federal and state environmental requirements and regulations, and the Postal Service would complete appropriate NEPA reviews at the local level in the future, as needed.

4-3 Socioeconomics

4-3.1 Background and Regulatory Setting

Socioeconomics encompasses the basic economic and social attributes associated with the human environment, particularly economic status, employment, and demographics. NEPA directs federal agencies to identify and address as appropriate the socioeconomic effects of proposed actions and alternatives, prior to making a decision.

Environmental Justice is analyzed in detail in Section 4-11 and Appendix D.

4-3.2 Affected Environment

The following sections describe the socioeconomic conditions within the nation with respect to Community Economics and Employment.

4-3.2.1 Community Economics

The Postal Service plays an essential role in commerce by providing basic, fundamental, and affordable mail services to the U.S. population. American opinions of the Postal Service are very positive according to a Pew Research Center Survey released in 2020; approximately 91 percent of respondents had a favorable view of the Postal Service, higher than any other federal agency (Pew Research Center, 2020).

In 2022, the Postal Service had more than 31,000 Post Office locations, Stations, and Branches in the U.S., which made us the nation's largest retail network – larger than Walmart (approximately 4,700 U.S. locations) and Starbucks (more than 15,000 U.S. locations) (USPS, 2022b; Walmart, 2023; Statista, 2022). The Postal Service operates an extensive transportation, delivery, and distribution network to accomplish delivery of our services. In FY 2022, the Postal Service had approximately 635,000 employees (Table 4-3.1), and delivered more than 127 billion pieces of mail to more than 164 million delivery points. The number of delivery points increased to 164.9 million in FY 2022, an increase of 1.1 percent as compared to FY 2021. The number of total routes increased 0.18 percent as compared to the prior year (USPS, 2022b).

The Postal Service positively and directly affects communities by providing employment at local facilities throughout the nation and through expenditures to local service providers for utilities and supplies associated with the operations and maintenance of our vehicles and facilities. Indirect benefits to other sectors of the local economy occur as a result of direct expenditures by employees and to suppliers, such as increased purchases at retail gas stations and commercial garages.

Table 4-3.1
2022 Key Postal Service Statistics

Fiscal Year Statistics (first 3 columns); % Change from Prior Year (last 2 columns)	**FY 2022**	**FY 2021**	**FY 2020**	**FY 2022**	**FY 2021**
Operating Revenue (in millions)	$78,620	$77,041	$73,133	2.05%	5.34%
Total Mail and Package Volume (in millions of units)	127,258	128,842	129,171	-1.23%	-0.25%
Total Postal Service-managed Offices, Stations and Branches	31,132	31,247	31,330	-0.37%	-0.26%
Total Employees (both Career and Non-Career)	635,369	653,167	644,033	-2.72%	1.42%
Total Delivery Points (in millions)	164.9	163.1	161.4	1.10%	1.05%
Total Number of Delivery Routes	233,585	233,171	231,579	0.18%	0.69%
Total Number of Delivery and Collection Vehicles (0.5 - 2.5 tons)	216,456	212,327	207,945	1.94%	2.11%
Total Postal Vehicles	236,532	232,368	231,541	1.79%	0.36%

Source: (USPS, 2022b)

The Postal Service's delivery fleet consumed about 189 million gallons of gasoline in FY 2022 for delivery operations, with the majority purchased at local retail outlets and the remainder purchased from bulk fuel suppliers.

4-3.2.2 Employment

As a major employer, the Postal Service expends approximately $2.2 billion in salaries and benefits every two weeks, providing employment in local communities across the nation (USPS, 2023). U.S. total employment was approximately 201.1 million jobs in 2021; government and government enterprises represented approximately 12.1 percent of the workforce in 2021, less than in 2010 (14.3 percent) or 2000 (13.9 percent) (BEA, 2022).

The Postal Service had 635,369 employees in FY 2022 of which 516,760 were career employees and 118,609 were non-career employees (Table 4-3.1). Approximately 0.12 percent of the total U.S. workforce, or 247,590 individuals, were career mail carriers (USPS, 2022b; BEA, 2022).

The Postal Service is a leading employer of women and minorities according to Pew Research. In May 2020, The Pew Research Center recognized USPS as "more racially and ethnically diverse than the U.S. labor force as a whole" (Desilver & Schaeffer, 2020). The overall U.S. workforce is approximately 77 percent white, while approximately 47 percent of the Postal Service workforce is white. Black Americans make up 13 percent of the national workforce, but comprise approximately 29 percent of the Postal Service workforce (BLS, 2023; USPS, 2022c).

4-3.3 Environmental Consequences

4-3.3.1 Alternatives 1 and 2

Community Economics

Under Alternatives 1 and 2, the COTS ICE vehicles and/or ICE NGDV purchased and deployed would be more fuel efficient (see Section 4-9.3.1) than the existing LLVs, resulting in lower overall Postal Service fuel (gasoline) purchases. Additionally, increasing the BEV percentage from a 10 percent minimum (under the No-Action Alternative) to 62 percent would lower the Postal Service's total future fuel purchases for our delivery fleet. Local retail outlets and bulk fuel suppliers would experience a decrease in revenue under both Alternatives 1 and 2. Local utility providers, however, would experience an increase in revenue due to the Postal Service's increased purchase of electricity to power BEVs at our facilities.

The economic impact due to a reduction in purchase of delivery vehicle replacement parts would be partially offset by the increased demand for scrapping of vehicles and waste management and disposal services for LLVs (see Section 4-10.3.1). The need for commercial garage maintenance due to unscheduled repairs of vehicles is anticipated to decrease relative to existing conditions, as high-maintenance cost vehicles would be removed from the fleet, and maintenance time and money could be focused on preventive maintenance of newer vehicles.

Additionally, under Alternatives 1 and 2, the Postal Service would purchase 106,480 new vehicles, which would economically benefit automotive and charging station suppliers.

The adverse effects to commercial fuel retailers and bulk fuel suppliers from lower overall fuel sales; economic benefits from scrapping and waste management/disposal; and adverse economic impacts to commercial garages due to less need for unscheduled repairs would be insignificant compared to the nationwide economy. Economic benefits of increased electric utility purchases and new vehicle purchases would likely be nominally substantial, although still minor compared to the nationwide economy.

Employment

Vehicle replacements would not change the number or location of delivery personnel or vehicle maintenance employees, the number of vehicles on a national basis, or the number of VMFs. Due to less maintenance anticipated for the new vehicles, the Postal Service would, however, be less reliant on third-party commercial shops for repair and off-cycle maintenance of our delivery vehicles; the number of Postal Service vehicles repaired by these shops would be low compared to the total number of vehicle repairs performed on an annual basis. Thus, neither Postal Service nor third-party vehicle maintenance employment would be significantly affected.

4-3.3.2 No-Action Alternative

Community Economics

Under the No-Action Alternative, the Postal Service would replace 50,000 to 165,000 LLVs/FFVs with NGDV, of which at least 10 percent would be BEVs, as determined in the NGDV ROD. The ICE NGDV is more fuel efficient than the LLV, so the No-Action Alternative would result in fuel savings (and thus reduced commercial fuel purchases) compared to existing conditions (see Section 4-9). However, these fuel savings would likely be substantially less than under Alternatives 1 and 2 due to the lower minimum number of BEVs (10 percent compared to 62 percent).

Potential economic impacts due to reduced purchasing of LLV replacement parts, increased purchasing of LLV scrapping and waste management/disposal services, and reduced demand for third-party commercial garages to perform maintenance would be generally the same as Alternatives 1 and 2 but slightly greater, because the No-Action Alternative would replace a larger number of LLVs than Alternatives 1 and 2 (since no new vehicles would replace delivery POVs). As the No-Action Alternative would entail purchasing only NGDV, associated economic benefits would not accrue to electric charging suppliers as under Alternatives 1 and 2.

Employment

Under the No-Action Alternative, new NGDV would replace existing LLVs on a one-for-one basis; the total number of Postal Service delivery vehicles would remain the same. There would be no changes to the total Postal Service carrier or vehicle maintenance workforce. The Postal Service could reduce its reliance on third-party commercial garages for unscheduled repairs throughout the country, although this would not impact their employment.

4-4 Transportation

4-4.1 Background and Regulatory Setting

State Departments of Transportation (DOTs) are generally responsible for their state highway systems and the federal highways and interstates within their boundaries. Arterials, connectors, rural roads, and local roads are typically the responsibility of county or city governments. Local governments determine whether a transportation impact analysis is required for proposed actions; the threshold used to determine whether a transportation impact analysis is needed, and the definition of the threshold, can vary by jurisdiction. The Postal Service is not subject to local requirements, but often follows those transportation regulations and thresholds, such as the Institute of Transportation Engineers publication *Transportation Impact Analyses for Site Development* (ITE, 2010). The Institute suggests that in lieu of a locally preferred or required determinant, an appropriate threshold is the addition of 100 or more new inbound or outbound vehicle trips during the surrounding area's or adjacent roadway's peak hour of traffic.

4-4.2 Transportation – Affected Environment

Postal Service delivery routes are located in urban, suburban, and rural areas, on nearly every road in the nation. Urban areas are generally characterized by a complex and extensive system of roads, including major freeways, arterials, and surface streets. Urban roads typically support high levels of traffic, which often result in roadway segment and intersection congestion. Suburban environments can be characterized by fewer roads and a predominance of two-lane and four-lane roads. Generally, rural roads have lower traffic volumes with minimal congestion.

4-4.2.1 Overview of the Postal Service Transportation Network

The Postal Service transportation network is responsible for moving large volumes of mail and packages from a mailer or domestic point of entry to a receiver or domestic point of export. The vehicle fleet is divided into two major categories: Logistics, which is responsible for moving mail and packages to and from processing and distribution facilities and delivery units, and Delivery, or "Last Mile," which is responsible for moving mail and packages between delivery units and delivery points in the community. This SEIS is focused on delivery fleet vehicles that drive primarily on city streets, and suburban and county roads, and less frequently on major highways.

4-4.2.2 Traffic

About 275.9 million motor vehicles were owned and operated in the U.S. in 2020, which were driven a total of more than 2.9 trillion miles (USDOT, 2022). The Postal Service delivery fleet of more than 210,000 purpose-built and COTS vehicles traveled approximately 1.3 billion miles in FY 2022, serving 164.9 million delivery points six (and sometimes seven) days per week. These delivery vehicles travel roads and highways in city, suburban, and rural environments with varying traffic densities and levels of congestion. Delivery vehicle routes consist of two primary segments: a transit segment, during which the vehicle travels from the vehicle deployment site to the first delivery point, and from the last delivery point back to the vehicle deployment site; and a delivery segment, during which the vehicle stops at each delivery point. Delivery carriers typically load vehicles with mail and leave on delivery routes in the morning primarily before 10:00 a.m. and complete their routes and typically return to the facility by 5:00 p.m.

4-4.2.3 Safety, Accessibility, and Parking

Site circulation, parking, and accessibility for most Postal Service facilities comply with the Postal Service Handbook RE-4, *Standards for Facility Accessibility* (2005). Parking areas for Postal Service vehicles are typically gated or otherwise access-controlled for authorized users. Any parking or vehicle safety-related issues identified are handled per Postal Service safety requirements. Designated public parking is available at most retail locations.

The Postal Service emphasizes safety for all aspects of our network. Postal Service policy document Handbook EL-804, *Safe Driver Program* (2013), provides driver safety guidance and policies and also addresses or references safety standards related to Postal Service vehicles. In addition, the Postal Service follows local standards for additional traffic safety at the facility level. Vehicle incidents are tracked and used to address safety issues and improve Postal Service safety performance.

The existing, end-of-life delivery fleet vehicles do not have certain modern safety features such as airbags, anti-lock brakes, air conditioning, back-up cameras, intermittent windshield wipers, blind-spot warning systems, daytime running lights, or seatbelt reminders found on more modern vehicles.

4-4.2.4 Public Transportation

American Community Survey estimates indicate that driving alone in a personal vehicle (74.9 percent) and carpooling (8.9 percent) remained the two most common means of commuting to work, with just 4.6 percent of workers (about 7 million people) using public transportation in 2020 (USCB, 2020a). According to the American Public Transportation Association, public transportation provided 5.97 billion unlinked passenger trips (defined as any time a person boards a transit vehicle, including transfers) in 2020 to the general public, representing 32,874 miles traveled by passengers (APTA, 2023).

The Postal Service works to minimize petroleum use by encouraging carpooling and public transportation, and expanding use of web-based technologies for meetings and training. Where available, some Postal Service employees use public transportation to travel to and from work each day or periodically. Public transportation is typically available for Postal Service employees reporting to facilities located in metropolitan areas. Where available, the Postal Service encourages employees to participate in ride-share and trip-reduction programs. In addition, the Postal Service maintains a Commuter Benefits Program that promote various commuting options, including public transit and vanpooling (USPS, 2022d).

4-4.3 Environmental Consequences

4-4.3.1 Alternatives 1 and 2

Traffic

Neither Alternative 1 nor 2 would result in additional delivery vehicles on a nationwide basis. Both Alternatives are not expected to affect city and rural route driving patterns or departure/return times for delivery vehicles at the vehicle deployment sites. As noted in Section 4-4.2.2, delivery vehicles are typically on the road for their daily routes during off-peak times between morning and evening rush hours. Overall, in the context of the national transportation network, there would be no effects on traffic anticipated under Alternatives 1 and 2.

As noted in Section 1-4, if deemed appropriate, the Postal Service will consider in a separate NEPA assessment any potential environmental effects, including potential effects to local traffic, from delivery facility network optimization.

Safety, Accessibility, and Parking

The modern safety features such as airbags, anti-lock brakes, air conditioning, back-up cameras, back-up alarms, intermittent windshield wipers, blind-spot warning systems, daytime running lights, and seatbelt reminders, available in both NGDV and COTS vehicles, would improve operational safety under Alternatives 1 and 2 as compared to use of the existing delivery vehicles, but would be the same as under the No-Action Alternative. Additionally, Alternatives 1 and 2 include a significant number of RHD vehicles to serve curb-line routes. Alternative 1 may include approximately 32,000 LHD vehicles, as opposed to the entirely RHD vehicles proposed under Alternative 2 and the No-Action Alternative. The Postal Service would deploy LHD vehicles primarily on routes that do not have a substantial number of curb-line delivery points (e.g., park and loop routes or cluster mailboxes), which would limit vehicle safety risk for the carrier and the public.

Alternatives 1 and 2 would have a negligible effect on access to Postal Service facilities and parking, with parking areas for Postal Service delivery vehicles typically dedicated and off-limits to the public. Some parking lots would need to be expanded or reconfigured to accommodate the proposed BEVs and associated charging infrastructure, as well as the new delivery vehicles replacing existing delivery POVs that are not currently parked overnight at Postal Service facilities. These modifications would be analyzed individually in site-specific NEPA reviews. Retail locations would retain sufficient public parking areas for customers.

Public Transportation

Alternatives 1 and 2 would have no effect on Postal Service employee use of public transportation, or participation in ride-share and trip-reduction programs or the Postal Service's Commuter Benefits Program.

4-4.3.2 No-Action Alternative

Traffic

All new vehicles would replace existing delivery vehicles on a one-for-one basis. With no increase in the number of delivery vehicles or Postal Service employee commuter trips, the No-Action Alternative would have no impact on traffic.

Safety, Accessibility, and Parking

The NGDV would have modern safety features such as airbags, anti-lock brakes, air conditioning, back-up cameras, back-up alarms, intermittent windshield wipers, blind-spot warning systems, daytime running lights, and seatbelt reminders. This would improve operational safety as compared to use of the existing delivery vehicles. Additionally, all vehicles would be RHD, enabling enhanced operational flexibility for routes with significant curb-line delivery points.

The No-Action Alternative would have no effect on access to Postal Service facilities and parking. Parking areas for Postal Service delivery vehicles are typically dedicated, and there would be one-for-one replacement of existing delivery vehicles. BEV charging stations would be installed within dedicated Postal Service vehicle parking areas, in accordance with future site-specific NEPA reviews, and would not affect existing public parking available at retail locations. As the No-Action Alternative includes a minimum BEV commitment of 10 percent, it would likely require fewer parking lot modifications than Alternatives 1 and 2, which have BEV commitments of 62 percent.

Public Transportation

The No-Action Alternative would not change use of public transportation, nor change Postal Service employee participation in ride-share and trip-reduction programs or the Postal Service's Commuter Benefits Program.

4-5 Noise

4-5.1 Background and Regulatory Setting

Noise can be an unwanted sound that interferes with or disrupts normal human activities, and the principal human response to noise is annoyance. Inadequately controlled noise can present a danger to health and welfare, particularly in urban areas. Major sources of noise are traffic, machinery and equipment, and commercial noise sources (EPA, 2022a). The Noise Control Act of 1972 (42 USC §4901 et seq.,1972) establishes a national policy to promote an environment free from noise that would jeopardize health and welfare. The primary responsibility for noise control lies with state and local governments except for major transportation sources that traverse local boundaries. Noise pollution also is addressed in the Clean Air Act (CAA; Subchapter IV and Title IV – Noise Pollution). Additional background information is presented in Appendix E.

Many noise sources, such as vehicle traffic and construction, generate noise and contribute to the impact on the total noise environment. This noise is generally transitory, and a single vehicle represents a negligible contribution to the overall noise environment. Response to noise varies, depending on the type and characteristics of the noise, distance between the noise source and receptor, receptor sensitivity, and time of day. A noise-sensitive receptor is a location where people involved in indoor or outdoor activities may be subject to stress or considerable interference from noise. Noise-sensitive locations or facilities include residential dwellings, hospitals, nursing homes, educational facilities, and libraries.

Vehicle noise is comprised of three general sources: aerodynamic noise (air passing over vehicles), propulsion noise (engine, exhaust, and drivetrain), and tire-pavement noise (tires rolling on roadway surface). At speeds below typical speed limits, primary noise from BEVs is caused by tire-pavement noise, while primary noise from ICE vehicles is caused by propulsion noise at slow speeds and by tire-pavement noise at higher speeds. A BEV is naturally quieter than an ICE vehicle at speeds less than 19 miles per hour (mph) because propulsion noise generated by the ICE vehicle dominates any aerodynamic and tire-pavement noise. However, electric and hybrid vehicles with GVWRs up to 10,000

lbs are generally required by regulation to emit a sound when operating at speeds below approximately 20 mph for safety purposes. The vehicle must make a continuous noise level of at least 56 decibel (A-weighted scale) (dBA) (within 6.6 feet) and a maximum noise level of 75 dBA, rendering the noise level between ICE vehicles and BEVs very similar.

Table 4-5.1 provides a summary of reference noise levels for a typical light duty vehicle similar to both existing and proposed delivery BEV and ICE vehicles in Alternatives 1 and 2 and the No-Action Alterative. A light duty vehicle is considered to have two axles and four tires – primarily a vehicle designed to carry nine or fewer people (passenger cars, vans) or cargo (vans, light trucks), and generally with a GVWR less than 9,900 pounds (FHWA, 2019).

Table 4-5.1
Light Duty ICE Vehicle and BEV Noise Reference Levels Measured at 25 Feet

Speed	ICE Vehicle Sound Level (dBA)	BEV Sound Level (dBA)	BEV Sound Level with Increased Sound (dBA)	Difference (BEV with Increased Sound – ICE Vehicle Sound Level) (dBA)
Stationary	54.2	Undetectable	49.9	-4.3
0 < mph < 12.4	59.3 – 66.1	49.4 – 59.3	56.7 – 64	-2.6 to -2.1
12.4 < mph < 18.6	66.1 – 69.7	59.3 – 66.1	64 – 69.2	-2.1 to -0.5
> 18.6 mph	75	75	75	0

Source: (NHSTA, 2016)

4-5.2 Affected Environment

Typical outdoor noise levels in urban and suburban environments (see Appendix E) generally range from 50 to 70 dBA, depending on the time of day and location (e.g., residential or commercial land use).

The Postal Service fleet vehicles can be characterized into three classes for which the Federal Highway Administration (FHWA) established their respective reference noise levels: light duty vehicles (two axles with four wheels) for mail delivery, medium trucks (two axles with six wheels) for mail drop-off at delivery centers, and heavy trucks (three axles and greater) for mail hauling. The Postal Service's LLVs and delivery POVs are considered light duty vehicles, as defined by the FHWA. By nature of a delivery route (one vehicle traveling and/or starting/stopping on a road or at a delivery location), and given the minimal proportion of LLVs and/or delivery POVs in the overall background traffic in a community, the Postal Service's delivery vehicles contribute minimally to the existing ambient noise along all delivery routes. Further, LLVs do not have back-up alarms, and the Postal Service assumes most delivery POVs similarly do not have back-up alarms.

Noise levels in the environments around Postal Service facilities, located primarily in more urban or suburban settings, vary continuously over a period depending on the contributing sound sources within the noise environment. The Postal Service follows an internal anti-idling policy to minimize vehicle noise at Postal Service facilities. Existing LLV maintenance operations are primarily conducted inside VMFs, but can contribute to ambient noise around VMFs. Traffic from delivery vehicles contributes to ambient noise around Postal Service facilities during vehicle departures, primarily before 10:00 a.m. after morning rush hour, and vehicle returns in the mid-afternoon before evening rush hour. Delivery events occur at a specific destination over a very short duration. Therefore, Postal Service delivery vehicle-related operations have minimal adverse effects on the overall existing ambient noise conditions around Postal Service facilities, with noise levels dominated by other traffic and daily activities.

4-5.3 Environmental Consequences

4-5.3.1 Alternatives 1 and 2

Alternatives 1 and 2 would not change the route driving pattern (e.g., typical speeds) for each delivery vehicle, compared to existing conditions, which are currently served by outdated LLVs or by delivery POVs.

Based on the data provided in Appendix E and Table 4-5.1 for light duty vehicles, which includes all vehicles proposed for acquisition in this SEIS, the BEV NGDV and COTS BEVs would both be slightly quieter (by less than 3 dBA) than the ICE NGDV and COTS ICE vehicles at low speed (less than 19 mph), after accounting for the regulatorily required minimum noise level, which both the BEV NGDV and COTS BEV maintain. The difference of less than 3 dBA would be barely perceptible. The BEVs would have an artificial sound rather than the traditional ICE sound. As delivery vehicles reach an average top speed of approximately 20 mph when making curb-line deliveries (i.e., driving from mailbox to mailbox), this slight reduction in noise would apply to a substantial portion of the time the new vehicles are operating. At speeds above approximately 19 mph (such as when vehicles are transiting to and from their curb-line routes, or when serving non-curb-line routes), the emitted noise from the various proposed vehicles would be similar because noise from the tire-pavement interaction would be greater than noise from the drivetrains.

Some of the COTS vehicles proposed for purchase under Alternative 1 have an externally audible back-up alarm. While exterior back-up alarms are designed to be noticeable, the replacement COTS would only be in reverse for very short periods at a time, so the alarms would have negligible adverse effects on the ambient noise environment while on their daily routes. While these back-up alarms should have positive effects with respect to the safety of residents along routes and in the immediate vicinity of deployment sites (see Section 4-11.3.1), under Alternative 1, COTS vehicles with such alarms also will have the potential to cause greater adverse effects at communities immediately adjacent to major deployment sites depending on such factors as site layout and time needed to maneuver vehicles with such alarms. Adverse effects would remain negligible at deployment sites hosting a relatively small number of such delivery vehicles, as fewer back-up alarms would sound in the mornings or afternoons as vehicles leave and return to their parking spaces. However, under Alternative 1, back-up alarms could pose a minor or moderate adverse effect at some major deployment sites (i.e., Candidate Sites) if they are immediately adjacent to residential properties or other noise-sensitive land uses. At these sites, even very brief back-up alarms in a commercial/industrial context primarily during the a.m. and p.m. transit time intervals could have adverse effects to adjacent communities when sounded by multiple vehicles six (and sometimes seven) days per week. NGDV do not have back-up alarms that are externally audible, so associated adverse effects would not occur under Alternative 2.

VMFs would maintain all replacement delivery vehicles according to Postal Service requirements and maintenance schedules. Demand for vehicle maintenance at VMFs would not increase; the new COTS vehicles with back-up alarms would introduce this noise to the VMF environment, but that new noise is anticipated to be of short duration and in the context of mechanical operations (i.e., vehicle maintenance). The result is anticipated to be a comparable noise environment around each VMF.

A typical battery charging station would produce sound that would be less than 60 decibels (dB) measured at 3.3 feet (Kempower, 2023),[4] a level that would barely be noticeable to an off-site sensitive

[4] This brand is referenced as a typical BEV charging station; the actual brand(s) of charging stations the Postal Service would purchase may differ.

receptor. While 60 dB is likely conservatively high for BEV charging noise, the noise from a parking lot with 100 such chargers operating simultaneously would be expected to attenuate to 50 dB within 40 feet of the lot. Therefore, noise from charging operations would generally be considered ambient and would not adversely affect the noise environment around Postal Service facilities.

4-5.3.2 No-Action Alternative

Under the No-Action Alternative, 106,480 LLVs would be replaced with a mix of ICE and BEV NGDV. The number of delivery vehicles would not increase as compared to existing conditions. The No-Action Alternative would have negligible beneficial effects on community noise, particularly at low travel speeds, due to the greater number of BEVs relative to existing conditions; these benefits would be less than under Alternatives 1 and 2, which include substantially more BEVs. As with Alternative 2, the No-Action Alternative would not have any adverse effects on noise from external vehicle back-up alarms, as the NGDV only have internal vehicle back-up alarms. Overall, the No-Action Alternative would have negligible effects on the noise environment.

4-6 Air Quality

4-6.1 Background and Regulatory Setting

4-6.1.1 Clean Air Act and National Ambient Air Quality Standards

In accordance with the Clean Air Act's directive to protect and improve air quality across the U.S., EPA has established National Ambient Air Quality Standards (NAAQS) (see Appendix F) for six "criteria pollutants." These criteria pollutants are carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), sulfur dioxide (SO_2), lead (Pb), and particulate matter (measured as less than 10 micrometers in aerodynamic diameter [PM_{10}] and less than 2.5 micrometers in aerodynamic diameter [$PM_{2.5}$]).

Attainment areas are geographic areas that currently meet and have historically complied with the NAAQS; nonattainment areas have exceeded a NAAQS for one or more applicable pollutant; and maintenance areas have transitioned from nonattainment to attainment and are required to adhere to maintenance plans to ensure continued attainment. The CAA requires each state to develop a State Implementation Plan (SIP), and states that do not meet a NAAQS must include a specific plan to attain the NAAQS for each area of the state that is designated as nonattainment.

4-6.1.2 General Conformity

The purpose of the General Conformity rule is to ensure that federal activities do not cause or contribute to a violation of NAAQS established for criteria pollutants or otherwise delay attainment of NAAQS. Therefore, federal entities are required to demonstrate that the total direct or indirect emissions from a federal action will conform to the SIP or not otherwise interfere with a state's ability to attain and maintain the NAAQS. The General Conformity rule applies to all federal actions not regulated under the Transportation Conformity rule, conducted within designated nonattainment or maintenance areas, with some exemptions including actions with associated emissions below specified *de minimis* levels.

The EPA established *de minimis* emission levels for each criteria pollutant to limit the need to conduct conformity determinations for federal projects with minimal emission increases. *De minimis* levels vary by pollutant and also depend on the severity of the nonattainment status for the areas of concern as presented in Table F-2 in Appendix F. When the total direct and indirect emissions from a proposed project are below the *de minimis* levels, the project is considered to not exacerbate local concentrations and a detailed General Conformity analysis is not required.

4-6.1.3 Mobile Source Air Toxics

The CAA lists 187 air toxics, known as hazardous air pollutants (HAPs). Toxic air pollutants include several substances that are known or suspected to cause cancer or other health effects in humans when exposed to certain concentration levels of the pollutants. However, unlike the criteria pollutants, ambient air quality standards have not been established for HAPs. Of the 187 HAPs, 93 have been identified as mobile source air toxics (MSAT) from vehicles and non-road equipment and nine MSATs are considered priority MSATs (acetaldehyde, acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases [diesel PM], ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter).

The Postal Service adheres to Occupational Safety and Health Administration (OSHA) requirements and standards for the protection of personnel who may be exposed to air pollution from ICE vehicles. Future work would continue to be performed in accordance with OSHA requirements and standards.

4-6.1.4 Greenhouse Gases

Global climate change is a transformation in the average weather of the Earth, measured by changes in temperature, wind patterns, and precipitation. Scientists have identified human activity that generates greenhouse gas (GHG) emissions as a significant contributor to global climate change (NOAA, 2020). GHGs effectively trap heat in the atmosphere and influence Earth's temperature, causing the greenhouse effects. The key GHGs emitted by motor vehicular activities are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). GHGs differ in their ability to trap heat. To account for this, a factor called the Global Warming Potential (GWP) is defined for each GHG relative to the heat-trapping ability of the same mass of CO_2, and emissions are normally expressed in terms of CO_2 equivalents (CO_2e). The GWP of CO_2 is 1, the GWP of CH_4 is 25, and the GWP of N_2O is 298 for a 100-year timescale.

This SEIS was prepared using CEQ's interim *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*, which was issued on January 9, 2023, for immediate implementation while CEQ seeks and considers public comments (88 FR 1196). This interim guidance builds upon and updates CEQ's *2016 Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews* ("2016 GHG Guidance") (CEQ, 2016). The 2023 interim guidance explains that the analysis should consider (1) the potential effects of a proposed action on climate change, including by assessing both GHG emissions and reductions from the proposed action, and (2) the effects of climate change on a proposed action and its environmental impacts. The guidance identifies and explains the following steps to be taken when analyzing a proposed action's climate change effects under NEPA: (1) Quantify the reasonably foreseeable direct and indirect GHG emissions of a proposed action, the no-action alternative, and any reasonable alternatives, (2) Disclose and provide context for the GHG emissions and climate impacts associated with a proposed action and alternatives, including monetizing climate damages using estimates of the Social Cost of GHG (SC-GHG), and (3) Analyze reasonable alternatives, including those that would reduce GHG emissions relative to baseline conditions, and identify available mitigation measures to avoid, minimize, or compensate for climate effects.

4-6.1.5 Social Cost of Greenhouse Gas

The SC-GHG is an estimate of the economic damages associated with the emission of each additional ton of GHG into the atmosphere. It is used as a tool to assess the economic impacts of climate change and to inform policy decisions related to mitigation efforts. The SC-GHG is the monetary value of the net harm to society associated with marginal or incremental emissions into the atmosphere each year,

or the benefit of avoiding an emission increase. In principle, the SC-GHG includes the value of all climate change impacts, including (but not limited to) changes in net agricultural productivity, human health effects, property damage from increased flood risk and natural disasters, disruption of energy systems, risk of conflict, environmental migration, and the value of ecosystem services. The assessed cost would provide a benchmark for the economic evaluation of a proposed action. The SC-GHG is used to estimate in dollars all economic damage as to how much it is worth today to avoid the damage that is projected for the future.

In February 2021, the U.S. Interagency Working Group on Social Cost of Greenhouse Gases (IWG) published *Technical Support Document (TSD): Social Cost of Carbon, Methane, and Nitrous Oxide: Interim Estimates under Executive Order 13990* (IWG, 2021). These SC-GHG estimates are interim values developed under EO 13990 (86 FR 7037) for use as general guidance in benefit-cost analyses until updated estimates of the impacts of climate change can be developed based on the best available science and economics.

In September 2022, EPA issued Supplementary Material that included new estimates of the SC-GHG reflecting recent advances in the scientific literature on climate change and its economic impacts, and incorporated recommendations made by the National Academies (EPA, 2022b). This report contains methodologies, data sources, and calculations used to estimate the SC-GHG in the context of proposed rulemakings or regulatory processes. This SEIS evaluates the SC-GHG using both references.

4-6.2 Affected Environment

4-6.2.1 Air Emissions

Mobile Sources

Existing Postal Service mobile source air emissions include operation of over 210,000 active delivery vehicles, including the 106,480 delivery vehicles that would be replaced under this Proposed Action, as well as other vehicles used in its surface transportation operations.

Stationary Sources

Stationary air pollution sources at Postal Service facilities can include boilers, emergency power generators, painting operations, parts washers, and fuel storage tanks. However, as explained in Section 1-4, expansions of Postal Service facilities are not currently anticipated. For any construction or modification of Postal Service facilities necessary because of the Proposed Action, the Postal Service would conduct appropriate environmental review at the local level. Therefore, stationary source air emissions are not assessed in this SEIS.

4-6.2.2 General Conformity

Air quality conditions vary widely across the nationwide area in which the Postal Service operates the vehicles planned for replacement, and will include nonattainment, attainment, and maintenance areas. The Postal Service plans to replace our aged delivery vehicles, distributed nationwide, with new ones on a one-for-one basis.

4-6.2.3 Greenhouse Gases

GHG Emissions

The Postal Service generates GHG emissions from facility energy use, transportation fuel use, waste generation, employee commuting, contracted transportation services, and other sources.

Delivery vehicles emit a variety of gases during their operations, some of which are GHGs, including CO_2, CH_4, and N_2O. The nationwide total GHG emissions (direct and indirect from all sources, including non-fleet sources) generated by the Postal Service in FY 2021 was estimated to be 6,291,500 metric tons (MT) CO_2e (1.3 percent less than in FY 2019) (USPS, 2022d).

Climate Change

The U.S. climate is strongly connected to the changing global climate. Global annual average surface air temperature has increased by approximately 1.8 degrees Fahrenheit (°F) over the last 119 years (1901-2020). Worldwide, 2016 was the warmest year on record, 2020 was the second warmest, and 2012-2021 was the warmest decade on record since thermometer-based observation began. Global average surface temperature has risen at an average rate of 0.17°F per decade since 1901. However, since the late 1970s, the U.S. has warmed faster than the global rate (EPA, 2023a). Studies conducted around the world have documented rising surface, atmospheric, and oceanic temperatures, melting glaciers, diminishing snow cover, shrinking sea ice, changes in precipitation patterns, increased frequency and/or intensity of extreme weather events, rising sea levels and associated storm surge, and ocean acidification (USGCRP, 2017).

4-6.3 Environmental Consequences

4-6.3.1 Analysis Methodology

This SEIS is a supplement to the Postal Service's recent NGDV FEIS. The Air Quality analysis includes major updates, including the following:

- Direct Emissions: The Postal Service used the latest version of the MOtor Vehicle Emission Simulator (MOVES) model (MOVES3) to conduct a national-scale analysis[5] of direct emissions from both ICE vehicles and BEVs in this SEIS, as compared to the use of MOVES2014b in the NGDV FEIS. The Postal Service also analyzed USPS-specific drive cycles in this SEIS, as opposed to on-road average speed in the NGDV FEIS.
- Indirect Emissions: The Postal Service used the Greenhouse Gases, Emissions, and Energy use in Technologies (GREET) model (GREET2022) to estimate upstream indirect emissions associated with fuel consumption for both ICE vehicles and BEVs for all criteria pollutants and GHGs. In contrast, the NGDV FEIS used eGRID to model a limited number of upstream criteria pollutants and BEV GHG emissions. Additionally, this SEIS uses delivery vehicle-specific fuel efficiency data, whereas the NGDV FEIS used national default fuel efficiency data.

Air Emissions

As recommended by the EPA, the Postal Service analyzed this Proposed Action on a programmatic, nationwide level based on the Postal Service's specific fleet and drive cycles. Estimated nationwide air emissions, including direct and indirect emissions, from each of the Alternatives were calculated over the eight-year implementation period addressed in this SEIS (i.e., 2023 to 2030) based on the total number of vehicles, mileage per year, and fuel requirements. The analysis assumes one-for-one vehicle

[5] Cf. OIG Report, Environmental Emissions Assumption 1 regarding applying a single-county approach on a national scale (USPS OIG, 2023). This national-scale approach is also in concert with EPA's recommendation.

replacement and no increase in total route length.[6] This means that the total vehicle miles traveled (VMT) by the new delivery vehicles would be the same as the replaced delivery vehicles on a nationwide basis.

Direct Emissions

The Postal Service estimated direct emissions[7] using the EPA-recommended MOVES model, version 3.1,[8] which is a state-of-the-science emission modeling system that estimates mobile source emissions for criteria pollutants and GHGs. MOVES produces emission factors for on-road vehicles based upon miles of travel; as such, emission factors derived from MOVES must be multiplied by the VMT to determine total emissions. The Postal Service used MOVES to produce emission factors for ozone precursors (volatile organic compounds [VOC] and nitrogen oxides [NO_x]), CO, $PM_{2.5}$, PM_{10}, SO_2, and GHGs (CO_2, CH_4, N_2O, and CO_2e).

In addition, MOVES emission factors account for numerous scenario-specific parameters, which the Postal Service defined for this Proposed Action as follows:

- Vehicle Types: Passenger truck (LLV and delivery POV) and light commercial truck (all proposed new vehicles)
- Seasons: Averaged winter and summer emission factors
- Fuel Types: Gasoline and electric[9]
- Activity Types: Vehicle starting[10] and vehicle driving
- Road Types: Urban and rural access roads
- Operations/Driving Pattern: Average vehicle speeds developed for three different route types based on USPS-specific drive cycles
- Vehicle Make Years: 2023 – 2030 (new NGDV and COTS vehicles as light commercial truck), 1994 (LLV as passenger truck), 1960 – 2030 (delivery POV as passenger truck)
- Years of Analysis / Simulation Years: 2023 – 2030
- Location of Use: National average

Numerous MOVES model runs were conducted to derive emission factors (in grams per mile) from these specific inputs to account for the combination of factors applicable to different delivery vehicles and route types. The extracted emission factors were then multiplied by the average VMT for each

[6] The Postal Service's delivery network is constantly fluctuating as we adapt to growth in delivery points. While we do not anticipate any meaningful change in average route length as a result of this Proposed Action, a sensitivity analysis is provided in Section 4-6.3.2 to demonstrate the potential emissions effects that could result if average route length were to increase.
[7] Direct emissions include tailpipe, evaporative loss, fueling operation, vehicle start, brake wear, and tire wear emissions. Also, cf. OIG Report, Environmental Emissions Assumption 2 regarding refueling emissions (USPS OIG, 2023).
[8] MOVES version 3.1 is required for use as of January 9, 2023 (Federal Register 86 FR 1106), when MOVES2014b was phased out.
[9] The only direct emissions included for electric vehicles are particulate matter emissions from brake and tire wear.
[10] Cf. OIG Report, Environmental Emissions Assumption 2 regarding starting emissions (USPS OIG, 2023).

vehicle and route type scenario to determine total direct emissions in English short tons per year (tpy), consistent with regulatory air permitting and air emission inventory guidance. GHGs, however, are reported in MT per year, per industry standard.

Appendix F presents detailed information about how the MOVES model was run for this analysis.

Indirect Emissions

The Postal Service calculated our indirect upstream emissions (for the same set of pollutants as considered for direct emissions[11]) using the EPA-recommended GREET2022 model, developed by the Argonne National Laboratory. The GREET model estimates the upstream emissions associated with the production and distribution of vehicle fuels. For this analysis, the Postal Service analyzed "well-to-pump" (WTP) emissions for gasoline used by ICE vehicles, and electricity used by BEVs. Like the MOVES model, the GREET model estimates emission factors (kilograms per mile [kg/mi]). Emission factors account for project-specific factors, including years of analysis, time of innovation of the technology (vehicle make year), and appropriate vehicle parameters. With respect to upstream emissions from electric power, it is worth noting that the GREET model also accounts for transmission and distribution electricity losses,[12] based on grid gross loss factors from the Energy Information Administration (EIA), and anticipated future decarbonization of the electric grid[13] (which the Postal Service found to be consistent with the latest national net-zero emission goal of achieving a 50 to 52 percent reduction below 2005 levels by 2030 (USDOE, 2022)).

For each USPS delivery vehicle type (ICE NGDV, RHD ICE COTS, LHD ICE COTS, BEV NGDV, LHD BEV COTS, and LLV), the analysis used vehicle-specific fuel efficiency by incorporating the MPG and miles per kilowatt hour (mi/kWh, converted into MPGe ["miles per gallon equivalent"]) data into the model. The upstream emission rates for these vehicles were calculated per gallon of fuel used (or equivalent electricity).[14]

The Postal Service considers the fugitive emissions from fuel delivery to be negligible and they would not change the conclusion of this nationwide analysis. Fugitive emissions from pipeline components and tank breathing loss, not including potential pipeline or tank leaks, should already be accounted for as a part of air permits or air emissions inventory for the upstream sources. As such, it is likely that the magnitude of these fugitive emissions is generally negligible relative to point sources. The Postal Service also recognizes that risks of fugitive emissions from potential pipeline leaks or leaking underground storage tanks exist, but the risks are not quantifiable related to the Postal Service's Alternatives.

Appendix F presents detailed information about how the GREET model was run for this analysis.

Mobile Source Air Toxics (MSATs)

To address potential localized effects from MSATs, on February 3, 2006, the FHWA and the EPA issued a joint guidance for the assessment of MSATs for highway projects. The FHWA subsequently released multiple updated MSAT analysis guidance documents dated September 30, 2009, December 6, 2012,

[11] Cf. OIG Report, Environmental Emissions Assumption 5 regarding power sector emissions (USPS OIG, 2023).
[12] Cf. OIG Report, Environmental Emissions Assumption 6 regarding grid electrical losses (USPS OIG, 2023).
[13] Cf. OIG Report, Environmental Emissions Assumption 4 regarding future emissions reductions and electricity generation mix data (USPS OIG, 2023).
[14] For delivery POVs, GREET was used to estimate national default average emission factors for comparable vehicles, as vehicle-specific fuel efficiency data is unavailable.

October 18, 2016, and January 18, 2023 (FHWA, 2023). Although these available MSAT guidelines were developed to assess impacts from highway projects, they were referenced for this vehicle replacement action since it similarly involves vehicle operations on roadways.

FHWA's 2023 Interim Guidance establishes a three-tiered approach to determine the level of MSAT analysis required for a highway project. Under the first tier of this Interim Guidance, the following types of projects are exempt from emissions assessment:

- Projects exempt under the federal conformity regulations or 40 CFR §93.126; or
- Other projects with no meaningful adverse impacts on traffic volumes or vehicle mix.

Since this Proposed Action would involve replacing existing LLVs (last produced in 1994) and delivery POVs with new vehicle models that are much cleaner and would travel the same distance, it would have "no meaningful impacts on traffic volumes or vehicle mix" of local roadway networks and qualify for a categorical exclusion. Therefore, further MSAT assessment is not warranted in this SEIS.

General Conformity

To determine the applicability of the General Conformity rule, two criteria were considered:

- Whether the federal agency can practicably control the emissions and has continuing program responsibility to maintain control, and/or,

- Whether the emissions caused by the federal action are reasonably foreseeable.

While this is a nationwide analysis, it is assumed that the anticipated trend of substantial reduction of criteria pollutants on a national level from Alternatives 1 and 2 (and the No-Action Alternative) would also be observed in specific nonattainment and maintenance areas where the General Conformity rule is applicable. Since the VMT in any nonattainment or maintenance area would not increase, and direct emission factors from both proposed new ICE vehicles and BEVs will be lower than the emission factors from existing ICE vehicles (including LLVs and delivery POVs), replacing the aged ICE vehicles with new ICE vehicles and BEVs would result in a significant net reduction in direct emissions for all criteria pollutants. These estimated emissions levels are below any *de minimis* threshold as shown in Table F-2 (Appendix F) for all applicable criteria pollutants; therefore, the Proposed Action would be in compliance with the General Conformity rule requirements and would not be subject to the General Conformity rule determination.

The indirect upstream emissions associated with gasoline and/or electricity production are exempt from the General Conformity rule. These emissions are not under the Postal Service's practicable control, as we have no ability to influence the fuel sources for power plants, the way gasoline is produced and transported, or other related factors. Similarly, the upstream emissions are not reasonably foreseeable, as the Postal Service cannot isolate emissions from power generation to particular power plants or gasoline to particular supply chains, or predict the specific locations (and associated attainment statuses) where these emissions would occur.

Greenhouse Gases

GHG Emissions

The GHG emissions analysis is based on current federal regulations and CEQ's 2023 *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*.

GHGs were analyzed on a national level due to the programmatic nature of the action and the national implementation. State regulations were not considered. The analysis only used the most recent regulatory planning tools for estimating emissions. This SEIS does not identify a specific threshold of GHG emissions that would significantly affect the quality of the human environment. Instead, the estimated GHG emissions from each Alternative were compared to each other in absolute terms, and monetized in the form of SC-GHG, as discussed below.

The CEQ guidance states that the "rule of reason" should be employed to conduct analyses commensurate with the quantity of GHG emissions associated with the Proposed Action. CEQ advises that less-detailed analyses may be appropriate for projects with net GHG emission reductions or no net GHG emission increase. This SEIS quantifies the Alternatives' emissions and uses the best available SC-GHG estimates to monetize the net harm to society associated with the marginal increase in emissions in a given year, or the benefit of avoiding that increase.

The direct and indirect GHG emissions were calculated in the same manner as criteria pollutants using the MOVES and GREET models, as discussed above.

Climate Change

The Postal Service evaluated whether climate change would impact the Alternatives.

Social Cost of Greenhouse Gases

The SC-GHG was estimated for each year from 2023 through 2050,[15] as well as cumulatively over the same years by summing the SC-GHG of all years. The Postal Service performed these calculations using the present value of the monetary cost of emissions (in dollars per MT) provided in both the Technical Support Document from the IWG (IWG, 2021) and the Supplementary Material from the EPA (EPA, 2022b). The social cost estimation considered cost values based on discount rates[16] of 2.5 percent, 3 percent, 5 percent, as well as the 95th percentile of estimates based on a 3 percent discount rate, as provided by the IWG's Technical Support Document. Additionally, discount rates of 1.5 percent, 2.0 percent, and 2.5 percent from the EPA's Supplementary Material were considered. Due to the wide range of discount rates included, the 27-year timeframe considered, and the inherent uncertainty in estimating the value of all climate change impacts on global systems, the resulting cumulative SC-GHG estimates vary widely. As a point of comparison, the estimated cost of 1 MT of CO_2 in 2023 under the

[15] Calculating SC-GHG from 2023-2050 assumes continuous use of all proposed vehicles from the time they are deployed through 2050. The year 2050 is the final year for which social cost dollar values are provided in the IWG guidance document. This year also loosely correlates with, but overestimates, the lifespan of the vehicles proposed for acquisition. The estimated lifespans of NGDV and COTS vehicles for Postal Service delivery options are 20 years and 12 years, respectively. Not accounting for possible lifespan extensions through vehicle maintenance and rehabilitation, the vehicles proposed for purchase under this Proposed Action would be expected to be replaced between 2035 and 2050, which has not been accounted for in this SEIS.

[16] The discount rate used in estimating SC-GHG reflects the preference for receiving benefits today rather than in the future. A higher discount rate implies a higher preference for present consumption over future consumption, resulting in lower importance assigned to future damages from climate change relative to present costs or benefits. This leads to lower estimated SC-GHG when a higher discount rate is used, potentially resulting in lower incentives for emissions reduction efforts. In contrast, a lower discount rate implies a lower preference for present consumption over future consumption, resulting in higher importance assigned to future damages from climate change relative to present costs or benefits. This leads to higher estimated SC-GHG when a lower discount rate is used, potentially resulting in higher incentives for emissions reduction efforts.

cheapest scenario is $16 (IWG 5% discount rate), and under the most expensive scenario is $351 (EPA 1.5% discount rate).

4-6.3.2 Alternative 1

Air Emissions

Table 4-6.1 presents the estimated annual direct emissions for Alternative 1 once fully implemented (i.e., once the full quantity of new vehicles has been acquired). Overall, Alternative 1 results in a net decrease in direct emissions for all applicable pollutants, indicating a net beneficial effect on current air quality compared to the existing conditions. Detailed calculations of direct air emissions are presented in Tables F-3, F-4, and F-5 (Appendix F).

Table 4-6.1
Net Change in Annual Direct Air Emissions Under Alternative 1

Vehicle	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
New BEV NGDV	0	0	0	5.21	40.77	0	0
New ICE NGDV	43.11	20.30	481.05	3.82	15.23	0.64	96,732
New RHD COTS ICE	38.74	18.08	448.22	3.67	16.20	0.65	98,537
New LHD COTS ICE	39.44	19.62	429.03	2.77	8.26	0.43	65,862
New LHD COTS BEV	0	0	0	1.89	14.79	0	0
Replaced LLVs	-5,932.26	-6,550.25	-75,804.16	-130.10	-213.27	-5.89	-993,567
Replaced Delivery POV	-47.21	-40.89	-755.22	-1.93	-11.55	-0.44	-65,745
Net (Total)	**-5,858**	**-6,533**	**-75,201**	**-115**	**-130**	**-5**	**-798,181**

tpy = Tons per Year
MT = Metric Tons
1.102 English Short Tons = 1 Metric Ton

The difference in reductions between Alternatives 1 and 2 is within 5 percent for all criteria pollutants. When compared to the No-Action Alternative, Alternative 1 would result in significantly greater reductions in the direct emissions of $PM_{2.5}$ and PM_{10} (by 10 percent) and SO_2 (by 95 percent), with other criteria pollutants being within 5 percent. A summary of net changes in direct emissions for all considered Alternatives is presented in Table F-4.j (Appendix F) and Section 4-12.1 below.

To account for the total aggregated emissions, both direct and indirect emissions were combined. As shown in Table 4-6.2, Alternative 1 results in a net decrease in emissions for most criteria pollutants, except for SO_2, indicating a net beneficial effect on current air quality compared to the existing condition. These aggregated emissions also show the greatest reduction for CO, $PM_{2.5}$, and PM_{10}, compared to Alternative 2 or the No-Action Alternative. A summary of net aggregated emissions for all Alternatives is shown in Table F-8.d (Appendix F). As SO_2 direct emissions would decrease under Alternative 1 (see Table 4-6.1), the increase in aggregate SO_2 emissions results from indirect upstream emissions, and specifically from electricity production for the BEVs. This increase would result in a negligible adverse effect on air quality in a nationwide context.

Table 4-6.2
Net Changes in Annual Aggregated (Direct and Indirect) Air Emissions Under Alternative 1

Vehicle	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
New BEV NGDV	14.88	92.66	53.07	12.73	53.97	76.05	117,530
New ICE NGDV	74.76	48.34	498.30	5.88	18.29	8.47	119,202
New RHD COTS ICE	72.60	48.58	466.93	5.91	19.54	9.43	122,973
New LHD COTS ICE	61.87	39.78	441.40	4.25	10.46	6.20	82,006
New LHD COTS BEV	7.56	47.83	27.01	5.80	21.75	40.39	60,570
Replaced LLVs	-6,224.68	-6,810.22	-75,963.96	-149.20	-241.63	-78.94	-1,201,867
Replaced Delivery POV	-59.12	-51.55	-761.76	-2.72	-12.72	-3.47	-74,283
Net (Total)	**-6,052**	**-6,585**	**-75,239**	**-117**	**-130**	**58**	**-773,871**

tpy = Tons per Year
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

As noted in Section 1-4, the Postal Service is considering a delivery facility network optimization strategy to make more efficient use of our existing facilities. That process may involve consolidating delivery vehicles at fewer, larger existing facilities, which has the potential to increase the distance each vehicle needs to travel to get to its route each day (i.e., the transit segment of their routes; see Appendix F). While delivery facility network optimization is not considered part of the Proposed Action analyzed in this SEIS, the Postal Service conducted a sensitivity analysis to identify the potential effects of increased route length on air emissions under Alternative 1 under two scenarios: +3 miles transit distance daily, and +10 miles transit distance daily. Under both scenarios, estimated annual aggregate emissions would still decrease relative to existing conditions for all pollutants except SO_2. Notably, while Alternative 1 is estimated to have a 49 percent greater CO_2e reduction compared to the No-Action Alternative under the current route length scenario, it would still have a 22 percent greater CO_2e reduction if the route length increased by 10 miles per day. Table F-10.a (Appendix F) provides the sensitivity results for all pollutants under each scenario.

Finally, the aggregated air emissions under Alternative 1 were calculated cumulatively over the implementation period of the Proposed Action from 2023 to 2030, as shown in Table 4-6.3. Alternative 1 would replace the vehicles more quickly during the first six years (2023 to 2028), and especially the first two to three years, while Alternative 2 follows a slower replacement schedule in later years (2024 to 2030). As a result, Alternative 1 is expected to achieve approximately 60 percent greater cumulative reduction for most criteria pollutants (except SO_2) within the implementation period (2023 to 2030) compared to Alternative 2. In comparison to the No-Action Alternative, Alternative 1 results in approximately 56 percent greater cumulative reductions for all criteria pollutants except SO_2 within the implementation period. Therefore, except for SO_2, Alternative 1 demonstrates the most significant benefits in cumulative emissions reductions. Alternative 1 would also result in the largest cumulative increase of SO_2 during the implementation period (2023 to 2030) – approximately 70 percent more than Alternative 2; however, as described above, this adverse effect would be negligible. A summary of cumulative net aggregated emissions for all Alternatives is shown in Table F-8.e (Appendix F).

Table 4-6.3
Cumulative Aggregated Air Emission Changes Under Alternative 1, Years 2023-2030

Year	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
2023	-107.04	-121.60	-1,411.45	-2.09	-2.38	-0.20	-8,062
2024	-1,656.27	-1,849.06	-21,907.23	-34.10	-38.18	7.87	-150,259
2025	-2,479.19	-2,768.21	-32,282.90	-50.01	-56.23	8.64	-226,868
2026	-4,256.23	-4,675.96	-54,041.06	-84.51	-94.31	31.41	-483,741
2027	-5,456.89	-5,952.06	-68,214.25	-106.45	-118.40	49.28	-677,718
2028	-6,052.12	-6,584.58	-75,238.99	-117.33	-130.33	58.13	-773,871
2029	-6,052.12	-6,584.58	-75,238.99	-117.33	-130.33	58.13	-773,871
2030	-6,052.12	-6,584.58	-75,238.99	-117.33	-130.33	58.13	-773,871
Cumulative Total	**-32,112**	**-35,121**	**-403,574**	**-629**	**-701**	**271**	**-3,868,260**

ton = English Short Tons
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)
Note:
(1) The emissions presented in Table 4-6.3 represent the cumulative aggregated air emissions under Alternative 1. The cumulative emissions for each year are based on the cumulative proposed vehicle replacements by each year. For instance, the cumulative emissions for 2023 are estimated based on the proposed vehicle distribution for that year alone, while the cumulative emissions for 2024 represent the combined emissions from both 2023 and 2024 based on the proposed vehicle replacements in those two years. This calculation methodology is consistently applied to all years through 2028, which is the end of the implementation period for Alternative 1. For the years 2029 and 2030, which are the years after full implementation, the yearly emissions remain the same as those for 2028.

Greenhouse Gases

GHG Emissions

As shown in Table 4-6.2, once Alternative 1 is fully implemented (i.e., once the full quantity of new vehicles is acquired), the total net aggregated CO_2e emissions reduction would be 773,871 MT per year, which is 49 percent greater reduction compared to the No-Action Alternative, showing a significant beneficial effect on current GHG emissions. Alternative 1 would result in less reduction in the annual aggregated CO_2e emissions by 4 percent as compared to Alternative 2.

As shown in Table 4-6.3, the cumulative aggregated emissions during the implementation period from 2023 to 2030 for Alternative 1 indicate a significant reduction in cumulative GHG emissions, relative to existing conditions, of approximately 3.87 million MT of CO_2e. Because Alternative 1 would replace vehicles more quickly than Alternative 2, Alternative 1 is projected to result in a significantly greater cumulative reduction in GHG emissions by 2030 compared to Alternative 2 by 44 percent (i.e., about 1.19 million MT). In addition, Alternative 1 is anticipated to achieve a 106 percent greater reduction in cumulative GHG emissions than the No-Action Alternative.

Current Postal Service-generated GHG emissions would be reduced by approximately 12.3 percent under Alternative 1, as compared to the total Postal Service GHG emissions addressed in Section 4-6.2.3.

Climate Change

One of the primary effects of climate change is warming temperatures. As temperatures continue to rise, Postal Service delivery vehicles may be required to use air conditioning more frequently to ensure the well-being and comfort of mail carriers. While this would not affect the Postal Service's mail delivery operations, greater use of air conditioning would reduce fuel efficiency of all proposed new vehicles,

thereby increasing criteria pollutant and GHG emissions relative to the estimates included in this SEIS and resulting in a minor adverse effect on Alternative 1. New proposed BEVs could also be adversely affected by excessive ambient air temperatures that could affect BEV performance and the life of the batteries.

Additionally, climate change is anticipated to result in increasing frequency and intensity of severe storms, which can lead to increased flooding. At facilities where BEVs would be deployed and that are subject to flooding (i.e., either located in the 100-year or 500-year floodplains, as established by the Federal Emergency Management Agency [FEMA], or subject to flooding from extreme weather events or sea level rise), the Postal Service would carefully consider the placement of BEV charging stations. The Postal Service would conduct appropriate environmental review at the local level per Postal Service Handbook RE-6 (2015) as needed. Postal Service environmental checklists, screening analyses, and stand-alone, project-level Environmental Assessments would be employed on a facility-specific basis to assess the extent of impacts. Increased storm intensity resulting in power outages could also affect BEV performance depending on the length of time that electricity is unavailable. Since Alternative 1 consists of 62 percent BEVs, it could be adversely affected by local power outages. The Postal Service has portable emergency generators frequently relocated to Postal Service facilities in response to power outages, and these could be used for charging the BEVs on a limited basis.

Social Cost of Greenhouse Gases

Table 4-6.4, Table F-9.j (Appendix F), and Table F-9.f (Appendix F) present the estimated total SC-GHG from Alternative 1 based on IWG's Technical Support Document (2021) and EPA's Supplementary Material (2022b). Since Alternative 1 would reduce GHG emissions, it would have a beneficial investment impact in terms of social cost. Overall, Alternative 1 would save a cumulative present value of between $242 million and $6.25 billion in climate change impacts by 2050, relative to existing conditions, depending on the discount rate and source of social cost values. Alternative 1 would result in 4 percent greater cumulative social cost benefits as compared to Alternative 2 on average (based on the seven different discount rates), and 58 percent greater cumulative social cost benefits as compared to the No-Action Alternative. Table F-9.b (Appendix F), Table F-9.a (Appendix F), and Table F-9.e (Appendix F) present net aggregated emissions and the unit social cost values used in the total SC-GHG calculation, respectively.

Table 4-6.4
SC-GHG of Alternative 1 from 2023-2050 (Cumulative Present Value)

Discount Rate	IWG (2021) ($)	EPA (2022) ($)
5%	-242,231,532	N/A
3%	-914,927,942	N/A
2.5%	-1,383,605,928	-2,193,894,309
2%	N/A	-3,619,159,191
1.5%	N/A	-6,254,829,712
3% (95th Percentile)	-2,716,157,888	N/A

N/A = Not applicable
Source: (IWG, 2021; EPA 2022b)
Note:
(1) The estimated social cost was derived from cumulative emissions of individual CO_2, CH_4, and N_2O values provided in Table F-9.b multiplied by the present value of unit social cost values identified in Table F-9.a (Appendix F) and Table F-9.e (Appendix F).

4-6.3.3 Alternative 2

Air Emissions

Table 4-6.5 presents the estimated annual direct emissions for Alternative 2 once fully implemented (i.e., once the full quantity of new vehicles has been acquired). Overall, Alternative 2 results in a net decrease in direct emissions for all applicable pollutants, indicating a net beneficial effect on current air quality compared to the existing conditions. Detailed calculations of direct air emissions using the MOVES model are presented in Tables F-3, F-4, and F-5 (Appendix F).

Table 4-6.5
Net Changes in Annual Direct Emissions Under Alternative 2

Vehicles	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
New BEV NGDV	0	0	0	7.67	60.01	0	0
New ICE NGDV	115.38	54.31	1,287.67	10.26	40.87	1.70	256,479
Replaced LLVs	-6,015.29	-6,640.84	-74,827.02	-125.70	-215.99	-6.11	-1,023,779
Replaced Delivery POV	-31.58	-22.93	-538.45	-1.37	-8.09	-0.30	-45,238
Net (Total)	**-5,932**	**-6,609**	**-74,078**	**-109**	**-123**	**-5**	**-812,538**

tpy = Tons per Year N/A = Not applicable
MT = Metric Tons
1.102 English Short Tons = 1 Metric Ton

Compared to Alternative 1, once fully implemented, Alternative 2 results in less annual reduction of CO, $PM_{2.5}$, and PM_{10} emissions, while resulting in greater reduction of VOC, NO_x, and SO_2 emissions. However, the differences between the two Alternatives are within 5 percent for all criteria pollutants. When compared to the No-Action Alternative, Alternative 2 results in greater reduction in the direct emissions of $PM_{2.5}$, PM_{10}, and SO_2, but less reduction of VOC, NO_x, and CO. The differences between these two Alternatives are within 4 percent for all criteria pollutants, except for SO_2, where Alternative 2 achieves 100 percent greater reduction compared to the No-Action Alternative. A summary of net changes in direct emissions for all considered Alternatives is presented in Table F-4.j (Appendix F).

To account for the total aggregated emissions, both direct and indirect emissions were combined. As shown in Table 4-6.6, Alternative 2 results in a net decrease in emissions for most criteria pollutants, except for SO_2, indicating a significant net beneficial effect on current air quality compared to the existing condition. A summary of net aggregated emissions for all Alternatives is shown in Table F-8.d (Appendix F). As for Alternative 1, the adverse effect resulting from increased SO_2 emissions (from BEV electricity consumption) would be negligible in a nationwide context. Alternative 2 would have less aggregate SO_2 emissions than Alternative 1.

Finally, the aggregated air emissions under Alternative 2 were calculated cumulatively over the implementation period of the Proposed Action from 2023 to 2030, as shown in Table 4-6.7. Since Alternative 2 would replace the vehicles more slowly than Alternative 1, Alternative 2 would achieve approximately 38 percent less cumulative emissions reduction for most criteria pollutants (except SO_2, which would have a smaller negligible increase in emissions) within the implementation period (2023-2030) compared to Alternative 1. Additionally, Alternative 2 is expected to result in approximately 3 percent less cumulative emission reduction for all criteria pollutants except SO_2 compared to the No-

Action Alternative. A summary of cumulative net aggregated emissions for all Alternatives is shown in Table F-8.e (Appendix F).

Table 4-6.6
Net Changes in Annual Aggregated (Direct and Indirect) Air Emission Under Alternative 2

Vehicles	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
New BEV NGDV	21.69	134.74	77.31	18.60	79.17	110.28	171,068
New ICE NGDV	200.30	129.32	1,333.85	15.77	49.04	22.58	316,620
Replaced LLVs	-6,323.88	-6,913.26	-74,994.76	-145.70	-245.69	-81.89	-1,242,242
Replaced Delivery POV	-40.00	-30.37	-543.03	-1.92	-8.90	-2.37	-51,197
Net (Total)	**-6,142**	**-6,680**	**-74,127**	**-113**	**-126**	**49**	**-805,751**

tpy = Tons per Year N/A = Not applicable
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Table 4-6.7
Cumulative Aggregated Air Emission Changes Under Alternative 2, Years 2023-2030

Year	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2024	-60.03	-67.71	-746.86	-1.11	-1.27	-0.13	-4,735
2025	-666.70	-749.56	-8,279.99	-12.37	-14.13	-1.15	-56,507
2026	-1,700.65	-1,864.74	-20,686.29	-31.44	-35.28	9.93	-204,153
2027	-2,899.81	-3,139.14	-34,850.00	-53.38	-59.35	27.81	-398,054
2028	-4,039.91	-4,388.34	-48,721.32	-74.47	-83.00	34.52	-536,471
2029	-5,185.13	-5,643.03	-62,624.24	-95.58	-106.69	41.17	-675,205
2030	-6,141.90	-6,679.56	-74,126.63	-113.26	-126.38	48.59	-805,751
Cumulative Total	**-20,694**	**-22,532**	**-250,035**	**-382**	**-426**	**161**	**-2,680,876**

ton = English Short Tons
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)
Note:
(1) The emissions presented in Table 4-6.7 represent the cumulative aggregated air emissions under Alternative 2. The cumulative emissions for each year are based on the cumulative proposed vehicle replacements by each year. For example, the cumulative emissions for 2024 are estimated based on the proposed vehicle distribution for that year alone, while the cumulative emissions for 2025 represent the combined emissions from all three previous years, 2023 , 2024, and 2025, based on the proposed vehicle replacements in those three years. This calculation methodology is applied to all years through 2030, which is the end of the implementation period for Alternative 2.

Greenhouse Gases

GHG Emissions

As shown in Table 4-6.6, once Alternative 2 is fully implemented, the total net aggregated CO_2e emissions reduction per year would be 805,751 MT, which is 4 percent greater reduction as compared to Alternative 1. Alternative 2 would result in a 55 percent greater reduction in the annual aggregated CO_2e emissions as compared to the No-Action Alternative, indicating the most beneficial annual effect on current GHG emissions.

As shown in Table 4-6.7, the cumulative aggregated emissions during the implementation period from 2023 to 2030 for Alternative 2 indicate a reduction in cumulative GHG emissions, relative to existing conditions, by approximately 2.68 million MT of CO_2e. Because Alternative 2 is projected to replace vehicles more slowly than Alternative 1, Alternative 2 is expected to result in 31 percent less cumulative reduction in GHG emissions by 2030 compared to Alternative 1. Alternative 2 is anticipated to achieve 42 percent greater cumulative GHG emission reduction compared to the No-Action Alternative.

Current Postal Service-generated GHG emissions would be reduced by approximately 12.8 percent under Alternative 2, as compared to the total Postal Service GHG emissions, including both mobile and stationary sources, addressed in Section 4-6.2.3.

Climate Change

The effects of climate change on Alternative 2 would be the same as on Alternative 1.

Social Cost of Greenhouse Gases

Table 4-6.8, Table F-9.k (Appendix F), and Table F-9.g (Appendix F) present the estimated total SC-GHG from Alternative 2 based on IWG's Technical Support Document (2021) and EPA's Supplementary Material (2022b). Since Alternative 2 would reduce GHG emissions, it would have a beneficial investment impact in terms of social cost. Overall, Alternative 2 would save a cumulative present value of between $230 million and $6.07 billion in climate change impacts by 2050, relative to existing conditions, depending on the discount rate and source of social cost values. Compared to Alternative 1, Alternative 2 would result in approximately 4 percent less cumulative social cost benefits on average. Compared to the No-Action Alternative, Alternative 2 would result in approximately 52 percent greater cumulative social cost benefits on average. Table F-9.c (Appendix F), Table F-9.a (Appendix F), and Table F-9.e (Appendix F) present net aggregated emissions and the unit social cost values used in the total SC-GHG calculation, respectively.

Table 4-6.8
SC-GHG of Alternative 2 from 2023-2050 (Cumulative Present Value)

Discount Rate	IWG (2021) ($)	EPA (2022) ($)
5%	-230,112,943	N/A
3%	-877,720,329	N/A
2.5%	-1,329,708,042	-2,119,743,452
2%	N/A	-3,503,906,382
1.5%	N/A	-6,066,640,193
3% (95th Percentile)	-2,611,832,744	N/A

N/A = Not applicable
Source: (IWG, 2021; EPA 2022b)
Note:
(1) The estimated social cost was derived from cumulative emissions of individual CO_2, CH_4, and N_2O values provided in Table F-9.b multiplied by the present value of unit social cost values identified in Table F-9.a (Appendix F) and Table F-9.e (Appendix F).

4-6.3.4 No-Action Alternative

Air Emissions

Table 4-6.9 presents the estimated annual direct emissions for the No-Action Alternative once the full 106,480 quantity subset of vehicles (out of the 165,000 vehicles authorized in the NGDV ROD) have

been deployed. Overall, the No-Action Alternative would result in a net decrease in direct emissions for all applicable pollutants, indicating a net beneficial effect on current air quality compared to the existing conditions. Detailed calculations of direct air emissions using the MOVES model are presented in Tables F-3, F-4, and F-5 (Appendix F).

Table 4-6.9
Net Changes in Annual Direct Air Emissions Under the No-Action Alternative

Vehicles	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
New BEV NGDV	0	0	0	1.23	9.65	0	0
New ICE NGDV	274.55	129.22	3,063.73	24.42	97.30	4.03	608,545
Replaced LLVs	-6,271.52	-6,923.58	-77,762.94	-130.28	-225.16	-6.39	-1,069,399
Replaced Delivery POV	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net (Total)	**-5,997**	**-6,794**	**-74,699**	**-105**	**-118**	**-2**	**-460,852**

tpy = Tons per Year N/A = Not applicable
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

The No-Action Alternative would achieve the greatest reduction in direct emissions for VOC and NO_x, compared to Alternative 1 and Alternative 2, and the least reduction for $PM_{2.5}$, PM_{10}, and SO_2. When compared to Alternative 1, the No-Action Alternative would result in greater reductions in direct emissions of VOC by 2 percent and NO_x by 4 percent, and less reductions of CO by 1 percent, $PM_{2.5}$ by 9 percent, PM_{10} by 9 percent, and SO_2 by 49 percent. When compared to Alternative 2, the No-Action Alternative would result in greater reduction in direct emissions of VOC by 1 percent, NO_x by 3 percent, and CO by 1 percent, and less reductions of $PM_{2.5}$ by 4 percent, PM_{10} by 4 percent, and SO_2 by 50 percent. A summary of net emission changes in direct emissions for all Alternatives is presented in Table F-4.j (Appendix F).

To account for the total aggregated emissions, both direct and indirect emissions were combined. As shown in Table 4-6.10, the No-Action Alternative results in a net decrease in emissions for all criteria pollutants, including SO_2, indicating a net beneficial effect on current air quality compared to the existing condition. A summary of net aggregated emissions for all Alternatives is shown in Table F-8.d (Appendix F).

Table 4-6.10
Net Changes in Annual Aggregated (Direct and Indirect) Air Emissions Under the No-Action Alternative

Vehicles	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
New BEV NGDV	3.52	21.95	12.57	3.02	12.78	18.03	27,842
New ICE NGDV	476.71	307.71	3,173.63	37.53	116.76	53.68	751,661
Replaced LLVs	-6,594.78	-7,209.04	-77,938.69	-151.25	-256.28	-85.82	-1,298,303
Replaced Delivery POV	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net (Total)	**-6,115**	**-6,879**	**-74,753**	**-111**	**-127**	**-14**	**-518,800**

tpy = Tons per Year N/A = Not applicable MT = Metric Tons 1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Finally, the aggregated air emissions under the No-Action Alternative were calculated cumulatively over the implementation period of the Proposed Action from 2023 to 2030, as shown in Table 4-6.11. The No-Action Alternative would result in the least cumulative emissions reductions for all pollutants compared to Alternatives 1 and 2. A summary of cumulative net aggregated emissions for all Alternatives is shown in Table F-8.e (Appendix F).

Table 4-6.11
Cumulative Aggregated Air Emission Changes Under the No-Action Alternative, Years 2023-2030

Year	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
2023	-	-	-	-	-	-	-
2024	-62.15	-70.10	-760.71	-1.13	-1.29	-0.16	-4,848
2025	-690.19	-776.11	-8,432.52	-12.50	-14.30	-1.44	-57,751
2026	-1,871.98	-2,075.79	-22,581.32	-33.77	-38.25	3.99	-194,514
2027	-3,011.38	-3,365.93	-36,592.77	-54.43	-62.02	-0.89	-281,489
2028	-4,150.81	-4,656.09	-50,604.42	-75.10	-85.79	-5.78	-368,566
2029	-5,290.26	-5,946.26	-64,616.25	-95.76	-109.56	-10.67	-455,767
2030	-6,114.55	-6,879.39	-74,752.50	-110.70	-126.74	-14.11	-518,800
Cumulative Total	**-21,191**	**-23,770**	**-258,341**	**-383**	**-438**	**-29**	**-1,881,736**

ton = English Short Tons
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)
Note:
(1) The emissions presented in Table 4-6.11 represent the cumulative aggregated air emissions under the No-Action Alternative. The cumulative emissions for each year are based on the cumulative proposed vehicle replacements by each year. For instance, the cumulative emissions for 2024 are estimated based on the proposed vehicle distribution for that year only, while the cumulative emissions for 2025 represent the combined emissions from all three previous years, 2023, 2024, and 2025, based on the proposed vehicle replacements in those three years. This calculation methodology is applied to all years through 2030, which is the end of the implementation period for the No-Action Alternative.

Greenhouse Gases

GHG Emissions

As shown in Table 4-6.10, once the No-Action Alternative is fully implemented, the total net aggregated CO_2e emissions reduction per year would be 518,800 MT, which is 33% less reduction in CO_2e as compared to Alternative 1 and 36% less reduction as compared to Alternative 2.

As shown in Table 4-6.11, the cumulative aggregated emissions during the implementation period from 2023 to 2030 for the No-Action Alternative indicate a reduction in cumulative GHG emissions, relative to existing conditions, of approximately 1.88 million MT CO_2e. Because the No-Action Alternative is expected to have a slower vehicle replacement timeline, similar to Alternative 2, and the No-Action Alternative would deploy substantially fewer BEVs compared to Alternatives 1 and 2, the No-Action Alternative would achieve the least reduction in cumulative GHG emissions relative to existing conditions.

Current Postal Service-generated GHG emissions would be reduced by approximately 8.3 percent under the No-Action Alternative, as compared to the total Postal Service GHG emissions addressed in Section 4-6.2.3.

Climate Change

The effects of climate change on the No-Action Alternative would be similar to those on Alternatives 1 and 2, except that the possibly lower proportion of BEVs would reduce the potential for warmer ambient temperatures to adversely affect BEV performance and battery life, fewer BEV charging stations would be at risk from flooding, and potential power outages would affect a smaller proportion of the fleet.

Social Cost of Greenhouse Gases

Table 4-6.12, Table F-9.l (Appendix F), and Table F-9.h (Appendix F) present the estimated total SC-GHG from the No-Action Alternative based on IWG's Technical Support Document (2021) and EPA's Supplementary Material (2022b). Since the No-Action Alternative would reduce GHG emissions, it would have a beneficial investment impact in terms of social cost. Overall, the No-Action Alternative would save a cumulative present value of between $156 million and $3.90 billion in climate change impacts by 2050, depending on the discount rate and source of social cost values. Compared to Alternative 1 and Alternative 2, the No-Action Alternative would result in approximately 37 percent and 34 percent less cumulative social cost benefits, respectively, on average. Table F-9.d (Appendix F), Table F-9.a (Appendix F), and Table F-9.e (Appendix F) present net aggregated emissions and the unit social cost values used in the total SC-GHG calculation, respectively.

Table 4-6.12
SC-GHG of the No-Action Alternative from 2023-2050 (Cumulative Present Value)

Discount Rate	IWG (2021) ($)	EPA (2022) ($)
5%	-156,162,109	N/A
3%	-586,131,486	N/A
2.5%	-885,556,556	-1,381,365,405
2%	N/A	-2,268,318,849
1.5%	N/A	-3,903,230,281
3% (95th Percentile)	-1,724,077,610	N/A

N/A = Not applicable
Source: (IWG, 2021; EPA 2022b)
Note:
(1) The estimated social cost was derived from cumulative emissions of individual CO_2, CH_4, and N_2O values provided in Table F-9.b multiplied by the present value of unit social cost values identified in Table F-9.a (Appendix F) and Table F-9.e (Appendix F).

4-7 Community Services

4-7.1 Background Information and Regulatory Setting

Local municipalities or county governments provide emergency fire and police services to Postal Service facilities and personnel to treat minor injuries. The Postal Service in turn provides a community service by delivering and collecting mail to and from residential and business addresses. The Postal Service follows certain service standards related to mail delivery and maintains our fleet of delivery vehicles to meet these delivery standards.

4-7.2 Affected Environment

Postal Service facilities are located nationwide in every state of the U.S. and in U.S. Territories. Local municipalities or county governments provide public safety and utility services to the Postal Service

facilities. Community service providers are equipped to adequately handle community services required by current Postal Service operations.

4-7.3 Environmental Consequences

4-7.3.1 Alternatives 1 and 2

The types of, and demand for, community services required by the Postal Service would not change under Alternative 1 or Alternative 2 due to there being no increase in the number of delivery vehicles. Replacing 106,480 existing vehicles (predominantly outdated, end-of-life LLVs) with newly acquired vehicles with modern safety features, whether NGDV or COTS vehicles, would provide an increase in safety on the road resulting in less demand for emergency services.

Current Postal Service delivery operations do not result in adverse effects on community services or emergency preparedness of local municipalities, county governments, or the nation. Alternatives 1 and 2 would have no adverse effect on community services and would be expected to result in a beneficial effect due to modern vehicle safety features.

4-7.3.2 No-Action Alternative

Under the No-Action Alternative, all 106,480 proposed new vehicles would replace existing LLVs. Thus, the No-Action Alternative would have similar beneficial effects on community services as Alternatives 1 or 2 by replacing outdated, end-of-life vehicles with newer vehicles with modern safety features. The No-Action Alternative would also have no total increase in delivery vehicles or mail carriers, so there would be no increases in community service demands.

4-8 Utilities and Infrastructure

4-8.1 Background and Regulatory Setting

Postal Service delivery operations are supported by existing utility and infrastructure systems that provide power, communications, water, wastewater, stormwater, and transportation services sufficient for the facilities' needs. Private companies normally provide power and communication services, while municipalities usually own and maintain water, wastewater, and transportation systems; privately owned well systems provide a limited number of facilities with water. Postal Service facilities, including Candidate Sites, are generally located within large utility networks and use a relatively small portion of the systems' total capacity.

4-8.2 Affected Environment

Some Postal Service locations have on-site fueling operations, storage tanks, emergency generators, wastewater pretreatment systems, septic systems, and/or vehicle maintenance and washing facilities. The Postal Service monitors these facilities and their functions to manage potential pollution sources and to ensure compliance with spill prevention requirements and stormwater permit regulations.

4-8.3 Environmental Consequences

Utility service and infrastructure in place at Postal Service facilities presently are meeting service demands. The one exception would be the need for electrical charging stations at locations where BEVs would be deployed. Modifications to electrical infrastructure and construction of new infrastructure at existing facilities would depend on the number of BEVs deployed. As discussed in Section 1-4, the Postal Service would conduct appropriate environmental reviews at the local level per Postal Service Handbook RE-6 (2015) as needed. Postal Service environmental checklists, screening analyses, and

stand-alone, project-level Environmental Assessments would be employed on a facility-specific basis to assess the extent of effects from any facility-related actions.

Section 4-9.3 discusses the potential effect on the electrical grid.

4-8.3.1 Alternatives 1 and 2

The most notable potential effect of Alternatives 1 and 2 on utilities and infrastructure, relative to the No-Action Alternative, would be the demand for more electricity to power the proposed BEVs, which would constitute 62 percent of the proposed vehicles. The overall effect of BEVs on the electrical grid would be similar across both Alternatives since they include the same number of BEVs.

Nationally, the electric infrastructure requirements of BEVs would be minor in the context of the U.S. electric grid systems and no significant, national investment in generation, transmission, or distribution would be required in order to implement either Alternative. This is due to the relatively low total electric demand required to support each BEV NGDV or COTS BEV and the proposed plan to focus deployments at larger vehicle deployment sites where existing power infrastructure can be actively leveraged, as well as the plan to charge each BEV nightly when national grid loads are at their minimum. Peak times for electric consumption generally occur between 3:00 p.m. and 9:00 p.m. local time, with some variation seasonally and geographically due to climatic patterns or availability of other energy utilities, such as natural gas (See NGDV FEIS, Figure 4-8.1). Late evening and early morning hours are consistently times of low load across seasons and geographies.

Charging primarily during off-peak periods, as intended under all Alternatives, when capacity is available nationally, would not require additional national infrastructure, as the capacity between afternoon summer peak and nighttime lows is available to serve these charging needs on a national scale. Similarly, charging during off-peak periods is anticipated to ensure any effects on local electric infrastructure serving the major vehicle deployment sites remains negligible; however, the Postal Service would include utility analysis in our facility-specific environmental reviews prior to implementation. The Postal Service also intends to leverage available load management capabilities of each respective electric vehicle supply equipment (EVSE) provider to help more tightly manage energy cost and usage and to mitigate grid impact as well.

4-8.3.2 No-Action Alternative

Under the No-Action Alternative, BEVs would constitute a minimum of 10 percent of the new vehicles, as opposed to 62 percent under Alternatives 1 and 2, resulting in less demand for supplemental electricity relative to Alternatives 1 and 2.

4-9 Energy Requirements and Conservation

4-9.1 Background and Regulatory Setting

Federal agencies are required to meet energy management and conservation goals through EOs and legislative measures. Postal Service facility operations incorporate energy conservation measures that comply with the Energy Independence and Security Act of 2007, the National Energy Conservation Policy Act, the Energy Policy Act of 1992 and 2005, and the National Energy Conservation Policy Act of 1978.

4-9.2 Affected Environment

The Postal Service currently operates a combined delivery fleet of over 210,000 vehicles. The existing fleet is comprised primarily of gasoline ICE vehicles. Smaller percentages of the delivery fleet include

alternative fuel-capable vehicles, most of which are equipped to use ethanol; electric vehicles; hybrid vehicles; vehicles fueled by compressed natural gas; and liquid propane gas vehicles. The fleet also includes a small percentage of hybrid two-ton vehicles, of which about half are electric hybrid and half are hydraulic hybrid.

The Postal Service emphasizes preventive, rather than corrective, maintenance to maximize existing vehicle performance. Aged delivery vehicles are being replaced, when necessary, with COTS vehicles that have improved fuel mileage, reduced maintenance costs, and lower air emissions. Postal Service career employees are offered a Commuter Benefits Program, which enables them to allocate pretax money for eligible commuter expenses. This incentivizes alternative modes of transportation (i.e., walking, cycling, public transportation) to reduce single employee vehicle commute trips to vehicle deployment sites and other Postal Service facilities.

The Postal Service seeks to optimize our transportation operations, including pursuing fuel-efficiency initiatives. Energy management systems are used to evaluate, track, and manage fuel usage. Further, the Postal Service works to make sure that all operating vehicles are performing at maximum possible efficiency.

The fuel efficiencies of LLVs and delivery POVs are estimated to be 8.8 MPG and 21.54 MPG[17], respectively. As shown in Appendix G, the existing delivery vehicles proposed for replacement are estimated to currently consume between 83 and 89 million gallons of gasoline per year.[18] The Postal Service's total estimated annual gasoline usage for delivery is about 189 million gallons, based on FY 2022 consumption data. As BEVs currently comprise a very small portion of the delivery fleet, the Postal Service's electricity consumption for delivery vehicles is negligible under existing conditions.

4-9.3 Environmental Consequences

Estimated annual fuel usage (gasoline and electricity) under each Alternative is shown in Appendix G.

4-9.3.1 Alternatives 1 and 2

Alternatives 1 and 2 would have a beneficial effect on energy use through reduction in gasoline consumption. Two primary factors would account for this fuel reduction. First, Alternatives 1 and 2 would both consist of 62 percent BEVs that would not require gasoline. Second, the ICE NGDV, LHD COTS ICE, and RHD COTS ICE vehicles have estimated average fuel efficiencies of 12.63 MPG, 11 MPG, and 12.1 MPG, respectively, compared with the LLV fuel efficiency of 8.8 MPG. Thus, all new ICE vehicles would be more fuel-efficient than the end-of-life LLVs being replaced, even after accounting for the new vehicles' additional features such as air conditioning, with improvements ranging from 25 to 44 percent. While the new vehicles would not have better fuel efficiency than the existing delivery POVs, delivery POVs represent a small portion of the total vehicles to be replaced.

During Years 1 through 8 (i.e., the implementation period covered in this SEIS), Alternative 1 would reduce cumulative gasoline consumption by approximately 284 million gallons relative to existing conditions (see Table G-1 in Appendix G) and by approximately 73 million gallons relative to Alternative 2. Once fully implemented, Alternative 1 would require about 24.1 million gallons of gasoline

[17] The delivery POV fuel efficiency value was derived from the GREET model for typical SUVs; this estimate does not account for the Postal Service's typical driving pattern (i.e., stop-and-go deliveries), which typically decreases fuel efficiency, and thus is potentially higher than delivery POVs realistically experience.
[18] This range results from the slight differences between Alternatives in the types of existing delivery vehicles to be replaced (i.e., only LLVs, or both LLVs and delivery POVs) and the routes they currently serve (i.e., city or rural).

per year, which represents a reduction in annual gasoline consumption of about 59.2 million gallons relative to existing conditions (see Year 6 in Table G-1 in Appendix G). By contrast, Alternative 2, which would entail a slower replacement schedule, would reduce cumulative gasoline consumption by about 211 million gallons during Years 1 through 8 (see Table G-2 in Appendix G). Once fully implemented, Alternative 2 would require about 23.3 million gallons of gasoline per year (similar to Alternative 1), but would reduce annual gasoline consumption by about 63.6 million gallons compared to existing conditions (see Year 8 in Table G-2 in Appendix G); this greater annual savings is primarily due to the slight differences in existing vehicles projected to be replaced under each Alternative. Additionally, the newer vehicles would require less frequent oil changes and other maintenance. Alternatives 1 and 2 would therefore have an overall beneficial effect on energy requirements and conservation with respect to gasoline and oil consumption.

The overall national impact of BEV charging is discussed in Section 4-8.3. The BEV specifications used for analysis are provided in Appendix G, and the analysis is based on anticipated Level 2 charging that uses a higher-output 240-volt power source. As shown in Table G-4 (Appendix G), Alternative 1 would consume about 1.8 billion kWh cumulatively in Years 1 through 8, with annual consumption of about 392 million kWh once fully implemented. Alternative 2 would consume about 1.3 billion kWh cumulatively in Years 1 through 8, with annual consumption of about 389 million kWh once fully implemented (see Table G-5 in Appendix G). The total U.S. electricity generation in 2021 was about 4,165 billion kWh (USEIA, 2022a), so Alternatives 1 and 2 would each consume about 0.009 percent of total U.S. electricity once fully implemented, not accounting for likely growth in U.S. electricity generation over the next six to eight years. Thus, Alternatives 1 and 2 would have negligible effects on national electricity consumption. For context, BEV sales are rapidly increasing in the U.S. National BEV sales were approximately 240,000 in 2020, 460,000 in 2021, and 740,000 in 2022 (Argonne National Laboratory, 2023).

The BEV NGDV would be expected to discharge 17 and 29 percent of battery capacity daily under average conditions for city and rural routes, respectively. COTS BEVs would be expected to discharge 27 and 45 percent of battery capacity under average conditions for city and rural routes, respectively.[19] Both BEV NGDV and COTS BEVs could fully recharge during non-business hours. Further, the Postal Service would not use public charging stations to recharge our BEVs.

4-9.3.2 No-Action Alternative

Under the No-Action Alternative, the Postal Service would replace 106,480 LLVs in accordance with the NGDV ROD, with 10 percent BEVs that would not require gasoline.[20] The No-Action Alternative would reduce cumulative gasoline consumption in Years 1 through 8 by about 126 million gallons (see Table G-3 in Appendix G), which represents only 44 to 60 percent of the reductions anticipated under Alternatives 1 and 2. Upon full implementation in Year 8, the No-Action Alternative would require 55.5 million gallons of gasoline per year (nearly double the amounts needed for Alternatives 1 and 2), and reduce annual gasoline consumption by just 33.3 million gallons compared to existing conditions.

[19] Daily battery use calculated based on daily route mileage, fuel efficiency, and battery size. For example, for a COTS BEV on a city route: 20.6 miles / 1.13 mi/kWh / 68 kWh = 27%; COTS BEV on a rural route: 34.9 miles / 1.13 mi/kWh / 68 kWh = 45%; BEV NGDV on a city route: 20.6 miles / 1.28 mi/kWh / 94 kWh = 17%; and BEV NGDV on a rural route: 34.9 miles / 1.28 mi/kWh / 94 kWh = 29%.

[20] Note that a subset of 106,480 NGDV is being analyzed to allow for a fair comparison, with respect to total vehicle quantities, with Alternatives 1 and 2. For an Energy Requirements and Conservation analysis of the full 165,000 vehicle quantity for the No-Action Alternative, see Section 4-9.3.1 of the NGDV FEIS.

Similarly, with 10 percent BEVs under the No-Action Alternative, the Postal Service would consume about 321 million kWh cumulatively in Years 1 through 8, with annual consumption of about 63 million kWh (about 0.002 percent of annual U.S. electricity generation) once fully implemented.

4-10 Solid and Hazardous Materials and Wastes

4-10.1 Background and Regulatory Setting

Solid waste includes garbage or refuse, and other discarded material as defined under the Resource Conservation and Recovery Act (RCRA) and 40 CFR 260 - 262. Materials that do not meet the RCRA definition are not solid wastes and are not subject to RCRA regulation.

4-10.2 Affected Environment

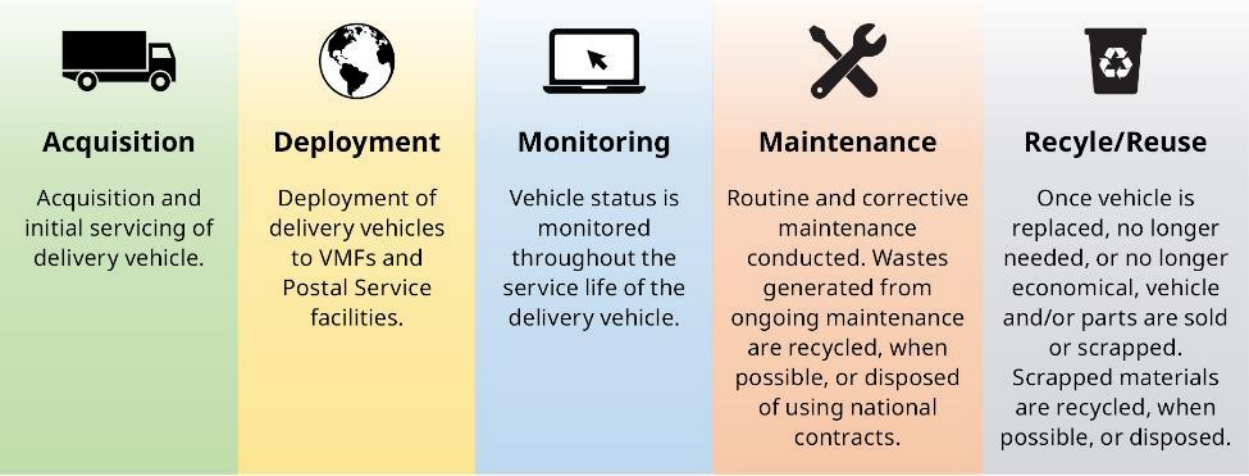
The RCRA defines hazardous wastes as solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (a) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. Certain types of hazardous wastes are subject to special management provisions intended to ease the management burden and facilitate the recycling of such materials. These are called universal wastes and their associated regulatory requirements are specified in 40 CFR 273. Hazardous waste batteries are one of the four types of waste currently covered under the universal waste regulations.

Postal Service delivery vehicle maintenance and delivery operations generate solid waste, regulated waste, and limited quantities of hazardous wastes. Recycling and disposal are managed in accordance with all applicable environmental and safety regulations. State and local environmental regulations vary from jurisdiction to jurisdiction nationwide. The Postal Service has programs and national contracts in place to ensure these wastes are properly recycled or, if necessary, disposed in accordance with regulatory requirements. Many waste streams generated through ongoing vehicle maintenance, including used oil and oil filters, antifreeze, tires, batteries, and scrap metal are recycled. Additionally, employees with hazardous waste management responsibilities are required to take waste management training annually in order to ensure proper procedures are followed.

Regarding vehicle disposal, the Postal Service has standard procedures in place to manage surplus vehicles and vehicle-related parts. The Postal Service's delivery vehicle life cycle is shown in Figure 4-10.1.

Currently, almost 100 percent of automobiles get recycled in the U.S. Many vehicle parts, such as wheels, seats, windows, and doors, are removed for future reuse. Other components of potential environmental concern are removed as well, including mercury switches and fluids. The remainder of the car is then shredded so the metals and other materials can be sorted and processed (LeBlanc, 2019). Postal Service procedures, including the Postal Service's Vehicle Disposal Strategy, support this national trend. The Postal Service manages its surplus vehicle fleet, vehicle-related parts and equipment through online auctions, live auctions, fixed-price sales, and vehicle cannibalization/scrapping processes. The Postal Service does not permit the reselling of LLVs in the secondary market. When scrapped, vehicle components such as metal, batteries, oil, coolant, and tires are removed and reused or recycled to the extent possible. The remainder of surplus parts are disposed in accordance with environmental laws and regulations.

Figure 4-10.1
USPS Delivery Vehicle Life Cycle



4-10.3 Environmental Consequences

4-10.3.1 Alternatives 1 and 2

Alternatives 1 and 2 would have a negligible adverse effect on solid and hazardous waste. Disposal of the existing delivery vehicles would take place over a six- to eight-year period, and the Postal Service vehicle disposal strategy and contracts in place for recycling and disposal would minimize the adverse effects to the extent possible. Recycling and disposal of the wastes and materials from the replaced vehicles would have no significant adverse effect on commercial treatment capacity and landfill capacity over the six- to eight-year period. Further, disposal of the existing delivery vehicles would occur under the No-Action Alternative as well, in accordance with the NGDV ROD.

The Postal Service anticipates the lifespan of NGDV and COTS vehicles to be about 20 years and 12 years, respectively. Following their useful lives, the proposed new vehicles would be recycled and disposed using the same or similar disposal strategy and contracts as the Postal Service uses for its current fleet vehicles. Since COTS vehicles are anticipated to have shorter lifespans than NGDV, they would need to be replaced sooner, resulting in a greater amount of solid and hazardous waste under Alternative 1 compared to Alternative 2 and the No-Action Alternative.

Operation and maintenance of new vehicles would use less hazardous materials and generate less solid and hazardous waste (e.g., used engine oil) than the existing LLVs and delivery POVs. Since BEVs do not require engine oil, used engine oil would not be generated at all for the BEVs, which comprise 62 percent of vehicles under both Alternatives. Minor amounts of other lubricant types, including bearing grease, coolants, and windshield wiper fluid would be required for both BEV and ICE vehicles, whether NGDV or COTS, but much of this material would be reclaimed or recycled.

Spent lithium-ion BEV batteries would be an additional source of hazardous waste for the BEV procurement scenarios. Recycling methods in the U.S. are currently limited and vary in recovery capabilities, although the Postal Service assumes that BEV batteries will become increasingly recyclable over time, and particularly given anticipated lifespans of the batteries. For example, the recently signed IRA includes specific funding programs for development of facilities to recycle critical materials (The White House, 2023). The Postal Service projects that COTS BEV batteries would last up to eight years, and BEV NGDV batteries would last up to ten years, after which they would be recycled to the extent practicable. Since COTS vehicle batteries would not last as long as NGDV

batteries, Alternative 1 would be anticipated to generate slightly more hazardous waste from batteries than Alternative 2.

4-10.3.2 No-Action Alternative

Under the No-Action Alternative, potential effects on solid and hazardous materials and wastes would be similar to Alternatives 1 and 2, as the existing aged delivery vehicles would still be recycled/disposed as they are replaced with new modern vehicles. However, the No-Action Alternative includes a minimum of 10 percent BEVs (as opposed to a 62 percent commitment), so it would be anticipated to produce greater amounts of used engine oil from ICE vehicles and less hazardous waste from spent BEV batteries that need to be recycled. The No-Action Alternative would have no significant adverse effect on solid and hazardous waste management and disposal capacity.

4-11 Environmental Justice

4-11.1 Background and Regulatory Setting

Environmental justice (EJ) addresses the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other federal activities that affect human health and the environment. Considering EJ evaluates whether people are fully protected from disproportionate and adverse human health and environmental effects and hazards and have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices.

Multiple Executive Orders (EOs) and guidance documents have been issued regarding the consideration of EJ, including EO 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All* (April 21, 2023), EO 14008, *Tackling the Climate Crisis at Home and Abroad* (Jan. 27, 2021), EO 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* (Jan. 20, 2021), and EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (Feb. 16, 1994).

The intent of EO 12898, EO 13985, EO 14008, EO 14096, and related directives and regulations, is to ensure that communities with EJ concerns do not bear a disproportionate burden of adverse effects resulting from federal actions. "Underserved Communities" as defined by EO 13985 refers to "populations sharing particular characteristics, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life." EO 14008 defines disadvantaged communities as those that are marginalized, underserved, and overburdened by pollution. Recently issued EO 14096, in particular Section 3(a)(ix), refers to the importance of the NEPA process to (a) analyze direct, indirect, and cumulative effects for communities with EJ concerns; (b) consider disparate health effects and other environmental hazards; and (c) provide opportunities for early and meaningful involvement during the environmental review process. Each of these EOs reinforces the long-held EPA definition for EJ: the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies (EPA, 2022c).

As an Independent Establishment of the Executive Branch of the U.S. Government, certain EOs, including those mentioned above, do not apply to the Postal Service. However, the Postal Service endeavors to fulfill their spirit and consider the effects of our actions on EJ communities of concern.

4-11.2 Affected Environment

Minority and Low-Income Populations – Nationwide

The Postal Service delivery network serves delivery points in all communities across the nation, regardless of minority or income status. The last five years of data indicate that minority populations in the U.S. are rising. In 2021, the most recent year for which data is available, the U.S. had an aggregate minority population of 40.6 percent, an increase from 2017 (38.5 percent). As shown in Table 4-11.1, the aggregate minority population increased four of the five years between 2017 and 2021. The southern portion of the U.S. has a larger share of minorities than the northern portion (PRB.org, 2023). The percentage of people with incomes below the U.S. poverty guidelines is falling. In 2021, the low-income population fell to 12.6 percent, from 12.8 percent (2020) and 13.4 percent (2019). As shown in Table 4-11.1, the low-income rate has fallen every year in the last five years (USCB, 2017; USCB, 2018a; USCB, 2018b; USCB, 2019a; USCB, 2019b; USCB, 2019c; USCB, 2020b; USCB, 2020c; USCB, 2021a; USCB, 2021b).

Table 4-11.1
Racial Composition and Poverty Status of the U.S., 2017 - 2021

Racial Composition	2021	2020	2019	2018	2017
White	59.4%	57.8%	60.7%	61.1%	61.5%
Minority	40.6%	42.2%	39.3%	38.9%	38.5%
Black or African American	12.2%	12.1%	12.3%	12.3%	12.3%
American Indian and Alaska Native	0.6%	0.7%	0.7%	0.7%	0.7%
Asian	5.6%	5.9%	5.5%	5.4%	5.3%
Native Hawaiian and Other Pacific Islander	0.2%	0.2%	0.2%	0.2%	0.2%
Other Race	0.4%	0.5%	0.2%	0.2%	0.2%
Two or More Races	3.2%	4.1%	2.4%	2.4%	2.3%
Hispanic or Latino	18.4%	18.7%	18.0%	17.8%	17.6%
Percent Below Poverty Level	12.6%	12.8%	13.4%	14.1%	14.6%

Source: (USCB, 2017; USCB, 2018a; USCB, 2018b; USCB, 2019a; USCB, 2019b; USCB, 2019c; USCB, 2020b; USCB, 2020c; USCB, 2021a; USCB, 2021b)

Candidate Sites

EJ is inherently a site-specific topic with highly localized considerations and impacts. The Postal Service operates over 31,000 facilities nationwide in essentially every American community. Most of these are retail facilities that may host a small number of delivery vehicles. However, the Postal Service also operates larger facilities, typically in more populated areas, where Postal Service operations and volume are more concentrated. As introduced in Section 3-3, the Postal Service anticipates deploying a large portion of the proposed new vehicles to these facilities.

To understand the potential effects, on a programmatic level, of deploying the proposed new vehicles, the Postal Service identified 414 tentative Candidate Sites[21] to be major deployment sites. The Postal

[21] These Candidate Sites are subject to change (if, for example, a site-specific analysis should find a particular site uneconomical or unavailable for lease renewal) and have not been announced publicly or within the Postal Service; as such, their specific locations are not disclosed in this SEIS.

Service then undertook a detailed, site-specific screening review of nearby communities with EJ concerns, as described below.

Candidate Site Screening for EJ Concerns

Based on early coordination with the EPA, this EJ review sourced data from EPA's EJScreen tool, CEQ's Climate and Economic Justice Screening Tool (CEJST), the Centers for Disease Control and Prevention (CDC) Environmental Justice Index (EJI), the Federal Emergency Management Agency's National Risk Index (NRI), and the U.S. Department of Transportation's (DOT) Equitable Transportation Community Explorer (ETCE). The analysis provides a high-level understanding of the presence and magnitude of pollution burdens or other disadvantages that communities near these 414 Candidate Sites may be facing.

The detailed methodology for this EJ screening review is included in Appendix D. In summary, the Postal Service reviewed the above-referenced data sources for communities (i.e., U.S. census block groups, typically) within a 1-mile buffer "study area" of each Candidate Site to estimate the disadvantage of those communities, based on a series of data indicators, in each of four categories:[22]

1. Air Pollution Burden;
2. Socioeconomic Risk;
3. Climate and Weather Hazard; and
4. Health Risk.

These scores were calculated in the form of percentiles, with higher percentiles reflecting greater disadvantage in that category as compared to the national level. The Postal Service compiled both a Population-Weighted Disadvantage Score and a Worst-Case Disadvantage Score for each site.[23] Finally, these scores were categorized as "high" disadvantage (95th percentile or greater), "moderate" disadvantage (90th to 94th percentile), and "minor" disadvantage (80th to 89th percentile). In addition to the calculated disadvantage scores, the Postal Service determined whether each Candidate Site is in an area of persistent poverty[24] and/or is in a historically disadvantaged community.[25]

For this review, Candidate Sites were considered to be in an EJ community if they (1) have a Worst-Case Disadvantage Score in the 80th percentile or higher (i.e., at least minor disadvantage) for at least

[22] Example data indicators used to compile these four categories include:
Air Pollution Burden: $PM_{2.5}$, diesel particulate matter, high-volume roads
Socioeconomic Risk: people of color, low income, limited English speaking
Climate and Weather Hazard: drought, wildfire risk, flood risk
Health Risk: asthma, heart disease, low life expectancy

[23] The Population-Weighted Disadvantage Score indicates widespread disadvantages within each site's study area. The Worst-Case Disadvantage Score is a general measure of the sensitivity of each study area by depicting the presence of elevated individual indicators for a disadvantage category throughout the overall study area, regardless of whether any particular block group would be considered disadvantaged.

[24] An area of persistent poverty is defined by the DOT as 1) a county with a 20 percent or higher poverty rate between 1990 and 2020; 2) a census tract with a 20 percent or higher poverty rate between 2014 and 2018; or 3) a U.S. territory or possession (USDOT, 2023a).

[25] A historically disadvantaged community is defined by the DOT based on 22 economic, environmental, transportation access, health, resilience, and equity disadvantage indicators at the census tract level (USDOT, 2023b).

one of the four categories, (2) are in an area of persistent poverty, or (3) are in a historically disadvantaged community.

The detailed results of this site-specific EJ review of all 414 Candidate Sites, including both disadvantage scores for each of the four categories, are included in Appendix D. In total, 349 (84 percent) of the 414 Candidate Sites are considered to be in EJ communities according to the three above-listed criteria. The breakdown of these sites by criteria is provided in Table 4-11.2. Most commonly, Candidate Sites are considered EJ communities due to socioeconomic risk, persistent poverty, and/or historical disadvantage; each of these considerations affect over 60 percent of Candidate Sites, while health risk and air pollution burden are concerns for fewer sites (see Table 4-11.2, and Table D-6 in Appendix D). It should also be noted that many sites meet multiple EJ community criteria; for example, about 93 percent of sites considered to be in areas of persistent poverty or historically disadvantaged communities also have a Worst-Case Disadvantage Score in at least the 80th percentile for a disadvantage category.

Table 4-11.2
Summary of Candidate Sites in Communities with EJ Concerns

EJ Community Criteria	Number of Sites
Population-Weighted Disadvantage Score >80	92 (22%)
Worst-Case Disadvantage Score >80	318 (77%)
Area of Persistent Poverty	253 (61%)
Historically Disadvantaged Community	265 (64%)
EJ Community (By Any Above Criterion)	349 (84%)
Not EJ Community	65 (16%)

Note:
(1) Every community with a population-weighted disadvantage score >80 also has a worst-case disadvantage score >80.

4-11.3 Environmental Consequences

4-11.3.1 Alternatives 1 and 2

As previously discussed, the Postal Service anticipates deploying a large portion of the vehicles proposed under Alternatives 1 and 2 to 414 Candidate Sites. These sites would average about 100 vehicles, with approximately 50 sites having more than 200 vehicles. Further, Candidate Sites would predominantly host BEVs (i.e., due to the greater feasibility benefits of concentrating BEVs in certain locations). However, to be conservative for this analysis, the Postal Service assumes a proposed vehicle mix at each site consisting of 62 percent BEVs in line with the overall proportion of BEVs proposed for purchase under Alternatives 1 and 2. New vehicles would generally replace existing vehicles at the Candidate Sites; no meaningful changes are anticipated in the number of vehicles stationed at each Candidate Site as compared to existing conditions.

Air Quality

Alternatives 1 and 2 would both have a beneficial effect on the air quality of the 84 percent of communities around Candidate Sites that have EJ concerns. As discussed in detail in Section 4-6.3, Alternatives 1 and 2 would significantly reduce direct air emissions from Postal Service delivery vehicles by replacing existing LLVs with both modern, lower-emitting ICE vehicles and BEVs.

To provide an approximate quantitative estimate of annual emission reductions near each Candidate Site, the Postal Service assumes the following: (1) each Candidate Site would receive 62 percent BEVs (as noted above, this may conservatively overestimate ICE vehicles at each site), and (2) each vehicle would drive 2 miles per day within the 1-mile buffer study area of the Candidate Site (i.e., 1 mile leaving the site to travel to its route, and 1 mile returning through the study area to the site).

Using these assumptions, Table 4-11.3 shows the annual direct emissions reductions anticipated for each listed pollutant under each Alternative per 100 vehicles stationed at a Candidate Site, relative to existing conditions. Since NGDV and COTS vehicles are equivalent in the direct emissions modeling, the annual emission reduction benefits for this scenario under Alternatives 1 and 2 would be about the same. Emissions of VOCs, NO_x, and CO would be nearly eliminated, and particulate matter, SO_2, and CO_2e emissions would be substantially reduced by 30 to 73 percent. It should be noted, however, that emissions reductions would occur sooner under Alternative 1 due to its accelerated rate of vehicle deployments. The greatest pollutant reductions in total pounds per year would be VOCs, NO_x, and CO. VOCs and NO_x are the precursors to ozone; all three of these pollutants are associated with aggravation and development of respiratory health conditions, such as asthma (EPA, 2022d; Pappas, et al., 2000; EPA, 2023b). Ozone is itself an important component of smog, as well. Elevated levels of outdoor CO can exacerbate the effects of heart disease, potentially causing chest pain (EPA, 2022e).

Table 4-11.3
Estimated Annual Delivery Vehicle Emissions (lbs/yr) at A Candidate Site per 100 Vehicles Under Alternatives 1 and 2

	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
Existing Conditions	262.2	539.5	3,292.9	3.4	9.5	0.4	68,321.7
Alternatives 1 and 2	1.2	0.4	34.4	0.9	6.7	0.1	18,465.5
Emissions Change	**-99.5%**	**-99.9%**	**-99.0%**	**-73.0%**	**-29.6%**	**-72.2%**	**-73.0%**

Notes:
(1) Emissions estimated using 2023 emission factors for each vehicle type on city routes. Emissions reductions (on a percentage basis) on rural routes would be about the same for most pollutants and greater for particulate matter.
(2) Percentages based on emissions values prior to rounding.
(3) Hypothetical Candidate Site Vehicle Mix Considered:
(4) Existing Conditions: 100 LLVs (Delivery POVs typically do not serve city routes)
(5) Alternatives 1 and 2: 62 BEVs, 38 ICE vehicles

Compared to the No-Action Alternative (see Table 4-11.5), Alternatives 1 and 2 would further reduce all emissions around Candidate Sites by about 58 percent (except particulate matter), although this additional marginal reduction would be negligible relative to the change from existing conditions.

Air quality effects on EJ communities nationwide beyond 1 mile of vehicle deployment sites (e.g., resulting from the replacement of a delivery vehicle on a specific route) would be negligible. Table 4-11.4 depicts annual direct emissions reductions for each vehicle type on a city curb-line route compared to existing LLVs. BEVs would completely eliminate VOC, NO_x, CO, SO_2, and CO_2e emissions, and reduce particulate matter emissions by 9 to 41 percent per year. ICE vehicles would reduce VOC, NO_x, and CO emissions by at least 97 percent; $PM_{2.5}$, SO_2, and CO_2e emissions by 26 to 36 percent; and PM_{10} emissions by about 8 percent. However, since delivery vehicle emissions are distributed along an entire delivery route (e.g., 21 miles long) and throughout the entire year, potential adverse air quality effects on EJ communities are negligible even under existing conditions, and therefore the beneficial effects of reducing or eliminating these emissions would similarly be negligible.

Table 4-11.4
Estimated Annual Direct Emissions (lbs/yr) per Delivery Vehicle per City Curb-Line Route

	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
LLV	74.1	75.3	567.0	0.5	2.6	0.1	16,464.4
NGDV/COTS ICE	0.9	0.1	17.5	0.3	2.4	0.1	11,660.7
NGDV/COTS BEV	0.0	0.0	0.0	0.3	2.4	0.0	0.0
Emissions Change: LLV to NGDV/COTS ICE	**-98.8%**	**-99.8%**	**-96.9%**	**-35.6%**	**-7.8%**	**-26.2%**	**-29.2%**
Emissions Change: LLV to NGDV/COTS BEV	**-100.0%**	**-100.0%**	**-100.0%**	**-40.5%**	**-8.9%**	**-100.0%**	**-100.0%**

Notes:
(1) Emissions estimated using 2023 emission factors for each vehicle type on city routes. Emissions reductions (on a percentage basis) on rural routes would be about the same for most pollutants and greater for particulate matter.
(2) Delivery POVs omitted from table as they typically do not serve city routes.
(3) Percentages based on emissions values prior to rounding.

Noise

Alternatives 1 and 2 would both be anticipated to have beneficial noise effects (see Section 4-5.3.1). Since the existing vehicles (LLVs and delivery POVs) are assumed to consist entirely of ICE powertrains, replacing them with about 62 percent BEVs, which are quieter than ICE vehicles, would constitute negligible beneficial effects on nearby EJ communities with respect to noise. As noted in Section 4-5.3.1, the noise reduction of BEVs compared to ICE vehicles occurs only at slow speeds (i.e., less than 19 mph). Since vehicles are likely to be traveling at slow speeds while they are within, entering, and exiting the Candidate Sites, Alternatives 1 and 2 would benefit the portions of EJ communities within the immediate vicinity of the sites by slightly reducing vehicle noise while they are driving.

However, as some COTS would have externally audible back-up alarms under Alternative 1, any concentration of new COTS vehicles at Candidate Sites (i.e., 100 vehicles per site on average) could have adverse effects for noise-sensitive land uses (e.g., residences) in disadvantaged communities immediately adjacent to Candidate Sites. NGDV only have internally audible back-up alarms, so this adverse effect would not occur under Alternative 2.

From a route-specific perspective, communities served by BEVs would experience a slight reduction in noise. This benefit would primarily be experienced by communities served by curb-line routes, since the delivery vehicles do not exceed about 20 mph on average during stop-and-go delivery, but would be negligible when considering the effect of one vehicle per day in the context of background traffic and noise conditions.

Community Services

Under Alternatives 1 and 2, the Postal Service would continue to deliver to the more than 164.9 million delivery points regardless of socioeconomic status due to our Universal Service Mission, resulting in no effect on EJ communities in terms of mail service. The Postal Service's new delivery vehicles would have safety features not currently present on LLVs. Safety features such as interior and exterior back-up alarms, back-up cameras, blind spot warnings would reduce the potential for delivery vehicles to collide with other vehicles or pedestrians, resulting in beneficial safety effects on EJ communities both near Candidate Sites and along individual routes.

4-11.3.2 No-Action Alternative

Air Quality

With respect to air quality, the No-Action Alternative would result in comparable beneficial effects for EJ communities near Candidate Sites as under Alternatives 1 and 2. While only 10 percent of vehicles would be BEVs, rather than 62 percent, the proposed new ICE NGDV and COTS ICE vehicles would be dramatically lower-emitting than existing LLVs. The estimated annual direct emissions of delivery vehicles near each Candidate Site would be within about 1.6 lbs/yr of estimated emissions for most pollutants under Alternatives 1 and 2 (see Table 4-11.3 and Table 4-11.5).

Table 4-11.5
Estimated Annual Delivery Vehicle Emissions (lbs/yr) at A Candidate Site per 100 Vehicles Under the No-Action Alternative

	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
Existing Conditions	262.2	539.5	3,292.9	3.4	9.5	0.4	68,321.7
No-Action Alternative	2.8	0.9	81.4	1.0	6.8	0.3	43,734.1
Emissions Change	**-98.9%**	**-99.8%**	**-97.5%**	**-73.6%**	**-35.8%**	**-34.2%**	**-36.0%**

Notes:
(1) Emissions estimated using 2023 emission factors for each vehicle type on city routes. Emissions reductions (on a percentage basis) on rural routes would be about the same for most pollutants and greater for particulate matter.
(2) Percentages based on emissions values prior to rounding.
(3) Hypothetical Candidate Site Vehicle Mix Considered:
Existing Conditions: 100 LLVs
No-Action Alternative: 10 BEVs, 90 ICE vehicles

On a route-specific basis, the beneficial reductions in direct air emissions on each route, compared to existing conditions, would be marginally less than under Alternatives 1 and 2 since more existing ICE vehicles would be replaced with new ICE vehicles rather than BEVs.

Noise

Potential beneficial noise effects of the No-Action Alternative on communities with EJ concerns located around Candidate Sites would be less than under Alternatives 1 and 2, as only 10 percent of the vehicles would be BEVs. Most existing LLVs and delivery POVs would be replaced with new ICE vehicles with comparable noise to existing delivery vehicles. As with Alternative 2, since NGDV only have interior back-up alarms that are not audible outside the vehicle, the No-Action Alternative would have no associated adverse effects. Additionally, fewer communities along delivery routes would experience the negligible noise benefits of replacing an existing ICE vehicle with a new BEV.

Community Services

As under Alternatives 1 and 2, the Postal Service would continue to deliver to the more than 164.9 million delivery points under the No-Action Alternative regardless of socioeconomic status, resulting in no effect on EJ communities in terms of mail service. The safety benefits from the new delivery vehicles would be the same as under Alternatives 1 and 2, as well.

4-12 Summary of Potential Environmental Effects

Implementation of Alternatives 1 and 2 would result in no or negligible environmental effects to the environmental resources that were not evaluated in detail: water, geology, soils, prime farmland,

vegetation, wildlife, threatened and endangered species, wetlands and floodplains, cultural resources, land use, wild and scenic rivers, and the coastal zone.

Alternatives 1 and 2 would have either beneficial or no to negligible adverse effects on most environmental resources summarized below (see Table 4-12.3). This is because the Alternatives are nationwide in scope; involve a one-for-one replacement of existing vehicles with more efficient, technologically advanced, ergonomic, and safer vehicles; and purchase and deployment would occur over a six- to eight-year period.

4-12.1 Comparison of Potential Effects for Alternatives

The potential environmental effects from Alternative 1, Alternative 2, and the No-Action Alternative are summarized in Table 4-12.3. Net and cumulative aggregated emission changes are summarized in Table 4-12.1 and Table 4-12.2, respectively.

Alternatives 1 and 2 would result in beneficial effects on transportation safety, traffic noise, air pollutant and GHG emissions (with exception of SO_2), community emergency services, fuel (gasoline) consumption, hazardous waste generation, and EJ communities both near the Candidate Sites and nationwide. Alternative 1 generally provides greater benefits than Alternative 2 by accelerating vehicle replacements, thus accruing the expected benefits sooner (e.g., reduced air emissions, quieter vehicles, reduced gasoline usage).

Alternatives 1 and 2 would result in no to negligible effects on community economics, employment, traffic, accessibility, parking, public transportation, noise around VMFs and BEV charging stations, SO_2 emissions, community utility services, utility availability and capacity (including the electric grid), and solid and hazardous waste treatment and disposal. Alternative 1 could also have a minor to moderate adverse effect on residents immediately adjacent to Candidate Sites due to the externally audible back-up alarms for some COTS delivery vehicle models.

The No-Action Alternative would generally have the same effects as Alternatives 1 and 2. However, beneficial effects associated with BEVs, such as reduced air emissions, traffic noise, and gasoline use, would be significantly less than Alternatives 1 and 2. Further, the No-Action Alternative would decrease SO_2 emissions (rather than increasing them), and require less electricity from the grid.

Table 4-12.1
Net Aggregated Annual Emission Changes for All Alternatives (tpy)

	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
Alternative 1	-6,052	-6,585	-75,239	-117	-130	58	-773,871
Alternative 2	-6,142	-6,680	-74,127	-113	-126	49	-805,751
No-Action Alternative	-6,115	-6,879	-74,752	-111	-127	-14	-518,800

tpy = Tons Per Year
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Table 4-12.2
Cumulative Aggregated (Direct and Indirect) Emission Changes for All Alternatives (2023-2030) (tpy)

	Volatile Organic Compounds (VOC) (tpy)	Nitrogen Oxides (NO_x) (tpy)	Carbon Monoxide (CO) (tpy)	Particulate Matter ($PM_{2.5}$) (tpy)	Particulate Matter (PM_{10}) (tpy)	Sulfur Dioxide (SO_2) (tpy)	Carbon Dioxide Equivalent (CO_2e) (MT)
Alternative 1	-32,112	-35,121	-403,574	-629	-701	271	-3,868,260
Alternative 2	-20,694	-22,532	-250,035	-382	-426	161	-2,680,876
No-Action Alternative	-21,191	-23,770	-258,340	-383	-438	-29	-1,881,736

tpy = Tons Per Year
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

4-12.2 Selection of Preferred Alternative

At this time, the Postal Service selects Alternative 1 as our Preferred Alternative, which is the purchase and deployment of a mixed fleet of NGDV and COTS vehicles, with an increased BEV commitment of 62 percent.

Alternatives 1 and 2 would both provide a purpose-built RHD vehicle that meets the Postal Service's Purpose and Need by providing the performance, safety, and ergonomic requirements for efficient Postal Service carrier deliveries to businesses and curb-line residential mailboxes over the entire nationwide system. Both Alternatives would also leverage the recently appropriated IRA funding to accelerate the electrification of the Postal Service's delivery fleet.

However, Alternative 1 would include the strategic purchase and deployment of COTS vehicles to supplement the purpose-built NGDV, thus allowing us to accelerate the overall replacement of the existing end-of-life and high-maintenance LLVs (as well as cost-ineffective delivery POVs) to ensure we continue to meet our Universal Service Mission. Furthermore, as noted in Section 3-3.3, Additional COTS Vehicle or NGDV Acquisition, under Alternative 1 the Postal Service would retain the option to replace COTS vehicles with equivalent or superior COTS vehicles to ensure an adequate vehicle supply and to achieve its BEV percentage commitment. Notably, Alternative 1 would enable the Postal Service to purchase and deploy nearly 31,000 more delivery vehicles in the next two years than under Alternative 2, and enable the Postal Service to purchase all 106,480 vehicles in six years rather than eight years (see Appendix C).

As a result of accelerating the Postal Service's delivery vehicle replacement schedule, including purchasing more BEVs sooner, Alternative 1 would save significantly more gasoline than Alternative 2 (i.e., by about 73 million gallons over the next eight years) and would more than double the gasoline savings as compared with the No-Action Alternative (i.e., by about 158 million gallons over the next eight years). Similarly, compared to Alternative 2, Alternative 1 would significantly decrease the estimated cumulative GHG emissions over the next eight years by about 1.19 million MT of CO_2e and by about 1.99 million MT as compared with the No-Action Alternative. Additionally, using the most conservative SC-GHG scenario (i.e., IWG's 5 percent discount rate), Alternative 1 would increase cumulative present value savings in climate change impacts by at least $12 million by 2050 compared to Alternative 2 and by at least $86 million by 2050 compared to the No-Action Alternative. As Alternatives 1 and 2 would incur at least $74 million more in climate savings than the No-Action Alternative, both action Alternatives are significantly better than the No-Action Alternative.

Alternative 1 would result in greater cumulative reductions of most criteria pollutants by 2030 as well. Potential effects of Alternative 1 on other resource areas would be comparable to those from Alternative 2. For these reasons, the Postal Service also identifies Alternative 1 as the Environmentally

Preferable Alternative which would best promote the national environmental policy as expressed in Section 101 of NEPA.

The No-Action Alternative, or status quo, would meet the Postal Service's Purpose and Need by implementing the selected alternative from the NGDV ROD. However, it would not allow the Postal Service to accelerate our replacement schedule by supplementing NGDV purchases with COTS vehicles in the near-term, thus prolonging the time the Postal Service must achieve our Universal Service Mission with end-of-life and high-maintenance delivery vehicles. It would also include a minimum of 10 percent BEVs, as opposed to 62 percent under Alternatives 1 and 2. Therefore, while the No-Action Alternative would reduce environmental effects relative to existing conditions, it would have significantly less environmental benefits than Alternatives 1 and 2, particularly in terms of gasoline consumption and air emissions.

Table 4-12.3
Potential Environmental Effects Summary Matrix

Key:
Impact symbols: B = beneficial effect; N = no effect or negligible effect; M = moderately adverse effect; and S = significant effect
Duration symbols: P = permanent effect; T = temporary effect; and N/A = not applicable
Mitigation symbols: Y = can be mitigated; N = cannot be mitigated; NR = not required; and N/A = not applicable

Environmental Resource Area	Alternative 1 Impact - Duration - Mitigation	Alternative 2 Impact - Duration - Mitigation	No-Action Alternative Impact - Duration - Mitigation
Socioeconomics			
Community Economics	N - P - NR	N - P - NR	N - P - NR
Employment	N - P - NR	N - P - NR	N - P - NR
Transportation			
Traffic	N - P - NR	N - P - NR	N - P - NR
Safety	B - P - NR	B - P - NR	B - P - NR
Accessibility	N - P - NR	N - P - NR	N - P - NR
Parking	N - P - NR	N - P - NR	N - P - NR
Public Transportation	N - P - NR	N - P - NR	N - P - NR
Noise			
Traffic	B - P - NR	B - P - NR	B - P - NR
Back-Up Alarms (Externally Audible)	N/M - P - N	B - P - N	B - P - N
VMF Operations & BEV Charging	N - P - NR	N - P - NR	N - P - NR
Air Quality			
Air Emissions – Criteria Pollutants Except SO_2	B - P - NR	B - P - NR	B - P - NR
Air Emissions – SO_2	N - P - NR	N - P - NR	B - P - NR
Greenhouse Gases	B - P - NR	B - P - NR	B - P - NR
Community Services			
Utilities	N - P - NR	N - P - NR	N - P - NR
Emergency Services	B - P - NR	B - P - NR	B - P - NR
Utilities and Infrastructure			
Availability	N - P - NR	N - P - NR	N - P - NR
Capacity	N - P - NR	N - P - NR	N - P - NR
Energy Requirements and Conservation			
Fuel Consumption	B - P - NR	B - P - NR	B - P - NR
Electrical Grid	N - P - NR	N - P - NR	N - P - NR
Solid/Hazardous Materials/Waste			
Solid Waste	N - P - NR	N - P - NR	N - P - NR
Hazardous Waste	B - P - NR	B - P - NR	B - P - NR
Recycling	N - P - NR	N - P - NR	N - P - NR
Environmental Justice			
EJ Communities Near Candidate Sites	B - P - NR	B - P - NR	B - P - NR
EJ Communities Nationwide	B - P - NR	B - P - NR	B - P - NR

5 OTHER IMPACTS

5-1 Unavoidable Adverse Impacts

Alternatives 1 and 2 would involve the purchase and deployment of 106,480 NGDV or COTS vehicles in total production orders over a six- to eight-year period, with 62 percent of the vehicles being BEVs. High-maintenance and end-of-life LLVs, and delivery POVs, would be replaced throughout the U.S. on a one-for-one basis, resulting in no additional delivery vehicles. This number of new delivery vehicles represents a negligible percentage of the 275.9 million motor vehicles owned and operated in the U.S. in 2020 (USDOT, 2022). Unavoidable potential adverse effects from Alternatives 1 and 2, and the No-Action Alternative, include the following:

- Local retail fuel providers and bulk gasoline suppliers, LLV replacement parts suppliers, and commercial garages would experience a decrease in revenue (see Section 4-3.3.1). These negligible effects would be the same under Alternative 1 and Alternative 2. The No-Action Alternative would have a lesser effect on gasoline suppliers.

- Access and parking areas at some Postal Service facilities may be temporarily affected as parking lots are reconfigured to accommodate the new delivery vehicles and charging stations (see Section 4-4.3.1). These negligible effects would be the same under Alternative 1 and Alternative 2. The No-Action Alternative would require fewer parking lot modifications, eliminating these potential effects.

- Back-up alarms that are audible from the exterior on certain COTS vehicle models would constitute a new and noticeable noise both around Candidate Sites and along delivery routes (see Section 4-5.3.1). This effect would only occur under Alternative 1.

- The Postal Service's indirect SO_2 emissions nationwide would increase slightly as a result of increased electricity requirements for BEVs (see Section 4-6.3). This negligible effect would be slightly greater under Alternative 1 than under Alternative 2. The No-Action Alternative would not increase SO_2 emissions.

- The Postal Service's nationwide demand for electricity would increase (see Section 4-9.3.1). This negligible effect would be greater under Alternative 1 than under Alternative 2, and substantially less under the No-Action Alternative.

- Solid and hazardous waste generation would increase as the Postal Service disposes of about 100,00 existing LLVs (recycling to the extent practicable) (see Section 4-10.3.1). The No-Action Alternative would replace the most LLVs, followed by Alternative 1, and finally by Alternative 2, although the differences between them are negligible. Further, Alternative 1 may ultimately generate more solid and hazardous waste from the proposed new vehicles than Alternative 2 or the No-Action Alternative, since COTS vehicles are anticipated to have shorter lifespans.

- Spent lithium-ion BEV batteries would be an additional source of hazardous waste for the Postal Service to dispose (recycling to the extent practicable, which would likely become more feasible over time) (see Section 4-10.3.1). This negligible effect would be slightly greater under Alternative 1 than under Alternative 2 due to the shorter battery lifespans for the COTS vehicles. The No-Action Alternative would generate many fewer BEV batteries requiring disposal.

- Communities immediately adjacent to Candidate Sites may be adversely affected by noise from vehicle back-up alarms (see Section 4-11.3.1). This effect would only occur under Alternative 1.

Alternatives 1 and 2 would not impact short-term uses of environmental resources that would affect the maintenance of long-term productivity.

5-2 Irreversible and Irretrievable Commitments of Resources

Irreversible and irretrievable commitments of resources refer to the impacts on or losses of resources that cannot be recovered or reversed such as the use of fuel or mined minerals.

Under Alternatives 1 and 2, gasoline would continue to be used for ICE NGDV and COTS vehicles. There would be a one-for-one replacement of existing delivery vehicles, predominantly LLVs, and the NGDV and COTS vehicles would be more fuel-efficient than the LLVs being replaced. Further, Alternatives 1 and 2 include significantly more BEVs than the No-Action Alternative. Thus, Alternatives 1 and 2 would require less gasoline to be consumed compared to both existing conditions and under the No-Action Alternative, and Alternative 1 would require substantially less gasoline over the next eight years than Alternative 2.

In 2022, non-renewable energy sources accounted for about 78 percent of electricity generation (USEIA, 2022b), so the BEV NGDV and COTS BEVs would result in irreversible commitment of these non-renewable fuel resources for electricity generation, although this commitment would decrease over time as the grid decarbonizes. Also, any materials used to construct the NGDV and COTS vehicles, including, for example, the vehicles' lithium-ion batteries, would result in an irreversible commitment of the fuel or mined mineral ores used. In particular, the minerals of primary concern for BEV battery production are cobalt, lithium, graphite, and manganese, all of which are listed as critical materials by the U.S. Geological Survey due to the heavy reliance for economic development and high vulnerability in the supply chain (USGS, 2022).

6 CUMULATIVE EFFECTS

6-1 Introduction

Cumulative effects are the effects on the environment that result from the incremental effect of a proposed action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects result when the effects of an action are added to or interact with other effects in a particular place and within a particular time frame. The cumulative effects of an action can be viewed as the collective environmental effects (magnitude, extent, or duration) on an environmental resource, ecosystem, or human community from a proposed action when added to impacts from other actions affecting that resource. If an action does not have effects on a particular resource, there would be no cumulative effects attributable to the action.

The analysis of cumulative effects requires specific knowledge of other actions occurring or proposed to occur within or near the geographic study area. This analysis focuses on the nationwide deployment of new Postal Service delivery vehicles with one-for-one replacement of mostly high-maintenance and end-of-life delivery vehicles over a six- to ten-year period. The site-specific locations of where the new delivery vehicles would be deployed are not known at this time, but would occur nationwide. Given the nature and nationwide scope of the Proposed Action under all Alternatives, identifying the actions of others would be very difficult if not impossible to quantify. Therefore, cumulative effects from the incremental effects of the Alternatives are evaluated broadly on a nationwide scale.

6-2 Geographic Extent and Time Frame

The deployment of up to 106,480 replacement delivery vehicles over a six- to ten-year period is nationwide in scope, with vehicles to be placed at various Postal Service facilities across the U.S. depending on the locations of the existing delivery vehicles to be replaced (i.e., LLVs and delivery POVs). Therefore, the geographic extent of this cumulative effects analysis is also national in scope. The temporal scope of this analysis considers nationwide trends related to past and future action effects when the incremental effects related to upgrading the Postal Service's delivery fleet are added. For all Alternatives, deployments would occur over six to ten years, respectively, and the vehicles' operational time-period would continue for the lifespan of the vehicles.

6-3 Past, Present, and Reasonably Foreseeable Projects and Actions Considered

The temporal scope of this analysis spans past and planned future actions related to upgrading the Postal Service's delivery fleet vehicles. The Postal Service continually replaces high-maintenance and end-of-life delivery vehicles. The Postal Service operates a delivery fleet of over 210,000 active vehicles consisting of purpose-built vehicles, COTS vehicles, and delivery POVs. The purpose-built vehicles, which comprise approximately 151,000 of the over 210,000 delivery vehicles (over 70 percent), include LLVs and FFVs that are all at least 22 years old and have reached end-of-life. New COTS delivery vehicles, evaluated in a 2017 PEA (USPS, 2017), and RECs in 2020 and 2023, will continue to be purchased as needed to replace high-maintenance and end-of-life delivery vehicles and to support delivery route growth.

Additionally, within the U.S. generally, BEV sales are rapidly increasing. National BEV sales were approximately 240,000 in 2020, 460,000 in 2021, and 740,000 in 2022 (Argonne National Laboratory, 2023). For this analysis, the Postal Service assumes that annual BEV sales will continue to increase nationally over the next ten years.

6-4 Discussion of Potential Cumulative Effects

6-4.1 Resources Not Studied in Detail

All Alternatives would potentially affect the environmental resources discussed in this section. There would be no potential for cumulative effects on the environmental resources not studied in detail in this SEIS, as described in Section 4-2 (water, geology, soils, prime farmland, vegetation, wildlife, threatened and endangered species, wetlands and floodplains, cultural resources, land use, wild and scenic rivers, and coastal zone).

6-4.2 Socioeconomics

All Alternatives, in conjunction with routine delivery vehicle replacements and growth in BEV sales nationally, would have negligible cumulative effects on community economics. There would be a negligible beneficial effect on the nationwide economy from the purchase and deployment of new delivery vehicles and BEVs on the local communities where the vehicles and charging stations are manufactured and sold. The sale, scrapping, and/or recycling of the aged delivery vehicles being replaced would likewise have a negligible positive economic effect on income for the used auto, parts, scrapping, and recycling industries. Increased purchases of BEVs and more fuel-efficient ICE vehicles nationally would reduce the demand for gasoline purchases, although this adverse effect on fuel retailers and bulk fuel suppliers would be insignificant when compared to the nationwide economy. Increased BEV sales nationwide would increase the demand for electricity available to commercial and residential users, so there would be negligible beneficial cumulative effect on electricity suppliers nationwide. No Alternative would have cumulative effects on employment.

6-4.3 Transportation

All Alternatives, in conjunction with routine delivery vehicle replacements and growth in BEV sales nationally, would increase the number of vehicles on the road with modern safety features, thereby improving the operational safety of vehicles and resulting in a positive cumulative effect on operational and roadway safety. In addition, there would be no cumulative effect on traffic, accessibility and parking at Postal Service facilities, or public transportation, and no potential for adverse cumulative effects on local or nationwide transportation on a nationwide scale.

6-4.4 Noise Environment

All Alternatives, in conjunction with routine delivery vehicle replacements and growth in BEV sales nationally, would have negligible cumulative effects on noise. The noise difference between BEVs and ICE vehicles is small, and most noticeable at slow speeds. Increased sales of BEVs nationwide could incrementally reduce the traffic noise in residential settings that typically have slow speed limits, where Postal Service delivery vehicles also complete daily deliveries. Back-up alarms would be used for short durations, so the externally audible back-up alarms of some COTS delivery vehicles are unlikely to have adverse cumulative effects on communities while on route. Adverse effects to communities immediately adjacent to major deployment sites which happen to have large numbers of COTS models with externally audible back-up alarms are expected to be negligible to moderate depending on such factors as site layout and time needed to maneuver vehicles with such alarms. Finally, BEV charging station noise is negligible and would have no adverse cumulative effects in conjunction with increased BEV sales nationally.

6-4.5 Air Quality

All Alternatives, in conjunction with routine delivery vehicle replacements and growth in BEV sales nationally, would have significant beneficial cumulative effects on air quality. The new ICE vehicles would continue to produce air emissions during operations. However, replacing the high-maintenance and end-of-life delivery vehicles with new vehicles (including ICE and BEV) would result in a beneficial net reduction in air pollutant (MSATs and most criteria pollutants) and GHG emissions, and would result in a significant beneficial effect on SC-GHG. The Postal Service's routine replacement of old, end-of-life delivery vehicles with new ICE vehicles and BEVs also produces a beneficial net reduction in air pollutant and GHG emissions, as does the increasing automotive market share of BEVs nationally.

Alternatives 1 and 2, in conjunction with increasing sales of BEVs nationally would contribute to increased indirect SO_2 emissions from the demand for more electricity generation. This adverse cumulative effect is expected to be negligible on a nationwide scale, particularly as renewable and cleaner fuels continue to supply a greater proportion of the electric grid.

6-4.6 Community Services

All Alternatives, in conjunction with routine delivery vehicle replacements and growth in BEV sales nationally, would have negligible beneficial cumulative effects on operational safety of vehicles and community services generally. Each of these actions generally involves replacing old vehicles with new vehicles that have modern safety features, thereby increasing safety on the road and resulting in less demand for emergency services.

6-4.7 Utilities and Infrastructure

All Alternatives, in conjunction with routine delivery vehicle replacements and growth in BEV sales nationally, would not result in a significant adverse cumulative impact on utilities or infrastructure. For Alternatives 1 and 2, adding about 66,000 BEVs to the Postal Service fleet over the next six to eight years would increase the demand for electricity from the electrical grid resulting in a negligible, incremental adverse effect on nationwide electricity demand (see Section 4-8.3.1), though much of this charging would occur in off-peak hours when overall grid demand is much lower. Accordingly, adding at least 10,648 BEVs under the No-Action Alternative would also have a negligible adverse effect on nationwide electricity demand. Charging stations would be needed at Postal Service facilities to accommodate BEVs, and public charging stations would not be used. Increasing BEV sales nationally would require increased electricity generation as well, in greater amounts than the Postal Service would require, although this would occur over several years, be distributed nationwide, and still comprise a small percentage of the total annual electricity generation in the country.

6-4.8 Energy Requirements and Conservation

All Alternatives, in conjunction with routine delivery vehicle replacements and growth in BEV sales nationally, would have a beneficial cumulative effect on energy use through reduction in gasoline consumption. All of these actions generally entail replacing older, less fuel-efficient vehicles with newer, more fuel-efficient vehicles. In particular, BEVs do not use gasoline at all. As noted previously, the overall national impact of BEV charging on electricity requirements would not be cumulatively significant. The Preferred Alternative's annual contribution to electricity demand would be about 0.009 percent of total U.S. electricity once fully implemented, not accounting for likely growth in U.S. electricity generation over the next six to eight years. However, under any

Alternative, there would be no significant adverse cumulative effect on energy requirements or conservation on a nationwide scale.

6-4.9 Solid and Hazardous Materials and Waste

All Alternatives, in conjunction with routine delivery vehicle replacements and growth in BEV sales nationally, would not result in significant adverse cumulative effects on solid and hazardous waste treatment and disposal. They would have a negligible adverse effect on solid and hazardous waste, with disposal of the existing delivery vehicles taking place over a six- to ten-year period. The Postal Service's vehicle disposal strategy and contracts in place for recycling and disposal would minimize the adverse effects to the extent possible. Recycling and disposal of the wastes and materials from the replaced vehicles would have no significant adverse effect on commercial treatment capacity and landfill capacity over the six- to ten-year period.

All Alternatives, and increased BEV sales generally, would contribute to a beneficial cumulative reduction in the use of lubricants, oils, and greases used in ICE vehicles. Nationally, there is adequate commercial treatment and landfill disposal capacity for hazardous waste through 2044 (EPA, 2019). Spent BEV batteries would be an increasing source of hazardous waste for both the Postal Service and the nation generally. Recycling capacity for BEV batteries is expected to increase over the next ten years before the end of the effective life of the NGDV or COTS vehicle batteries; the recently signed IRA includes specific funding programs for development of facilities to recycle critical materials (The White House, 2023). No significant adverse cumulative effects on solid and hazardous waste treatment and disposal on a nationwide scale are expected to result from implementation of the Proposed Action.

6-4.10 Environmental Justice

All Alternatives, in conjunction with routine delivery vehicle replacements and growth in BEV sales nationally, would have beneficial cumulative effects on EJ communities, with Alternatives 1 and 2 having significant beneficial effects with respect to air emissions. For Alternative 1, there is also the potential for negligible to moderate adverse effects to EJ communities immediately adjacent to sites where large numbers of COTS models with externally audible backup alarms are based, depending on site layouts and time needed to maneuver vehicles.

6-4.11 Conclusion

Effects from the Preferred Alternative would not have the potential for significant adverse cumulative effects on nationwide environmental resources when considered in conjunction with other actions nationwide. Because all Alternatives would include adding newer delivery vehicles and increasing the proportion of BEVs in the fleet, effects on environmental resources generally are expected to be less than under existing conditions.

7 MITIGATION MEASURES

7-1 Introduction

This SEIS has been developed in accordance with NEPA regulations. As specified in NEPA, mitigation was considered throughout the environmental analysis process. Mitigation measures include avoiding the adverse effects; minimizing or reducing the severity of effects over time; rectifying the effects by repairing, rehabilitating, or restoring the adverse effect; or compensating for the effects such that they are no longer significant.

7-2 Mitigation Measures

A summary of the potential beneficial and adverse effects of Alternatives 1 and 2 is provided in Section 4-12. Because of the small degree and low severity of adverse effects of each of the Alternatives on environmental resources, mitigation measures are not necessary to avoid adverse effects, reduce the severity of adverse effects, rehabilitate and restore adverse effects, or compensate for adverse effects. Implementation of Alternatives 1 and 2 would provide various degrees of beneficial effects on some environmental resources.

7-3 Conclusion

While the No-Action Alternative (i.e., continued implementation of vehicle replacements in accordance with the NGDV ROD) would already serve to mitigate the existing impacts on environmental resources from the Postal Service's existing delivery vehicles, implementation of Alternatives 1 or 2 would further mitigate these effects. Additionally, Alternative 1 (Preferred Alternative) would accelerate the replacement of existing delivery vehicles compared to both the No-Action Alternative and Alternative 2, thereby reducing environmental effects both sooner and by a more significant degree with respect to greenhouse gas emissions. The Postal Service has determined that no further mitigation measures are necessary or appropriate.

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APPENDIX A

ACRONYMS AND ABBREVIATIONS and INDEX

Table A-1
List of Acronyms and Abbreviations

Table A-2
Index

Table A-1
List of Acronyms

Acronym	Meaning
°F	degrees Fahrenheit
AC	air conditioning
APP	area of persistent poverty
BEA	U.S. Bureau of Economic Analysis
BEV	battery electric vehicle
CAA	Clean Air Act
CDC	Centers for Disease Control and Prevention
CEJST	Climate and Economic Justice Screening Tool
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalents
COTS	commercial-off-the-shelf
cyl	cylinder
dB	decibel
dBA	decibel (A-weighted scale)
DOT	Department of Transportation
EIS	Environmental Impact Statement
EJ	environmental justice
EJI	Environmental Justice Index
EO	Executive Order
EPA	Environmental Protection Agency
ETCE	Equitable Transportation Community Explorer
EVSE	electric vehicle supply equipment
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FFV	Flexible Fuel Vehicle
FHWA	Federal Highway Administration
FR	Federal Register
FY	fiscal year
GHG	greenhouse gas
GREET	Greenhouse Gases, Emissions, and Energy use in Technologies
GSA	General Services Administration
GVWR	Gross Vehicle Weight Rating
GWP	Global Warming Potential
HAPs	hazardous air pollutants
HDC	historically disadvantaged community
HVAC	heating, ventilation, and air conditioning
ICE	internal combustion engine
IRA	Inflation Reduction Act of 2022
ITE	Institute of Transportation Engineers
IWG	Interagency Working Group
kg/mi	kilogram(s) per mile
kWh	kilowatt hour
lbs	pounds
LHD	left-hand drive
LLV	Long-Life Vehicle

Acronym	Meaning
mi/kWh	miles per kilowatt hour
MOVES	MOtor Vehicle Emission Simulator
MPG	miles per gallon
MPGe	miles per gallon equivalent
mph	miles per hour
MSAT	mobile source air toxics
MT	metric ton
N_2O	nitrous oxide
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NGDV	Next Generation Delivery Vehicles
NO_x	nitrogen oxides
NO_2	nitrogen dioxide
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NR	not required
NRI	National Risk Index
O_3	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PEA	Programmatic Environmental Assessment
$PM_{2.5}$	particulate matter (measured as less than 2.5 microns in diameter)
PM_{10}	particulate matter (measured as less than 10 microns in diameter)
POV	personally owned vehicle
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
REC	Record of Environmental Consideration
RHD	right-hand drive
ROD	Record of Decision
SC-GHG	social cost of greenhouse gas
SEIS	Supplemental Environmental Impact Statement
SIP	State Implementation Plan
SO_2	sulfur dioxide
TCO	Total Cost of Ownership
tpy	ton per year
TSD	Technical Support Document
UDDS	Urban Dynamometer Driving Schedule
$\mu g/m^3$	micrograms per cubic meter
U.S.	United States
USC	United States Code
USCB	United States Census Bureau
USDOE	United States Department of Energy
USEIA	U.S. Energy Information Administration
USPS	United States Postal Service
VMF	Vehicle Maintenance Facility
VMT	vehicle miles traveled
VOC	volatile organic compound
WTP	well-to-pump

Table A-2
Index

Word	Found on page number(s)
NGDV FEIS, NGDV ROD	i, ii, iii, iv, v, 1-1, 1-2, 1-4, 2-1, 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, 3-8, 3-9, 3-10, 4-4, 4-7, 4-17, 4-29, 4-34, 4-37, 4-39, 4-51, 7-1, 9-2, 9-3
no effect	4-1, 4-9, 4-10, 4-47, 4-48, 4-51
noise	i, iv, 3-10, 4-10, 4-11, 4-12, 4-13, 4-46, 4-48, 4-49, 4-51, 5-1, 5-2, 6-2, 8-1, 8-2, 9-3
parking	ii, iv, 3-4, 3-8, 4-3, 4-8, 4-9, 4-10, 4-13, 4-48, 4-51, 5-1, 6-2
safety	i, ii, iii, iv, 1-2, 2-1, 3-4, 3-6, 3-9, 3-10, 4-2, 4-8, 4-9, 4-10, 4-11, 4-13, 4-14, 4-33, 4-38, 4-47, 4-48, 4-50, 4-51, 6-2, 6-3, 8-3
social cost, SC-GHG	v, ix, 4-15, 4-16, 4-21, 4-22, 4-26, 4-29, 4-32, 4-50, 6-3
solid waste	4-37, 4-38, 4-52
stakeholder involvement	1-4
traffic	i, iv, 3-10, 4-7, 4-8, 4-9, 4-10, 4-11, 4-12, 4-20, 4-46, 4-48, 4-49, 4-51, 6-2, 8-2, 8-3
utilities, utility services	ii, iv, 3-10, 4-5, 4-33, 4-34, 4-48, 4-51, 6-3, 9-2
workforce	4-3, 4-4, 4-5, 4-6, 4-7

APPENDIX B

CONSULTATION AND COORDINATION

B1 Notice of Intent

NOI Federal Register Publication (June 10, 2022)

Table B1-1
Notice of Intent Stakeholder Distribution List

Example NOI Letter (with Enclosure: June 10, 2022 Federal Register Publication, Postal Service Notice of Intent for Supplemental Environmental Impact Statement)

Notice to Postpone Public Hearing and Extend Public Comment Period for Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement – Federal Register Publication (July 21, 2022)

B2 Scoping Public Hearing Documentation

Scoping Public Hearing PowerPoint Presentation, August 8, 2022

Scoping Public Hearing Court Reporter Transcript, August 8, 2022

Scoping Public Hearing "Q&A Box" Comments, August 8, 2022

B3 Public and Agency Scoping Comments and Responses

Agency and Public Comments (representative)

Table B3-1
Summary of EPA, Other Agency, and Public Scoping Comments Timely Received in Response to the NOI of the Draft SEIS, and Postal Service Responses

B4 Notice of Availability of Draft SEIS

Table B4-1
NOA Stakeholder Distribution List

Example NOA Letter (with Enclosure: June 30, 2023 Federal Register Publication, Postal Service Notice of Availability of Draft Supplemental Environmental Impact Statement for Next Generation Delivery Vehicles Acquisitions)

NOA Federal Register Publication (June 30, 2023)

B5 Draft SEIS Public Hearing Documentation

Draft SEIS Public Hearing PowerPoint Presentation (corrected), July 26, 2023

Draft SEIS Public Hearing Court Reporter Transcript, July 26, 2023

Public Hearing "Q&A Box" Comments, July 26, 2023

B6 Public and Agency Draft SEIS Comments and Responses

Agency and Public Comments (representative)

B7 Notice of Availability of Final SEIS

B1 Notice of Intent

NOI Federal Register Publication (June 10, 2022)

Federal Register / Vol. 87, No. 112 / Friday, June 10, 2022 / Notices 35581

Postal Service's initial notice and is incorporated by reference. Notice at 3.

The Commission will review the proposed IRA–USPS II Agreement rates to ensure that the Inbound Competitive Multi-Service Agreements with Foreign Postal Operators 1 product continues to cover its attributable costs, does not cause Market Dominant products to subsidize Competitive products as a whole, and contributes to the Postal Service's institutional costs. 39 U.S.C. 3633(a); 39 CFR 3035.105 and 3035.107.

II. Commission Action

The Commission seeks public comments from interested persons on whether the Postal Service's Notice concerning the IRA–USPS II Agreement is consistent with 39 U.S.C. 3633 and 39 CFR 3035.105. Comments are due by June 21, 2022.

The Notice and related filings are available on the Commission's website (*http://www.prc.gov*). The Commission encourages interested persons to review the Notice for further details.

The Commission appoints Kenneth R. Moeller to serve as Public Representative in this proceeding.

III. Ordering Paragraphs

It is ordered:

1. The Commission seeks public comment from interested persons on whether the Notice of the United States Postal Service of Filing Modifications to Rates Under Inbound Competitive Multi-Service IRA–USPS II Agreement with Materials Filed Under Seal, filed June 3, 2022, is consistent with 39 U.S.C. 3633 and 39 CFR 3035.105.

2. Pursuant to 39 U.S.C. 505, Kenneth R. Moeller is appointed to serve as an officer of the Commission (Public Representative) to represent the interests of the general public in this proceeding.

3. Comments by interested persons are due by June 21, 2022.

4. The Secretary shall arrange for publication of this order in the **Federal Register**.

By the Commission.

Erica A. Barker,

Secretary.

[FR Doc. 2022–12503 Filed 6–9–22; 8:45 am]

BILLING CODE 7710–FW–P

POSTAL SERVICE

Notice of Intent To Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement

AGENCY: Postal Service.

ACTION: Notice.

SUMMARY: On January 7, 2022, the Postal Service published a Final Environmental Impact Statement (FEIS) pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA), its implementing regulations, and the President's Council on Environmental Quality (CEQ) regulations for its Next Generation Delivery Vehicle (NGDV) Acquisitions. On February 23, 2022, the Postal Service issued its Record of Decision, determining that it would implement the NGDV FEIS's Preferred Alternative to purchase and deploy over a ten-year period 50,000 to 165,000 purpose-built, right-hand drive NGDV consisting of a mix of internal combustion engine (ICE) and battery electric vehicle (BEV) powertrains, with at least ten percent BEVs. On March 24, 2022, in accordance with that decision, the Postal Service placed an order for 50,000 NGDV, of which 10,019 are BEV. The Postal Service now announces its intention to prepare a Supplemental Environmental Impact Statement (SEIS) to address the three considerations that have developed since the NGDV FEIS and Record of Decision.

DATES: Comments should be received no later than July 25, 2022. The Postal Service will also publish a Notice of Availability to announce the availability of the Draft SEIS and solicit comments on the Draft SEIS during a second 45-day public comment period.

ADDRESSES: Interested parties may direct comments and questions to: Mr. Davon Collins, Environmental Counsel, United States Postal Service, 475 L'Enfant Plaza SW, Office 6606, Washington, DC 20260–6201, or at *NEPA@usps.gov*. Note that comments sent by mail may be subject to delay due to federal security screening. Faxed comments are not accepted. All submitted comments and attachments are part of the public record and subject to disclosure. Do not enclose any material in your comments that you consider to be confidential or inappropriate for public disclosure.

The Postal Service will also conduct a virtual public hearing on Tuesday, July 19, 2022, at 7 p.m. (ET). Registration information will be made available 15 days prior to the hearing date at the following website: *http://uspsngdveis.com/*.

SUPPLEMENTARY INFORMATION: The three considerations that have developed since the NGDV FEIS and Record of Decision are as follows:

First, in response to potential delivery network refinements and route optimization efforts being considered for the postal delivery network, the SEIS would analyze the potential impacts to the delivery fleet from such changes, including whether the changed route length and characteristics warrant an increase in the minimum number of BEV NGDVs to be procured under the Proposed Action set forth in the FEIS.

Second, in response to its need to accelerate the replacement of aged and high-maintenance Long Life Vehicles (LLV) and Flexible Fuel Vehicles (FFV) in furtherance of its Universal Service Obligation, the Postal Service intends to analyze the potential impacts of replacing the remainder of its LLV/FFV fleet with a combination of NGDV and Commercial Off-the-Shelf (COTS) vehicles. The Postal Service anticipates that the SEIS Proposed Action will propose acquiring up to 37,000 left-hand drive COTS with ICE and BEV powertrains, which would be deployed on routes with fewer than 21 curb-line delivery points.

Third, as the NGDV FEIS only assessed the environmental impacts from a replacement of the Postal Service's LLV and FFVs, the SEIS would also assess the potential impacts from replacing other aged and high-maintenance non-LLV/FFV postal delivery vehicles. This analysis would include consideration of the acquisition of: (1) up to 60,000 right-hand drive non-NGDV purpose-built vehicles with ICE and BEV powertrains to place on routes currently utilizing personally owned vehicles (POVs), for rural route growth, and for routes that require a vehicle less than 111 inches tall; and (2) the acquisition of up to 26,000 left-hand drive COTS with ICE and BEV powertrains to replace existing COTS delivery vehicles that will reach the end of their service lives within the next ten years.

The Postal Service actively seeks input from the public, interested persons, organizations, and Federal, state, and regional agencies to identify environmental concerns and potential alternatives to be addressed in the SEIS and will accept public comments for a 45-day period, concluding on July 25, 2022. With respect to recommendations regarding potential alternatives, the Postal Service requests that comments be as specific as possible regarding vehicle type, model and manufacturer so that the Postal Service might fully consider the alternative in terms of pricing, operational capabilities, and market availability.

References

1. U.S. Postal Service, Notice of Intent to Prepare an Environmental Impact

Statement for Purchase of Next Generation Delivery Vehicles, 86 FR 12715 (Mar. 4, 2021).
2. U.S. Postal Service, Notice of Availability of Draft Environmental Impact Statement for Purchase of Next Generation Delivery Vehicle, 86 FR 47662 (Aug. 26, 2021).
3. U.S. Environmental Protection Agency, Notice of Availability of EIS No. 20210129, Draft, USPS, DC, Next Generation Delivery Vehicle Acquisitions, 86 FR 49531 (Sept. 3, 2021).
4. U.S. Environmental Protection Agency, Notice of Availability of EIS No. 20220001, Final, USPS, DC, Next Generation Delivery Vehicle Acquisitions, 87 FR 964 (Jan. 7, 2022).
5. U.S. Postal Service, Notice of Availability of Final Environmental Impact Statement for Purchase of Next Generation Delivery Vehicles, 87 FR 994 (Jan. 7, 2022).
6. U.S. Postal Service, Notice of Availability of Record of Decision, 87 FR 14588 (Mar. 15, 2022).

Joshua J. Hofer,
Attorney, Ethics and Legal Compliance.
[FR Doc. 2022–12581 Filed 6–7–22; 4:15 pm]
BILLING CODE 7710–12–P

POSTAL SERVICE

Sunshine Act Meetings

TIME AND DATE: June 22, 2022, at 9:00 a.m.

PLACE: Atlanta, GA.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

Wednesday, June 22, 2022, at 9:00 a.m.

1. Strategic Issues.
2. Financial and Operational Issues.
3. Executive Session.
4. Administrative Items.

GENERAL COUNSEL CERTIFICATION: The General Counsel of the United States Postal Service has certified that the meeting may be closed under the Government in the Sunshine Act.

CONTACT PERSON FOR MORE INFORMATION: Michael J. Elston, Secretary of the Board of Governors, U.S. Postal Service, 475 L'Enfant Plaza SW, Washington, DC 20260–1000. Telephone: (202) 268–4800.

Michael J. Elston,
Secretary.
[FR Doc. 2022–12628 Filed 6–8–22; 11:15 am]
BILLING CODE 7710–12–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–95048; File No. SR–FINRA–2022–014]

Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend FINRA Rules 4111 (Restricted Firm Obligations) and 9561 (Procedures for Regulating Activities Under Rule 4111)

June 6, 2022.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act") [1] and Rule 19b–4 thereunder,[2] notice is hereby given that on May 26, 2022, the Financial Industry Regulatory Authority, Inc. ("FINRA") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by FINRA. FINRA has designated the proposed rule change as constituting a "non-controversial" rule change under paragraph (f)(6) of Rule 19b–4 under the Act,[3] which renders the proposal effective upon receipt of this filing by the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

FINRA is proposing to amend FINRA Rules 4111 and 9561 to make non-substantive and technical amendments.

The text of the proposed rule change is available on FINRA's website at *http://www.finra.org*, at the principal office of FINRA and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, FINRA included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. FINRA has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

[1] 15 U.S.C. 78s(b)(1).
[2] 17 CFR 240.19b–4.
[3] 17 CFR 240.19b–4(f)(6).

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

On July 30, 2021, the Commission approved rules concerning firms with a significant history of misconduct, including new Rule 4111 (Restricted Firm Obligations), amendments to Rule 9559 (Hearing Procedures for Expedited Proceedings Under the Rule 9550 Series), and new Rule 9561 (Procedures for Regulating Activities Under Rule 4111).[4] The rules allow FINRA to impose obligations on broker-dealers with significantly higher levels of risk-related disclosures than other similarly sized peers based on numeric, threshold-based criteria.[5] Specifically, Rule 4111 requires members that are identified as "Restricted Firms" to deposit cash or qualified securities in a segregated account, adhere to specified conditions or restrictions, or comply with a combination of such obligations.[6]

The annual Rule 4111 process through which FINRA will determine which members are Restricted Firms, and the obligations to impose on them, has several steps and includes features that narrowly focus the obligations on the firms of most concern.[7] The first step is the annual calculation.[8] Specifically, for each member, the Department of Member Regulation ("Department") will compute annually the member's "Preliminary Identification Metrics" to determine if it meets the "Preliminary Criteria for Identification." [9] The date, each calendar year, as of which the Department calculates the Preliminary Identification Metrics to determine if the member meets the Preliminary Criteria for Identification is the "Evaluation Date." [10]

For a member that meets the Preliminary Criteria for Identification during the annual calculation, the Department will conduct an Initial

[4] *See* Securities Exchange Act Release No. 92525 (July 30, 2021), 86 FR 42925 (August 5, 2021) (Order Approving File No. SR–FINRA–2020–041, as Modified by Amendment Nos. 1 and 2) ("SEC Order"); *see also* Securities Exchange Act Release No. 92525 (July 30, 2021), 86 FR 49589 (September 3, 2021) (Order Approving File No. SR–FINRA–2020–041, as Modified by Amendment Nos. 1 and 2) (Correction).
[5] *See* SEC Order, 86 FR 42925, 42926.
[6] *See* SEC Order, 86 FR 42925, 42926; *see also* Rule 4111(i)(16) (defining "Restricted Firm").
[7] *See* SEC Order, 86 FR 42925, 42927.
[8] *See* Rule 4111(b).
[9] *See* Rule 4111(b); Rule 4111(i)(9) (definition of "Preliminary Criteria for Identification") and (i)(10) (definition of "Preliminary Identification Metrics").
[10] *See* Rule 4111(i)(5).

B1 Notice of Intent

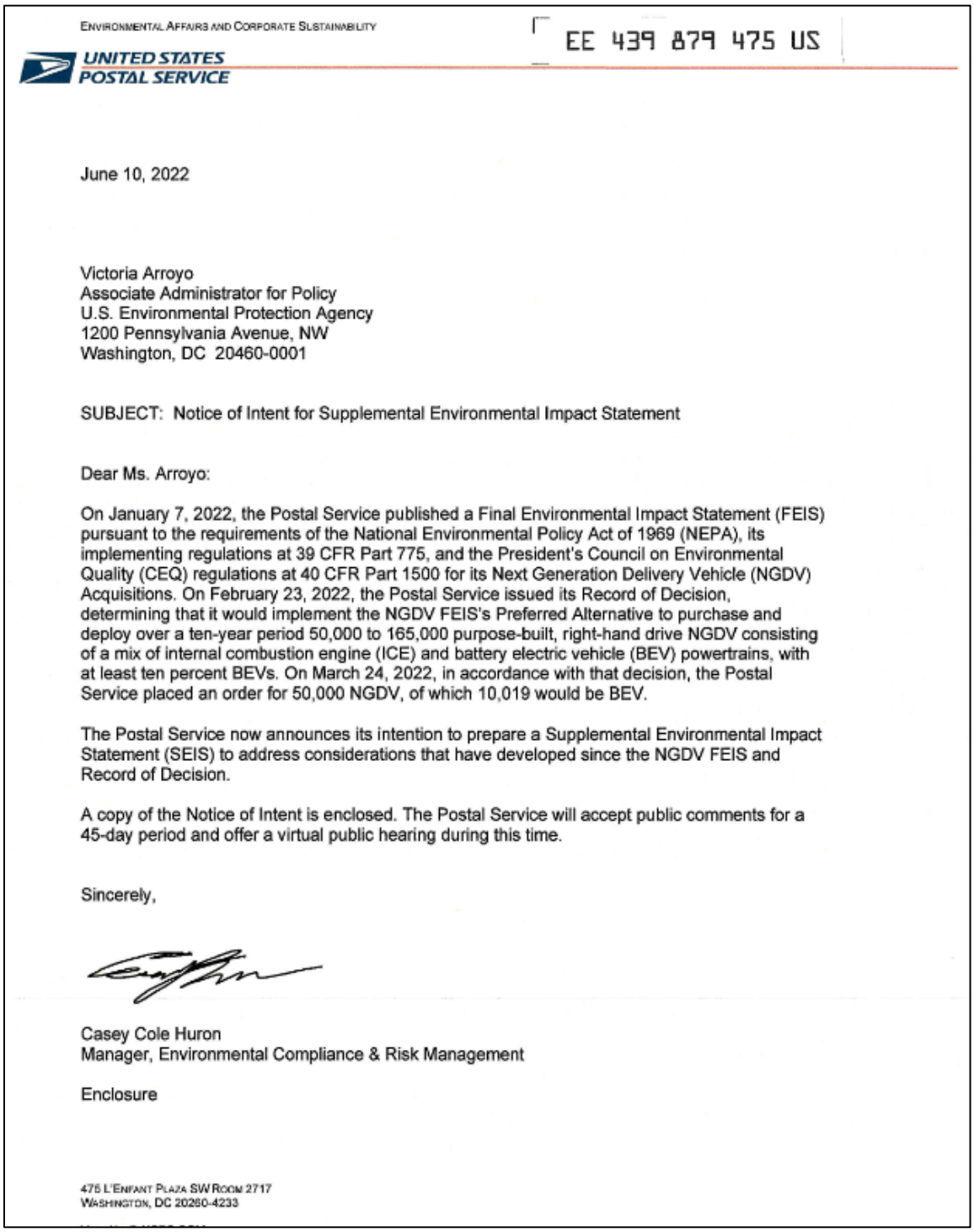
Table B1-1
Notice of Intent Stakeholder Distribution List

Contact Name **Position**	**Mailing Address**
Robert Tomiak Director, Office of Federal Activities, Office of Policy	U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW WJC Building North, Mail Code 2251A Washington, DC 20460-0003 tomiak.robert@epa.gov
Victoria Arroyo Associate Administrator for Policy	U.S Environmental Protection Agency 1200 Pennsylvania Avenue NW Washington, DC 20460-0001 Arroyo.Victoria@epa.gov
Cindy Barger Director, NEPA Compliance Division	U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW WJC Building North, Mail Code 2251A Washington, DC 20460-0003 Barger.Cindy@epa.gov
Alexander Crockett Air District Assistant Council / Interim Executive Officer	Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105-2097
Mr. Mark Dimondstein President	American Postal Workers Union 1300 L Street, NW Washington, DC 20005-4128
Ronnie W. Stutts President	National Rural Letter Carriers' Association 1630 Duke Street Alexandria, VA 22314-3467
Fredric V. Rolando President	National Association of Letter Carriers 100 Indiana Avenue, NW Washington, DC 20001-2144
Paul V. Hogrogian National President	National Postal Mail Handlers Union 815 16th Street N.W., Suite 5100 Washington, DC 20006-4101
Ivan Butts National President	National Association of Postal Supervisors 1727 King Street, Suite 400 Alexandria, VA 22314-2753
Edmund A. Carley President	United Postmasters and Managers of America 8 Herbert Street Alexandria, VA 22305-2628
Tammy L. Whitcomb Inspector General	Office of Inspector General, United States Postal Service 1735 North Lynn Street Arlington, VA 22209-2005
Brian Costner Director	U.S. Department of Energy Office of NEPA Policy and Compliance (GC-54) 1000 Independence Avenue, S.W. Washington, DC 20585-0001

Contact Name **Position**	**Mailing Address**
Steven Cliff Administrator	National Highway Traffic Safety Administration Department of Transportation 1200 New Jersey Avenue, SE. West Building Washington, DC 20590-0001
Jayni Hein Senior Director for NEPA Oversight	Council on Environmental Quality 722 Jackson Place, NW. Washington, DC 20503-0002
Iliana Paul, Senior Policy Analyst, Max Sarinsky, Senior Attorney, Jason A. Schwartz, Legal Director, Andrew Stawasz, Legal Fellow	Institute for Policy Integrity New York University School of Law Wilf Hall 139 MacDougal Street, Third Floor New York, NY 10012-1076
William Eubanks II, Managing Attorney	Eubanks & Associates, PLLC 1629 K Street NW, Suite 300 Washington, DC 20006-1631
Adrian Martinez, Senior Attorney, Candice Youngblood, Legal Fellow	EarthJustice 707 Wilshire Boulevard, Suite 4300 Los Angeles, CA 90017-3622
Eric J. Guter Vice President, Hydrogen for Mobility	Air Products and Chemicals, Inc. 7201 Hamilton Boulevard Allentown, PA 18195-9642 guterej@airproducts.com
To whom it may concern	The Center for Transportation and the Environment 730 Peachtree Street NE, Suite 450 Atlanta, GA 30308-1244
Robert Yuhnke Policy Committee	Elders Climate Action www.eldersclimateaction.org
James Parkhurst Wesley Yurgaites	EOP Foundation, Inc. 1616 H Street, NW, 5th Floor Washington DC 20006-4903 jsparkhurst@819eagle.com wmyurgaties@819eagle.com
Katherine García Director of Sierra Club's Clean Transportation for All Campaign	Sierra Club 2101 Webster Street, Suite 1300 Oakland, CA 94612-3546
Frank Wolak President & CEO	Fuel Cell & Hydrogen Energy Association 1211 Connecticut Avenue NW, Suite 650 Washington DC 20036-2725 fwolak@fchea.org
David M. Hughes Professor of Anthropology	Rutgers, The State University of New Jersey Ruth Adams Building, 3rd Floor 131 George Street New Brunswick, NJ 08901-1414 dhughes@aesop.rutgers.edu
--	Natural Resources Defense Council 40 West 20th Street, Floor 11 New York, NY 10011-4231 nrdcinfo@nrdc.org
Carl E. Nash, Ph.D.	330 Adolf Cluss Court, SE Washington, D.C. 20003-2487 cenash@verizon.net

B1 Notice of Intent

Example NOI Letter (with Enclosure: June 10, 2022 Federal Register Publication, Postal Service Notice of Intent for Supplemental Environmental Impact Statement)



ENVIRONMENTAL AFFAIRS AND CORPORATE SUSTAINABILITY

UNITED STATES POSTAL SERVICE

EE 439 879 475 US

June 10, 2022

Victoria Arroyo
Associate Administrator for Policy
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

SUBJECT: Notice of Intent for Supplemental Environmental Impact Statement

Dear Ms. Arroyo:

On January 7, 2022, the Postal Service published a Final Environmental Impact Statement (FEIS) pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA), its implementing regulations at 39 CFR Part 775, and the President's Council on Environmental Quality (CEQ) regulations at 40 CFR Part 1500 for its Next Generation Delivery Vehicle (NGDV) Acquisitions. On February 23, 2022, the Postal Service issued its Record of Decision, determining that it would implement the NGDV FEIS's Preferred Alternative to purchase and deploy over a ten-year period 50,000 to 165,000 purpose-built, right-hand drive NGDV consisting of a mix of internal combustion engine (ICE) and battery electric vehicle (BEV) powertrains, with at least ten percent BEVs. On March 24, 2022, in accordance with that decision, the Postal Service placed an order for 50,000 NGDV, of which 10,019 would be BEV.

The Postal Service now announces its intention to prepare a Supplemental Environmental Impact Statement (SEIS) to address considerations that have developed since the NGDV FEIS and Record of Decision.

A copy of the Notice of Intent is enclosed. The Postal Service will accept public comments for a 45-day period and offer a virtual public hearing during this time.

Sincerely,

Casey Cole Huron
Manager, Environmental Compliance & Risk Management

Enclosure

475 L'ENFANT PLAZA SW ROOM 2717
WASHINGTON, DC 20260-4233

B1 Notice of Intent

Notice to Postpone Public Hearing and Extend Public Comment Period for Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement – Federal Register Publication (July 21, 2022)

Federal Register / Vol. 87, No. 139 / Thursday, July 21, 2022 / Notices 43561

POSTAL SERVICE

Notice To Postpone Public Hearing and Extend Public Comment Period for Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement

On June 10, 2022, the Postal Service published a Notice of Intent (NOI) to prepare a Supplemental Environmental Impact Statement (SEIS) to analyze potential environmental impacts of a proposed change to the Preferred Alternative for its Next Generation Delivery Vehicle (NGDV) Acquisitions, which was adopted in the Record of Decision (ROD) on February 23, 2022. The Final Environmental Impact Statement (FEIS) for the NGDV Acquisitions was published on January 7, 2022, pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA), its implementing regulations at 39 CFR part 775, and the President's Council on Environmental Quality (CEQ) regulations at 40 CFR part 1500.

The FEIS analyzed potential environmental impacts of several alternatives that the Postal Service developed and considered for replacing end-of-life and high-maintenance delivery long-life vehicles (LLVs) and flexible fuel vehicles (FFVs) with new vehicles that have more energy-efficient powertrains, updated technology, reduced emissions, increased cargo capacity and improved loading characteristics, improved ergonomics and carrier safety, and reduced maintenance costs. Under the selected Preferred Alternative, the Postal Service would purchase and deploy 50,000 to 165,000 NGDVs, at least 10 percent of the NGDVs would have battery electric vehicle (BEV) powertrains, and the Postal Service would have the flexibility to acquire significantly more BEV NGDVs should funding become available. On March 24, 2022, in accordance with the ROD, the Postal Service placed an order for 50,000 NGDVs, of which 10,019 are BEVs.

The NOI for the SEIS announced that network refinements and route optimization efforts could impact the makeup of the Postal Service's future delivery fleet—including vehicles purchased pursuant to the NGDV Acquisition—and that the SEIS would analyze the potential environmental impacts of those potential changes. Specifically, the Postal Service announced that it would consider the impacts of proposed route changes that may warrant an increase in the minimum number of BEV NGDVs to be procured to replace LLVs and FFVs. The Postal Service included in the NOI for the SEIS a notice for a virtual public hearing to be conducted on Tuesday, July 19, 2022, at 7:00 p.m. (ET).

The Postal Service now announces our intention to postpone that virtual public hearing to the new date of Monday, August 8, 2022, at 7 p.m. (ET). Registration information is available at the following website: *http://uspsngdveis.com/*. Accordingly, the public comment period for the Notice of Intent will also be extended until August 15, 2022.

The reason for the public hearing postponement and public comment extension is to inform the public and solicit comments regarding the Postal Service's adjustment to the scope of the SEIS. As the Postal Service has determined that there is a compelling need to redesign our operating model in order to substantially reduce operating costs, significantly improve service, and enable exponential growth in our package delivery business, the SEIS scope is being adjusted to analyze potential environmental impacts from these recent changes that will affect our delivery procurement strategy and require two modifications to our Preferred Alternative for replacing LLVs and FFVs with new vehicles.

First, the Postal Service proposes to modify its Preferred Alternative to the purchase and deployment of only 50,000 NGDVs consisting of a mix of ICE and BEV powertrains with what we anticipate will be a significantly higher percentage of BEVs, and certainly not less than 50 percent. This significant increase that we anticipate in the minimum percentage of BEV NGDVs reflects the favorable cost benefit impacts expected from the changes to both our operational strategy and our acquisition planning horizon that are discussed below.

Any purchase of NGDVs above the 50,000 (or the purchase of any other purpose-built vehicles) would be subject to future supplements to the FEIS, given the likelihood of advances in technology, changes to the cost profile and market availability of current and future technology, and further improvements and refinements in the operational strategy of the Postal Service.

Second, in response to our critical need to accelerate the replacement of aged and high-maintenance LLVs and FFVs in the near term, thereby reducing the significant operational risks, adverse environmental impacts, and considerable costs associated with extending their lives, and to be more responsive to dynamic market conditions, the Postal Service proposes to procure within a two-year period: (1) up to 20,000 left-hand drive Commercial Off-the-Shelf (COTS) vehicles, including as many BEVs as are commercially available and consistent with our delivery profile; and (2) up to 14,500 right-hand drive ICE COTS vehicles. To be clear, the Postal Service anticipates that because of our critical and immediate need for delivery vehicles to fulfill our universal service mission, and the limitations on the current market availability for BEVs that can support our daily requirement to deliver to 163 million addresses six (and sometimes seven) days per week, it will be necessary for us to procure some ICE vehicles. In parallel, we will also need to make significant investment in the repair of over 50,000 aging LLVs and FFVs each year to continue extending their useful life, despite the significant operational risk, considerable maintenance costs, and the higher emissions of greenhouse gases and other air pollutants when compared to more modern vehicles. This activity will be necessary because of our universal service mission and our inability to acquire sufficient quantities of modern vehicles in the current market (irrespective of the type of drive train) to replace our delivery fleet.

If adopted, these measures would significantly modify the Postal Service's Preferred Alternative for replacing LLVs and FFVs with new vehicles. The SEIS is intended to evaluate the potential environmental impacts of the current procurement of 50,000 NGDVs and procuring the additional 34,500 COTS vehicles. It is the Postal Service's expectation that the total quantity of NGDVs and COTS vehicles to be procured in the SEIS's Preferred Alternative will be at least 40 percent BEV.

Over the next ten to fifteen years, the Postal Service intends to pursue a multiple step acquisition process in our longer term efforts to fully replace our aging delivery fleet, and in that regard anticipates evaluating and procuring smaller quantities of vehicles over shorter time periods than the ten-year period analyzed in the FEIS in order to be more responsive to our evolving operational strategy, technology improvements, and changing market conditions, including the expected increased availability of BEV options in the future. Additional vehicle procurements beyond the procurements being analyzed in this Supplement would be assessed in subsequent supplements to the FEIS, on an as-needed basis, taking advantage of the then-current market and operational conditions.

The change to our delivery procurement strategy is being made in response to substantial delivery network and route optimization improvements to the postal delivery network. As such, the SEIS will analyze the potential environmental impacts to the delivery fleet from the new Preferred Alternative, including the extent to which we expect the network improvements, changed route length and characteristics, and improved facility electric infrastructure will result in a significant increase in the minimum number of BEV NGDVs and COTS to be procured under the SEIS Preferred Alternative.

The Postal Service actively seeks input from the public, interested persons, organizations, and federal, state, and regional agencies to identify environmental concerns and potential alternatives to be addressed in the SEIS and will continue to accept public comments until August 15, 2022. With respect to recommendations regarding potential alternatives, the Postal Service requests that comments be as specific as possible regarding vehicle type, model, and manufacturer so that the Postal Service might fully consider the alternative in terms of pricing, operational capabilities, and market availability.

Comments should be received no later than August 15, 2022. The Postal Service will also publish a Notice of Availability to announce the availability of the Draft SEIS and solicit comments on the Draft SEIS during a second 45-day public comment period.

Interested parties may direct comments and questions to: Mr. Davon Collins, Environmental Counsel, United States Postal Service, 475 L'Enfant Plaza SW, Office 6606, Washington, DC 20260–6201, or at *NEPA@usps.gov*. Note that comments sent by mail may be subject to delay due to federal security screening. Faxed comments are not accepted. All submitted comments and attachments are part of the public record and subject to disclosure. Do not enclose any material in your comments that you consider to be confidential or inappropriate for public disclosure.

The Postal Service will also conduct a virtual public hearing on Monday, August 8, 2022, at 7 p.m. (ET).

References

1. U.S. Postal Service, Notice of Intent to Prepare an Environmental Impact Statement for Purchase of Next Generation Delivery Vehicles, 86 FR 12715 (Mar. 4, 2021).
2. U.S. Postal Service, Notice of Availability of Draft Environmental Impact Statement for Purchase of Next Generation Delivery Vehicle, 86 FR 47662 (Aug. 26, 2021).
3. U.S. Environmental Protection Agency, Notice of Availability of EIS No. 20210129, Draft, USPS, DC, Next Generation Delivery Vehicle Acquisitions, 86 FR 49531 (Sept. 3, 2021).
4. U.S. Environmental Protection Agency, Notice of Availability of EIS No. 20220001, Final, USPS, DC, Next Generation Delivery Vehicle Acquisitions, 87 FR 964 (Jan. 7, 2022).
5. U.S. Postal Service, Notice of Availability of Final Environmental Impact Statement for Purchase of Next Generation Delivery Vehicles, 87 FR 994 (Jan. 7, 2022).
6. U.S. Postal Service, Notice of Availability of Record of Decision, 87 FR 14588 (Mar 15, 2022).
7. U.S. Postal Service, Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicle Acquisitions Final Environmental Impact Statement, 87 FR 35581 (June 10, 2022).

Sarah E. Sullivan,

Attorney, Ethics and Legal Compliance.

[FR Doc. 2022–15616 Filed 7–20–22; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, First-Class Package Service, and Parcel Select Service Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* July 21, 2022.

FOR FURTHER INFORMATION CONTACT: Sean Robinson, 202–268–8405.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on July 15, 2022, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail, First-Class Package Service, and Parcel Select Service Contract 17 to Competitive Product List*. Documents are available at *www.prc.gov*, Docket Nos. MC2022–87, CP2022–91.

Sarah Sullivan,

Attorney, Ethics & Legal Compliance.

[FR Doc. 2022–15533 Filed 7–20–22; 8:45 am]

BILLING CODE P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, First-Class Package Service, and Parcel Select Service Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* July 21, 2022.

FOR FURTHER INFORMATION CONTACT: Sean Robinson, 202–268–8405.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on July 13, 2022, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail, First-Class Package Service, and Parcel Select Service Contract 16 to Competitive Product List*. Documents are available at *www.prc.gov*, Docket Nos. MC2022–84, CP2022–88.

Sarah Sullivan,

Attorney, Ethics & Legal Compliance.

[FR Doc. 2022–15536 Filed 7–20–22; 8:45 am]

BILLING CODE P

POSTAL SERVICE

Product Change—Priority Mail and First-Class Package Service Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

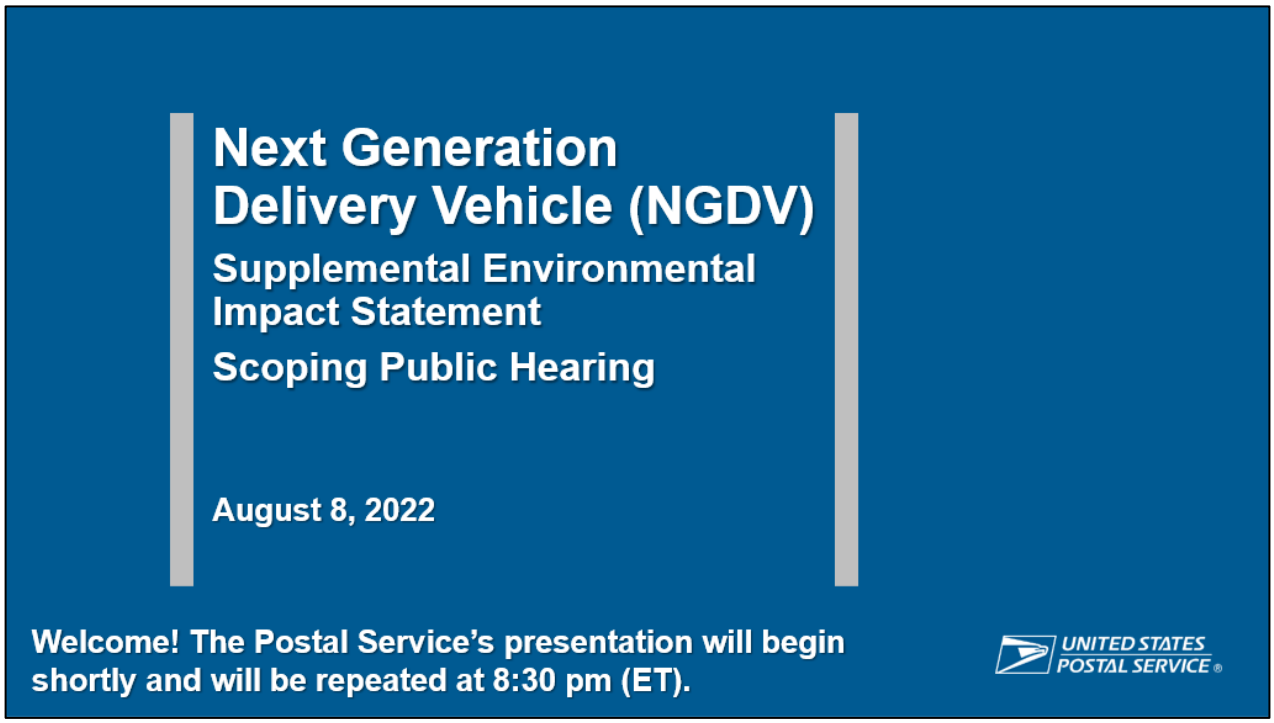
DATES: *Date of required notice:* July 21, 2022.

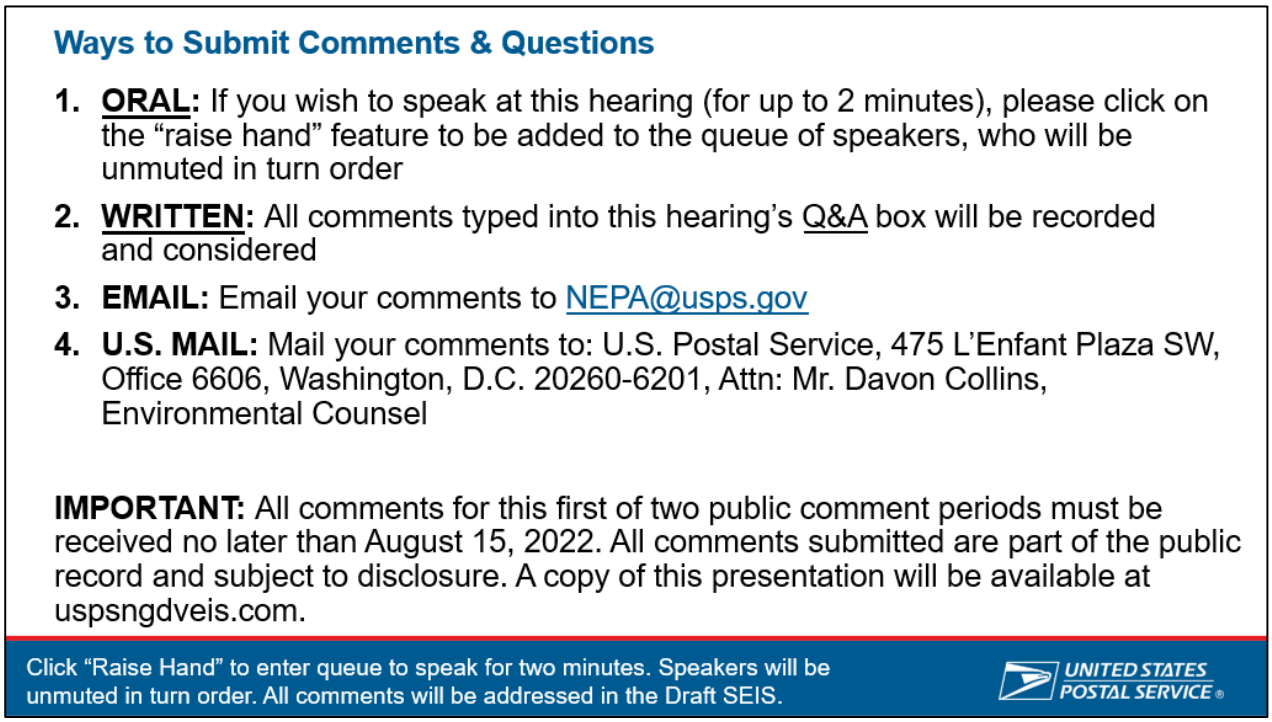
FOR FURTHER INFORMATION CONTACT: Sean Robinson, 202–268–8405.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on July 14, 2022, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & First-Class Package Service Contract 219 to Competitive Product List*. Documents are available at

B2 Scoping Public Hearing Documentation

Scoping Public Hearing PowerPoint Presentation, August 8, 2022





Current State of Postal Fleet

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE

Current State of the Postal Fleet

- The current Postal Service delivery fleet is comprised of both purpose-built, right-hand drive Long-Life Vehicles (LLVs) and Flexible Fuel Vehicles (FFVs), as well as Commercial Off-the-Shelf (COTS) vehicles. The LLVs & FFVs, which account for the majority of the fleet, are near or past the end of their useful life.
- The expected service life of LLVs is 24 years. These vehicles currently average 30 years in age and have high annual maintenance costs.
- LLVs do not have certain standard modern safety features:
  - No airbags
  - No air conditioning
  - No anti-lock brakes
  - No back-up cameras
  - No intermittent windshield wipers
  - No blind-spot warning systems
  - No daytime running lights

Example of RHD LLV (on left) and RHD FFV (on right)

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE

National Environmental Policy Act (NEPA)

Overview & Recent Actions to Date

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE®

National Environmental Policy Act Overview

- NEPA is a procedural statute intended to ensure Federal agencies consider the environmental impacts of their major actions in the decision-making process.
- An Environmental Impact Statement (EIS) is a document that informs Federal agency decision-making and the public, and must:
  - include a full and fair discussion of significant environmental impacts;
  - inform of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment; and
  - be concise, clear, to the point, and supported by evidence that the agency has made the necessary environmental analyses.
- The purpose and function of NEPA is satisfied if Federal agencies have considered relevant environmental information and the public has been informed regarding the decision-making process. NEPA does not mandate particular results or substantive outcomes.

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE®

NGDV EIS Record of Decision

- On February 23, 2022, the Postal Service completed the EIS process by issuing a Record of Decision to purchase and deploy over a ten-year period 50,000 to 165,000 purpose-built, right-hand drive "Next Generation Delivery Vehicles" (NGDV) to replace its LLV/FFVs
- While NGDV powertrains will be a combination of internal combustion engine (ICE) and battery electric vehicle (BEV), the Postal Service committed to a minimum of 10% BEVs with the flexibility to increase that percentage if justified by its financial and operational requirements
- On March 24, 2022, the Postal Service placed an order for 50,000 NGDV, including over 20% BEVs
- NGDV are one component in the Postal Service's Mixed Delivery Fleet Strategy

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE

Why is the Postal Service supplementing its NGDV EIS?

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE

Supplemental EIS – Areas of Consideration

The Postal Service is considering three changes which, if implemented, could potentially affect the composition of the postal delivery fleet.

1. Modification of FEIS Preferred Alternative to consider **more frequent vehicle purchases of fewer vehicles over shorter periods of time**, rather than over ten years
2. Purchase of **Commercial Off-the-Shelf (COTS) vehicles** to address critical, immediate need
3. **Increase in battery electric vehicles** due to changes resulting from delivery network and route optimization improvements

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE®

Supplemental EIS – Areas of Consideration, 1 of 3

- Under current Record of Decision, the Postal Service may purchase and deploy over a ten-year period 50,000 to 165,000 NGDV (at least 10% BEV) to replace its LLV/FFVs
- On March 24, 2022, the Postal Service placed an order for 50,000 NGDV, including 20% BEVs
- The Postal Service is now proposing to reduce the maximum quantity of NGDV being analyzed for NEPA purposes to the 50,000 already ordered to reflect a vehicle purchasing strategy that covers shorter periods of time (rather than 10 years).
- Note that this is a proposed change in the scope under NEPA, not to the Postal Service's contract with Oshkosh, which will continue to provide the option to purchase up to 165,000 NGDV in total. However, future purchases of NGDV above 50,000 would only be done after additional supplements to the EIS.
- Future supplements would therefore reflect advances in technology, changes to costs and market availability, and further improvements in postal operations.

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE®

Supplemental EIS – Areas of Consideration, 2 of 3

- In order to accelerate the replacement of its aged and high-maintenance LLV/FFVs, the Postal Service will consider purchasing within a two-year period:
  - (1) up to 20,000 left-hand drive COTS vehicles, including as many BEVs as are commercially available and consistent with our delivery profile; and
  - (2) up to 14,500 right-hand drive internal combustion COTS vehicles.

Current COTS ICE Vehicles: LHD Ram ProMaster®

Current COTS ICE Vehicles: RHD Mercedes Metris

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE®

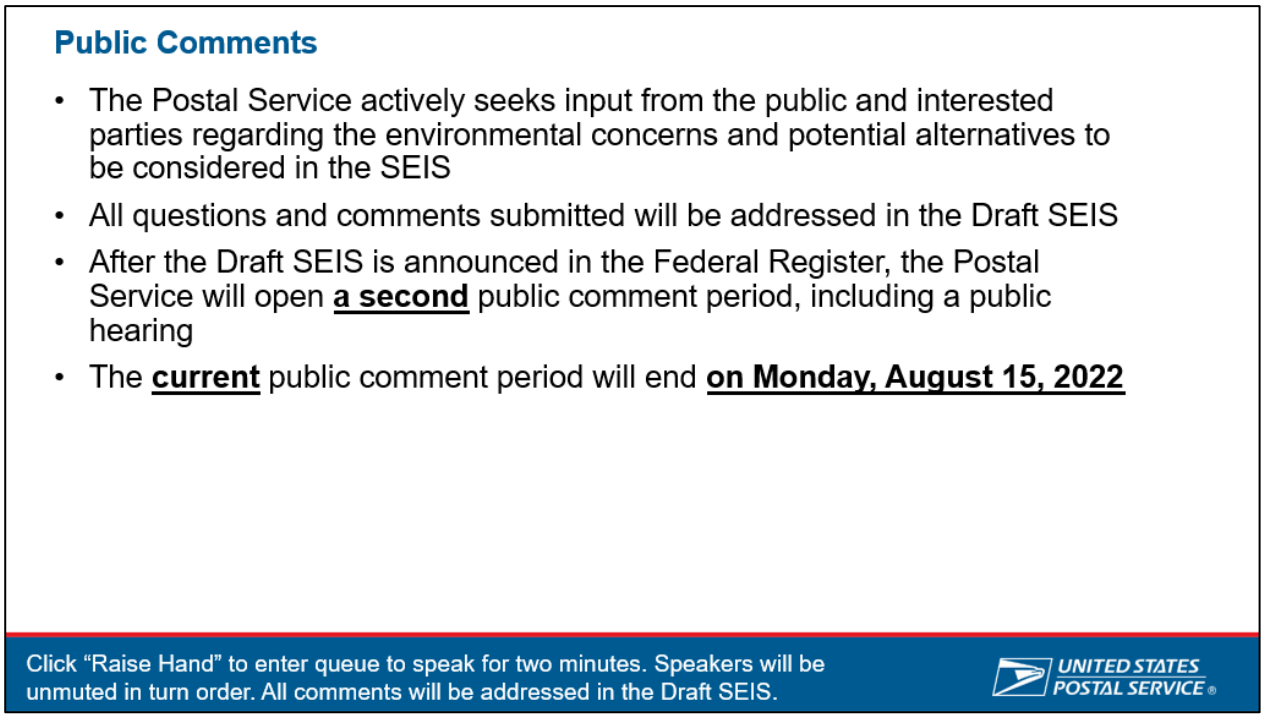
Supplemental EIS – Areas of Consideration, 3 of 3

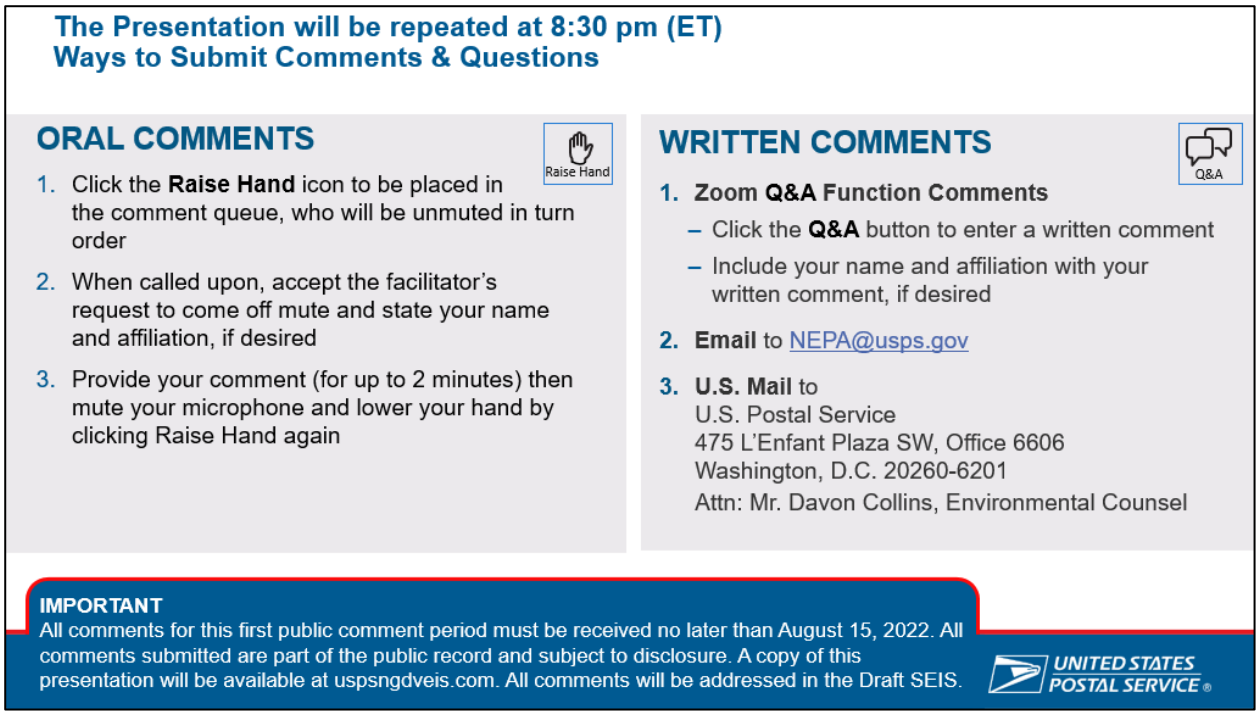
- In May 2022, the Postal Service announced that it is considering delivery network refinements and route optimization efforts which would potentially affect route lengths and characteristics
- The Postal Service anticipates that these changes (for example, expected increases in average delivery route length) will result in a significantly higher percentage of BEVs:
  - At least 50% BEV NGDV (of 50,000 ordered)
  - At least 40% BEVs of total vehicle quantity being considered in SEIS (50,000 NGDV + 34,500 COTS vehicles)
- As with NGDV, additional purchases of COTS vehicles would only be done after future supplements to EIS

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.

UNITED STATES POSTAL SERVICE®


Public Comments
Click “Raise Hand” to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.
UNITED STATES POSTAL SERVICE


Public Comments
• The Postal Service actively seeks input from the public and interested parties regarding the environmental concerns and potential alternatives to be considered in the SEIS
• All questions and comments submitted will be addressed in the Draft SEIS
• After the Draft SEIS is announced in the Federal Register, the Postal Service will open a second public comment period, including a public hearing
• The current public comment period will end on Monday, August 15, 2022
Click “Raise Hand” to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Draft SEIS.
UNITED STATES POSTAL SERVICE


The Presentation will be repeated at 8:30 pm (ET)
Ways to Submit Comments & Questions
ORAL COMMENTS
Raise Hand
1. Click the Raise Hand icon to be placed in the comment queue, who will be unmuted in turn order
2. When called upon, accept the facilitator's request to come off mute and state your name and affiliation, if desired
3. Provide your comment (for up to 2 minutes) then mute your microphone and lower your hand by clicking Raise Hand again
WRITTEN COMMENTS
Q&A
1. Zoom Q&A Function Comments
– Click the Q&A button to enter a written comment
– Include your name and affiliation with your written comment, if desired
2. Email to NEPA@usps.gov
3. U.S. Mail to
U.S. Postal Service
475 L'Enfant Plaza SW, Office 6606
Washington, D.C. 20260-6201
Attn: Mr. Davon Collins, Environmental Counsel
IMPORTANT
All comments for this first public comment period must be received no later than August 15, 2022. All comments submitted are part of the public record and subject to disclosure. A copy of this presentation will be available at uspsngdveis.com. All comments will be addressed in the Draft SEIS.
UNITED STATES POSTAL SERVICE

B2 Scoping Public Hearing Documentation

Public Hearing Court Reporter Transcript, August 8, 2022

UNITED STATES POSTAL SERVICE

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SUPPLEMENT TO THE NEXT GENERATION DELIVERY VEHICLES ACQUISITIONS FINAL ENVIRONMENTAL IMPACT STATEMENT

+ + + + +

PUBLIC HEARING

+ + + + +

MONDAY

AUGUST 8, 2022

+ + + + +

The Hearing convened via Videoconference, at 7:00 p.m. EDT, Chris Orr, Facilitator, presiding.

PRESENT

CHRIS ORR, Facilitator
PATRICK ECKER, U.S. Postal Service

ALSO PRESENT

LAWRENCE ABBOTT
MARK ABRAMOWITZ, Community Environmental Services
MANDELA BARNES, Lieutenant Governor of Wisconsin
LAURA BENDER, American Lung Association
BRITT CARMON, Natural Resources Defense Council
RICHARD DIAZ, BlueGreen Alliance
CHRISTOPHER FELT
KATHERINE GARCIA, The Sierra Club
TERRI HALL
SCOTT HOCHBERG, Center for Biological Diversity
CHRISTOPHER JONDA
ADRIAN MARTINEZ, Earthjustice
MICHAEL McDONALD
PAUL MILLER, Northeast States for Coordinated Air Use Management (NESCAUM)
SYED NAQVI
TARI PANTALEO
WILLIAM ROBERSON, California Air Resources Board
SUSAN ROBISON
VICTORIA SAWICKI
JAMES SIMPSON
BRYCE SPRINGFIELD, Princeton University
DAVID STAIGER
AARON VILES, The Electrification Coalition
DONALD VISAGE
SAM WILSON, The Union of Concern Scientists
MAXWELL WOODY, University of Michigan Center for Sustainable Systems

EMILY YEN, University of Virginia

CONTENTS

P-R-O-C-E-E-D-I-N-G-S

7:00 p.m.

SESSION 1 (7:00 P.M. TO 8:30 P.M. EASTERN)

MR. ORR: Good evening, everyone. Welcome to the public hearing on the Supplemental Environmental Impact Statement for the Postal Service's next Generation Delivery Vehicle Acquisitions Program.

My name is Chris and I will the meeting facilitator.

This hearing is being recorded, and we will offer a video of the recording on the website.

We will have a brief presentation, a comment period for approximately one hour, and then, we will repeat the presentation at 8:30 p.m. Eastern. We will, then, open it up for more comments. The meeting will end at 10 o'clock p.m. Eastern.

I will now turn it over to our Postal Service presenter, Patrick.

MR. ECKER: Thank you, Chris.

Good evening and welcome to the public hearing for the Supplemental Environmental Impact Statement for the Postal Service's Next Generation Delivery Vehicle Acquisition Program.

My name is Patrick Ecker, the Executive Manager of Fleet Strategy and Support. And I will provide an overview of why the Postal Service is conducting a Supplemental Environmental Impact Statement at this time; what we are considering to assess through this process.

I will repeat this overview at the hearing's midpoint at 8:30 p.m. Eastern time, and a copy of the presentation will also be made available afterwards on the website uspsngdveis.com.

But, first, some information about how you may submit comments and questions. If you wish to be given up to two minutes to provide an oral comment at anytime during or after the presentation, you may click on the "Raise Hand" feature. After the presentation, we will unmute

attendees in the order they clicked the "Raise Hand" feature. You may also at anytime type your comments and questions in the chat feature.

Additionally, you may submit your comments vial email or U.S. mail at the addresses provided on the screen.

Note that comments must be received no later than August 15th, 2022, to be considered.

All submitted comments, whether provided at this hearing or via email or mail, will be recorded and made part of the public record and are, therefore, subject to disclosure. All submitted comments will be considered by the Postal Service in the Draft Supplemental Environmental Impact Statement, which will be published in The Federal Register at a later date.

First, I will provide a summary of the current state of the postal delivery fleet. Currently, the postal delivery fleet is comprised of both purpose-built, righthand-drive, long-life vehicles and flexible fuel vehicles, as well as

commercial off-the-shelf vehicles, such as the RAM ProMaster and Mercedes Metris.

The purpose-built vehicles currently account for the majority of the fleet and are past or nearing the end of their useful life. For example, while the expected service life of long-life vehicles is 24 years, they currently average 30 years in age and, thus, have high annual maintenance costs.

Importantly, our long-life vehicles do not have certain standard modern safety features. They have no airbags, no air conditioning, no anti-lock brakes, no backup cameras, no intermittent windshield wipers, no blind spot warning systems, and no daytime running lights.

In short, it is vital that we provide our 200,000 mail carriers with appropriate vehicles that allow them to support our daily service mission, with advanced safety and security features, better fuel economies, and the amenities we expect in our own personal vehicles.

I will now discuss the environmental

impact analyses the Postal Service has done to date, as part of our effort to modernize our delivery fleet.

The National Environmental Policy Act, or NEPA, is a federal procedural law that is intended to ensure that federal agencies consider the environmental impacts of their major actions in the decision-making process. The documentation of this process, an Environmental Impact Statement, informs both agency decisionmakers and the public, and it must do a number of things.

It must include a full and fair discussion of the action's significant environmental impacts.

It must consider reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment.

And it must be concise, clear, to the point, and supported by evidence that the agency has made the necessary environmental analyses.

The purpose and function of NEPA is satisfied if federal agencies have considered relevant environmental information and the public has been informed regarding the decision-making process. NEPA does not mandate particular results, substantive outcomes, or that an agency choose a course of action with the least environmental impact.

On February 23rd of this year, the Postal Service completed the Environmental Impact Statement process by issuing what is called a record of decision: to purchase and deploy over a 10-year period between 50,000 and 165,000 purpose-built, righthand-drive, next generation delivery vehicles to replace our long-life vehicles and flexible fuel vehicles. You can see a picture of the NGDV's design on this slide.

NGDV power trains will be a combination of both internal combustion engine and battery electric. And in our record of decision, the Postal Service committed to a minimum of 10 percent battery electric.

As part of our universal service obligation, the Postal Service delivers to 163 million addresses in all climates and topographies six days per week. And by law, we must do so in a financially self-sufficient manner.

This means the Postal Service generally receives no tax dollars for operating expenses. It relies on the sale of postage, products and services to fund its operations.

As a result, the Postal Service determined that, given the higher total cost of ownership for battery electric vehicles as compared to internal combustion, a 10 percent battery electric minimum was the only fiscally-responsible commitment that could be made, absent additional funding from Congress or a change in our financial circumstances.

Importantly, in our record of decision, the Postal Service retained the flexibility to increase the percentage of battery electric vehicles if justified by our financial

and operational requirements. And this flexibility was demonstrated on March 24th of this year, when the Postal Service placed an order for 50,000 NGDVs, of which 20 percent will be battery electric.

However, the NGDVs are just one component in our mixed delivery fleet strategy, which brings us to our current need to supplement the Environmental Impact Statement just described.

The Postal Service is considering three new actions which, if implemented, could potentially affect the composition of the postal delivery fleet. Thus, in short, this Supplemental Environmental Impact Statement would assess the environmental impacts of these three actions, as well as reasonable alternatives, including continuing with the current record of decision unchanged.

The first change under consideration is our adoption of a vehicle purchase strategy whereby we will evaluate and buy vehicles over

shorter time periods in smaller quantities to be more responsive to rapid changes in our operating strategy, technology improvements, and market conditions.

The second change under consideration is the purchase of some commercial off-the-shelf vehicles to address our critical immediate needs.

Finally, the third change under consideration is an increase in the minimum percentage of battery electric vehicles to be purchased as a result of delivery network and route optimization improvements.

Turning back to the first proposed change, purchasing vehicles over shorter time periods in smaller quantities. Under our current record of decision, the Postal Service may purchase and deploy over a 10-year period up to a total of 165,000 next generation delivery vehicles to replace its delivery fleet, with at least 10 percent battery electric. Following that decision, the Postal Service placed an order for 50,000 NGDVs, including 20 percent battery

electric.

As part of our new vehicle purchase strategy, the Postal Service is now proposing to reduce the maximum quantity of NGDVs to these 50,000 trucks already ordered, an order that will cover a period of five years, rather than the previous 10 years. It is important to note that this proposed change would not affect the Postal Service's contract with Oshkosh. The Postal Service would continue to have the option to purchase up to a total of 165,000 NGDVs.

However, under this proposed change, any future purchases of NGDVs above the 50,000 already ordered would be done after additional supplements to the EIS. Thus, the public would be informed in advance and have the opportunity to comment on such future purchases.

Furthermore, these future supplements would reflect advances in technology, changes to vehicle cost and market availability, and additional improvements in postal operations.

Returning now to the second proposed

change, as I have previously explained, the current state of our postal delivery fleet is dire. Therefore, in order to accelerate the replacement of our aged and high-maintenance, long-life vehicles and flexible fuel vehicles, the Postal Service will consider purchasing over a two-year period, and thus, in line with our purchase strategy over shorter periods of time:

One, up to 20,000 lefthand-drive, commercial off-the-shelf vehicles, including as many battery electric vehicles as are commercially available and consistent with our delivery profile. These vehicles would be of a similar style to the existing RAM ProMaster, as you can see in the lower left corner of the slide.

And second, up to 14,500 righthand-drive, internal combustion, commercial off-the-shelf vehicles, such as the Mercedes Metris you can see in the lower right corner.

Finally, turning back to the third proposed change, our minimum percentage of

battery electric vehicles. In May of this year, the Postal Service announced that we were considering delivery network refinements and route optimization efforts which would potentially affect route lanes and characteristics.

The first area of consideration are certain delivery network refinements and route optimization efforts which would potentially affect route lanes and characteristics. For example, if you look at the diagram to the right, you will see that the Postal Service is exploring consolidating package sorting and delivery operations, which are currently scattered at dozens of local post offices, and consolidating them into centrally-located facilities. This would affect delivery routes by, for example, making some longer.

We anticipate that these sorts of changes to our delivery routes will result in a financial case for a significantly higher percentage of battery electric vehicles. More

specifically, we expect that at least 50 percent of the 50,000 NGDVs ordered will be battery electric, and at least 40 percent of the total quantity of 84,500 vehicles being considered in this supplement will be battery electric.

And as with the NGDV, any additional purchases of commercial off-the-shelf vehicles would only be done after future supplements to the Environmental Impact Statement.

As a reminder, while I have outlined the actions the Postal Service is currently considering for evaluation in this Supplemental Environmental Impact Statement, we are actively seeking input from the public regarding the environmental concerns and potential alternatives to be considered in the supplement. All questions and comments, if made, will be addressed in the Draft Supplemental Environmental Impact Statement, which will be published in The Federal Register at a future date.

After its publication, the Postal Service will open a second public comment period,

including a second public hearing. So, you will have an additional opportunity to review the progress on the Supplemental Environmental Impact Statement and provide comments.

Note that the current public comment period will end on Monday, August 15th.

That concludes the Postal Service presentation portion of this public hearing. I will now open the floor to public comments until 8:30 p.m., when we will repeat the presentation.

MR. ORR: Thank you, Patrick.

We'll now take comments in the order that hands were raised.

And our first commenter is Christopher.

Christopher, please remove yourself from mute and go ahead with your comments.

MR. JONDA: With the need for more NGDV EVs coming along and the delays that have been already posted by Oshkosh, and the amount, that they're only willing to make 10 percent, how is the Postal Service going to meet those

demands, when I think Postmaster DeJoy said they would need $3.3 billion to make the entire fleet EV? When the Inflation Reduction Act just passed the Senate, which will likely go through the Congress and be signed by the President, the funds will be there with that additional $3 billion in the Act.

With supply chain shortages affecting Oshkosh and all the suppliers, how are we every going to get there?

MR. ECKER: Thank you for your comment. We'll be addressing all the comments in the Supplemental Environmental Impact Statement.

As for the congressional legislation, it's not yet law, but we will certainly evaluate it when it becomes so, if and when it becomes so.

MR. ORR: Thank you.

Next up is Adrian.

Adrian, please proceed with your comments.

MR. MARTINEZ: Good evening.

My name is Adrian Martinez, and I'm a

senior attorney for Earthjustice. I'm counsel for CleanAirNow and Sierra Club in litigation against the Postal Service over the first Environmental Impact Statement that was produced for the next generation delivery vehicle program.

We appreciate the Postal Service having the public hearing, which was requested prior to the completion of the prior Environmental Impact Statement. And we appreciate that you will be doing future public hearings after the Draft Environmental Impact Statement is released.

We encourage you to do multiple hearings, potentially go out into the field to discuss some of these changes with impacted communities, and then, also, potentially provide Spanish translation for folks who want to participate.

As far as the substance of this discussion, we want to raise a couple of points.

The first is the Postal Service should be pursuing 100 percent electric vehicles.

There's an immense opportunity for leadership here, and a lot of the obstacles that have been identified by the Postal Service have been alleviated or are on the path to being alleviated. There's no reason we shouldn't be worldwide leaders in electric vehicle package delivery.

The second is the environmental review should look at providing these benefits to disadvantaged communities first. There are several communities, many communities across the Nation that are overly burdened with pollution. We should be providing these zero-emission vehicles in their neighborhoods first. The prior Environmental Impact Statement kind of brushed this issue off. We encourage looking at this issue seriously in the future Environmental Impact Statement. You can provide immense benefits to communities, especially as you're considering other types of vehicles.

And then, finally, we want to reiterate our support that, as you add vehicles

to the fleet, they should be made with union labor. There is no reason that we should enter into one of the largest vehicle contracts in history, if not the largest vehicle contract in history, and not support our brothers and sisters in labor unions to make sure that the jobs for creating these vehicles are good.

We hope that the Postal Service will reconsider its prior commitment to what are considered largely gas-guzzling postal delivery trucks and pave the way for 100 percent --

MR. ORR: Thank you, Adrian. That will be two minutes. I'm sorry. Thanks very much. Appreciate your comments.

MR. MARTINEZ: Thank you.

MR. ORR: Next up is Paul.

Paul, please proceed with your comments.

MR. MILLER: Good evening.

My name is Paul Miller. I'm the Executive Director of the Northeast States for Coordinated Air Use Management, or NESCAUM.

NESCAUM is the regional association of eight state air quality agencies in the Northeast. We serve as a technical and policy advisor to our member agencies and facilitate multi-state initiatives to accelerate electric vehicle adoption.

For more than three decades, NESCAUM and its members closely collaborated with California and other states, EPA, and the automobile industry to promote transportation electrification.

NESCAUM welcomes the Supplemental EIS as an opportunity for the Postal Service to revisit and revise its assumptions in its December 2021 Final EIS and to publicly provide those assumptions.

The Postal Service's recent announcement to expand the number of EVs procured is a positive step, but it fails to take full advantage of the opportunity now before it.

NESCAUM has led a coalition of 19 jurisdictions that work collaboratively to

develop a multi-state action plan with a wide range of market-enabling policies to accelerate adoption of zero-emission trucks, vans, and buses. The participating jurisdictions have set goals to achieve at least 30 percent medium and heavy duties of sales by 2030 and 100 percent of sales by 2050.

The action plan was released on July 27th of this year and provides a number of recommendations for market-enabling policies states can pursue to accelerate the adoption of these within their jurisdictions. We will submit this plan to the Postal Service in our written comments.

The Postal Service should position itself to take advantage of these state-led opportunities, as many of its competitors will be doing. As one of the largest vehicle purchasers in the United States, the Postal Service has a tremendous opportunity to lead the transportation electrification transition, improve air quality and public health, reduce greenhouse gas

emissions, and stimulate growth of the green energy economy.

We look forward to helping the Postal Service take full advantage of this opportunity. Thank you.

MR. ECKER: Thank you for your comments.

MR. ORR: Thank you, Paul.

Next is Britt.

Britt, please proceed with your comments.

MS. CARMON: Thank you.

Hello. Can you hear me?

MR. ORR: Yes, we can.

MS. CARMON: Good. Thank you.

Good evening.

My name is Britt Carmon. I'm a Senior Advocate at the Natural Resources Defense Council, or NRDC. I'm here today on behalf of NRDC's more than 3 million members and activists who support our efforts to safeguard the rights of all people to clean air, clean water, and a

healthy planet.

The Postal Service's replacement of its ancient delivery fleet over the next 10 years is vital. Failure to maximize the number of battery electric vehicles in the fleet with lock in decades of fossil fuel vehicles operating in communities across America, resulting in higher maintenance and fuel costs, worse air quality, and increased climate impacts.

For this reason, we welcome the opportunity to provide comment on the SEIS as well as to reiterate concerns with certain deficiencies that existed in the Postal Service's previous environmental review.

We appreciate the agency's new announcement to make at least 40 percent of the delivery fleet electric. Although it's a step in the right direction, it's important that the agency correct the underlying assumptions from its original environmental review.

The original review was deficient at every step, ignored the latest in vehicle

technology advancements, made use of inflated costs, and misrepresented the benefits of EVs. A more thorough review would have shown that electrical vehicle technology is capable of meeting the Postal Service's needs, certainly at a ratio much higher than the agency originally committed to exploring, while also saving the agency money in the long run.

The Postal Service has also repeatedly stated that it would accelerate its electric vehicle strategy if it receives additional funding for this purpose. The Inflation Reduction Act, which has passed the Senate, would provide the agency with $3 billion in additional funding and needs to go fully electric. Given this, the agency should honor this commitment, once passed by Congress.

In sum, it's imperative that the Postal Service do the following:

Revise the original environmental review by correcting the assumptions about battery range, gas prices, cost estimates,

savings and benefits related to electrifying the fleet, and the infrastructure needed to do this. Use these corrected assumptions in its updated analysis.

Monetize and conceptualize air pollution reduction benefits for various fleet mix scenarios.

Account for the socioeconomic and workplace impacts whether the vehicle production facilities are sited.

And all of this should be done prior to the agency beginning review of any of the new considerations outlined in the Notice of Intent for the Supplemental Review.

Thank you so much.

MR. ORR: Thank you. That's two minutes. Thank you very much.

All right. Next, we have Katherine.

Katherine, you may proceed with your comments.

MS. GARCIA: Thank you.

Good evening.

My name is Katherine Garcia, and I'm here representing the Sierra Club, the Nation's oldest and largest nonprofit environmental advocacy organization. I'm the Director of the Sierra Club's Clean Transportation for All Campaign. We appreciate you hosting this hearing this evening.

Our campaign is focused on advocating for both policies and programs ensuring that we are rapidly transitioning our fleets of electric cars to electric cars, trucks, and buses. This is essential for improving air quality, especially in overburdened communities, predominantly areas of low-income residents and people of color, and to meet our climate goals. At the same time, the shift to a clean energy economy must create good, family-sustaining jobs.

The USPS delivery fleet that we are here to discuss today is a critical part of our advocacy, since it includes 230,000 vehicles that travel through every highway and residential road across the country. The pace at which the USPS

transitions to electric vehicles will either help deliver a pollution-free future we are striving for or set us back apace.

The Sierra Club demands that the U.S. Postal Service fully commit to transitioning every vehicle in its fleet to electric and prioritize the plan to use these in areas that are most impacted by air pollution first.

Postal delivery vehicles are the perfect use case for electric vehicles. They don't travel long distances. They sit idle overnight, when they can charge, and they're currently very expensive to fuel. Shifting to a 100 percent electric USPS fleet should be a no-brainer.

Over the past year, USPS has announced an increase in the quantity of electric delivery vehicles, but anything short of 100 percent does not go far enough to address the climate crisis or improve air quality in the communities that need it the most.

USPS vehicles are a touchstone of

American life. They usually bring essential goods, heartwarming deliveries, and I bet most of us see a few postal vehicles each day throughout our communities.

MR. ORR: Thank you, Katherine. That's two minutes. Appreciate your comments.

Next up, we have Victoria.

Victoria, please proceed with your comments.

Okay. I think you're still on mute, Victoria.

MS. SAWICKI: Sorry, I just unmuted. Thank you.

I am a retired letter carrier, I am a customer, and I am a member of the planet that lives on planet Earth.

I have, basically, three comments, three major points.

No. 1 point is 40 percent is simply not enough. We need a commitment, a full commitment, to 100 percent electric vehicles. Why? Because the science is there and the

science should be driving the decision to go electric.

It's not a matter of like juggling all these words. The report that was just given, it was just a lot of words to me on, as Greta Thunberg would probably say, blah, blah, blah.

But the point why we're here, why those of us that want to speak, it's about the climate; it's about the planet. We live on planet A; we have a planet A, but there's no planet B.

The other point that I want to make is that we need no more gas guzzlers in our communities, especially in communities that are disadvantaged, poor, and of color. Usually, a lot of these communities are situated near refineries and chemical factories. Their bodies are already being inundated with chemicals and pollutants which they did not ask for.

And we have to transition to a fossil-free planet, environment, community, industry. Portugal has already transitioned 60 percent of

its fossil fuel, and Sweden has committed to be 100 percent fossil-free soon.

So, I would like to hear from the Postal Service, based on science, based on the crisis. The scientists are saying we're facing an existential crisis. What does that mean? It means if we don't do something right now and change course, it's over. And this is not hyperbole. They're not lying. They've been telling us this for 30 or 40 years.

So, I'm hoping that the decision you make, I hope you find the courage to --

MR. ORR: Thank you, Victoria. That's two minutes. Thanks very much for your comments.

Next up, we have William.

William, please proceed with your comments.

MR. ROBERSON: Hello. My name is Bill Roberson, and I'm a Vehicle Program Specialist with the California Air Resources Board.

Thank you for the opportunity to provide comments on this critically important

vehicle procurement. Addressing transportation's impact requires making maximum program at every such opportunity.

As an expert on electrification, the California Air Resources Board continues to have deep concerns about the USPS focus on legacy internal combustion technology instead of zero-emission vehicles. This deficiency, among others, demands a full rethink.

CARB urges USPS to build on their recent laudable increases in ZEV consideration by leading development of innovative electrification scenarios and by a USPS commitment to 100 percent electrification as the preferred alternative.

USPS can immediately act on the 94 to 99 percent most electrifiable delivery routes identified by USPS and its own Inspector General, while also applying more specific market-available ZEVs to the remaining sliver of routes having additional needs.

Proposed congressional funding and pending vehicle rules across California and

aligned jurisdictions illustrate but two of the drivers for USPS electrification nationally. CARB refers to our written comments for details on ZEV models' performance, California negotiated pricing, total cost of ownership, equity considerations, and examples of electrification decisions across the delivery industry.

Significant public health and climate mitigation benefits will be realized from a fleet that must shortly compete with committed electrifying competitors, including UPS, FedEx, DHL, Amazon, Walmart, and others.

Such prompt electrification is aligned with the interests of urgent public health, federal technology leadership, and securing the viability of the Postal Service going forward.

Thank you.

MR. ECKER: Thank you for your comments.

MR. ORR: Thank you, Bill.

Next up, we have Aaron.

Aaron, please proceed with your

comments.

MR. VILES: Thank you.

My name is Aaron Viles. I'm the Director of Campaigns for the Electrification Coalition, a nonpartisan, nonprofit committed to the deployment of plug-in electric vehicles on a mass scale in order to combat the economic, public health, and national security dangers caused by America's dependence on oil.

The Biden Administration has been committed to electrifying federal fleet vehicles since its first days in office. The White House and other federal agencies are making plans to exclusively purchase electric vehicles by 2035.

While the U.S. Postal Service is an independent agency outside of direct White House control, we ask USPS to follow those plans and to commit to 100 percent electric vehicles.

If the USPS proceeds with buying and building these dirty vehicles as planned, they will lock in decades of increased pollution, oil dependency, and fuel and maintenance costs,

costing millions, if not billions, of dollars.

According to an analysis by Atlas Public Policy, USPS offers a uniquely compelling case for vehicle electrification. By 2025, it will be cheaper to use an EV in place of a conventional vehicle.

More than 99 percent of the fleet of light duty vehicles used by the USPS, if the USPS were to electrify all those vehicles in 2025, it would save $2.9 billion over the life of the vehicles. By 2030, that figure increases to nearly 100 percent of vehicles with $4.6 billion in savings. Electrification of USPS mail trucks, the long-life vehicles, alone would yield $2.8 billion and $4.3 billion in savings in 2025 and 2030, respectively.

USPS competitors are electrifying their fleets without a federal directive or a direct investment.

Amazon has committed to at least 100,000 new Rivian EV delivery vans as part of its commitment to have at least 50 percent

deliveries carbon-neutral by 2030.

FedEx, in pursuit of its goal of becoming carbon-neutral by 2040, is preparing to buy tens of thousands of electric vans shortly, with a goal that battery-powered make up half its van purchases by 2025 and 100 percent by 2030.

Arrival has partnered with UPS to support its fleet with EV delivery vans, and Canoo will be providing EV delivery vehicles for Walmart.

GM's BrightDrop, Ford's E-Transit, and other commercial options should be considered as the USPS supplements its Environmental Impact Statement and analyzes its fleet options.

MR. ORR: Thanks very much, Aaron. That's two minutes. Appreciate your comments.

Next up, we have Susan.

Susan, please proceed with your comments.

MS. ROBISON: Yes. My name is Susan Robison. I'm a retired postal clerk.

The current postal vehicle fleet has

a huge carbon footprint. And now, the agency has a unique opportunity, especially if the Inflation Reduction Act becomes law, to acquire a new vehicle fleet that's at least 95 percent electric.

Now, we know gas isn't going to go back to $2.50 gallon in most parts of the country. The proposed conventional vehicles would still get terrible gas mileage. So, it just makes no sense to put that kind of money into gas guzzlers, where they have a chance to fund these, cover a lot of the upfront costs of electric vehicles.

Postal delivery vehicles go everywhere. I live in one of those so-called disadvantaged neighborhoods, and I would rather have cleaner electric vehicles in my neighborhood than trucks that burn fossil fuel.

This is our chance to go electric. Thank you.

MR. ECKER: Thank you for the comment.

MR. ORR: Thanks very much.

Next up, we have Sam.

Sam, please proceed with your comments.

MR. WILSON: Hi. Good evening, everybody.

My name is Sam Wilson. I'm a Senior Vehicles Analyst with the Union of Concerned Scientists. We're a national nonprofit that's focused on putting rigorous independent science to work in our democracy.

On behalf of our over half a million UCS supporters, thanks so much for the opportunity to comment tonight.

The three points under consideration in the Supplemental Environmental Impact Statement avoid accountability for, and fail to address, the fundamental flaws in the study design's Final EIS for the NGDV.

We are glad to see that the Postal Service is signaling a more reasonable consideration of zero-emission vehicles, given their significant public health and economic

benefits over fossil fuel trucks. But if this new analysis relies on similar data, methodology, and assumptions that were in the Final EIS, its validity is going to be in question from the start.

So, the Supplemental EIS must address the fatal flaws of the Final EIS, including that the SEIS must include at least one reasonable alternative to the 90 percent NGDV scenario, as the alternative of 100 percent considered in the Final EIS had already previously been determined to be unfeasible due to route constraints. The USPS determined 95 percent of its routes to be serviced by the EVs in the Final EIS, and we would recommend that this percentage of the EVs is the most reasonable alternative to analyze, if those assumptions still remain the same.

Second, critical data assumptions such as fuel costs must be within the ballpark of reality. The Final EIS included fuel estimates beginning at $2.19 a gallon. Only seven times in the past 10 years has the national average hit

that low. Independent studies show that battery electric delivery trucks are most cost-effective to own and operate over their lifetime compared to their combustion counterparts. However, this absurdly underestimated cost of gasoline falsely undervalues the significant operational benefits of EVs compared to delivery vehicles powered by gasoline.

So, in conclusion, the validity of the Supplemental EIS hinges on the quality of the (audio interference) and is of utmost importance in developing a clean, efficient, and economical fleet for the future of the USPS.

We look forward to reviewing --

MR. ORR: Thank you for those comments. Appreciate it. Thanks very much.

Next up, we have James.

James, please proceed with your comments.

James, I show you on mute. Please unmute your phone and go ahead with your comments. I'm sorry, James, we're having some

difficulty hearing you. Could you possibly speak up?

MR. SIMPSON: Yes. Can you hear me okay now?

MR. ORR: Only slightly better. Please go ahead and turn up the volume, if you can.

MR. SIMPSON: Yes.

MR. ORR: Yes, James, I'm sorry, we'll have to move on to another caller. Please try to pull your connection back in. We'll try to get to you again.

Next up, we have Richard.

Richard, please proceed with your comments.

Go ahead and unmute yourself.

MR. DIAZ: Hello. Thank you.

My name is Richard Diaz. I am with the BlueGreen Alliance. I serve as their Midwest Regional Field Organizer. I'm here to comment today on the NGDV acquisition.

The BlueGreen Alliance unites labor

unions and environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs. We also do this in building a clean economy, building a prosperous and more equitable economy.

And we have been following closely the progress of the Postal Service's next generation delivery vehicles contract with Oshkosh Defense, given the contract's significant implications for climate and for its workers.

The NGDV contract represents the opportunity to rebuild the largest non-business federal fleet to advance climate progress, improve air quality in our neighborhoods, support workers and their communities, and model responsible procurement practices.

We hope to see continued growth in the EV share of the future fleet, as the Supplemental Environmental Impact Statement's results demonstrate the significant environmental, health, and cost savings that come with electrification.

Despite this positive development, however, there still remains significant issues with NGDV's contract, mainly its lack of consideration for the workers who will be building these vehicles, their components, and the communities where they are built.

The socioeconomic impacts on workers and communities as a result of the planned placement of the NGDV fleet manufacturing facility in South Carolina, where Oshkosh Defense employees will not fall under the longest standing collective bargaining agreement between the United Auto Workers and Oshkosh Defense and all of its Wisconsin facilities is horrible.

We hope that the U.S. Postal Service will continue support for workers building --

MR. ORR: Thank you very much. That's time. Appreciate your comments.

We'll move on to the next person, and that is Maxwell.

Maxwell, please proceed with your comments.

MR. WOODY: Hi. Can you hear me all right?

MR. ORR: Yes, we can.

MR. WOODY: My name is Max Woody. I'm a Research Specialist at the University of Michigan Center for Sustainable Systems.

I just have one question. I was wondering if, in the Supplemental Environmental Impact Statement, will the USPS be considering revised methods in addition to these alternative scenarios?

I ask this because the original FEIS had some significant shortcomings in the methods used, particularly for estimating greenhouse gas emissions. For example, the estimates assume that the grid emissions factor would not change over the lifetime of the vehicles, even though they're going to phased in over the course of several years and have a lifetime of 20 years, and the grid is expected by almost every projection to decarbonize significantly in that time.

Furthermore, the estimates did not include emissions from the construction of the vehicles themselves, also known as the vehicle cycle emissions, and there are additional methods concerns regarding the estimates for the ICEV as well.

So, that's my basic question: are the methods going to be reconsidered as well or just the alternative scenarios?

Thank you.

MR. ORR: Thank you, Max.

MR. ECKER: And we will take all that into consideration when updating the impact statement.

MR. ORR: All right. Our next person is Scott.

Scott, please proceed with your comments.

MR. HOCHBERG: Hello. My name is Scott Hochberg, and I'm an attorney with the Center for Biological Diversity.

I urge the Postal Service to conduct

an expansive Supplemental EIS that remedies many of the defects in the original EIS, highlighted by government agencies, environmental groups, and the public.

For example, USPS should note the current cost of gasoline, which has skyrocketed in recent months, and will continue to fluctuate due to global insecurity and worsening climate change disasters.

And it should note the cumulative climate impacts of its plan, which will release many more tons of carbon pollution and airborne pollutants than is necessary.

President Biden has requested that USPS do its part in adopting a clean vehicle fleet. In line with that directive, the Postal Service should analyze a 100 percent EV alternative in a 95 percent EV alternative, which is the percentage of the routes that the first EIS admitted were already (audio interference) --

MR. ORR: I'm sorry, it appears that we've lost you. If you can, try to come in.

We'll move to the next person.

Emily, please proceed with your comments.

DR. YEN: Hello. My name is Dr. Emily Yen. I am from the University of Virginia in Charlottesville, Virginia.

I would like to express my concern about the FEIR, and I am very concerned about the USPS potentially adopting a policy that would have a large amount of conventional vehicles.

I would encourage you to consider climate change, cumulative effects of climate change, and thinking about especially with the use of air conditioning in the life and days of increased air conditioning. Achieving only 8.6 miles per gallon is unacceptable, and this is barely an improvement on the current 8.2 miles per gallon.

I would like to see a comprehensive analysis of the impact on air quality in every metropolitan area, as well as every micropolitan area in the United States, given that postal

vehicles will be running in every community in the United States.

And I would like for this comprehensive analysis to be done with both 100 percent electric vehicles and 95 percent of electric vehicles in the proportion of electric vehicles. I would like it to be done under the current conditions, rather than -- the current conditions, rather than thinking about changes in delivery, and with these electric vehicles, just to clarify, with battery electric vehicle power trains versus conventional internal combustible engines.

And then, I would also like you to specifically consider the impacts on communities of color and climate change, and especially in terms of childhood asthma rates in this analysis --

MR. ORR: Thank you, Emily. I appreciate your comments. That's your time.

We're going to move back to Max. We had some technical difficulties.

Max, if you are still online, please proceed with your comments. Go ahead, Max. Unmute yourself.

Okay. Still not able to hear Max at the moment.

We will move forward. Next up is Lawrence.

Lawrence, please proceed with your comments.

MR. ABBOTT: Yes. Thank you.

There's multiple serious flaws in the EIR, as many people have mentioned.

And I know of many, many people that have gone to having only electric vehicles for their personal use, and especially in conjunction with solar. So, that's one of the things that I would like the EIR to supplement, to look at. You know, it's possible to have solar at each postal depot, so that these vehicles are charging. It's a slightly larger upfront investment, but you recoup that very quickly by having no fuel costs, by charging the vehicles

when they come back.

And a good thing about the LEVs for city routes, that the range doesn't need to be very long at all. So, the batteries can be very small, and that saves a huge amount of money. And the batteries could be modular, so that extra packs could be rolled in and out of these new electric LEVs to add range, as needed. So that they would even function for driving routes.

So, I'm pushing for 100 percent renewable energy electric vehicles. I've done that with my own home to power my home and my electric car. If I can do that, I'm pretty sure that the U.S. Postal Service can figure out how to do it, too, with just the technology that we have right now.

So, please do that. Pass.

MR. ORR: Thanks very much, Lawrence. Appreciate your comments.

Next up, we have Bryce.

Bryce, please proceed with your comments.

MR. SPRINGFIELD: Hi. My name is Bryce Springfield. I'm a student at Princeton University and a member of Pinellas DSA.

The proposal we have today is just not sufficient, and I urge the Postal Service to reconsider its commitments and ensure all new vehicles are fully electric and union-made.

A hundred percent electric postal vehicles going forward would be not only the most sustainable for the Postal Service and our environment, it would also be more cost-efficient to charge those vehicles with electricity rather than have to constantly rely on expensive foreign oil. They would be much quieter and with fewer local emissions as well, keeping our neighborhoods more peaceful and healthy.

And not only that, of course, we have a very unique chance to build only vehicles with union-represented labor, and that means supporting American good-paying jobs which workers are desperately in need of in this country.

And I yield my time. Thank you.

MR. ORR: Thank you, Bryce. Appreciate your comments.

Next up is Christopher.

Christopher, please proceed with your comments.

MR. JONDA: Hey, guys, I'm not a lawyer. I don't go to any fancy university. I'm just an American who wants actual good money spent. An average vehicle goes 12 miles a postal route. That should be electric. They should have regenerative braking. It's absolute insanity.

I want to also look and see why there haven't been other manufacturers added to this. Why just Oshkosh? There are others in the NGDV, like Workhorse. Those should be added. We need more. We need more manufacturers. Let's get it together. Let's go.

MR. ORR: Thank you, Christopher. Appreciate your comments.

Next up is David.

David, please proceed with your comments.

MR. STAIGER: Hi. My name is Dave Staiger. I'm a letter carrier in Michigan.

And I support 100 percent electric. The LLVs we have are awful. They're unsafe.

And I also feel bad that I am adding to the problem. Every time I go out and try to do a good thing of delivering people their mail, I'm also adding to the carbon footprint.

And the post office, anything less than 100 percent, or at least 95 percent electric, is, to me, just an immoral choice. We're at a crossroads for the planet, for our kids, for our future. So, this is a chance, it's an opportunity that we have to act on.

And I want to feel good -- I feel good about my job. I feel good about delivering the mail, but I don't feel good about adding to the pollution every day, and it's just unnecessary.

So, I hope to see all electric or at least 95 percent, and also union-made.

Thank you.

MR. ORR: Thank you, David. Appreciate your comments.

Next up is Scott.

Scott, please proceed with your comments.

MR. HOCHBERG: Hi. Thank you so much for coming back to me.

I just have one additional point to make, which is this: should the Inflation Reduction Act be passed by Congress in the coming weeks, the Postal Service stands to receive $3 billion for EVs and related infrastructure. We believe those funds should be used to supplement, and not replace, the funding USPS had already allocated for EV purchases, which is 40 percent of the initial order.

The Postal Service should be specific about how many vehicles the prior commitment totaled and how many additional vehicles can be purchased as a result of the new funding, should it come to pass.

And we also urge that the Postal Service maximize the percentage of that funding in the initial vehicle order because there's no time to waste in replacing the fleet with clean vehicles.

We hope that the USPS commits to a cleaner future by buying 100 percent EVs.

Thank you.

MR. ORR: Thank you, Scott.

Our next comment on the list is Terri.

Terri, please proceed with your comments.

Unmute yourself, Terri, please. And go ahead.

MS. HALL: Thank you.

My name is Terri Hall, and I'm an American citizen dependent on the Postal Service for deliveries. I want to thank the postal workers doing their best every day under difficult circumstances to deliver our mail.

The last few years, I was able to count on my checks reaching my creditors within

two to three days of them leaving my home. In the past month, however, two of my checks did not reach the credit card company in time, and I was charged late fees. The checks were mailed 7 to 10 days before their due date. This lateness goes against the stated delivery time on the USPS website for a first class mail letter, which states, the website states one to three business days for delivery. I no longer have confidence in the post office delivery.

Representative Katie Porter of California wrote, "On-time mail delivery has plummeted under Postmaster Louis DeJoy, forcing veterans to wait longer for prescriptions, seniors to scramble to pay bills without their Social Security checks, and communities to feel less connected. Postmaster DeJoy needs to go." And I agree. This is not the first time items have arrived late.

I have also lost confidence that the mail-in ballot so many voters count on will not reach their destination in time for the November

midterm elections. The Postal Service has acknowledged in court filings that thousands of ballots had not been processed in time for the 2020 election.

It's also been reported by the Project on Government Oversight, a nonprofit, bipartisan group investigating corruption and abuse of power, that Mr. DeJoy owns stock in Abbott Laboratories, the manufacturer of rapid COVID tests that the Postal Service has been delivering to households. It's a contract with more than $1 billion. This is a clear violation of the federal conflict-of-interest law for the head of an agency that's directly involved in interstate commerce.

He also owns stock in Bristol Myers Squibb and Pfizer. Now, a disclosure last year shows that he sold up to one-third of that stock, but the most recent financial disclosure from March shows no evidence that Mr. DeJoy sold all of the rest of his shares.

I ask that the USPS Board of Governors

deliver a pink slip to Mr. DeJoy to remove him from his post immediately and appoint someone more ethical and law-abiding to lead the USPS. He is not delivering for America.

Thank you.

MR. ORR: Thank you, Terri.

Mr. Ecker or Mr. Collins, we no longer have any comments. We do have one hand raised.

Christopher, please bring yourself off mute. Ask your question. I'm sorry, make your comment.

MR. JONDA: When are the first EVs supposed to be delivered to the USPS?

MR. ECKER: So, our vehicles will begin delivery in October of 2023.

MR. JONDA: And how many will it be in the first year?

MR. ECKER: We have not yet determined or published the quantities by year.

MR. JONDA: Aren't you limiting your amount that you can even receive or other manufacturers who could plan to build a righthand

vehicle by only giving a contract to one manufacturer?

MR. ORR: So, Mr. Jonda, did you have a comment?

MR. JONDA: Yes, I'm just commenting that there needs to be more manufacturers, like others who were in the NGDV for years beforehand, because, again, you're limiting by the simple fact that you have one manufacturer, but you're only going to be able to build so many EVs.

So, even without making it 100 percent EV, even at the percentage you're at now, you're only going to get so many from one manufacturer. And they've even said in their 8-K filings before that they don't even know if they could build them. So, the fact that all these people are calling in and saying we need more percentage, they're not even going to be able to build them, and how many. So, you need more manufacturers.

Thanks, guys.

MR. ORR: Thanks very much for your comment. Thank you, Chris. Appreciate your

comment.

If anyone else would like to make a comment, until we make a presentation at 8:30, please raise your hand. And then, when called upon, please come off mute and introduce yourself, and then, go ahead and make your comments.

Once again, we will remain online until we begin the second session at 8:30 p.m. Eastern. If you have any comments, please raise your hand and we will call on you. Thank you.

Okay. I see we have one hand raised.

Christopher, please proceed with your question -- I'm sorry -- with your comment.

Please remove yourself from mute.

MR. FELT: Are you able to hear me?

MR. ORR: Go ahead.

MR. FELT: I have a quick, just a reiteration of the last guy that just spoke.

The 8-K filings of Oshkosh did state that they, it stated that they, themselves, were not original manufacturers of EV vehicles. So,

what was the plan when originally selecting them for the contract to have them within the next year and a half?

MR. ECKER: I mean, we can't go into the details of the solicitation, but we will note your comments for the SEIS.

MR. FELT: So, just going back to the contract then, when it came to the selection, we -- I know during the selection process Workhorse was a secondary option that was the followup to Oshkosh. And following the selection, it didn't seem like they were even considered, as if the deal itself was already predetermined. Is there any comment on that?

MR. ECKER: No. It was a competitive solicitation process, but that's, you know, really all we can comment on the solicitation process itself.

MR. FELT: Okay.

MR. ORR: Thank you very much, Chris.

Our next commenter is Dave.

Dave, please remove yourself from mute

and proceed with your comments.

DAVE: Unfortunately, I'm going to have to take a pass. Thank you.

MR. ORR: Thank you, Dave.

We will remain online. If you have a comment, please click on the "Raise Hand" icon to get in the queue.

I see we have another request from Emily.

Emily, please remove yourself from mute and proceed with your comments.

DR. YEN: Hi. I am Emily Yen again.

And I just wanted to encourage you for the environmental -- or for the Supplemental EIS, to reprice the cost of electric charging stations or electric chargers. I mean the cost that was in the FEIS was dramatically inflated by more than twice as much. And would encourage you to look at real market prices for these electric chargers and, also, not price at the assumption that every postal electric vehicle or battery-powered electric vehicle needs its own charger.

And I'd also encourage you to think about the impact of having electric charging stations, the ecological impact in rural communities across the United States and areas that have low uptake on electric vehicles currently. I mean, the USPS is a valuable national institution that has facilities currently that are more equitably distributed across the United States compared to any other federal agency, and there's a real opportunity for leadership, for stewardship, that you can build out the national infrastructure to build for electric vehicles. That would have a humongous environmental impact, both in terms of climate change, as well as air pollution. And I just really hope that the USPS takes this opportunity.

MR. ORR: Thank you, Emily.

Given the number of participants, we're going to increase the speaking time allowed up to three minutes.

Next up is Victoria.

Victoria, please remove yourself from mute and please go ahead with your comments.

MS. SAWICKI: Thank you. Yes. Thank you.

You know, I was kind of surprised when I read the EIS report that there was very little said or mentioned about the environment and the impacts on the environment.

I happen to live across the street from Chevron, and we have shelter in place, you know, flaring and fires, and stuff. And we have to deal with that.

So, I'm wondering, I'm very curious as to who made the decision to go from 5 percent to 10 percent to 40 percent. And obviously, everybody on this call is very happy because it's going in the right direction. Was it just the pressure? I mean, and who ultimately makes the decision? Is it the Board of Governors? The Postmaster? Or is there another body that will decide, you know, which contract?

And lastly, I want to say that I'm 100

percent union. I think union-made is the way to go, and I'm just so disappointed that they chose a non-union Oshkosh to build these electric vehicles.

Thank you.

MR. ORR: Thank you, Victoria.

As I mentioned earlier, we will remain online until the beginning of the next session. If you have a comment, please raise your hand and we'll come to you.

Next up is Aaron.

Aaron, please remove yourself from mute and go ahead with your comments.

MR. VILES: Thanks for opening up additional time for those in attendance.

I'm glad to see that you've at least partially listened to the EPA and to the White House Council on Environmental Quality when they critiqued your flawed decision under the leadership of Postmaster General Louis DeJoy.

I'm glad to see the increase in electrifying from a paltry 10 percent to 20

percent, to now 40 percent. But, still, it is inadequate.

DeJoy's decision is irresponsible and misses the single largest federal opportunity to charge ahead with transportation electrification.

As we are looking right now to Ukraine and Russia, it is very clear that our addiction to oil leads us to listen more closely to international voices than we should have to.

Please ensure that your supplement to the next generation of delivery vehicles' Environmental Impact Statement adequately assesses the total cost of ownership, which should include current and realistic fuel price projections balanced against far more stable prices for electricity, and the reduced maintenance costs EVs also deliver.

If such an assessment is done fairly, the USPS would end its efforts to slow walk electrification and embrace an all-electric future immediately.

Thank you.

MR. ORR: Thank you, Aaron.

Once again for everyone, if you have a comment, please click the "Raise Hand" icon. We'll get you in the queue, and then, when you're called upon, please come off mute and state your name and affiliation.

Next up we have Dave.

Dave, please proceed with your comments.

DAVE: Yes. Is there any chance we could put a wood-burning stove in the back all these EVs and use the junk mail to generate power, and possibly solar?

And I'm all set. Thank you.

MR. ORR: Thank you, Dave. Appreciate your comment.

Again, for the folks who haven't heard this, if you have a comment, please click the "Raise Hand" icon. We'll get you in the queue. After that, we'll call upon you to come off mute. State your name and go ahead with your comments.

We will remain on the line until the

beginning of the next session.

Okay. Next up, we have Tari.

Tari, please remove yourself from mute and go ahead with your comment.

MS. PANTALEO: Hello. My name is Tari. I'm a USPS window clerk of 44 years.

And I don't want to say anything that everybody else has already said. I don't want to repeat.

But I wonder how many of our decisionmakers are EV owners. I've had an EV for nine years. It's changed my life. I don't know how many hours of my life I've saved from sitting at the gas station. It takes about 30 seconds to plug in my car and 30 seconds to unplug it. So, those are a lot of hours saved across the Nation.

We've also talked about gas, but the internal combustion engines also require oil, and neither of those is needed for an EV. And the maintenance is virtually nil -- tires and brakes. My vehicle had an eight-year warranty on the battery, and the battery has lost just a little

bit over time, but it still works fine. And it's an early model.

So, I think that perhaps the people who are making the decisions should try to get more experience with an actual electric vehicle, and I think they would be so much more enthused about increasing the percentage.

That's all I have to say. Thank you.

MR. ORR: Thank you, Tari. Appreciate your comments.

Once again, as a reminder to everybody, if you have a comment, please click on the "Raise Hand" icon. We'll get you in the queue, and when you're called upon, please pull yourself off mute and begin with your comments.

As a reminder, we will repeat this presentation again at 8:30 p.m. Eastern.

We'll go to Christopher.

Christopher, please remove yourself from mute and go ahead with your comments.

MR. JONDA: I'm just curious, how many current Grumman LLVs are decommissioned per day,

per week? Just some numbers for anybody else listening out there. Just because of their failure, their age, their cost for repair.

MR. ECKER: I don't have those figures handy, but, again, we'll take that and respond in the SEIS.

MR. JONDA: Yeah, I mean, since -- I made my comment before. With only one manufacturer, that's a company that makes, you know, military vehicles, fire trucks, you name it, and it has never made an electric vehicle before, you're never going to have enough for all the comments that you just heard.

All these people are calling in imploring the United States Postal Service to have more EVs. We don't even know if the EVs that are going to be built in number are even going to cover the ones that are just decommissioned each day. We all see them being towed down the streets.

I mean, you know, there's other manufacturers out there. You know, it's not like

the United States Postal Service only has Grumman across the board. There's four. There's Mercedes. You know, there's all these other vehicles.

I'm just confused on why the push hasn't been made out there to get these vehicles going. Because, like you said, you know, the COTS that are going to come, there's other manufacturers. You could buy those off a lot tomorrow and put a United States Postal Service mail truck sticker on them, and they could get the job done.

But to make a righthand vehicle, you know, look at the process just for the NGDV.

And again, Oshkosh didn't even have an electric vehicle. Have we seen how many miles that their prototype can even go right now? Everybody is calling in saying we need to make an EV for the Postal Service. I haven't seen one thing delivered by an Oshkosh vehicle. Do they even have a prototype that's even delivering mail yet? Is there an Oshkosh prototype EV that the

manufacturer has built and that is running, that the Postal Service has agreed to buy, you know, this upwards of $6 billion contract from?

MR. ECKER: So, there's a robust testing process as part of the contract for any new vehicle. So, certainly, there's a lot of work going on between the Postal Service and the manufacturer in that regard.

I would also just note that, in terms of COTS vehicles, our LLVs and FFVs are righthand-drive. So, there is a limited market for righthand-drive vehicles, as we noted, for COTS righthand-drive vehicles, as we noted in our original estimate.

MR. JONDA: Sure, sure. My question, my main concern, then, is if there's a contract already for this vehicle, how many have they produced already, even if they are pre-production vehicles, that are out and getting real-road miles on them? Are there any?

MR. ECKER: Yes, I mean, those aren't specifics that we're able to share today. But,

again, there is a robust testing and evaluation process of the new vehicles.

MR. JONDA: Okay. And I mean, I think the biggest consideration is, of course, moving forward with, of course, the environment, people out there, wherever they may live, but I'm talking sheerly economics and building the vehicles to actually have them out there. Anybody can want EVs as much as they want, but unless you guys have more manufacturers building them, specifically, ones that have already been tested, it's a pipedream.

It will never happen from the current contract that you have to build enough to even probably replace the current LLVs that we don't even know the number on those that are gone today. So, I ask the Postal Service, if you're really serious about EVs, it's not just money, because you can have all the money in the world put towards the manufacturing, but if you don't have the manufacturers that are capable of building them, it's just not going to happen.

So, you really need to put, you know, some foresight into finding some other manufacturers like Workhorse that had already done the NGDV testing, and that could build these in collaboration. You know, these companies don't have to work against each other. They could work together to make this happen.

Because, again, you can throw as much money at the situation as you want, but unless you have people building them and manufacturers that are in EV, it's not going to work. Because the consensus is, of course, EV. Nobody is calling in saying we need, you know, more Ford Focus ICE vehicle, something like that, delivering mail. It's EV, and you've got to have the people to build it.

I thank you guys for opening this up, though, to everybody out there who are making their opinions heard. I really appreciate it.

MR. ORR: Thank you, Chris.

As a reminder to everybody, if you have a comment, please click the "Raise Hand"

icon. We'll put you in the queue, and when you're called upon, we'll bring you off mute and you can begin your comments.

Also as a reminder, we will repeat this presentation again at 8:30 p.m.

We have a commenter. We'll move to David.

David, please remove yourself from mute and begin with your comments.

MR. STAIGER: Yeah, just following on the last caller who was Chris, I'm a letter carrier, as I said before.

And the fleet of LLVs is a nightmare. The vehicle maintenance crew do an amazing job of keeping these things running, but they're way past their time. We had one just north of here catch on fire and somebody died. It was rear-ended and a postal worker died in that fire. They're just safety hazards. People call them "tuna cans."

So, I agree that this is urgent to have for the safety of letter carriers and the

public, to have these things replaced as soon as possible, and then, replace with electric. Have more manufacturers, and I would like to see those as union-made manufacturers.

But it's a crisis. I don't know how many we're losing a day, but I see it every day that vehicles are out of commission and there's others that should be that are still on the road. And you just don't feel safe out there in them. So, it's an urgent, an urgent matter, and I urge you to just act on it.

And again, 100 percent, or as close as possible, electric vehicles and safely built, union-built.

Thank you.

MR. ORR: Thank you, David.

Okay. As a reminder, folks, if you have a comment, please click the "Raise Hand" icon. We'll put you in the queue. Once you're called on, please remove yourself from mute and begin your comments.

Again, we'll repeat this presentation

at 8:30 p.m. Eastern.

And we await further comment.

(Pause.)

I see we have a commenter.

Lawrence, please remove yourself from mute and begin with your comments.

MR. ABBOTT: Yeah, I just wanted to say one thing about solar electric vehicles in general. It is that, typically, it doesn't make sense to try to put solar panels on a vehicle. Normally, the best way to have a solar electric vehicle is, if you're a fleet, you know, to have solar panels at your base station, or if you're homeowner, have solar panels on your property, especially on your roof.

And then, you're putting electricity out on the grid all day, and then, when you come back, you charge your car and you set your timer to charge -- usually from midnight until 7:00 in the morning is when the power companies have too much energy, especially in areas where there's hydro and they have to continue running water

through the turbines. So, they actually have an excess of electricity in the middle of the night. And it's difficult and expensive to dump the electricity.

So, that's why they give you super-cheap energy, electric energy, between those hours. And so, that's part of what makes electric vehicles so cheap to own, aside from a lot of other things -- no maintenance, virtually no maintenance at all.

And so, the exception is for like a parcel vehicle, which most driving -- not most driving routes, but most city routes and suburb routes are a very short amount of miles. So, in a case like that, a solar electric vehicle could easily work and provide most, if not all, of the needed energy for those few miles by having solar panels directly above the vehicle while the sun is shining. And that way, when they go back to the yard to plug in overnight, they wouldn't require much energy at all; and plus, the battery could be incredibly small and cheap.

I mean, I see Postal Service LLVs as being an incredible windfall. When I learned how to do solar design and installation for rooftops, my professor said that it was, in college, said that it was the best return on investment. And it is for most people that can invest in solar for your rooftop. But when you combine that with an electric vehicle, the investment just pays for itself that much faster and that much better.

And now that I'm retired, and I've had solar and an electric car for a while, my costs are like just amazing. They're virtually nothing, and I can go everywhere I want to go.

So, I'm sure the Postal Service can figure out how to do that and save money and make money with solar and electric vehicles.

Thank you so much. I yield my time..

MR. ORR: Thank you, Lawrence.

As a reminder, once again, if you have a comment, please click the "Raise Hand" icon, and we'll put you in the queue. And then, when you're called on, please come off mute and begin

your comments.

Also as a reminder, we will repeat this presentation at 8:30 p.m. Eastern.

And we await further comments. Thank you.

I see David has a comment.

David, please remove yourself from mute and begin with your comments.

MR. STAIGER: Yeah, just following up on the last caller. Again, I'm a letter carrier in Michigan.

And in addition to looking at solar panels on the LLVs or the new vehicles, electric vehicles, I also hope that you're considering solar panels at post offices. That's a great opportunity. There's a lot of space, large roofs, and also, solar or EV charging stations not just for the LLVs, but, hopefully, available for the public, for customers who are coming into the post office. Those would be available, too.

Just again, it seems like just a great opportunity for us to move forward and try to

turn around climate change.

Thanks.

MR. ORR: Thank you, David.

Next up, we have Syed.

Syed, please pull yourself off mute and begin with your comments.

MR. NAQVI: Thank you much.

My only question is, is the Postal Service considering alternative methods of mail delivery, especially in remote areas with all this drone technology getting more and more highlighted?

MR. ECKER: I mean, the SEIS is focused specifically on vehicles.

MR. NAQVI: So, if there is a vehicle that is capable of launching drones to aid in mail deliveries, is that being considered?

MR. ECKER: It's outside the scope of this conversation, but, certainly, we're always looking at new technologies and opportunities.

MR. NAQVI: Thank you.

MR. ORR: Thank you, Syed.

While we await further comment, just a reminder, if you have a comment, please raise your hand.

We'll move to Lawrence.

Lawrence, please remove yourself from mute and begin with your comments.

Pull yourself off mute, Lawrence, if you would, please, and begin with your comments.

I'm afraid we're not having any luck with Lawrence.

Lawrence, if you would, try again.

In the meantime, a reminder, if you have a comment, please click the "Raise Hand" icon. Get yourself in the queue and we will move to you.

Next, we have Max.

Max, please remove yourself from mute and begin with your comments.

MR. WOODY: Hi. I spoke earlier.

I just wanted to ask, so back last year, I read the Draft Environmental Impact Statement, and then, a bunch of public comments

that were submitted for that Draft Environmental Impact Statement, and then, which were responded to in the Final Environmental Impact Statement.

A lot of the concerns that were raised in that process, particularly about gas prices, about electricity price assumptions, about grid assumptions, all these methodological questions that were brought up in the comment period weren't really substantively engaged with in the Final Environmental Impact Statement.

So, I'm just wondering if there's any sort of improvements in the process or, you know, things that you've done to ensure that the comments at this period and others will be more substantively engaged with than last time around.

MR. ECKER: I can say that we consider all the comments, and we will consider all these comments as well, as we're evaluating the supplement, sure.

MR. WOODY: I mean, that's great and that's what I want to hear, but, I mean, just based on the draft last time, and the response to

a lot of the comments in the draft, a lot of pretty significant comments were kind of ignored or brushed aside without much to really address it. So, I hope you're right and I hope it's better this time around.

MR. ORR: Thank you, Max. Appreciate your comments.

As a reminder once again to everybody, if you have a comment, please click the "Raise Hand" icon. We will put you in the queue, and when you're called upon, please remove yourself from mute, and then, begin your comments.

Also as a reminder, we will repeat this presentation at 8:30 p.m. Eastern.

At present, we await further comments. Thank you.

(Pause.)

Okay. We have a comment from Britt.

Britt, please remove yourself from mute and begin with your comments. Thank you.

MS. CARMON: Hi. Thank you.

It's more of a question. I already

gave my comment, but I was curious to know, if we have to switch devices -- I noticed in the RSVP link it said that this was only loaded to the first 10,000 people -- if we needed to switch devices, are we able to still get back on this, or have you reached that cap?

MR. ORR: We have not reached the cap, no. We will begin the presentation again at 8:30 p.m., but we have not reached our cap.

MS. CARMON: Okay. Thank you so much.

MR. ORR: Yes, ma'am.

Okay. We have about nine minutes remaining in this session.

If you have a comment, please click the "Raise Hand" icon and we'll put you in the queue. Once you're called upon, please remove yourself from mute and begin your comments.

(Pause.)

As a reminder to all those on the call, the next presentation will begin at 8:30 p.m. Eastern.

If you have a comment for this final

portion of our session, please click the "Raise Hand" icon. We'll put you in the queue, and when you're called on, please bring yourself off mute and begin your comments. Thank you.

(Pause.)

For all those currently with us, we will repeat our presentation in five minutes at 8:30 p.m. Eastern. Thank you.

(Pause.)

We have a comment from Michael.

Michael, please remove yourself from mute, and you have two minutes. Thank you.

Michael, if you would remove yourself from mute, you have two minutes to begin your comments. Thank you.

Okay. We're having a little bit of difficulty. Michael, if you would, try again.

(No audible response.)

We'll begin the second session at 8:30 p.m. Eastern, approximately two minutes from now.

(Pause.)

SESSION 2 (8:30 P.M. TO 10:00 P.M. EASTERN)

MR. ORR: All right. We're going to move to repeat our presentation.

Good evening and welcome to the public hearing for the Supplemental Environmental Impact Statement for the Postal Service's Next Generation Delivery Vehicle Acquisitions Program.

My name is Chris, and I will be your meeting facilitator.

This hearing is being recorded, and we will offer a video of the recording on the website.

We will have a brief presentation, a comment period for approximately one hour, and then, we'll be done.

The meeting will end at 10 o'clock p.m. Eastern time.

I will now turn the meeting over to our Postal Service presenter, Patrick.

MR. ECKER: Thank you, Chris.

Good evening. Welcome to the public hearing for the Supplemental Environmental Impact Statement for the Postal Service's Next

Generation Delivery Vehicle Acquisitions Program.

My name is Patrick Ecker, the Executive Manager of Fleet Strategy and Support. And I will provide an overview of why the Postal Service is conducting a Supplemental Environmental Impact Statement at this time, and what we are considering to assess through this process.

But, first, some information about how you may submit comments and questions.

If you wish to be given up to two minutes to provide an oral comment at anytime during or after the presentation, you may click on the "Raise Hand" feature. After the presentation, we will unmute attendees in the order they clicked the "Raise Hand" feature. You may also at anytime type your comments and questions into the chat feature.

Additionally, you may submit your comments via email or U.S. mail at the addresses provided on the screen.

Note that comments must be received no

later than August 15th, 2022, to be considered.

All submitted comments, whether provided at this hearing or via email or mail, will be recorded and made part of the public record and are, therefore, subject to disclosure. All submitted comments will be considered by the Postal Service in the Draft Supplemental Environmental Impact Statement, which will be published in The Federal Register at a later date.

First, I'll provide a summary of the current state of the postal delivery fleet. Currently, the postal delivery fleet is comprised of both purpose-built, righthand-drive, long-life vehicles and flexible fuel vehicles, as well as commercial off-the-shelf vehicles, such as the RAM ProMaster and Mercedes Metris.

The purpose-built vehicles currently account for the majority of the fleet and are past or nearing the end of their useful life. For example, while the expected service life of long-life vehicles is 24 years, they currently

average 30 years in age and, thus, have high annual maintenance costs.

Importantly, our long-life vehicles do not have certain standard modern safety features. They have no airbags, no air conditioning, no anti-lock brakes, no backup cameras, no intermittent windshield wipers, no blind spot warning systems, and no daytime running lights.

In short, it is vital that we provide our 200,000 mail carriers with appropriate vehicles that allow them to support our daily service mission, with advanced safety and security features, better fuel economies, and the amenities we expect in our own personal vehicles.

I will now discuss the environmental impact analyses the Postal Service has done to date, as part of our effort to modernize our delivery fleet.

The National Environmental Policy Act, or NEPA, is a federal procedural law that is intended to ensure that federal agencies consider the environmental impacts of their major actions

in the decision-making process. The documentation of this process, an Environmental Impact Statement, informs both agency decisionmakers and the public, and it must do a number of things.

It must include a full and fair discussion of the action's significant environmental impacts.

It must consider reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment.

And it must be concise, clear, to the point, and supported by evidence that the agency has made the necessary environmental analyses.

The purpose and function of NEPA is satisfied if federal agencies have considered relevant environmental information and the public has been informed regarding the decision-making process. NEPA does not mandate particular results, substantive outcomes, or that an agency choose a course of action with the least

environmental impact.

On February 23rd of this year, the Postal Service completed the Environmental Impact Statement process by issuing what is called a record of decision: to purchase and deploy over a 10-year period between 50,000 and 165,000 purpose-built, righthand-drive, next generation delivery vehicles to replace our long-life vehicles and flexible fuel vehicles. You can see a picture of the NGDV's design on this slide.

NGDV power trains will be a combination of both internal combustion engine and battery electric. And in our record of decision, the Postal Service committed to a minimum of 10 percent battery electric.

As part of our universal service obligation, the Postal Service delivers to 163 million addresses in all climates and topographies six days per week. And by law, we must do so in a financially self-sufficient manner.

This means the Postal Service

generally receives no tax dollars for operating expenses. It relies on the sale of postage, products, and services to fund its operations.

As a result, the Postal Service determined that, given the higher total cost of ownership for battery electric vehicles as compared to internal combustion, a 10 percent battery electric minimum was the only fiscally-responsible commitment that could be made, absent additional funding from Congress or a change in our financial circumstances.

Importantly, in our record of decision, the Postal Service retained the flexibility to increase the percentage of battery electric vehicles if justified by our financial and operational requirements. And this flexibility was demonstrated on March 24th of this year, when the Postal Service placed an order for 50,000 NGDVs, of which 20 percent will be battery electric.

However, the NGDVs are just one component in our mixed delivery fleet strategy,

which brings us to our current need to supplement the Environmental Impact Statement just described.

The Postal Service is considering three new actions which, if implemented, could potentially affect the composition of the postal delivery fleet. Thus, in short, this Supplemental Environmental Impact Statement would assess the environmental impacts of these three actions, as well as reasonable alternatives, including continuing with the current record of decision unchanged.

The first change under consideration is our adoption of a vehicle purchase strategy whereby we will evaluate and buy vehicles over shorter time periods in smaller quantities to be more responsive to rapid changes in our operating strategy, technology improvements, and market conditions.

The second change under consideration is the purchase of some commercial off-the-shelf vehicles to address our critical immediate needs.

Finally, the third change under consideration is an increase in the minimum percentage of battery electric vehicles to be purchased as a result of delivery network and route optimization improvements.

Turning back to the first proposed change, purchasing vehicles over shorter time periods in smaller quantities. Under our current record of decision, the Postal Service may purchase and deploy over a 10-year period up to a total of 165,000 next generation delivery vehicles to replace its delivery fleet, with at least 10 percent battery electric. Following that decision, the Postal Service placed an order for 50,000 NGDVs, including 20 percent battery electric.

As part of our new vehicle purchase strategy, the Postal Service is now proposing to reduce the maximum quantity of NGDVs to these 50,000 trucks already ordered, an order that will cover a period of five years, rather than the previous 10 years. It is important to note that

this proposed change would not affect the Postal Service's contract with Oshkosh. The Postal Service would continue to have the option to purchase up to a total of 165,000 NGDVs.

However, under this proposed change, any future purchases of NGDVs above the 50,000 already ordered would be done after additional supplements to the EIS. Thus, the public would be informed in advance and have an opportunity to comment on such future purchases.

Furthermore, these future supplements would reflect advances in technology, changes to vehicle cost and market availability, and additional improvements in postal operations.

Returning to the second proposed change, as I have previously explained, the current state of the postal delivery fleet is dire. Therefore, in order to accelerate the replacement of our aged and high-maintenance, long-life vehicles and flexible fuel vehicles, the Postal Service will consider purchasing over a two-year period, and thus, in line with our

purchase strategy over shorter periods of time:

First, up to 20,000 lefthand-drive, commercial off-the-shelf vehicles, including as many battery electric vehicles as are commercially available and consistent with our delivery profile. These vehicles would be of a similar style as the existing RAM ProMaster, which you can see in the lower left corner of the slide.

And second, up to 14,500 righthand-drive, internal combustion, commercial off-the-shelf vehicles, such as the Mercedes Metris you can see in the lower right corner.

Finally, turning back to the third proposed change, our minimum percentage of battery electric vehicles. In May of this year, the Postal Service announced that we were considering delivery network refinements and route optimization efforts which would potentially affect route lanes and characteristics.

The first area of consideration are

certain delivery network refinements and route optimization efforts which would potentially affect route lanes and characteristics. For example, if you look at the diagram to the right, you will see that the Postal Service is exploring consolidating package sorting and delivery operations, which are currently scattered at dozens of local post offices, and consolidating them into centrally-located facilities. This would affect delivery routes by, for example, making some longer.

We anticipate that these sorts of changes to our delivery routes will result in a financial case for a significantly higher percentage of battery electric vehicles. More specifically, we expect that at least 50 percent of the 50,000 NGDVs ordered will be battery electric, and at least 40 percent of the total quantity of 84,500 vehicles being considered in this supplement will be battery electric.

And as with the NGDV, any additional purchases of commercial off-the-shelf vehicles

would only be done after future supplements to the Environmental Impact Statement.

As a reminder, while I have outlined the actions the Postal Service is currently considering for evaluation in this Supplemental Environmental Impact Statement, we are actively seeking input from the public regarding the environmental concerns and potential alternatives to be considered in the supplement. All questions and comments submitted will be addressed in the Draft Supplemental Environmental Impact Statement, which will be published in The Federal Register at a future date.

After its publication, the Postal Service will open a second public comment period, including a second public hearing. So, you will have an additional opportunity to review the progress on the Supplemental Environmental Impact Statement and provide comments.

Note that the current public comment period will end on Monday, August 15th.

And that concludes the Postal Service

presentation portion of this public hearing. I will now open the floor for public comments.

MR. ORR: Thank you, Patrick. We're going to take comments in the order that hands are raised. We currently have one commenter in queue. Our commenter is Mandela. Mandela, you may go ahead. Please remove yourself from mute and begin with your comments. Thank you.

MR. BARNES: All right. Thanks a lot. My name is Mandela Barnes. I'm Lieutenant Governor of Wisconsin. I'm actually running for the U.S. Senate. I just want to thank you for the chance to speak.

Here in Wisconsin, we all thought that we were going to have a tremendous opportunity when Oshkosh Defense landed the USPS contract. It would have put 1,000 people to work building the next generation of postal vehicles.

At this point, Oshkosh Defense wants to deny those jobs to our workers. They want to ship them down to South Carolina instead. And we have a Senator who supports that decision instead

of fighting for good paying jobs for our workforce here in Wisconsin.

Now my family, my dad, is an active member of the UAW. He spent 30 years on an assembly line. He assembled catalytic converters. And I know from personal experience that Wisconsin has some of the best and the most skilled autoworkers in the country. And the UAW, Local 578, in Oshkosh has made vehicles of the highest quality for Oshkosh truck for nearly 100 years.

And these workers built a reputation that won Oshkosh Defense's contract in the first place. The United States Postal Service must call on Oshkosh Defense to reverse this decision to build those trucks right here in the State of Wisconsin. And I am calling on Congress, the President and the entire administration to do everything in their power to bring the jobs to Oshkosh where they belong. Thank you.

MR. ECKER: Thank you. I appreciate the comment.

MR. ORR: Thank you, sir. Our next commenter is Laura. Laura, please remove yourself from mute and begin your comments. Thank you.

MS. BENDER: Thank you so much. My name is Laura Kate Bender. I'm the National Assistant Vice President for Healthy Air at the American Lung Association. And I want to take a couple minutes tonight to talk about the health benefits of zero emission vehicles.

The Lung Association's mission is to save lives and improve health by preventing lung disease. And a big way that we can do that is by reducing the emissions from transportation, including the vehicles under discussion for today.

So I want to highlight -- I've entered it into the record, the Lung Association's report from earlier this year, zeroing in on healthy air, and that report finds that transitioning from combustion technologies to zero emissions transportation powered by zero emission

electricity generation will reduce pollution, save lives and prevent suffering in communities across America.

So with this study, we assumed that -- or we modeled out a scenario in which all new passenger vehicles sold would be zero emission by 2035, and all medium and heavy duty vehicles, like the ones under discussion here today, will be zero emission by 2040, so, you know, delivery vans, school transit buses all the way to long haul trucks. And then we also modeled the benefits of switching to a clean, non-combustion energy grid by 2035.

And what we found is that over 30 years, 2020 through 2050, or that scenario, that shift to zero emission transportation and non-combustion electricity would yield over $1.2 trillion in public health benefits, benefitting Americans in every state and that we would see 110,000 lives saved, 2.7 million asthma attacks avoided and 13.4 million lost work days avoided due to cleaner air. And that is separate from

the additional climate benefits that we would see. That's just reductions in the upstream and downstream emissions for energy and transportation.

So I want to thank USPS so much for this opportunity to comment as well as for increasing the projected rate of federal electric vehicles and urge you to explore all options to go further to have as many of those vehicles to be battery electric as possible so that we can lock in these health benefits of zero emission transportation. Thank you.

MR. ECKER: Thank you.

MR. ORR: This is a reminder. If you have a comment, please click the raise hand icon. It will put you in the queue. When you're called upon, please bring yourself off mute and begin your comments.

We currently have no one in queue, but we will remain on the line waiting for your comments. Oh, I see we have two commenters. The first one is Michael. Michael, please remove

yourself from mute and begin your comments. Thank you.

MR. McDONALD: Good afternoon. Thank you. My name is Michael McDonald. So I am a service provider for the Post Office Service now, and we work on quite a few of the Post Office trucks.

I guess my question is, is we all understand the benefits of EV and how important it is for the environment, for our economy, for our lack of foreign oil. My question to the Post Office is what about the employees? You know, I'm from Wisconsin. It's 20, 30 below in the winter and 100 degrees in the summer.

What are we doing for them? I mean, these trucks are not warm. They are not cool in the summer. They are freezing in the winter time. You know, I think you guys owe it to your employees to do something for them. You know, they are the ones out on the streets. They are the ones that are freezing and bundled up with as many layers of clothes as they can wear.

You know, I think, no matter which company, and somebody said in the earlier sessions, why aren't we utilizing every single company to get these vehicles on the ground as soon as we can? You know, there's Oshkosh, of course. There are all these other companies that we are not utilizing and why is that?

MR. ECKER: The comfort of our carriers is, of course, of the utmost importance, hence the dire need to replace the fleet so, yes, we thank you for the input.

MR. McDONALD: Yes. I mean, I've condemned at least a dozen or more of these vehicles in the last few years. The frames have rotted out of them They are not safe to be on the road. You know, I just think that the employees deserve better than what they're getting.

MR. ORR: Thank you, Michael. I appreciate your comments. We'll move to the next commenter. Mark, please remove yourself from mute and begin your comments. Thank you.

MR. ABRAMOWITZ: Thank you. My name is Mark Abramowitz. I am with Community Environmental Services in California. And I think it is essential for the Post Office to maximize the amount of zero emission vehicles it obtains.

In local communities, those trucks impact the air quality. And the areas have been very challenged in trying to meet air quality standards in addition to reducing greenhouse gases.

It is imperative that the federal government do its fair share to maximize the number of zero emission vehicles in those communities.

But I also want to point out that as you expand route sizes and depending upon the community that you expand the breadth of vehicles that you look at, and you look at vehicles from a performance-based standpoint. In other words, for some vehicle types, battery electric vehicles may be the perfect technology to use. But for

some of the trucks and for lengthier routes or maybe in rural areas, fuel cell electric vehicles may be a better option and may be more cost effective and have lower infrastructure costs.

So thank you for this opportunity to address you. And I appreciate it and look forward to the next round of public comment period.

MR. ECKER: Thank you.

MR. ORR: Thank you, Mark. As a reminder to everybody, if you have a comment, please click the raise hand icon and then we'll place you in the queue. Once you are called on, please remove yourself from mute and begin your comments.

We don't have anybody currently in queue. However, we will remain online and await further comment. Thank you.

Victoria, you can proceed with your comment. Bring yourself off mute and go ahead.

MS. SAWICKI: Hi. I had a question the first round, and it wasn't answered. I was

wondering if you could describe the decision-making procedure, like who makes the decision, and did the same body that made the decision ultimately make the decision to go with Oshkosh, to go some 5, 10, 40 percent electric cars. Just explain the process. I mean, is there a group of people that make a recommendation to the Board of Governors and then they decide or? Just a few words on the process. Thank you.

MR. ECKER: We really can't go into depth on the internal decision-making process on this call beyond what we state in the Environmental Impact Statements.

MR. ORR: Thank you, Victoria. We'll move to Adrian. Adrian, please remove yourself from mute and begin your comments. Thank you.

MR. MARTINEZ: Good evening. I testified before, but one other recommendation, and I'm not sure you'll be able to answer this, but Adrian Martinez from Work Justice.

I insist that you communicate the contents of this public hearing to the Board of

Governors. It is important that they hear about the overwhelming support for zero emission vehicles, the overwhelming support for those vehicles being built with union labor and then also the overwhelming support that you deploy those vehicles in communities that are overly burdened with pollution first.

And I think it will be important for them to hear that before the draft EIS so that they understand what the tenor of the conversation is during this debate instead of at the end of the process. Thank you.

MR. ORR: Thank you, Adrian. As a reminder to everybody on the call, if you have a comment, please click the raise hand icon. We'll put you in the queue. Once you are called on, bring yourself off mute and begin your comments.

We have no one in queue currently. However, we will remain on the line awaiting comment. Thank you.

Donald, please go ahead with your comments. Bring yourself off mute and begin.

Thank you.

MR. VISAGE: Yes. I was just curious if Workhorse Group would be considered as one of the EV options since they already have a tested vehicle, and they were passed up on the decision to go with Oshkosh. Thank you.

MR. ECKER: I mean, it was a competitive solicitation process and beyond that we will respond in the SEIS.

MR. ORR: Thanks very much. We will remain online and await further comment.

As a reminder to those still with us, you may also submit your comments in written form. There are three ways to do this. If you wish to enter a comment into the Q&A here in the Zoom, please do that, include your name and affiliation with your written comment if you so desire.

You may also email to NEPA at usps.gov, and you may also send your comments via United States Mail to the address on the screen.

Once again, if you have a comment,

please click the raise hand icon, and we'll place you in the queue. Once you are called upon, please pull yourself off mute and begin your comments. We will remain online and awaiting comment. Thank you.

As a reminder to everyone with us, you submit your comments either orally or in written form. If you wish to submit them orally, you can do so during this meeting. Please click the raise hand icon, and you will be placed in the queue. Once you are called on, please pull yourself off mute and begin your comments.

If you wish to submit your comments in written form, you can do so one of three ways. You can either do it through the Zoom Q&A and click on the Q&A button, enter your comment and include your name and affiliation with your written comment if you so desire.

The second way is to email your comments to nepa@usps.gov. And finally the third way to enter your comments is through the United States mail via U.S. Postal Service, 475 L'Enfant

Plaza Southwest, Office 6606, Washington, DC 20260-6201, to the attention of Mr. Davon Collins, Environmental Counsel.

Next, we have a comment from Syed. Syed, please remove yourself from mute and begin your comments. Thank you.

MR. NAQVI: Hey, thank you very much for taking the question again. My question is do we have an idea of what the mileage is offered by these new combustion engines that would be provided by Oshkosh in the future as compared to what the Postal Service has right now?

MR. ECKER: We can take that in the SEIS. To be clear, you are asking about the range of the combustion engines or?

MR. NAQVI: No, no. Yeah, what's the mileage? I mean, what's the mileage per gallon of these new vehicles that would be provided by Oshkosh? Many of these vehicles are supposed to be combustion engines, right? So what do the mileage for those vehicles when we compare it to the current vehicles that the Postal Service has?

MR. ECKER: Understood. We published some numbers on that previously. And we'll certainly address it again with the most current figures in the SEIS.

MR. NAQVI: All right. Thank you very much.

MR. ORR: A brief reminder for those online. This is the public hearing for the Supplemental Environmental Impact Statement for the Postal Service's Next Generation Delivery Vehicles Acquisitions Program. We remain online and await further comment. Thank you very much.

For those of us still online, this is the public hearing for the Supplemental Environmental Impact Statement for the Postal Services Next Generation Delivery Vehicles Acquisitions Program.

We remain online awaiting further comment. Thank you very much.

Once again, everyone, this is the public hearing for the Supplemental Environmental Impact Statement for the Postal Service's Next

Generation Delivery Vehicles Acquisitions Program. We remain online awaiting further comments. There are 15 minutes remaining in this session. Thanks very much.

MR. ECKER: All right. We are right at 10:00 p.m. So thank you, everyone, on behalf of the Postal Service for your interest in the Next Generation Delivery Vehicles Program.

As a reminder, a copy of the presentation will be available afterwards at uspsngdveis.com. And all the comments received today and through the other channels that are on the screen will be addressed in the Draft Supplemental Environmental Impact Statement.

Thank you, again, and have a great night.

MR. ORR: Thank you, everyone. This concludes the public hearing. Have a great evening.

(Whereupon, the above-entitled matter went off the record at 10:00 p.m.)

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: EIS for the Postal Service's Next Generation Delivery Vehicle

Before: USPS

Date: 08-08-22

Place: teleconference

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate complete record of the proceedings.

Neal R. Gross

Court Reporter

B2 Scoping Public Hearing Documentation

Public Hearing "Q&A Box" Comments, August 8, 2022

Christopher Jonda 07:08 PM
How will the USPS NGDV make enough EV vehicles when not one has been produced and the manufacturer chosen has not yet delivered one. The USPS said they would need 3.3 billion to make the entire fleet EV. With the passage of the "inflation reduction act" by the senate and likely the congress and signed by the president. How will this void be filled with only one manufacturer? Will the previous players in the NGDV testing for EV be reevaluated?
Why hasn't another manufacturer for the NGDV such as Workhorse who already went through testing g been announcers to build EVs for the USPS.
We need more manufacturers for EV ! These can be vehicle to grid technology where the trucks act as batteries back to the grid. 12 miles a day with hun motors.
Workhorse group
Lordstown motors
NUVVE

James Burton 07:15 PM
Submitted on behalf of the Shyft Group, Josh Sherbin, Chief Legal Officer, Chief Compliance Office, The Shyft Group, Office 248.567.2002, Cell 248.802.4301, Email josh.sherbin@theshyftgroup.com.
Every day, thousands of workers at the United States Postal Service pull off a logistical feat critical to our country's commerce. We are all grateful for the efforts of our mailmen and women, sorters, and other postal workers who persevere in snow, rain, and heat. This Next Generation Delivery Vehicles Acquisition process offers the USPS an opportunity to modernize its fleet in conjunction with private sector companies to accomplish the twin goals of efficient mail and package delivery and reducing the impact on our climate by electrifying that delivery fleet. The Shyft Group, formerly known as Spartan Motors, has been a business partner with the Postal Service for many years. Since 2015, Shyft has provided nearly 50,000 Utilimaster™ vehicles as a prime supplier and a subcontractor to the USPS, with an estimated value greater than $300 million for complete trucks and upfit packages. Most recently, Shyft signed a deal with the USPS last fall for freight truck bodies to carry bulk mail. Shyft's Utilimaster is proud of this strong multi-decade partnership with the Postal Service. Last June, Shyft began development of a medium-duty (Class 3) all-electric delivery truck, within a newly created division branded Blue Arc™ EV Solutions, as well as a proprietary portable charging solution, the Power Cube™, designed ideally for flexible fleet charging management. Production of the Power Cube and the Blue Arc EV delivery truck (Classes 3 through 5) is expected to commence in the second half of 2023.
As many in the industry know, medium-duty vehicles make up a small portion of all vehicles on roadways, yet they contribute nearly a quarter of the transportation sector's fossil fuel emissions. For this reason, Shyft believes it would be prudent for the Postal Service to consider the schedule for electrifying beyond standard mail delivery vehicles. We recommend that USPS should consider using its ongoing Next Generation vehicle procurement to modernize the entire vehicle fleet, including the vehicles used in bulk transport. We believe the medium and heavy-duty fleets will lead the way to electrification and can quickly reduce greenhouse gas emissions as a result.
It is incumbent on private industry, as well as our partners in the Federal Government, to prepare for full electrification of our fleet and to take advantage of upcoming market offerings to make a greener USPS fleet consistent with appropriate vehicle specifications. The Shyft Group stands ready to work side by side with the Postal Service and its leadership to help achieve these ambitious goals in a cost-effective manner.

Anonymous Attendee 07:17 PM
USPS vehicles should be 100% electric. Hard to imagine a more foolish, short-sighted investment right now than to invest in gas-powered vehicles over the next decade. It would be willfully blind to the realities before us.

Justin Stoner 07:19 PM
Why wouldn't you go for a higher percentage of BEVs(+75%)? There are companies out there that can help provide what is needed. One of those companies, Workhorse, can help provide the vehicles needed. They have new leadership and the ability to mass produce electric last mile delivery trucks.

Adrian Keller 07:20 PM
Please think of our air quality and our children's health by prioritizing replacing the current fleet with as many EVs as feasible, as fast as possible. This is an incredible opportunity for the US to lead on the world stage and kickstart a made-in-America electric vehicle revolution. Replacing the current fleet with more ICE vehicles will lock in polluting trucks for decades to come which will continue to exacerbate health concerns across the nation.

Bryce Springfield 07:22 PM
Bryce Springfield, member of Pinellas DSA. We have a very unique opportunity now to make all new USPS vehicles electric and union-made. Not only would this make the USPS's vehicles more sustainable, but it would support American, good-paying jobs.

William Roberson 07:29 PM
Below are the comments delivered on behalf of the California Air Resources Board this evening:
"Hello My name is Bill Robertson and I am a Vehicle Program Specialist with the California Air Resources Board. Thank you for the opportunity to provide comments on this critically important vehicle procurement. Addressing transportation's impact requires making maximum progress at every such opportunity. As an expert on electrification, the California Air Resources Board continues to have deep concerns about the USPS focus on legacy Internal Combustion Technology instead of Zero Emission Vehicles. This deficiency, among others, demands a full rethink. CARB urges USPS to build on their recent laudable increases in ZEV consideration by leading development of innovative electrification scenarios and by a USPS commitment to 100% electrification as the Preferred Alternative. USPS can immediately act on the 94 to 99% 'most electrifiable delivery routes' identified by USPS and its own Inspector General, while also applying more specific market-available ZEVs to the remaining sliver of routes having additional need

Dyllen Grossman 07:42 PM
There are companies, first and foremost Workhorse Group, that have the infrastructure and leadership in place to help get EV vehicles on the road for USPS quickly. Are you exploring these options? We need change now. The environment cannot afford to waste any more time

Dyllen Grossman 09:08 PM
Will USPS be open to partnering with other companies to obtain adequate number of EVs? It appears Oshkosh will not be able to provide these vehicles in sufficient quantity, or in a timely fashion. Will other companies, such as Workhorse Group, have a chance to partner with USPS?
If so, when will we learn details of this? Thank you

Dyllen Grossman 09:21 PM
Thank you. Is it fair to say USPS is open to multiple companies for vehicles?

Kenneth Espinal 07:47 PM
Would it be possible to reverse the contract from Oshkosh to workhorse for a fully Battery electric vehicle or give 80% to workhorse and 20% to Oshkosh for better energy and cost wise? Giving the best choice to save money and the planet.

Kenneth Espinal 09:02 PM
Last year for giving the Decision for Oshkosh vs. workhorse to be the next generation delivery. Why did they choose workhorse over Oshkosh with their working prototype and cleaner options over combustion engine? My final question is what postal service options are to save American tax dollars from oil to solar and not wasted energy when you have free clean energy from the sun.

Syed Naqvi 07:50 PM
Your current contractor has not been able to deliver BEVs.
Why are we not considering other American Companies that CURRENTLY have the ability to produce BEVs … and can provide future prospects with option of DRONE delivery?

Luis MacDonald 07:52 PM
This is to support USPS efforts to deploy electric vehicles and install charging stations throughout the United States.

James Simpson 07:55 PM
I am James Simpson, the owner of Pedal Power Work Bikes, and I wanted to add my comments to the discussion so as to orient the USPS in the new developments I have made in the design and engineering of a Human Powered Vehicle. Our Workhorse Trike is created with an Electric-Assisted Drivetrain that offers the space to carry numerous packages and parcels, and have the efficiency ratings to maintain pace with traffic for up to 200 miles per charge. The cost-effective Workhorse Trike is set for mass production to fulfill the demand for alternative vehicles from numerous companies and is an in demand product. Please take consideration of this option and contact me to arrange a preliminary summary of the options that I can provide the USPS.
Thank You,
My contact details are blueexplorer76@hotmail.com and you can review the preliminary designs we published on our parent company website at eldoradoenterprises.biz
I look forward to offering the USPS a chance to demonstrate the option of an Electric Assisted, DOT Class B Work Bike, that is designed to provide a solution to the growing need for an inexpensive and cost-effective addition to the new fleet developments pending.

Anonymous Attendee 08:09 PM
Totally agree with Christopher. The USPS is going to need more EV, union-represented manufacturers with proven results!

Anonymous Attendee 08:29 PM
what about Workhorse

Luis MacDonald 08:30 PM
I was the Project Coordinator under Ford EV Program that was awarded USPS EV contract in 2000 (22 years ago) for the installation of 500+ charging stations at Post Offices in California and Washington DC. The Option Years of the USPS contract was for 6,000 electric mail delivery vehicles, however, 9/11 changed the World and here we are 22 years later re-launching the USPS EV Program once again!
Based on the comments I have been hearing, I take this opportunity to offer some clarification on the USPS contract awarded to OSHKOSH for Next Generation Delivery Vehicles (NGDVs). The USPS is NOT putting "all of their eggs into one basket" OSHKOSH is NOT the only EV manufacturer that will

deploy electric vehicles into the nationwide USPS fleet. The USPS will also be ordering "Off the Shelf" electric vehicles from other manufacturers as per USPS contract requirements and as per the USPS presentation that has been made this evening!

Anonymous Attendee 08:50 PM
As one who has driven an EV for several years in the northeast, I'd like to note that EVs not only save money in fueling and maintenance and save time since they can be fueled while parked, they are also more reliable since they start right away in cold weather and they are more comfortable since there are no gear shifts and no engine noise. Driving long distances, as postal workers do, is a lot less fatiguing in an EV than in a gas-powered vehicle. And being around a running EV all day means breathing clean air, whereas being around a gas powered vehicle all day means breathing its pollution. All this impacts the USPS bottom line and the health and working conditions of its drivers. New USPS vehicles should be 100% EV. The USPS needs to model this new best practice for delivery services, especially because it has country-wide reach.

Anonymous Attendee 09:01 PM
Someone mentioned drove delivery earlier -- it has already failed when tried by other corporations and is not cost efficient. We can be most sustainable and cost-efficient by ensuring ALL new USPS vehicles are fully electric. We can also use this opportunity to ensure whatever solutions we take up are produced by workers who are represented by unions so we promote high-paying American jobs.

Anonymous Attendee 09:06 PM
Will USPS be open to partnering with other companies to obtain adequate number of EVs? It appears Oshkosh will not be able to provide these vehicles in sufficient quantity, or in a timely fashion. Will other companies, such as Workhorse Group, have a chance to partner with USPS?

Brian Marx 09:13 PM
You tested a Ford Transit and awarded a computer generated image and now paying Oshkosh to build a factory in SC. There was nothing competitive about the decision. It was rigged. You reap what you sow.

B3 Public and Agency Scoping Comments and Responses

Summary

- 88,501 sets of comments were timely received in response to the NOI of the SEIS; the vast majority were form letter.
- Comments received during the Scoping Public Hearing are presented in Appendix B2.

Agency and Representative Public Comments Timely Received on the NOI of the SEIS

- U.S. Environmental Protection Agency (letter, August 12, 2022)
- California Air Resources Board (July 29, 2022)
- University of Michigan, School for Environment and Sustainability (email, August 15, 2022)
- Eubanks & Associates, PLLC [on behalf of the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW)] (letter, August 4, 2022)
- The Climate Reality Project (letter submission with 12,946 names)
- Natural Resources Defense Council (36,032 submissions)
- NESCAUM (Northeast States for Coordinated Air Use Management) (letter, August 15, 2022)
- BlueGreen Alliance
- CleanAirNow, Sierra Club, Center for Biological Diversity, Earthjustice (letter, August 15, 2022)
- California Electric Transportation Coalition, CALSTART, Center for Biological Diversity, Chispa LCV, CleanAirNow, Coltura, Dream.Org, Earthjustice, Ecology Center, Elders Climate Action, Environmental Defense Fund, GreenLatinos, IndigoJLD, League of Conservation Voters, Pacific Environment, Peoples Collective for Environmental Justice, Plug In America, Sierra Club, West long Beach Association, Zero Emission Transportation Association (ZETA) (letter, August 15, 2022)
- Multistate (Attorneys General, New York, California Colorado, Connecticut, Delaware, The District of Columbia, Illinois, Maine, Maryland, Michigan, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington, The Corporate Counsel of the City of New York, and the District Counsel of the Bay Area Air Quality Management District) (letter, August 15, 2022)

Copies of all agency comments received are presented following this page. Given the volume of common public comments received, a selection of representative public comments is presented.

A summary of the comments timely received from agencies and the public in response to the NOI of the SEIS, and the Postal Service's response to the comments, are presented in Table B3-1 that follows copies of the representative letters and emails received.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
POLICY

August 12, 2022

Mr. Davon Collins
Environmental Counsel
United States Postal Service
475 L'Enfant Plaza SW, Office 6606
Washington, D.C. 20260-6201

Dear Mr. Collins,

The U.S. Environmental Protection Agency has reviewed the United States Postal Service's (Postal Service) revised Notice of Intent (NOI) to prepare a Supplement to the Next Generation Delivery Vehicles (NGDV) Acquisitions Final Environmental Impact Statement (EIS) supporting new Postal Service fleet acquisition considerations.

The Postal Service issued a Record of Decision (ROD) for its January 2022 final EIS on February 23, 2022. The purpose of the previous Postal Service proposal was to purchase and deploy purpose-built NGDVs to replace the Postal Service's end-of life and high-maintenance delivery vehicles with new vehicles that have more energy-efficient powertrains, updated technology, reduced emissions, increased cargo capacity and improved loading characteristics, improved ergonomics and carrier safety, and reduced maintenance costs. The Postal Service selected the proposed action to purchase and deploy over a ten-year period 50,000 to 165,000 purpose-built, right-hand drive NGDV consisting of a mix of internal combustion engine (ICE) and battery electric vehicle (BEV) powertrains, with at least 10 percent BEVs. As addressed in the NOI, the Postal Service placed an initial order for 50,000 NGDV, of which 10,019 are BEVs.

On June 10, 2022, the Postal Service published an initial NOI to prepare a supplemental EIS (SEIS) to analyze potential environmental impacts of a proposed change to the preferred alternative adopted in the ROD. On July 21, 2022, it published a revised NOI noting that the SEIS scope is being adjusted to address efficiencies and other benefits from redesigning its operating model, including utilizing a shorter acquisition planning horizon, in order to reduce operating costs, improve service, and enable growth in package delivery business. Specifically, the Postal Services proposes to:

1. Modify the preferred alternative to purchase and deploy only 50,000 NGDVs consisting of a mix of ICE and BEV with no less than 50 percent BEV acquisition.
2. To meet the need to accelerate replacement of aged and high maintenance Long Life Vehicles (LLV) and Flexible Fuel Vehicles (FFV), procure an additional 34,500 Commercial Off-the-Shelf (COTS) vehicles in two years. These COTS vehicles would include up to 20,000 left-hand

drive vehicles, including as many BEVs as are commercially available and consistent with Postal Service delivery profile, and up to 14,500 right-hand-drive ICE COTS vehicles within two years.

The Postal Service's expectation is that the total quantity of NGDVs and COTS vehicles procured under the SEIS's preferred alternative would be at least 40 percent BEVs. The Postal Service noted that it will need to invest in the repair of over 50,000 aging LLV and FFV each year to extend their useful life. Over the next 10-15 years, the Postal Service intends to pursue a multiple step acquisition process to fully replace the aging delivery fleet. The Postal Service proposes to assess these additional subsequent acquisitions in supplements to the FEIS.

There have been significant legal and policy changes since the previous EIS was published that will affect the benefits and costs of BEVs relative to ICE delivery vehicles. In particular, the Inflation Reduction Act (IRA) will dramatically change the costs and benefits of BEVs relative to ICE NGDVs. The legislation provides the Postal Service with $3 billion to support the purchase of BEVs and the installation of necessary infrastructure (battery charging stations). The legislation also creates tax incentives for the purchase of both new and used electric vehicles, provides $2 billion in grants to produce electric and alternative fuel vehicles, and supplies $3 billion in loans to expand or establish manufacturing facilities for low emissions vehicles. These are projected to drive battery and BEV production costs down over time. The IRA is also expected to dramatically affect the carbon intensity and the cost of electric power in the future. Therefore, it is reasonably foreseeable that the Total Cost of Ownership (TCO) will decrease for BEVs, and the carbon emissions will be dramatically lower. Also, the Postal Service should consider the federal and state regulatory environment that its new vehicles will face, such as under California's forthcoming Advanced Clean Fleets rule.

Based on the review of the NOI, EPA recommends the Postal Service:

- Consider a range of alternatives that fully explores the feasibility of acquiring a higher percentage of BEVs, as well an alternative for right-hand drive COTS vehicles that includes BEVs.
- Revise and improve its modelled total cost of ownership in a transparent fashion.
- Use its potential delivery network refinements and route optimization efforts to refine assumptions about total cost of ownership.
- Incorporate an update to the final EIS emissions modelling that reflects the proposed acquisition of right-hand drive and left-hand drive COTS vehicles.
- Revise its social costs of greenhouse gas (SC-GHG) analysis by refining the start date, using annual estimates, updating emissions modelling, and including cumulative present value totals.
- Reflect science-driven climate policy in the supplemental EIS and acquisition commitments.
- Consider how targeted BEV deployment could mitigate potential disproportionate adverse impacts from ICE vehicle deployments, including to planned multifunctional distribution centers in communities with environmental justice concerns, consistent with either existing Postal Service deployment criteria and NEPA processes, or revised deployment criteria developed to address equity issues associated with these acquisitions and the distribution center realignment.

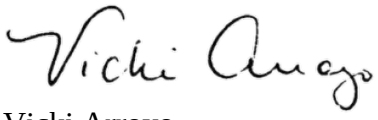
We appreciate and firmly support the Postal Service's proposed modifications to the FEIS preferred alternative that will substantially reduce the carbon footprint and other air emissions from its fleet acquisitions. As we have indicated in the past, EPA stands ready to work with the Postal Service to identify ways to improve its fleet and meet multiple objectives including enhanced safety and utility as well as efficiency and environmental and public health goals. Our subject matter experts are available to provide technical assistance and advice in air quality, environmental economics – including estimating social cost of greenhouse gases; engagement with communities with environmental justice concerns and

analyzing potential opportunities to increase services to those communities; and advice and assistance in conducting NEPA analyses. The enclosure provides our detailed comments and recommendations regarding these issues.

We also request that the Postal Service consider inviting EPA to serve as a Cooperating Agency due to our special expertise. We believe that technical level team discussions would be of value and help the Postal Service better understand and address our comments and concerns expressed within the detailed comments EPA previously submitted (*See* enclosed EPA comments on the Draft EIS (October 2021) and Final EIS (February 2022)). As you are aware, there are several benefits to having EPA serve in that capacity. Our teams may work collaboratively on the analysis as it is developed, and the early engagement will serve to identify and evaluate potential concerns as they arise.

The EPA looks forward to reviewing the draft supplemental EIS. If you have any questions, please contact Cindy Barger, Director, NEPA Compliance Division, at 202-564-3169 or by e-mail at barger.cindy@epa.gov.

Sincerely,



Vicki Arroyo
Associate Administrator

Enclosures

1. EPA recommendations on the Postal Service NOI to Supplement NGDV Acquisitions final EIS
2. EPA comments on the Postal Service NGDV Acquisitions draft EIS (October 21, 2021)
3. EPA comments on the Postal Service NGDV Acquisitions final EIS (February 2, 2022)

United States Postal Service
Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement
EPA Detailed Comments and Recommendations

I. The EPA recommends the Postal Service supplemental EIS consider a range of alternatives that fully explores the feasibility of acquiring as high a percentage of BEVs as reasonably possible.

Consistent with NEPA, the supplemental EIS should include a reasonable range of alternatives, including alternatives consistent with national policies aimed at achieving clean, zero-emission vehicles in Federal fleets,[1] as well the U.S. economy-wide target under the Paris Agreement to reduce net GHG emissions to 50-52 percent below 2005 levels by 2030.[2] Accordingly, the Postal Service supplemental EIS should consider an alternative for the 50,000 acquisition that discusses the feasibility of acquiring 70% BEVs, to attain "dramatically positive effects" for public health, address the climate crisis, and improve American competitiveness, as stated by the Council on Environmental Quality (CEQ).[3] EPA recommends a similar alternative be considered for the proposed 20,000 LHD COTS acquisition, in addition to a 100% EV alternative. Finally, EPA recommends the proposed 14,500 RHD COTS acquisition consider a range of reasonable alternatives involving BEV acquisition, given available RHD COTS BEVs currently on the market.

> Recommendation: As the range of reasonable alternatives is developed, EPA recommends the Postal Service fully disclose acquisition options available for each proposal covered in the supplemental EIS to help the public and decisionmakers understand and account for existing limitations and opportunities, consistent with EPA's further recommendations below.
>
> To avoid public confusion, EPA also recommends that the Postal Service clarify whether and to what extent the revised proposals address personally-owned vehicles, and any implications for its analysis.

Since the final EIS was published, several vehicles are now listed on the US Department of Energy's (DOE) website for alternative fuel vehicles for Federal fleets.[4]

> Recommendation: The EPA recommends updating the analysis of alternatives to consider vehicles from DOE's list, utilizing different size vehicles where appropriate. The NOI was unclear about whether and to what extent the Postal Service was considering the use of different vehicle configurations. Where appropriate, the Postal Service should optimize over vehicle size and should mitigate the adverse environmental impacts of vehicle emissions, by choosing vehicles with the lowest tailpipe emissions available to meet the local requirements.

[1] Supra, note 1.
[2] Supra, note 2.
[3] https://www.whitehouse.gov/wp-content/uploads/2022/02/USPS_letter_02022022.pdf.
[4] https://www.energy.gov/eere/femp/electric-vehicles-federal-fleets.

II. The EPA recommends the Postal Service use the supplemental EIS to revise and improve its modelled total cost of ownership (TCO).

Since the release of the final EIS and ROD, the U.S. Government Accounting Office, the U.S. Postal Service Office of the Inspector General, and states have questioned core Postal Service assumptions and decisions in the final EIS.[5] Many of these concerns relate to modelled TCO, which the EPA expects will be a key input to the supplemental EIS and related decision-making.

Recommendation: The EPA recommends the Postal Service use the supplemental EIS to revise and improve its modelled TCO analysis from the final EIS. The EPA continues to recommend that the Postal Service disclose all relevant assumptions underlying the TCO analysis. The supplemental EIS TCO analysis should also address the following concerns:

- **Gasoline prices**. Gasoline prices and forecasts have changed significantly in the last few months. In its ROD, the Postal Service noted that it used the Annual Energy Outlook from the US EIA, with a baseline of October 2020 and stated that accounting "for continual fluctuations in TCO components such as gasoline, utility, and charging infrastructure prices was not warranted." EPA recommends that these TCO calculations be updated for the supplemental EIS. The cost of petroleum derived fuels relative to electric power is of overriding importance in any credible analysis of the economics of ICE vs BEVs. EIA's projections are based on a rigorous, well documented methodology, and include numerous alternative scenarios that can help inform the analyses within the supplemental EIS. EPA recommends updating the alternatives analysis to include higher gasoline price forecasts, as well as future uncertainty in prices.
- **Ratio of chargers to vehicles.** The assumption of a one-to-one ratio of chargers to vehicles should be revised. GAO noted that this assumption increased the cost of a BEV by several thousand dollars.[6] Relaxing it should significantly reduce the TCO for BEVs.
- **The terminal value of NGDVs and Commercial Off-the-Shelf (COTS) vehicles.** EPA recommends incorporating the terminal value of vehicles proposed for purchase. The NGDVs—or at minimum, their components—retain value at the end of the 20-year period of analysis. The difference between the upfront purchase price of the NGDV and this terminal value is the total amount these vehicles will depreciate over the period the Postal Service is using them. Due to the ongoing electrification of the transportation sector and the valuable critical minerals stored in a high-voltage battery, the terminal value of a BEV will almost certainly be greater than the terminal value of a conventional ICE vehicle. The difference between these values will impact the TCO calculation for a BEV. Particularly now that COTS vehicles are included in the analysis, vehicle terminal value should be considered in TCO calculations and decisions deriving from the supplemental EIS.
- **The risk of gas price fluctuation and likelihood of BEV cost decreases.** There is real business risk associated with locking in a reliance on gasoline to power the fleet, since the future cost of gasoline is unknown and could be much higher than the scenario modeled. As discussed above, recent events have shown that the final EIS gas price assumptions are probably far too low. In contrast, the future cost of electricity is not as variable since the performance and costs of renewable technologies provide a low "back stop" cost that is likely to come down over time. Moreover, the amount of cost reductions from innovation and

[5] https://www.gao.gov/assets/gao-22-105931.pdf; https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf.
[6] https://www.gao.gov/assets/gao-22-105931.pdf.

learning by doing is likely to improve the TCO for BEVs but not the already established technology of ICEs. These differences should be incorporated and disclosed into the alternatives analysis and TCO calculations.

In GAO's comments on Fleet Management (GAO-22-105931), GAO noted that DOE offers technical guidance by providing engineers and other experts to help fleet managers minimize installation costs for charging stations.

Recommendation: EPA recommends incorporating DOE's technical guidance into the TCO analysis.

III. The EPA recommends the Postal Service use its potential delivery network refinements and route optimization efforts to refine assumptions.

The EPA supports the Postal Service supplementing its NGDV final EIS to limit its preferred alternative to 50,000 vehicles and purchase a significantly higher percentage of BEVs, particularly in light of both its operational strategy and shorter planning horizon. The SEIS should discuss in detail the potential operational strategy impact on increasing BEV acquisition, including route length changes and efficiencies, as well as streamlining charging infrastructure. In that vein, the EPA acknowledges that the Postal Service "anticipates taking advantage of the flexibility built into the contract with Oshkosh Defense to increase the number of BEVs purchased in the initial delivery order."[7] This supplement provides an important opportunity to better align the minimum number of BEVs to be procured with science-based climate policy goals, including increasing not only the 50,000 NGDV purchases, but also the 20,000 LHD COTS and 14,500 RHD COTS proposals.

Route optimization efforts would be expected to influence projections for several components of the previous EIS modeling, including fuel expenses, which vary by region, especially for electricity. In addition, if the new route optimization changes modify the projected annual miles traveled by each vehicle, then depreciation expenses – typically the most significant line item in TCO calculations – are also subject to change since vehicles that travel more miles depreciate more quickly. Moreover, vehicles that are confined to specific routes are likely subject to insurance premiums that differ from vehicles operating nationwide.

Recommendation: EPA recommends the Postal Service use this new route optimization effort to, among other things, update previous assumptions about TCO, taking account of regional variation in fuel prices, the effects of updated projections for annual miles traveled on depreciation, and potential impacts to insurance premiums.

The route optimization effort is expected to impact GHG emissions from both BEV and ICE vehicles. EPA recommends the Postal Service update its analysis of the carbon intensity of gasoline and electricity. The Postal Service previously used a national average for the carbon intensity of electricity; however, concentrating BEVs in particular regions could result in highly variable intensities depending on the location. Some state programs (such as the Low Carbon Fuel Standards promulgated in several states) provide valuable incentives for low carbon electricity as a transportation fuel. These subsidies are effectively financed by conventional fossil fuels, and their net impact on the prices facing the Postal Service for electricity and gasoline can be significant.

[7] https://about.usps.com/newsroom/national-releases/2022/0601-usps-delivery-network-improvement-plan-offers-expand-number-of-electric-vehicles.htm.

Recommendation: EPA recommends the Postal Service update its analysis of the carbon intensity of gasoline and electricity. As emphasized in previous comments, different assumptions here can have notable impacts on several components of the analysis. Other local considerations related to route optimization include state incentive programs.

IV. The EPA recommends the Postal Service supplemental EIS incorporate an update to the final EIS emissions modelling that includes COTS.

The updated NOI introduces several new options for vehicles to be incorporated into the supplemental EIS, including both RHD and LHD COTS vehicles. In the ROD, the Postal Service argued against updating its MOVES modeling to account for vehicle-specific considerations, as it was "unlikely to produce information that significantly changes the relative environmental costs and benefits between the ICE NGDV and the BEV NGDV."

Recommendation: The EPA recommends updating the emissions modeling from the final EIS to include these new COTS vehicles, as well as reflecting any light-duty vehicle acquisitions considered under the alternatives. This includes providing all modeled assumptions used to achieve the MOVES results highlighted. These new proposed acquisitions represent a significant departure from the previous analysis and should be appropriately accounted for. Given these additional vehicles under consideration, a better-tailored model could change the relative differences across alternatives.

V. The EPA recommends the Postal Service revise its SC-GHG analysis by refining the start date, using annual estimates, and including cumulative present value totals.

In its final EIS, the Postal Service presents the climate impact estimates starting only in 2030, and only in five-year increments.

Recommendation: To ensure the climate damages of each alternative are disclosed accurately, comprehensibly, and usefully to the public and decisionmakers, EPA recommends the Postal Service refine the start date, use annual estimates, and include cumulative present value totals -- sums of annual discounted impacts. This would enable comparisons between the total benefits of potential GHG reductions with the costs of achieving them.

VI. The EPA recommends the supplemental EIS and acquisition commitments consider science-driven climate policy.

EPA supports the Postal Service's commitment to acquire a significantly higher percentage of BEVs for its 50,000 NGDV acquisition, and as many BEVs as commercially available for its 20,000 left-hand drive (LHD) COTS acquisition proposal. The supplemental EIS provides an opportunity for the Postal Service to frame its new proposals, including its proposed 14,500 right-hand drive (RHD) ICE COTS acquisition, in the context of science-based greenhouse gas (GHG) emissions reduction targets necessary to avoid the worst consequences of climate change, including national policies aimed at transitioning Federal fleets to clean zero-emission vehicles to address the climate crisis.[8] The Postal Service

[8] See Executive Order 14008, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/; Executive Order 14057, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/.

leadership can also help make meaningful progress towards the U.S. economy-wide target under the Paris Agreement to reduce net GHG emissions to 50-52 percent below 2005 levels by 2030.[9]

> Recommendation: EPA recommends the Postal Service ensure its supplemental EIS explicitly discusses the impact of its proposed acquisitions on the ability of the federal government, states, and local governments to achieve climate policy goals. In addition, EPA recommends Postal Service decisionmakers maximize the purchase of BEVs under its proposed NGDV and LHD COTS acquisitions as well as consider BEVs in its proposed RHD COTS acquisition, consistent with those goals and factoring in substantial new funding for BEV acquisition and charging infrastructure in the Inflation Reduction Act.

VII. The EPA recommends the Postal Service discuss equitable vehicle deployment issues and whether an increase in BEV purchases may be warranted to mitigate potential adverse impacts in communities with existing environmental justice concerns.

The supplemental EIS will address NGDV and COTS vehicle acquisitions that have the potential to affect communities with environmental justice concerns. Communities with environmental justice concerns are disproportionately affected by, and vulnerable to, climate change,[10] and will be disproportionately affected by GHG emissions from ICE vehicles, wherever they occur. Locally, communities with environmental justice concerns are already burdened with high levels of traffic-related pollutants and other non-pollution burdens, and the continued or increased presence of such pollutants will have a disproportionate impact not experienced by the broader population.

These potential local, adverse impacts of the proposed acquisitions may be particularly disproportionate in communities that will host multifunctional distribution centers. According to Postmaster General's keynote address during the 2022 National Postal Forum,[11] the Postal Service plans to simplify current infrastructure by replacing and centralizing a network of existing processing facilities into single multifunctional distribution centers. Plans are already underway with 60 multifunctional distribution centers and early initiatives in the cities of Atlanta, Charlotte, and Indianapolis.[12] These distribution centers may modify the delivery routes considered in the supplemental EIS. Potential delivery network refinements and route optimization efforts identified in the NOI may have environmental justice implications. By aligning the Postal Service's facilities network, the Postal Service will reduce the number of trips the fleet vehicles will take to serve its customers. The result of this effort could concentrate potential impacts to communities with environmental justice concerns by rerouting vehicle trips and increasing vehicle emissions at a single geographical location.

> Recommendation: Pursuant to the environmental justice goals outlined in Executive Orders 12898 and 14008, EPA recommends the SEIS discuss EJ concerns in detail, including whether an increase in the minimum number of BEV NGDVs and COTS vehicles to be procured may be warranted to address any potential disproportionate adverse impacts from the GHG and other air pollutant emissions of the acquired vehicles, taking into consideration the potential future

[9] https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/; https://www.whitehouse.gov/wp-content/uploads/2021/10/US-Long-Term-Strategy.pdf.

[10] https://www.epa.gov/cira/social-vulnerability-report.

[11] https://about.usps.com/newsroom/national-releases/2022/0518-video-and-transcript-of-pmg-louis-dejoys-keynote-address-during-2022-national-postal-forum.htm.

[12] https://www.govexec.com/management/2022/07/see-where-usps-building-out-its-first-mega-centers-year/368961/.

location of multifunctional distribution centers in communities with existing environmental justice concerns. EPA also recommends discussing the equitable distribution of BEV NGDVs and COTS vehicles in potentially affected communities with EJ concerns. This may include the following considerations:

- Disclosure of climate change impacts from the vehicle acquisitions on communities with environmental justice concerns.
- Discussion of opportunities in Postal Service deployment criteria, or revised criteria developed to address equity issues associated with these acquisitions, that promote the equitable distribution of BEV NGDVs or COTS vehicles in potentially affected communities with environmental justice concerns and mitigate potential adverse impacts in those communities.
- Disclosure of potential impacts in combination with potential future location of multifunctional distribution centers in areas with environmental justice concerns:
    - Identification of people of color, low-income and indigenous communities within the geographic scope of potential multifunctional distribution center locations that may bear disproportionately high and adverse effects, including the sources of data and a description of the methodology and criteria utilized.
    - Identification of environmental indicators such as particulate matter, air toxic respiratory hazard index, and traffic proximity/volume using EPA's environmental justice screening tool and other reasonably available data sources.[13] Atlanta neighborhoods, for example, with these concerns include Five Points, West End, Battle Hill Haven, Stratford, Lakewood Park, Roseland, Thomasville, and Adamsville. Charlotte neighborhoods with these concerns include Atando Junction, Biddleville, Greenville, Hoskins, Enderly Park, Newell, Sharonbrook, Hebron, Starmont, Paw Creek, Junker, and Yorkmont Park. Indianapolis neighborhoods with these concerns include North Indianapolis, Wolfington, Flackville, Glendale, Ben Davis, Snacks, Brightwood, Holida, and Brendonwood.
    - Information on how affected communities were or will be meaningful engaged and included in the decision-making process on EV and ICE deployments, including in the proposed location of multifunctional distribution centers.

[13] https://ejscreen.epa.gov/mapper/.

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July 29, 2022

Ms. Jennifer Beiro-Réveillé
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Dear Senior Director Beiro-Réveillé:

I am writing on behalf of the California Air Resources Board (CARB) to provide comment to the United States Postal Service (USPS) regarding the upcoming Supplemental Environmental Impact Statement[1] (SEIS) prepared for USPS Master Contract 3DVPRT-21-B-0002 and related actions procuring up to 165,000 Next Generation Delivery Vehicles (NGDV) and potentially other Commercial Off-the-Shelf (COTS) vehicles or upfitted COTS of various classes and types (referred to as the "Preferred Alternative" in the February 23, 2022, Record of Decision).

CARB is an expert agency on vehicle emissions and electrification, and has deep concerns about the Final Environmental Impact Statement's (FEIS)[2] proposed decision to focus procurement on internal combustion engine (ICE) vehicles rather than zero-emission vehicles (ZEV) such as battery electric vehicles (BEV). CARB has expressed deep reservations about issues in the December 2021 NGDV FEIS that need to be remedied to allow proper analysis of next steps in the announced SEIS. We are pleased that the SEIS will apparently consider much greater levels of electrification, but are dismayed that the SEIS does not yet appear to fully consider 100 percent electrification or commit to that course as the preferred alternative. Our comments below highlight this major opportunity which (along with the many flaws in the FEIS) necessitates a full rethink. Further given the funding potentially provided by the proposed Inflation Reduction Act of 2022, it all the more important for the USPS to fully evaluate full electrification alternatives, and not to commit to combustion vehicles at this juncture. We also remind USPS that CARB's own proposed regulations would require this outcome in California and in states which choose to adopt our rules – a factor that further argues for this course nationally.

CARB also continues to request a public hearing to address critical concerns more broadly on USPS's critical decision to move forward with the Preferred Alternative, which would allow

[1] USPS, *Notice of Intent To Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement*, 2022 (weblink: https://www.federalregister.gov/documents/2022/06/10/2022-12581/notice-of-intent-to-prepare-a-supplement-to-the-next-generation-delivery-vehicles-acquisitions-final, last accessed July 2022).
[2] USPS, *Final Environmental Impact Statement United States Postal Service: Next Generation Delivery Vehicle Acquisitions*, 2021, (weblink: https://uspsngdveis.com/documents/USPS+NGDV+FEIS_Dec+2021.pdf, last accessed July 2022).

USPS to hear from expert agencies, members of the public, industry, and other stakeholders directly and further ensure appropriate consideration of this critical choice on the future of a large portion of the federal fleet.

Ultimately, as one of the single largest components of the federal fleet, as a business interested in efficiencies, and as a vital public service and symbol of American government, USPS should lead on electrification. As we confront a climate crisis that strains so many aspects of our society, USPS can be an example of progress – after all, as the classic words on the New York City Post Office remind us, "neither snow nor rain nor heat nor gloom of night stays these couriers from the swift completion of their appointed rounds." Rain, snow, heat, and gloom may lie ahead, but USPS now has the opportunity to choose ZEVs that can meet this crucial moment.

General Comments Regarding Proposed SEIS

The prior version of the EIS had multiple flaws, including those previously noted by CARB, the United States Environmental Protection Agency (U.S. EPA), the Council on Environmental Quality (CEQ) and multiple members of Congress including Congressional oversight committees. USPS is right to revisit these flawed analyses and revisit its errant decision to begin procurement even before the EIS was complete. USPS should accordingly undertake a revised analysis which would further demonstrate that fleet electrification is the right course. A zero--emission USPS fleet would ultimately be less costly, more consistent with USPS's need to compete with other carriers, better protect communities, and better serve government goals.

This letter highlights key data points and issues USPS should consider. CARB's analyses[3, 4, 5, 6] and numerous other groups' analyses generally indicate that battery electric medium- and heavy-duty delivery vans are more cost effective on a total cost of ownership basis today, and better in nearly all medium and heavy-duty applications by 2030. As of today, there are already more than 100 commercially available models of ZEVs in a variety of medium-duty and heavy-duty configurations. There are already more than 1,000,000 ZEVs sold in

[3] California Air Resources Board, *Attachment C: Updated Costs and Benefits Analysis for the Proposed Advanced Clean Trucks Regulation*, 2020 (web link: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2019/act2019/30dayattc.pdf, last accessed July 2022).
[4] California Air Resources Board, *Public Hearing to Consider the Proposed Advanced Clean Cars II Regulations – Staff Report: Initial Statement of Reasons*, 2022 (web link: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/isor.pdf, last accessed July 2022).
[5] California Air Resources Board, *Advanced Clean Fleets Regulation: Standardized Regulatory Impact Analysis*, 2022 (web link: https://dof.ca.gov/wp-content/uploads/Forecasting/Economics/Documents/ARB-ACF-SRIA_2022-05-18.pdf, last accessed July 2022).
[6] California Air Resources Board, *Draft Advanced Clean Fleets Total Cost of Ownership Discussion Document*, 2021 (web link: https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf, last accessed July 2022).

California.[7,8] BEVs are best suited in fixed route operations which return-to-base daily and can be charged overnight. The USPS delivery fleet meets all of these criteria and presents an ideal candidate for electrification as has been pointed out by USPS Office of the Inspector General (OIG), U.S. EPA, and the White House CEQ.[9,10,11]

At the outset, we note that one critical consideration is the impact of USPS's fleet on the communities in which USPS vehicles operate daily. Consistent with the Administration's clear direction for agencies to make achieving environmental justice part of their missions,[12] USPS should include an analysis on how their facilities, fleet yards, and operating vehicles are distributed with respect to environmental justice or disadvantaged communities. As a part of this analysis, USPS should analyze how their vehicle's routes and mileage are distributed within or immediately upwind of these communities. This analysis should not be used as a means to claim USPS's impact is small versus other emissions sources within these communities, but rather as a way to estimate USPS's direct impact in these communities and to identify ways to promptly mitigate those direct impacts. This analysis should also consider how the impacts would change by incorporating BEVs versus current or future ICE vehicles.

USPS's prior analysis failed to reach these conclusions in part because it was rooted in flawed data. This time, USPS should disclose all data sources, assumptions, and analysis methods used in the SEIS analysis. Such disclosure must be of sufficient detail as is necessary to ensure USPS's methodology is transparent and the conclusions reached can be meaningfully evaluated by outside parties. USPS failed to provide this level of disclosure with the FEIS. This is particularly necessary given that several conclusions within the FEIS are unfounded, for example, claiming higher maintenance costs for BEVs versus gasoline-powered vehicles. USPS should not exclude from consideration in the SEIS third party analysis of total cost of ownership (TCO) and future costs of technology and operation including but not limited to those mentioned in this letter. Published studies gather information from a variety of sources and present more thorough analysis than USPS may be able to conduct itself. These studies can contain additional analysis which supplement USPS's efforts to upgrade their fleet in the most efficient manner.

Finally, in any future new or modified agreements with its contractor, USPS should refrain from committing any further resources until it completes the National Environmental Policy

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[7] California HVIP, *All Eligible Vehicles*, 2022 (weblink: https://californiahvip.org/vehicles/, last accessed July 2022).
[8] Office of Governor Gavin Newsom, *California Leads the Nation's ZEV Market, Surpassing 1 Million Electric Vehicles Sold*, 2022, last accessed July 2022).
[9] USPS OIG, *Electric Delivery Vehicles and the Postal Service, Report Number RISC-WP-22-0*, 2022 (weblink: https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf, last accessed July 2022).
[10] Washington Post, *United States Environmental Protection Agency Letter*, 2022 (weblink: https://context-cdn.washingtonpost.com/notes/prod/default/documents/cb839d93-acf3-4390-8106-508a98e25b48/note/2b41bc0f-ccdb-4107-b59c-afdbd475640c.#page=1, last accessed July 2022).
[11] Whitehouse.gov, *USPS_letter_02022022.pdf,* 2022 (weblink: https://www.whitehouse.gov/wp-content/uploads/2022/02/USPS_letter_02022022.pdf, last accessed July 2022).
[12] Executive Order 14008 (February 1, 2021) at Section 219.

Act (NEPA) process for any revised procurement proposal. USPS previously claimed that providing funding to Oshkosh before the NEPA process was complete did not violate NEPA principles because it did not "pre-determine an ICE or BEV outcome."[13] Even assuming that is true, which CARB does not, USPS overlooks the fact that committing resources to Oshkosh *does* represent a commitment to that specific contractor as a source for the vehicles, and thereby committed those resources to those two particular vehicles. Therefore, this kind of pre-decisional funding allocation is the type of pre-commitment that NEPA disallows.[14]

Comments Regarding Delivery Network Refinements and Route Optimization Efforts

USPS specifically requested comments on what should be considered in the SEIS in relation to three identified actions.[15] Regarding the first action, which involves assessing impacts from delivery network refinements and route optimization efforts, as an initial matter, CARB recommends disclosure of both current and projected route and facility statistics. It is not possible to comment with any specificity on this action without any information as to what types of network refinements and route changes USPS is contemplating.

As background to this potential action, the USPS Postmaster General has already indicated to Congress that ~94 percent of postal routes are electrifiable today with USPS's proposed BEV NGDV and existing grid access.[16] The FEIS similarly indicates that only around 5 percent of USPS delivery routes currently are not suitable for a BEV NGDV.[17] The FEIS further states that existing USPS routes, on average, are expected to result in discharge of only 20 percent of a BEV NGDV's battery capacity under average conditions,[18] which means multiple vehicles can use the same charger further lowering costs and demonstrating how well-suited BEVs are to USPS's operations.

In coming years, continued improvements in ZEV technology are expected to simultaneously drive down vehicle costs and increase vehicle range, both of which expand the percentage of routes on which ZEVs can operate. At the same time, upcoming route consolidation will increase route lengths and improve the payback period of ZEVs even more versus their gasoline counterparts due to lower fueling and operating costs. While USPS has not released detailed information on the route changes they are contemplating, the facility consolidation concepts stated would be expected to cause nominal route length increases. Such

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[13] February 23, 2022 Record of Decision (ROD) at 9.
[14] *See*, e.*g.*, *California v. Norton*, 311 F.3d 1162, 1168 (9th Cir. 2002); *see also* 39 C.F.R. § 775.11(b)(2) (providing that an EIS must "[s]erve to assess the environmental impact of proposed actions, rather than to justify decisions already made").
[15] USPS, *Notice of Intent To Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement*, 2022 (weblink: https://www.federalregister.gov/documents/2022/06/10/2022-12581/notice-of-intent-to-prepare-a-supplement-to-the-next-generation-delivery-vehicles-acquisitions-final, last accessed July 2022).
[16] Letter from USPS Postmaster General Louis DeJoy to Senate Committee on Homeland Security and Government Affairs and House Committee of Oversight and Reform, dated March 11, 2021.
[17] FEIS at 3-2.
[18] SEIS at 3-2.

lengthening would be expected from both combining of previous shorter routes together as well as dispatching from more centralized locations requiring more 'deadhead' miles just to reach and return from the delivery zone of each new route.

Additionally, in reaching its conclusion that the proposed action would not result in climate change effects, the FEIS relied on the notion that "no increase in travel route and/or vehicle travel miles would occur." The FEIS found a reduction in all criteria pollutants and greenhouse gases (GHG) emissions. (FEIS at 4-22 and 4-23.) Proposed modifications[19] to the delivery networks and routes would likely affect the emissions estimates in the FEIS. Potential changes to reasonably foreseeable direct and indirect criteria, toxics, and GHG emissions should be analyzed in the SEIS.

Comments Regarding Incorporating NGDV and COTS Vehicles

In response to the second consideration to analyze the impact of incorporating both NGDV and COTS vehicles, CARB requests that USPS carefully evaluate what the performance defining characteristics are for each of the route types. Core vehicle performance specifications in the FEIS – including vehicle weight – are dubious at best and need revision. For instance, CARB notes that USPS's decision to proceed with a gross vehicle weight rating of 8,501 lb. does not appear to be driven by any mission performance standard but rather look like an attempt to avoid more stringent standards applicable to vehicles weighing a single pound less.[20] Instead of this methodology, USPS must consider which vehicles best achieve both mission function and environmental protections. The apparent attempted skirting of the more stringent light-duty regulations appears at odds with USPS statements that the safety and well-being of postal carriers is a reason to speed this procurement forward.[21] In addition, when assessing different options, USPS should not artificially place a vehicle into one application where it is not a viable option and claim the vehicle is not viable in all routes. For example, finding difficulty when placing a particular model BEV on one of the 6 percent of routes where USPS has claimed electrification is not viable does not mean that same model BEV cannot operate satisfactorily on the remaining 94 percent of routes.

[19] USPS, *Video and Transcript of Postmaster General Louis DeJoy's Keynote Address During the 2022 National Postal Forum - Newsroom - About.usps.com*, 2022 (web link: https://about.usps.com/newsroom/national-releases/2022/0518-video-and-transcript-of-pmg-louis-dejoys-keynote-address-during-2022-national-postal-forum.htm, last accessed July 2022).

[20] VICE, *The New USPS Trucks Would Probably Be Illegal If They Weighed One Pound Less (vice.com)*, 2022 (weblink: https://www.vice.com/en/article/4awqqw/the-new-usps-trucks-would-probably-be-illegal-if-they-weighed-one-pound-less, last accessed July 2022).

[21] PR Newswire, *USPS Completes Environmental Review of Next Generation Delivery Vehicle Program, Proceeds with Next Steps*, 2022 (weblink: https://www.prnewswire.com/news-releases/usps-completes-environmental-review-of-next-generation-delivery-vehicle-program-proceeds-with-next-steps-301488740.html, last accessed July 2022).

USPS should also continue exploring[22] the role electric cargo bikes[23,24] and other less traditional but effective vehicles[25,26] can play in its procurement, and how they could further reduce any perceived need to purchase combustion vehicles.

Comments Regarding Level of Analysis Needed

USPS should analyze multiple scenarios when performing their analysis. This includes modeling more than one type of vehicle per given powertrain type, modelling multiple battery configurations when assessing BEVs, and modelling multiple types of BEV vehicles within the same category; e.g., a turnkey COTS vs. an upfitted COTS vs. a USPS-specific modified COTS. There are a multitude of options for acquiring ZEVs including commercial off-the-shelf vehicles, the NGDV, and zero-emission upfits of COTS or chassis. In sum, before dismissing a higher percentage of BEV vehicle procurement as infeasible or uneconomical, USPS's analysis needs to be robust and consider all options and not predetermine the results.

USPS also should take care not to preclude options by imposing an arbitrarily short timeline for procurement.[27] The USPS's July 21, 2022, notice[28] provides further information regarding the scope of the proposed SEIS, including a newly-proposed "multiple step acquisition process." The multi-step purchasing approach described in this notice may create positive opportunities for USPS to capitalize on future BEV cost and performance improvements. However, it also creates the risk that rushing this first stage of the procurement could unnecessarily drive avoidable ICE purchases. Supplies of all vehicle types are tight presently and this supply chain situation should not be used to lock in additional numbers of high operational cost and tailpipe emitting delivery vehicles. This SEIS scope narrowing also poses the risk of the USPS analysis failing to provide the guidance and whole-of-fleet perspective to inform subsequent USPS delivery vehicle procurement, as well as USPS infrastructure development that will be needed for electrifying broader waves of delivery vehicles, short haul mail trucks, long haul mail trucks, service vehicles, and off-road equipment like terminal

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[22] The Postal Record, *eBike Testing*, 2021, p. 27 (web link: https://www.nalc.org/news/the-postal-record/2021/september-2021/document/DCD.pdf last accessed July 2022)
[23] Reuters, " *UPS tries out 'eQuad' electric bikes for urban deliveries | Reuters*" 2022 (web link: https://www.reuters.com/article/autos-electric-ups-bikes-idCAKCN2LT34Z last accessed July 2022).
[24] Correos, *Correos incorporará 800 nuevas motos eléctricas a su flota de reparto*, 2022 (web link; https://www.correos.com/en/sala-prensa/correos-incorporara-800-nuevas-motos-electricas-a-su-flota-de-reparto/# last accessed July 2022).
[25] USPS Link, *Pedal Power*, 2020, (web link: https://link.usps.com/on_the_job/pedal-power/, last accessed July 2022).
[26] Medialist, *Postbot – Deutsche Post tests robot helpers for its postmen*, 2018 (web link: https://medialist.info/en/2018/10/30/postbot-deutsche-post-tests-robot-helpers-for-its-postmen/ last accessed July 2022).
[27] USPS, *Notice To Postpone Public Hearing and Extend Public Comment Period for Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement*, 2022 (web link: h*ttps://www.federalregister.gov/documents/2022/07/21/2022-15616/notice-to-postpone-public-hearing-and-extend-public-comment-period-for-supplement-to-the-next,* last accessed July 2022).
[28] USPS, *Notice to Postpone Public Hearing and Extend Public Comment Period for Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement* (July 21, 2022) 87 F.R. 43561.

trucks and forklifts. In taking a more incremental approach to future purchases (and associated NEPA review) as outlined in the SEIS supplement, USPS should be careful to avoid improper segmentation of the environmental analysis for the broader fleet electrification effort. With USPS also separately announcing reconfiguration and capital upgrades of entire USPS systems,[29] a holistic analysis looking beyond the vehicles of this reduced procurement itself must be undertaken to fully understand the resource and emissions costs of failing to plan for full electrification. Without such a comprehensive view, a more limited analysis sets USPS up for process delays where each individually analyzed aspect of USPS electrification is hampered or delated due to uncertainty of not having a common vision and failing to leverage the synergies of "build it once" type infrastructure and utility upgrade strategies.

Additionally, USPS should consider including ZEV options for the types of vehicles used today on the 6 percent of routes identified by USPS as most challenging. The longest routes may not be using the biggest, heaviest vehicles but in many cases may be the personally owned vehicles mentioned in the request for comment. There are a number of long-range BEV passenger cars and BEV light trucks that are likely of sufficient capability to perform such longest distance (~200 mi.) low stop count rural routes today. The COTS passenger car and light truck BEVs are undergoing rapid development and improvement with ranges reaching into 300-400 miles. By the time USPS has electrified the readily electrifiable routes, the COTS BEV options for the longest routes are likely to be even more capable and widespread than those already available. USPS should look carefully at how the COTS vehicle numbers identified for analysis in the SEIS could be selected to serve these routes today.

Likewise, USPS's analysis should assess the cost impacts and feasibility of multiple battery sizes within BEVs. A one-size-fits-all approach will lead to sizing batteries for a worst-case scenario and lead to overbuying batteries on short or intermediate routes which unnecessarily drives up vehicle costs. As noted above, the FEIS indicates that existing USPS routes, on average, are expected to result in discharge of only 20 percent of a BEV NGDV's battery capacity under average conditions.[30] This would also reduce the number of chargers needed because multiple vehicles could share a single charger. The analysis should therefore evaluate what size of battery is necessary on different types of routes and optimize costs accordingly. Equipping NGDVs with properly sized battery packs on the many length USPS routes could enable USPS to more cost-effectively purchase a greater share of BEV NGDVs. Canada Post has stated "We're experimenting with different vehicle types and ultimately we probably will be looking at a vehicle with a custom battery pack. We don't need an oversize battery — we have no interest in a 300-km-range battery. Part of our development phase is going to be to optimize the vehicle solution."[31]

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[29] USPS, *Delivering for America*, 2021 (web link: *https://about.usps.com/what/strategic-plans/delivering-for-america/*, last accessed July 2022).
[30] SEIS at 3-2.
[31] Canada Post, *Canada Post is electrifying 14,000 last-mile fleet vehicles. We go behind the scenes of that decision*, 2022 (web link: https://electricautonomy.ca/2022/06/28/canada-post-fleet-electrification-plan/, last accessed July 2022).

Similarly, USPS's analysis should consider multiple chargers with different power levels and evaluate how different route profiles lead to different charging needs. The amount of energy needed on a 20 mi. route will be substantially less than an 80 mi. route, and as a result the power needs of the chargers installed can be significantly less. Many of these needs could be met with a single Level 2 charger, a Level 2 charger shared between multiple vehicles, or in some instances a Level 1 charger (i.e., a standard wall outlet). Other delivery companies are investing in infrastructure including electric load-management-enabled charging across their operations, and are recognizing situations where more than one vehicle can share a charge point such as 2 vehicles per 22kW charger.[32] By early 2023, the Royal Mail plans an investment of 5,500 electric vans and £12.5M of charging infrastructure which one could view as roughly averaging out to about £2,300/vehicle.[33]

USPS should look at combinations of vehicles and charging strategies that best meet its total route needs, not artificially restricting to limited or even a single vehicle type forced to perform in all situations. USPS already has a variety of types in its own vehicles as well as use of contracted and personally owned vehicles to match the variety of use cases. Artificially excluding this current USPS practice of matching vehicles to routes from analysis in this new procurement would be arbitrary and capricious.

When updating their analysis, USPS must make the following corrections, many of which are discussed in more detail below:

- Fuel costs should reflect realistic prices based on reasonable actual projections such as information from the U.S. Energy Information Administration including the effects of choice of analysis base year. In addition, USPS should conduct a sensitivity analysis assessing the impacts of fuel price volatility and USPS's exposure under different technology options.
- Similarly, electricity costs should have reasonable basis and assume prudent use of charging strategies to minimize avoidable time-of-use / demand charges and needless upsizing of equipment and electrical supplies.
- USPS must update their emissions analysis to correct their underestimate of ICE emissions and overestimate of BEV emissions.
- USPS must correct their assumption that BEVs are more expensive to maintain than ICE vehicles. Data from Argonne National Laboratory shows that BEVs offer a 40 percent maintenance cost reduction versus today's gasoline-powered vehicles.[34] Data from fleets operating both BEVs and internal combustion-powered vehicles also

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[32] Automotive Today, *Posta Romana acquires 15 electric vans for its postal services in Bucharest*, 2020 (weblink: https://www.automotive-today.ro/index.php/2020/12/14/posta-romana-acquires-15-electric-vans-for-its-postal-services-in-bucharest/, last accessed July 2022)
[33] Royal Mail, *Net Zero Deliveries*, 2022 (weblink: https://www.royalmail.com/sustainability/stepstozero/net-zero-deliveries , last accessed July 2022)
[34] Argonne National Laboratory, *Comprehensive Total Cost of Ownership Quantification for Vehicles with Different Size Classes and Powertrains* (web link: https://publications.anl.gov/anlpubs/2021/05/167399.pdf, last accessed July 2022)

reflects a savings.[35] USPS's analysis should incorporate maintenance savings with BEVs and not factor in an arbitrary maintenance cost increase.

- The social cost of GHG (SC-GHG) must be applied in USPS's analysis, consistent with the Administration's latest guidance.[36] In the existing FEIS, the SC-GHG analysis does not provide total (cumulative) social costs over the foreseeable life of the procured vehicles. The SEIS should remedy this by providing total cumulative SC-GHG figures under the various discount rate scenarios, and should further facilitate cost savings comparisons by incorporating a side-by-side comparison of the 10 percent BEV (FEIS Table 4-6.3) and 100 percent BEV (FEIS Table 4-6.6) scenarios.
- USPS's analysis should include reasonable projections on the electricity grid mix and corresponding carbon intensity assumptions and should reflect how it will get cleaner over time. USPS's current assumptions are already out-of-date and do not incorporate future expected reductions in grid carbon intensity due to continuing proliferation of zero-carbon renewable sources. Given the broad electrification going on in transportation and buildings, it is not reasonable to assume that every additional BEV will be powered by additional operation of a peaker plant with a higher than average emissions rate. Increases in generation capacity are anticipated over the next decade and will likely be cleaner than the overall grid mix around those generation capacity increases – indeed, many grid capacity additions may be zero-emission or battery storage facilities.
- Projected ZEV technology improvements over time should be incorporated into USPS's analysis. Improvements in battery energy density, motor power efficiency, and cost have all been observed and are projected to continue. USPS has stated that a contract for purpose-built vehicles may lock out certain types of such improvements and savings, despite the decadal scale of this procurement. It is unreasonable to preclude the possibility of running changes during a production run that is longer than most manufacturer production runs between model refreshes. The recent supplement to the SEIS comment solicitation moves in this direction, but could go much further. USPS analysis should acknowledge opportunities to assimilate technology improvements during the course of such a production run and should seek mechanisms to achieve such additional benefit. The delay in USPS realizing ZEV advancements within a long time period manufacturing contract would not be an issue to COTS or upfitted-COTS vehicles that would be expected to continue market evolving individually and as new competing models appear during the course of this procurement period. Subsequent purchases of COTS over the procurement period

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[35] NYC DCAS, *Reducing Maintenance Costs With Electric Vehicles*, 2019 (web link: https://www1.nyc.gov/assets/dcas/downloads/pdf/fleet/NYC-Fleet-Newsletter-255-March-8-2019-Reducing-Maintenance-Costs-With-Electric-Vehicles.pdf, last accessed July 2022).

[36] Interagency Working Group on the Social Cost of Carbon, *Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 13990*, 2021 (web link: https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdfhttps://www.whitehouse.gov/, last accessed July 2022).

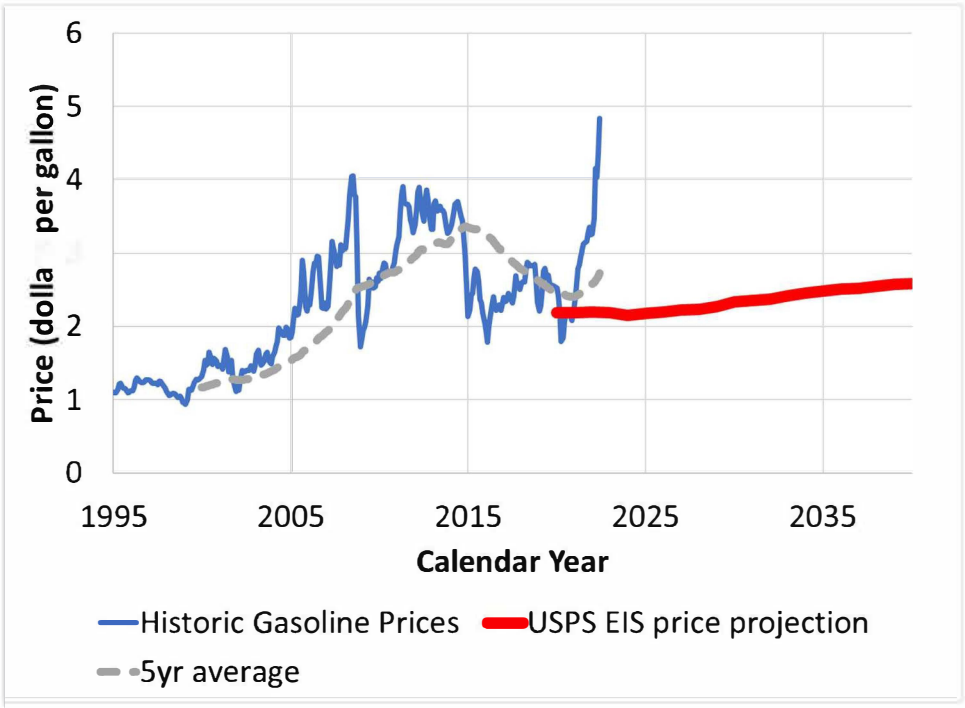
would naturally receive the development improvements added by their original equipment manufacturers (OEM) to remain competitive in the broader market.

Supplemental Information to Bolster USPS's Analysis

The USPS-selected method for projecting fuel prices into the future does not seem to account for the energy price volatility when assessing the vehicle technology options. Figure 1 illustrates that USPS appears to have chosen a base year gasoline price that was below that base year's 5-year preceding average subjecting the projection to inordinate influence potentially biasing it significantly low. This particular choice of base year pegs the USPS future projection to a price lower than has been seen in the 5-year average for a decade which casts doubt on the base year as an accurate representation of long-term trends in lieu of a longer view of prices. USPS then scaled the potentially under estimating base year price without any sensitivity analysis for the effects of reasonably expected (upward) price volatility or sensitivity analysis for variation in the base price (repeating analysis with earlier and later base years or long-term averages). Beyond the obvious price volatility observed directly in the actual gasoline price history, there are many reasons to expect continued price volatility and upward price pressures on gasoline including declining US refining capacity,[37] unscheduled interruptions in production, trade, and transportation of crude oil, and a growing inability of the energy industry to avoid the real societal costs of petroleum extraction, transportation, refining and eventual combustion. Petroleum has long been an international commodity subject to geopolitical and cartel influences on availability and pricing. These price influencing factors are difficult to include in long-range price forecasts, but are clearly understood to individually act in the upward direction. Our current experience today is a price that has doubled in a very short time with underlying factors that may be unlikely to reverse for quite some time. The range and duration of volatility in the Energy Information Administration data could be argued to support more realistic future price expectations close to double those used in the FEIS, directional shifts that would significantly affect FEIS and SEIS total cost of ownership calculations.

[37] Reuters, *U.S. oil refining capacity down in 2021 for second year –EIA*, 2022 (web link: https://www.reuters.com/business/energy/us-oil-refining-capacity-drops-2021-2d-straight-year-eia-2022-06-21/, last accessed July 2022).

Figure 1: US Gasoline Price History[38] compared to USPS-selected future price projection[39]



USPS should also consider the effects of regulatory changes on its procurement. CARB, for instance, has adopted and is developing regulations to shift the state's transportation fleet to zero-emissions. CARB has adopted regulations that require manufacturers to sell both light-duty and heavy-duty ZEVs as an increasing portion of sales as required by the Advanced Clean Cars and Advanced Clean Trucks (ACT) regulations, respectively. CARB is additionally currently developing regulations to require full fleet electrification of medium-duty, heavy-duty, and light-duty delivery vehicles under the proposed Advanced Clean Fleets (ACF) regulation. The proposed ACF regulation would require USPS to transition its delivery fleet to fully ZEVs by 2035, and its semi-tractor fleet to ZEV by 2042. USPS's analysis should particularly consider the ACF regulation's fleet definition, as it applies to subhaulers and other contracted entities beyond the explicitly USPS-owned vehicles.

Many other jurisdictions are moving forward in this regard. After the ACT regulation was adopted by CARB, California along with 16 states, the District of Columbia, and Province of Quebec signed a Memorandum of Understanding to work collaboratively to advance and

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[38] Energy Information Agency, *Monthly Retail Gasoline and Diesel Prices*, 2022 (web link: https://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_nus_m.htm, last accessed July 2022).
[39] USPS, *Environmental Impact Statement United States Postal Service*, 2021 (web link: https://cdxapps.epa.gov/cdx-enepa-II/public/action/eis/details;jsessionid=5567E09C857ABF7BA8E62ACD797F82CF?downloadAttachment=&attachmentId=354121, last accessed July 2022).

accelerate the market for electric medium- and heavy-duty vehicles.[40,41] These states agreed to work together to set and meet medium- and heavy-duty ZEV sales targets and develop action plans.[42,43] To date Oregon, Massachusetts, New Jersey, New York, and Washington states have fully adopted the ACT regulation in their jurisdictions. CARB anticipates that other states will likewise begin adopting the ACF regulation and as a result require USPS like other large delivery fleets to electrify their fleet, which will require a larger fraction of their nationwide fleet to be zero-emission. Washington state has a statute setting the timeframe for excluding new light duty ICEs from registration.[44] It does not make sense for USPS to adopt a preferred alternative that would set it on a collision course with current and likely law.

CARB analyses on light-, medium-, and heavy-duty vehicle electrification all show substantial cost benefits associated with electrifying.[45,46,47,48] These analyses are performed across the entire fleet, and include many ZEV applications that present special challenges for electrification. This analysis is corroborated by numerous other universities, non-governmental organizations, and industry groups showing that transitioning vehicles to

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[40] California Air Resources Board, *Press Release 20-18 15 states and the District of Columbia join forces to accelerate bus and truck electrification*, 2020 (web link: https://ww2.arb.ca.gov/news/15-states-and-district-columbia-join-forces-accelerate-bus-and-truck-electrification, last accessed July 2022).
[41] NESCAUM, *NESCAUM Welcomes Nevada's Participation in the Multi-State Zero-Emission Electric Trucks Initiative — NESCAUM*, 2022 (weblink: https://www.nescaum.org/documents/nescaum-welcomes-nevada-s-participation-in-the-multi-state-zero-emission-electric-trucks-initiative/, last accessed July 2022).
[42] NESCAUM, *NESCAUM Releases Draft Multi-State Medium-and Heavy-Duty Zero-Emission Vehicle Action Plan for Public Comment*, 2022 (weblink: https://www.nescaum.org/documents/announcement-mhd-zev-ap-public-draft.pdf/, last accessed July 2022)
[43] Washington, Oregon, New York, New Jersey, and Massachusetts have all adopted the ACT regulation.
[44] Washington State, *SB 5974 - 2021-22*, 2022 (web link: https://app.leg.wa.gov/billsummary?BillNumber=5974&Initiative=false&Year=2021, last accessed July 2022)
[45] California Air Resources Board, *Attachment C: Updated Costs and Benefits Analysis for the Proposed Advanced Clean Trucks Regulation*, 2020 (web link: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2019/act2019/30dayattc.pdf, last accessed July 2022).
[46] California Air Resources Board, *Public Hearing to Consider the Proposed Advanced Clean Cars II Regulations – Staff Report: Initial Statement of Reasons*, 2022 (web link: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/isor.pdf, last accessed July 2022).
[47] California Air Resources Board, *Advanced Clean Fleets Regulation: Standardized Regulatory Impact Analysis*, 2022 (web link: https://dof.ca.gov/wp-content/uploads/Forecasting/Economics/Documents/ARB-ACF-SRIA_2022-05-18.pdf, last accessed July 2022).
[48] California Air Resources Board, *Draft Advanced Clean Fleets Total Cost of Ownership Discussion Document*, 2021 (web link: https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf, last accessed July 2022).

zero-emissions creates positive total cost of ownership.[49,50,51,52] This is primarily due to the operational savings of BEVs – these vehicles offer lower fuel prices and substantial maintenance cost reductions near 40 percent. When combined with the declining cost of BEVs, the total cost of ownership equation starts to rapidly come together, with numerous reports suggesting that local delivery vehicles such as those the USPS uses are already more cost-effective today. In addition, USPS must factor in substantial savings for charging station or hydrogen station owners in states which have adopted Low Carbon Fuel Standard (LCFS) regulations. These regulations programs reduce fuel prices through a market-based mechanism that offers credits to low-carbon fuels such as electricity and hydrogen. California,[53] Oregon,[54] and Washington[55] have already adopted LCFS regulations and similar programs are being considered by other states.

More specifically, CARB staff prepared an assessment of the projected total cost of ownership for a variety of medium- and heavy-duty vehicles as part of the ACF rulemaking, with the most relevant being the examples for a Class 2b cargo van and a Class 5 delivery van as shown in Figure 2 and Figure 3. Both of these examples show immediate TCO savings in 2025 and further savings as time goes on and costs decline. Even when factoring in vehicle and infrastructure costs, the results show a payback in as few as five years, with quicker payback possible by taking advantage of incentive programs which were not factored into this analysis. This analysis also shows the benefits of procuring COTS BEVs as the per vehicle cost is substantially lower than the values used in USPS's analysis.

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[49] Argonne National Laboratory, *Comprehensive Total Cost of Ownership Quantification for Vehicles with Different Size Classes and Powertrains* , 2022 (web link: https://publications.anl.gov/anlpubs/2021/05/167399.pdf, last accessed July 2022)
[50] NACFE, *Electric Trucks Have Arrived: The Use Case for Vans and Step Vans*, 2022 (weblink: https://nacfe.org/wp-content/uploads/edd/2022/04/Vans-and-Step-Vans-Report-FINAL.pdf, last accessed July 2022)
[51] LBNL, *Why Regional and Long Haul Trucks Are Primed for Electrification Now*, 2022 (weblink: *https://eta-publications.lbl.gov/sites/default/files/updated_5_final_ehdv_report_033121.pdf*, last accessed July 2022).
[52] EDF, *Technical Review of Medium-Duty and Heavy-Duty Electrification Costs for MY 2027-2030*, 2022 (web link: https://blogs.edf.org/climate411/files/2022/02/EDF-MDHD-Electrification-v1.6_20220209.pdf, last accessed July 2022).
[53] California Air Resources Board, *LCFS Credit Generation Opportunities*, 2022 *(weblink:* https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-credit-generation-opportunities, last accessed July 2022).
[54] Oregon.Gov, *Clean Fuels Program*, 2022 (weblink: https://www.oregon.gov/deq/ghgp/cfp/Pages/default.aspx, last accessed July 2022).
[55] Washington State Department of Ecology, *Clean Fuel Standard*, 2022 (weblink: https://ecology.wa.gov/Air-Climate/Climate-change/Reducing-greenhouse-gases/Clean-Fuel-Standard, last accessed July 2022).

Figure 2. Cargo Van TCO Comparison

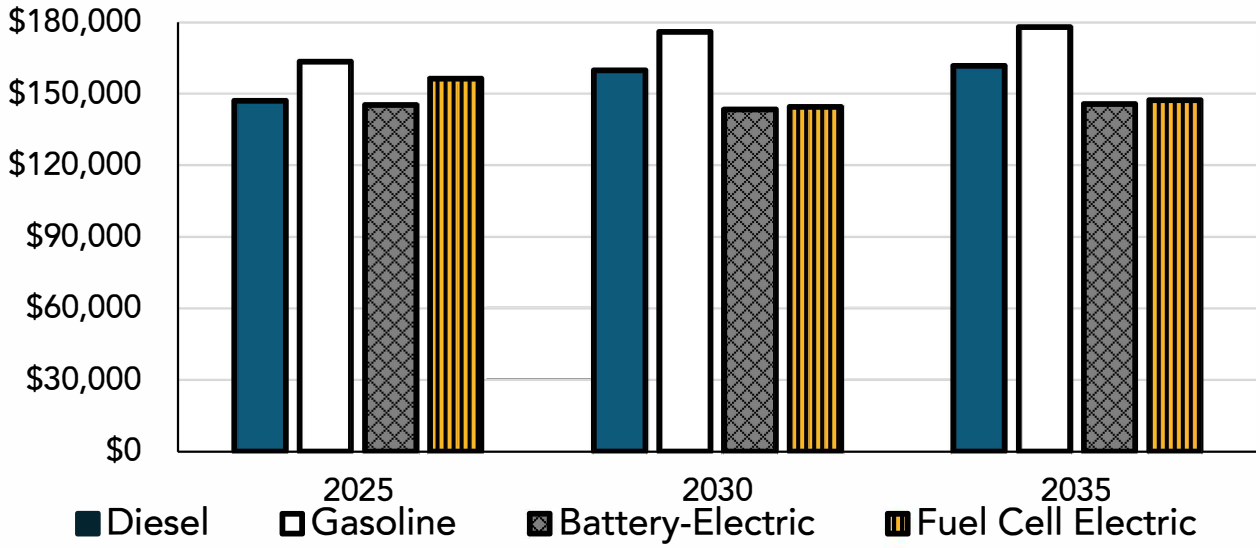
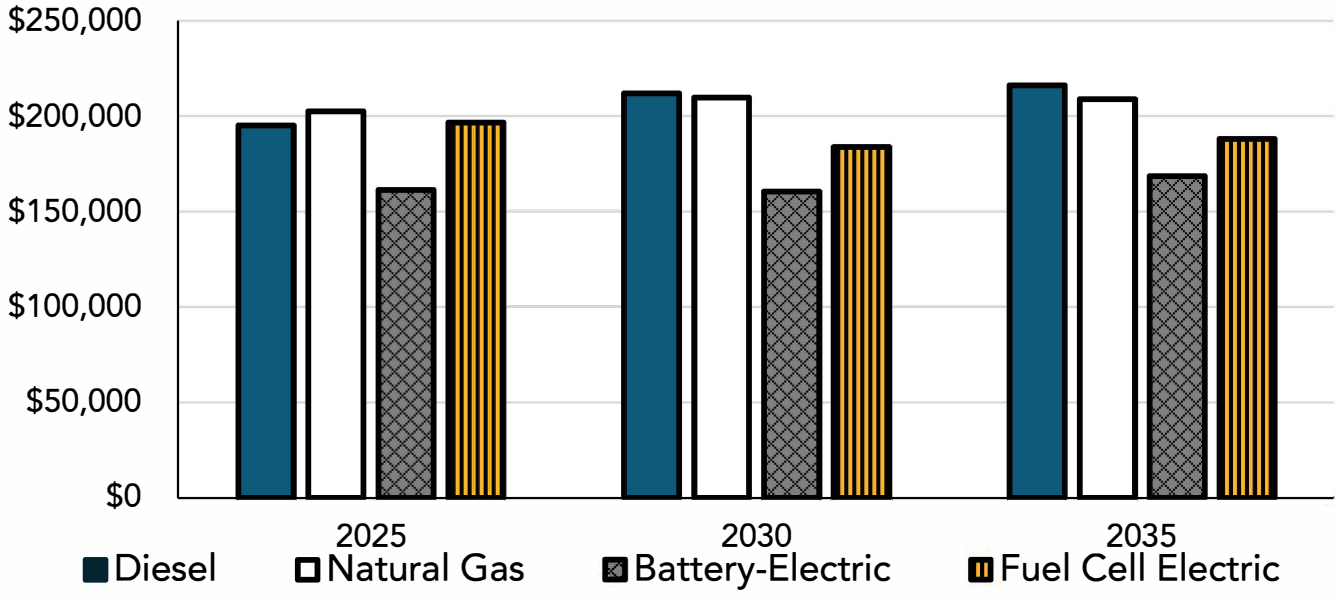


Figure 3. Walk-in Van TCO Comparison



In light of these changes, and in light of the clear economic advantages of zero-emission technologies, USPS's peers are also making changes. Other mail delivery providers around the world have committed to a ZEV transition as listed in Table 1. These mail delivery services operate around the world over a wide range of terrain, weather, and operating conditions.

Table 1. Mail Carrier Providers' Zero-Emission Delivery Goals

Country	100% Zero-Emission commitment
Austria Austrian Post[56]	2030 (ended ICE purchases December 2021)
Canada Canadian Post[57]	2040
Croatia Croatian Post[58]	2040
Ireland An Post[59]	2030
Netherlands PostalNL[60]	2030
Singapore SingPost[61]	2026
Sweden/Denmark Post Nord[62]	2027
Switzerland Swiss Post[63]	2026

Royal Mail in the United Kingdom has a 2040 net zero goal and already owns 19,000 ZEVs.[64] Many private delivery companies similar to USPS have committed to large-scale

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[56] Elective.com, *Austrian Post stops purchasing fossil-fuelled vehicles*, 2022 (weblink: https://www.electrive.com/2022/03/02/austrian-post-stops-purchasing-fossil-fuelled-vehicles/, last accessed July 2022)
[57] Canada Post, *Canada Post commits to investments and actions to reach net zero*, 2022, (weblink: https://www.canadapost-postescanada.ca/cpc/en/our-company/news-and-media/corporate-news/news-release/2022-06-09-canada-post-commits-to-investments-and-actions-to-reach-net-zero, Last Accessed July 2022)
[58] Hrvatska Posta, *Croatian Post Joins The Climate Pledge initiative*, 2022 (weblink: https://www.posta.hr/en/croatian-post-joins-the-climate-pledge-initiative/9407, Last Accessed July 2022)
[59] An Post, *The journey so far*, 2022(weblink: https://www.anpost.com/Sustainability/Climate-Action/The-journey-so-far, last accessed July 2022)
[60]Postnl, *PostNL steps up sustainability commitment*, 2021 (weblink: https://www.postnl.nl/en/about-postnl/press-news/press-releases/2021/postnl-steps-up-sustainability-commitment.html, Last Accessed July 2022)
[61] Singpost, *SingPost pilots fully electric three-wheelers, deploys electric vans as part of green plan to replace current delivery fleet*, 2021 (weblink: https://www.singpost.com/sites/default/files/2021-09/Media-Release-SingPost-pilots-electric-scooters-and-vans-delivery-fleet-to-go-green-by-2026-Aug%2021.pdf, Last Accessed July 2022)
[62] Postnord.fi, *Emission-free last mile transports by 2027*, 2022(weblink: https://www.postnord.fi/en/about-postnord/logistics-news/news/emission-free-last-mile-transports-by-2027, last accessed July 2022)
[63] SwissPost, *On the road to carbon-neutral logistics*, 2022(weblink: https://geschaeftsbericht.post.ch/21/ar/en/on-the-road-to-carbon-neutral-logistics/, Last Accessed July 2022)
[64] Royal Mail, *Steps to Zero*, 2022 (weblink: https://www.royalmail.com/sustainability/stepstozero#:~:text=Our%20four%20step%20journey%20to%20become%20net%20zero%20by%202040.&text=How%20we%20intend%20to%20lower,goal%20of%20becoming%20net%20zero.&text=Our%20plans%20to%20reduce%20consumption,as%20transport%20networks%20and%20buildings., last accessed July 2022)

electrification in the United States despite having more variable operations. Amazon announced that they would be purchasing 100,000 zero-emission delivery vans from Rivian for use in their delivery fleet[65] and holds 20 percent.[66] Amazon is pairing this vehicle acquisition activity with necessary infrastructure build out including the recent activity on a 399 electric vehicle (EV) charger site in Wisconsin with option to expand to 760 chargers[67,] and a 335 EV charger site in Texas[68] adding in bulk to their "thousands" of chargers installed to date.[69] UPS has purchased 10,000 zero-emission Arrival vans with options in place for an additional 10,000.[70]. FedEx has purchased 2,500 BEVs from the GM subsidiary Brightdrop and has already placed 150[71] into service. DHL began producing ZEVs in-house[72] under the Street Scooter brand in 2016 and those purpose-built package delivery vehicles are being sold into the North American market.[73] Walmart recently placed an order for 4,500 BEVs from Canoo for use in last mile delivery to support their growing ecommerce business.[74] All these announcements indicate USPS's competitors see clear value in electrification and are accelerating their procurements. If USPS were to lock itself to unnecessary years of ICE vehicle purchases, the agency would be left behind other delivery fleets who can operate their vehicles at lower cost.

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[65] CNBC, *Amazon is Purchasing 100,000 Rivian Electric Vans, the Largest Order of EV Delivery Vehicles Ever*, 2019 (web link: https://www.cnbc.com/2019/09/19/amazon-is-purchasing-100000-rivian-electric-vans.html, last accessed July 2022).
[66] Fortune, *Amazon Discloses 20% Stake in Electric Vehicle Maker Rivian Ahead of IPO*, 2021 (weblink: https://fortune.com/2021/10/29/amazon-discloses-20-percent-stake-in-electric-vehicle-maker-rivian-ahead-of-ipo/, last accessed July 2022) /
[67]Journal Times, *Amazon Prepares to Go Electric in a Big Way with Delivery Vans at Racine County Hub*, 2022 (web link: https://journaltimes.com/news/local/amazon-prepares-to-go-electric-in-a-big-way-with-delivery-vans-at-racine-county/article_a89d3c0e-f342-11ec-823f-0f3f5e4a7dea.html)
[68] Texas Department of Licensing and Regulation, *Project #: TABS2022019987*, 2022, (web link: https://www.tdlr.texas.gov/TABS/Search/Project/TABS2022019987, last accessed July 2022)
[69] Amazon, *Amazon's custom electric delivery vehicles are starting to hit the road*, 2022 (web link: ttps://www.aboutamazon.com/news/transportation/amazons-custom-electric-delivery-vehicles-are-starting-to-hit-the-road, last accessed July 2022)
[70] Arrival, *UPS Invests in Arrival and Orders 10,000 Gen 2 Electric Vehicles*, 2020 (web link: https://arrival.com/us/en/news/ups-invests-in-arrival-and-orders-10000-generation-2-electric-vehicles, last accessed July 2022).
[71] Freightwaves, *150 EVs Delivered to FedEx*, 2022 (web link: https://www.freightwaves.com/news/fedex-takes-delivery-of-gm-brightdrop-electric-vans, last accessed July 2022).
[72] DHL, *StreetScooter and the Future of Electric Vehicles*, 2022 (web link: https://www.dhl.com/discover/en-global/business/business-ethics/future-of-electric-vehicles, last accessed June 2022).
[73] Parcel and Postal Technology International, *GoFor and Odin Automotive to deploy electric last-mile delivery platform in North America*, 2022 (weblink: https://www.parcelandpostaltechnologyinternational.com/news/delivery/gofor-and-odin-automotive-to-deploy-electric-last-mile-delivery-platform-in-north-america.html, last accessed July 2022)
[74] Walmart, *Walmart To Purchase 4,500 Canoo Electric Delivery Vehicles To Be Used for Last Mile Deliveries in Support of Its Growing eCommerce Business*, 2022 (web link: https://corporate.walmart.com/newsroom/2022/07/12/walmart-to-purchase-4-500-canoo-electric-delivery-vehicles-to-be-used-for-last-mile-deliveries-in-support-of-its-growing-ecommerce-business, last accessed July 2022).

In considering model and specification availability of COTS and upfitted-COTS vehicles, CARB provides the following examples from our programs. Light-duty ZEVs available today are listed on the Drive Clean CA website.[75] California has negotiated prices on a number of BEV passenger cars, vans, and light trucks through state contracts administered by the Department of General Services. These contract lists are available on the DGS website.[76] These prices for COTS BEVs must be recognized when evaluating their large potential cost savings – based on the information provided in the FEIS Table 3-1.1, USPS assumes the per vehicle cost of an ICE vehicle and BEV to be $124,000 and $155,000, respectively. COTS BEVs can be purchased at prices significantly below this as seen in the table. When combined with the aforementioned operational cost savings, COTS BEVs are able to offer to offer a savings both upfront and over the life of the vehicle. CARB's contractor for the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) program (CALSTART) maintains a list of program eligible commercial vehicles that are currently market available including vans/stepvans, box trucks, and Class 8 tractors.[77] Related to Class 8 tractors are the terminal tractors that operate at warehouse and logistics centers to reposition semi-trailers. Our Clean Off Road Equipment voucher project (CORE) has determined eligibility for a number of ZEV terminal tractors (whether on-road or off-road) with more models and suppliers under current consideration for CORE program eligibility.[78] Recent opening of CORE funding saw the initially available $25M for ZE terminal tractor vouchers claimed in minutes and robust total requests exceeding that by a factor of three.[79]Several vehicle manufacturers and third party upfitters are offering COTS BEV vans, step vans, and cab-chassis and cut-away chassis which can be upfitted with a van body. A number of COTS BEV pickup trucks from traditional automotive OEM are being offered in a body-on-frame configuration that would be straightforward to swap the pickup bed for a package delivery body similar in concept to package delivery vehicles that have been manufactured by a major German delivery company. Upfitting is not necessarily precluded by unibody approaches to pickup chassis design despite some constraint placed on package body design freedom.

[75] DriveClean, *Clean Car Buying Guide*, 2022 (weblink: https://driveclean.ca.gov/, last accessed July 2022)
[76] California Department of General Services, *Statewide Contract Fleet Vehicles*, 2020 (web link: https://www.dgs.ca.gov/PD/Resources/Page-Content/Procurement-Division-Resources-List-Folder/Statewide-Contract-Fleet-Vehicles, last accessed July 2022).
[77] California HVIP, *All Eligible Vehicles*, 2022 (weblink: https://californiahvip.org/vehicles/, last accessed July 2022).
[78] California Core, *California Core - Yard Tractors*, 2022 (weblink: https://californiacore.org/equipment-category/terminal-tractors/, last accessed July 2022)
[79] California CORE, *Available Voucher Funds*, 2022 (web link: https://californiacore.org/ticker/, last accessed July 2022).

Table 2: US availability of BEV Vans, Pickups, and SUVs[80,81]

Region	Model Year	Make	Model	Tech	Class Size	EV Range (mi.)	CA DGS contract pricing[82,83]
USA	2021	Chrysler	Pacifica Hybrid	Plug-in hybrid electric vehicle (PHEV)	Minivan - 2WD	32	$47k
USA	2022	Ford	E-Transit	BEV	Cargo Van(s)	125	$41- $49k
USA	2022	Ford	F-150 Lightning PRO	BEV	Standard Pickup	230, 300	$41k
USA	2022	GMC	Hummer EV Edition 1	BEV	Standard Pickup	329	
USA	2022	GMC	Sierra Denali	BEV	Standard Pickup	400	
USA	2022	Kandi	K32	BEV	Standard Pickup	60, 150	
USA	2022	Lordstown Motors	Endurance	BEV	Standard Pickup	250	
USA	2022	Rivian	R1T	BEV	Standard Pickup	314	
USA	2023	Bollinger	Deliver-E	BEV	Van	200	
USA	2023	Brightdrop (GM)	Zevo 400 and 600	BEV	Van(s)	250	

[80] Top Electric SUV, *12 New Electric van models coming to U.S. (2022-2025)*, 2022 (weblink: https://topelectricsuv.com/featured/future-electric-van-models-usa/, last accessed July 2022).
[81] Kelley Blue Book, *There Are Electric Vans — Here Are Your Options*, 2022 (weblink: https://www.kbb.com/car-news/electric-vans/, last accessed July 2022).
[82] California Department of General Services, *1-22-23-23A-I – Fleet Vehicles – Vans and SUVs Contract Pricing*, 2022 (web link: https://www.dgs.ca.gov/-/media/Divisions/PD/Acquisitions/Fleet/5-26-22/Attachment-A-Pricing--Vans--SUVs--Supplement-1.xlsx?la=en&hash=9237E977430139F08490347DDC7D65A33E541769, accessed July 2022)
[83] California Department of General Services, *1-22-23-20A-K – Fleet Vehicles – Trucks Contract Pricing*, 2022 (web link: https://www.dgs.ca.gov/-/media/Divisions/PD/Acquisitions/Fleet/5-26-22/Attachment-A-Pricing---TRUCKS---Supplement-1.xlsx?la=en&hash=7E79108CCFD2FAF365E15257FD73EE58326C6540, last accessed July 2022).

Region	Model Year	Make	Model	Tech	Class Size	EV Range (mi.)	CA DGS contract pricing[82,83]
USA	2023	Canoo	Electric AWD Pickup Truck	BEV	Standard Pickup	200	
USA	2023	Canoo	Electric Van	BEV	Standard Pickup	250	
USA	2023	Chevrolet	Silverado	BEV	Standard Pickup	400	$39-45k
USA	2023	GMC	Sierra SUV	BEV	Standard Pickup	400	
USA	2023	Lightning eMotors	Zero-Emission Transit Cargo Van	BEV	Van	140, 170	
USA	2023	Lordstown Motors	Van Concept	BEV	Minivan	350	
USA	2023	Mercedes	eSprinter	BEV	Van	225	
USA	2023	Ram	ProMaster	BEV	Van	200	
USA	2023	Rivian	EDV 500, 700, and 900	BEV	Van(s)	120-150	
USA	2023	Shyft Group	Blue Arc Delivery Van	BEV	Van	150-175	
USA	2023	Tesla	Cybertruck	BEV	Standard Pickup	250, 300, 500	
USA	2023	Volkswagen	I.D. Buzz	BEV	Minivan	TBD	
USA	2023	Volkswagen	I.D. Buzz Cargo	BEV	Cargo Van	TBD	
USA	2024	Canoo	MPDV (Multi-purpose Delivery Vehicle)	BEV	Van	90-230	
USA	2024	Ram	1500 Electric	BEV	Standard Pickup	500	
USA	2025	Chevrolet	Electric Cargo Van	BEV	Van	TBD	

Region	Model Year	Make	Model	Tech	Class Size	EV Range (mi.)	CA DGS contract pricing[82,83]
USA	2025	KIA	Mid and Large PBV	BEV	Van(s)	TBD	

Table 3: Europe (MY 2022-2023)[84,85]

Region	Make	Model	Tech Type	Class Size
Europe	Citroen	Jumpy	BEV	Utility Van / Camper
Europe	Fiat	Ulysse	BEV	Large Capacity Van
Europe	Mercedes	Vito	BEV	Utility Van / Camper
Europe	Mercedes	V-Klasse	BEV	Large Capacity Van / Camper/
Europe	Nissan	Nv200	BEV	Utility Van
Europe	Opel	Combo	BEV	Utility Van
Europe	Opel	Zafira Life	BEV	Utility Van / Camper
Europe	Peugeot	Expert	BEV	Utility Van / Camper
Europe	Peugeot	Rifter	BEV	Utility Van
Europe	Toyota	Proace	BEV	Utility Van / Camper
Europe	Volkswagen	Crafter	BEV	Utility Van / Camper
Europe	Volkswagen	Transporter	BEV	Utility Van / Camper
Europe	Volkswagen	Transporter	Gasoline PHEV	Utility Van / Camper

Additional European models are anticipated for near-term release including Mercedes eCitan, Citroen e-Relay, Citroen e-Dispatch, Fiat e-Ducato, Fiat e-Scudo, Nissan Townstar, Peugeot e-Boxer, Renault Master E-TECH, Renault Kangoo E-TECH, Vauxhall Movano-e, Vauxhall Vivaro-e, Vauxhall Combo-e. The Italian Postal service, like USPS, is finding use for

[84] Kraftfahrt-Bundesamt, *Neuzulassungen von Personenkraftwagen nach Marken und Modellreihen*, 2022 (weblink: https://www.kba.de/DE/Statistik/Produktkatalog/produkte/Fahrzeuge/fz10/fz10_gentab.html?nn=3514348, last accessed July 2022).
[85] Kraftfahrt-Bundesamt, *Neuzulassungen von Personenkraftwagen nach Marken und Modellreihen*, 2022 (weblink: https://www.kba.de/DE/Statistik/Produktkatalog/produkte/Fahrzeuge/fz11/fz11_gentab.html?nn=3514348, last accessed July 2022).

plain passenger car BEVs and has ordered[86] 1,744 Corasa-e's on their way to 20 percent fleet electrification this year.[87]

USPS has indicated their need for righthand drive vehicles that are not commonly produced in the US and gone further in the SEIS comment solicitation supplement to indicate a predetermination of ICE powertrains for the proposed 16,000 righthand drive COTS. USPS has provided no basis why these righthand drive COTS must be ICE while proposing to procure BEV lefthand drive COTS. CARB is further concerned that USPS makes a particular point in the SEIS supplement announcement to state "it will be necessary for us to procure some ICE vehicles," a statement that predetermines an outcome before full analysis and a statement with which CARB does not agree. A number of these COTS BEV vehicles or their competitors' equivalents are offered in the United Kingdom and other righthand drive markets [88][89][90][91] whether by directly buying such vehicles or by contracting with their manufacturers to produce these righthand drive variants in the US. Again, an arbitrarily short USPS procurement schedule setting should not be used to preclude procurement of such BEV delivery options. Similarly, USPS should not leverage the long deferred maintenance and replacement of the current fleet to create a false urgency justification of ICE over BEVs. The actual urgency has apparently not been sufficient to force action in each of the similar previous years beyond planned vehicle design life when vehicle replacement did not occur. The USPS demanded vehicle numbers are on a similar size as already caused shifts in automotive manufacturer perspectives on supplying BEV light commercial vehicles. For example, when DHL proceeded with self-manufacture in 2016 after being denied electrification requests by traditional manufacturer it led to public shifts of corporate posture. This included Volkswagen's very public pivot stating they were "annoyed beyond measure"[92] to have been as they said left out of the opportunity they had dismissed, and

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[86] Electrice.com, *21 million more electric vehicles expected worldwide by 2030*, 2019 (weblink: https://www.electrive.com/2021/05/27/italian-postal-services-order-1744-corsa-e-from-opel/ last accessed 6/21/2022, last accessed July 2022)
[87] Transport Intelligence, *Poste Italiane receives 45 electric vehicles at Cuneo distribution centre*, 2022 (weblink: https://www.ti-insight.com/poste-italiane-receives-45-electric-vehicles-at-cuneo-distribution-centre/ last accessed 6/21/2022, last accessed July 2022)
88 Electrek, *Tesla is surprised by demand for Model Y in right-hand drive markets, will increase production*, 2022 (web link: https://electrek.co/2022/06/13/tesla-demand-model-y-right-hand-drive-markets-increase-production/, last accessed July 2022).
[89] InsideEVs, *UK: DPD Ordered 1,000 Ford E-Transit Electric Vans*, 2022 (web link: https://insideevs.com/news/584340/uk-dpd-ordered-1000-ford-etransit/, last accessed July 2022).
[90] Electrive, *DHL Parcel UK buys 50 Mercedes eSprinter Vans*, 2021 (web link: https://www.electrive.com/2021/10/27/dhl-parcel-uk-buys-50-mercedes-esprinter-vans/, last accessed July 2022).
[91] Fleet Europe, *Arrival gears up for first deliveries of e-LCVs*, 2022 (web link: https://www.fleeteurope.com/en/connected/europe/features/arrival-gears-first-deliveries-e-lcvs?a=JMA06&t%5B0%5D=LeasePlan&t%5B1%5D=Electric%20%26%20Connected&t%5B2%5D=LCVs&curl=1 last accessed 7/2022).
[92] Automotive News Europe, *Deutsche Post upsets VW 'beyond measure' by dropping Caddy for its own electric van*, 2016 (weblink: https://europe.autonews.com/article/20161007/ANE/161009888/deutsche-post-upsets-vw-beyond-measure-by-dropping-caddy-for-its-own-electric-van, last accessed July 2022)

then fielding a number of BEV vans and other models since. (While included as an illustration of a package delivery company driving BEV manufacturing and doing so already several years ago, one would be remiss to not underscore that these exact vehicles are now available in the US and Canada.) USPS should not discount the opportunity to seek COTS or USPS-specific COTS variants whether lefthand or righthand drive.

USPS should carefully consider the direct and operational costs and emissions impacts of extending the lives of current long life vehicles (LLV) and flex fuel vehicles (FFV) as indicated by the USPS stated intent to "to make significant investment in the repair of over 50,000 aging LLVs and FFVs each year to continue extending their useful life, despite the significant operational risk, considerable maintenance costs, and the higher emissions of greenhouse gases and other air pollutants when compared to more modern vehicles." The apparent USPS intent to exclude the significant limitations of these outdated vehicles from the environmental analysis while significantly extending their operational lives is quite concerning. These LLV and FFV shortcomings should motivate acceleration of fleet electrification rather than a justification for further outdated ICE operation.

Infrastructure costs to serve USPS delivery vehicles can be modeled based on information within the ACC II regulation's Staff Report, where values of $200 for a charging cord and $680 for site upgrades per vehicle are used.[93] This costing did not account for the economies of scale achieved when installing many charge points at a single location or potential service upgrade costs that may act in the other direction for those subset of sites that actually require additional electrical service capacity upgrades. These CARB-analyzed ACC II infrastructure costs are called out here because of the similar vehicle size and short daily mileage of the USPS delivery application's similarity to typical large passenger cars and light duty trucks. As mentioned above, Royal Mail is spending an average of £2,300/van on infrastructure across a 5,500 BEV van deployment. Permit filings by Amazon for one of the projects noted above indicates an average just over $10,000/Level 2 charge point for that 335 charger site retrofit project which likely includes upstream grid infrastructure like transformers and high voltage distribution bringing power into the site. As noted above such Level 2 charging may not be required for every USPS delivery vehicle whether through sharing or use of Level 1 charging that could cover many daily mileage needs. For USPS owned, leased and contracted vehicles larger than typical mail delivery vehicles such as Class 4-8 box and vocational trucks, Class 7-8 tractors and terminal tractors, even more capable infrastructure was analyzed in the ACT regulatory development.[94,95] CARB points USPS to resources developed over the last year on commercial fleet infrastructure issues via several

[94] California Air Resources Board, *Public Hearing to Consider the Proposed Advanced Clean Trucks Regulation - Staff Report: Initial Statement of Reasons*, 2020 (https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2019/act2019/isor.pdf, last accessed July 2022).
[95] California Air Resources Board, *Draft Advanced Clean Fleets Total Cost of Ownership Discussion Document*, 2021 (weblink: https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf, last accessed July 2022).

public workgroups on the topic.[96,97] To evaluate electricity costs, USPS should use information analogous to what CARB included in its charging cost calculator tool to carefully consider the potentially strong interaction between utility rate structures and user selected charging infrastructure strategies to avoid inflated SEIS BEV cost estimations.[98]

In addition to analyzing right-sized infrastructure strategies appropriate for the actual vehicles and their use profiles, USPS should factor in state and local utility charging infrastructure assistance programs as part of their analysis. Many utilities are in the process of setting up or have set up fleet electrification programs designed to accelerate transportation electrification. For example, California's three largest investor-owned utilities have been approved to invest roughly $740 million in transportation electrification by 2023 to promote the deployment of medium- and heavy-duty ZEVs through incentivizing infrastructure upgrade projects that offset most or all the costs for electrical service upgrades. USPS is eligible to receive funding for ZEVs or their supporting infrastructure through the Carl Moyer program from the state's air districts. The California Energy Commission has launched the Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles program, or EnergIIZE, which provides incentives for ZEV infrastructure equipment for medium- and heavy-duty battery electric and hydrogen fuel cell vehicles in California.[99]

Conclusion

We appreciate the opportunity to provide feedback on the upcoming SEIS. The additional information and suggested modifications are critical to create a robust, factual analysis. Significant public health and climate mitigation benefits will be realized from a fleet that must shortly compete with committed electrifying competitors including UPS, FedEx, DHL, Amazon, and others. Such prompt electrification is in the aligned interests of urgent public health, federal technology leadership, and securing the viability of the USPS going forward.

[96] California Air Resources Board, *Virtual Medium and Heavy-Duty Infrastructure Workgroup Meetings (govdelivery.com)* 2021 (weblink: *https://content.govdelivery.com/accounts/CARB/bulletins/2fc61e9*, last accessed July 2022)
[97] California Air Resources Board, *Medium and Heavy-Duty Zero-Emission Vehicle Fueling Infrastructure Forum - YouTube*, 2021 (weblink: *https://www.youtube.com/playlist?list=PLSOs1pufasEbvJRZG9SS2YvoXDy6DO0qz*, last accessed July 2022).
[98] California Air Resources Board, *Battery-Electric Truck and Bus Charging Cost Calculator | California Air Resources Board*, 2018 (weblink: https://ww2.arb.ca.gov/resources/documents/battery-electric-truck-and-bus-charging-cost-calculator, last accessed July 2022).
[99] California Energy Commission, *EnergIIZE Commercial Vehicles*, 2022 (weblink: https://www.energiize.org/, last accessed July 2022).

For more information or questions, please contact me at *Craig.Segall@arb.ca.gov*.

Sincerely,

Craig Segall, Deputy Executive Officer

cc: Mr. Davon Collins, Environmental Counsel
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William Robertson, Ph.D., Vehicle Program Specialist, Mobile Source Control Division

From:	Maxwell Woody
To:	NEPA
Subject:	[EXTERNAL] RE: Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement
Date:	Monday, August 15, 2022 11:38:24 PM

Mr. Davon Collins
Environmental Counsel
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Washington, DC 20260-6201

RE: Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement

Dear Mr. Collins,

Thank you for the opportunity to provide comments on the forthcoming supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement (FEIS). There are several significant scientific flaws in the FEIS that will hopefully be corrected in this supplement. As a research specialist at the University of Michigan Center for Sustainable Systems, I worked with colleagues to conduct an independent assessment of the greenhouse gas (GHG) emissions of the vehicle acquisition scenarios investigated in the FEIS. Those results and the associated methods will be published in full in the Journal *Environmental Science & Technology* under the title "Life Cycle Greenhouse Gas Emissions of the USPS Next Generation Delivery Vehicle Fleet" in August 2022. Critical sections of the results are shown and summarized in this comment.

Our model includes several improvements from the analysis used in the USPS FEIS. First, we quantify vehicle life cycle emissions, which encompass vehicle materials, manufacturing, use phase (operation and service), and end-of-life management, rather than only use phase emissions. Second, we include projections of how the electricity grid may change over the lifetime of the vehicles. Third, we use a more accurate method than the USPS to calculate vehicle operating emissions, relying on fuel economy and fuel combustion intensity rates rather than per mile emissions rates. We supplement our analysis with alternative scenarios based on different vehicle parameters and future projections of electric grid energy sources. In our base case, we find the ICEV and BEV scenarios would result in 15% greater and 8% fewer GHG emissions, respectively, than the USPS estimate. Favorable vehicle and grid development would result in 63% lower BEV scenario emissions than the USPS estimate. Consequently, we calculate a cumulative lifetime emissions reduction of 57-82% (14.7-21.4 Megatonnes (Mt) CO_2e) from procuring 100% BEVs instead of 10% BEVs, compared to the USPS's estimate of 10.3 Mt – a concerning discrepancy.

There are several reasons why our results differ significantly from the USPS FEIS. We include emissions from the materials, assembly, and disposal of the vehicles. This increases the emissions for both vehicle powertrains, but more so for the BEV. Conversely, the BEV has much lower operating emissions, especially once grid decarbonization is considered. For grid emissions, the USPS FEIS uses 403 kg CO_2e/MWh, based on the national average in 2019 from eGRID. However, the NGDVs will slowly phase in through 2032 and operate for 20 years on average thereafter. Therefore, we use future grid emissions factors that decline from 402 kg CO_2e/MWh to 215 kg CO_2e/MWh between 2024 and 2050 in our base case based on the National Renewable Energy Laboratory's business-as-usual scenario in the Cambium model.

Over the lifetime of all vehicles from 2023 to 2052, we project the 90% ICEV NGDV fleet to emit approximately 25.9 Mt CO_2e. This is 15%, or 3.4 Mt, greater than the USPS estimate. The USPS reports significantly lower direct (from combustion) use phase emissions from the ICEV NGDV than shown in our model. This is because the USPS uses a per mile GHG emissions estimate from the MOVES model of 323 g CO_2e/mile for a light commercial truck (FEIS Table F-4.a). We use a combustion intensity for gasoline of approximately 8.65 kg CO_2e/gallon, which along with a fuel economy of 8.6 miles/gallon results in direct emissions of 1,005 g CO_2e/mile. This is over three times the direct emissions estimate in the USPS FEIS.

This discrepancy is largely offset by the USPS' significantly higher upstream (indirect) use phase emissions estimate for the ICEV NGDV. The USPS uses an estimate of 769 g CO_2e/mile for the upstream emissions of the fuel, based on a light heavy duty vocational vehicle in GREET (FEIS Table F-6.f). Our estimate of upstream emissions again relies on the fuel economy of the vehicle (8.6 miles/gallon), and the upstream emissions of gasoline (2.03 kg CO_2e/gallon), resulting in an estimate of 236 g CO_2e/mile. It is possible that the USPS' application of the light commercial truck within MOVES for direct combustion emissions and the light heavy duty vocational vehicle within GREET for upstream emissions are not appropriate for the ICEV NGDV.

In our base case, we project the 100% BEV NGDV fleet to emit approximately 11.2 Mt CO_2e. This is 8%, or 1.0 Mt, less than the USPS estimate. With 95% grid decarbonization by 2050 and by 2035 the 100% BEV fleet would emit roughly 9.1 and 5.7 Mt CO_2e, respectively, 25% and 53% less than the USPS estimate.

Though our emissions results and USPS emissions values are on the same order of magnitude, the details of the USPS FEIS seem to have significant miscalculations and vary greatly from the established literature on vehicle life cycle assessments. For example, the USPS asserts that the majority of ICEV GHG emissions are the result of upstream processes rather than combustion of the fuel (shown in FEIS Tables F-3.a and F-6.a). In fact, the opposite relationship is well established in academic literature – including the same GREET model used by the USPS. Furthermore, the USPS estimate of 323 g CO_2e/mile of direct combustion emissions for the ICEV NGDV is irreconcilable with their fuel economy estimate of 8.6 miles/gallon and the combustion intensity of gasoline (8,645 g CO_2e/gallon), which would indicate direct combustion emissions of 1,005 g CO_2e/mile. Finally, ignoring the vehicle cycle excludes a significant portion of the total emissions, especially as the grid decarbonizes.

In conclusion, the USPS underestimates the emissions of ICEVs and overestimates the emissions of BEVs. Our emissions estimate of a 14.7 – 21.4 Mt CO_2e difference between the 90% ICEV fleet and the 100% BEV fleet is significantly larger than the USPS' 10.3 Mt CO_2e. Though the USPS now plans to purchase at least 40% BEVs, these flawed methods should be corrected in the supplement to the FEIS. Furthermore, as BEVs are suitable for approximately 95% of USPS routes, a BEV percentage much higher than 40% should be pursued. Each gas vehicle purchased locks in infrastructure for at least twenty years, falling behind private vehicle fleets and driving future GHG emissions that could be dramatically reduced by greater BEV deployment. Given the long lifetimes expected of these vehicles, committing to such a course contradicts US climate policy and environmental justice goals, squanders an opportunity to deploy BEVs in an ideal use case, exposes a lack of sustainability leadership, and jeopardizes our ability to meet national and international climate targets.

Sincerely,

Maxwell Woody

Research Area Specialist, Center for Sustainable Systems
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August 4, 2022

Via E-mail
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Re: Comments on the Postal Service's Notice of Intent to Prepare a Supplemental EIS in Connection with the Agency's Acquisition of Next Generation Delivery Vehicles

Dear Mr. Collins:

On behalf of our client the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America, ("UAW"), we submit the following comments on the United States Postal Service's ("USPS") Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicle ("NGDV") Acquisitions Final Environmental Impact Statement ("FEIS"). *See* 87 Fed. Reg. 35,581. We explicitly incorporate by reference UAW's previous comments on the Postal Service's Draft EIS ("DEIS") and FEIS. *See* Attachments 1 & 2 (without their original attachments that USPS already has in its possession). Because UAW has previously supplied USPS with extensive background information regarding both the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321-4347, and the relevant facts, UAW below provides only brief comments raising the most glaring aspects of USPS's notice to prepare a supplemental EIS ("SEIS").

As explained in UAW's prior comments and in more detail below, UAW has grave concerns about USPS's acquisition of NGDVs that are produced using non-union labor, as well as the agency's compliance with federal law in deciding how to manufacture and acquire this large quantity of vehicles. Nothing in USPS's notice to prepare an SEIS suggests that the agency has any good faith intention of analyzing—let alone resolving in a manner favorable to UAW and its members—the concerns UAW has repeatedly raised about union labor, environmental, social, or economic impacts that USPS failed to consider before entering into a massive contract for the first purchase order of NGDVs.

DISCUSSION

Although UAW commends USPS for its decision to prepare an SEIS—as UAW has long called for in its DEIS and FEIS comments—it is clear from USPS's notice that the agency views this SEIS as an opportunity merely to shore up a severely deficient administrative record in the

course of active litigation (including a case filed by UAW challenging USPS's Record of Decision ("ROD") and FEIS), rather than a serious effort to address all relevant concerns raised by the public with respect to the FEIS. Accordingly, as explained below, UAW does not view the narrowly tailored proposed SEIS as an appropriate vehicle to address myriad important issues that USPS has repeatedly failed to address under NEPA.

In its notice, USPS states that the SEIS will only "address the three consideration[s] that have developed since the NGDV FEIS and Record of Decision." 87 Fed. Reg. at 35,581. USPS then limits the scope of the SEIS to analyzing: (1) "potential delivery network refinements and route optimization efforts being considered" and whether this change "warrant[s] an increase in the number of BEV [battery electric vehicle] NGDVs to be procured under the Proposed Action"; (2) "the potential impacts of replacing the remainder of [USPS's] fleet with a combination of NGDV and Commercial Off-the-Shelf (COTS) vehicles"; and (3) "the potential impacts from replacing other aged and high-maintenance" vehicles, in addition to the Long Life Vehicles and Flexible Fuel Vehicles considered for replacement in the FEIS. *Id.* Nowhere in the notice does USPS suggest that it will consider alternatives of procuring any vehicles produced by union labor, nor does USPS suggest that it will examine any broader socioeconomic or environmental impacts resulting from its procurement decisions. Nor, for that matter, does USPS indicate that it will withdraw the ROD or suspend its prior order to Oshkosh Defense to procure 50,000 NGDVs from a non-union facility located in South Carolina. There are several troubling concerns with USPS's notice, which raise serious questions about USPS's NEPA compliance.[1]

First, USPS is violating the letter and spirit of NEPA by acknowledging that a supplemental EIS is required, but nevertheless refusing to withdraw or at least suspend the Record of Decision and USPS's order for 50,000 NGDVs until the agency completes its SEIS. As courts have explained, "[s]uch a strategy is contrary to the purpose of NEPA, which seeks to ensure that the government looks before it leaps." *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 282 F. Supp. 3d 91, 106 (D.D.C. 2017). However, USPS is doing exactly the opposite here—it has already leaped by placing a major procurement order for 50,000 NGDVs, without completing its "hard look" of the issues that will be contained in the SEIS, or *any* look at certain issues such as those regarding social, economic, and union versus non-union labor matters. Accordingly, to bring its actions into compliance with NEPA and the express purposes underlying the statute, UAW urges USPS to immediately withdraw its ROD and suspend all contracts and orders for NGDV procurement, pending completion of the SEIS.

Second, in the absence of ROD withdrawal and suspension of USPS's procurement order, USPS will be committing even more flagrant violations of NEPA, by failing to complete a mandatory NEPA process prior to an irreversible and irretrievable commitment of additional

[1] On July 20, 2022, USPS announced that it was adjusting the scope of its SEIS and limiting its decision to the 50,000 NGDVs already purchased by the agency. *See* USPS, *Postal Service Modernization Enables Expanded Electric Vehicle Opportunity* (July 20, 2022), https://about.usps.com/newsroom/national-releases/2022/0720-postal-service-modernization-enables-expanded-electric-vehicle-opportunity.htm. Nothing in that announcement changes the serious concerns that UAW has repeatedly raised in prior comments and that UAW reiterates in this letter.

resources by the agency. These concerns are heightened by the fact that USPS has *already* irreversibly and irretrievably committed large sums of taxpayer money to this action, as explained in detail in UAW's DEIS and FEIS comments. *See* Attachments 1 & 2. This also further underscores what UAW has previously explained in its detailed comments—i.e., that USPS predetermined this outcome long before finalizing the FEIS and ROD, and once again has no intention of seriously considering new alternatives to the actions prior to completing the SEIS. USPS's approach to NEPA has been result-oriented from the start, designed to reach a predetermined outcome—as made clear in the agency's already executed procurement order. However, the NEPA process cannot be used to rationalize or justify a decision already made by the agency. *See, e.g.*, 40 C.F.R. § 1502.2(g) (EISs "shall serve as the means of assessing the environmental impact of proposed agency actions, *rather than justifying decisions already made*."). A supplemental NEPA review of a decision already made does not cure this fatal defect. Here, it is plain from USPS's notice that its decisions—including the selected contractor and location for manufacturing NGDVs with hundreds of millions of federal dollars—are *already set in stone*, and nothing in the SEIS will reconsider or address those issues in any meaningful way. That is the textbook definition of using the SEIS process to rationalize decisions that the agency has already made, in patent violation of NEPA.

Third, unless USPS dramatically expands the scope of the SEIS, UAW views the SEIS as essentially a sham process designed to support USPS optically in pending litigation without seriously considering a full array of alternatives and impacts in the manner required by NEPA. Indeed, UAW has repeatedly raised grave concerns with USPS's prior failure to evaluate alternatives and impacts of significant environmental and socioeconomic importance. *See* Attachments 1 & 2. Yet, even after UAW filed suit raising those legal violations in federal court, USPS has not indicated that the SEIS will address those issues *at all*. In short, if USPS once again refuses to consider the impacts of and alternatives to its proposed (in fact, existing) order for production of NGDVs, it will only further compound the obvious NEPA violations that UAW has twice before identified to the agency.

Fourth, at minimum, insofar as USPS's SEIS contemplates consideration of other aged and high-maintenance USPS vehicles not originally considered in the FEIS, UAW requests the same consideration for those vehicles that it has repeatedly requested for NGDVs—USPS must consider the impacts of and alternatives to procuring these new vehicles using American union labor versus other options, along with the consequent environmental, social, and economic impacts resulting from various options for production and procurement. In the absence of such an examination, USPS will commit the same legal errors with respect to these vehicles that it did for NGDVs and once again flunk NEPA's hard look standard.

CONCLUSION

Although UAW appreciates USPS's willingness to prepare a supplemental EIS, UAW is extremely disappointed that USPS is using this opportunity to once again sidestep important issues that matter to UAW, its many members, and American citizens. The federal procurement of NGDVs not only will cost taxpayers billions of dollars, but these vehicles will be prominent in our neighborhoods and society for decades to come. UAW urges USPS to reconsider the unduly

narrow scope of its SEIS, and to instead analyze all relevant issues that have been raised to the agency at the DEIS, FEIS, and SEIS stages.

Respectfully submitted,

William S. Eubanks II
Elizabeth L. Lewis
EUBANKS & ASSOCIATES, PLLC

Counsel for UAW

The Climate Reality Project®

August 12, 2022

Environmental Counsel
United States Postal Service
Document Number 2022-15616
475 L'Enfant Plaza SW, Office 6606,
Washington, DC 20260-6201

Dear Mr. Davon Collins,

On behalf of nearly 13,000 Americans who want to improve their communities' health and protect the planet we share, The Climate Reality Project urges you to increase your commitment to purchasing battery electric vehicles for your fleet of Next Generation Delivery Vehicles from 40% to as close to 100% as possible.

We have attached the comment letter we have asked our followers, friends, and volunteers in the region to sign as well as each signatory's name. As you tablulate the number of comments, we hope you count each and every one of these signatories as an individual comment.

Thank you for your attention.

Sincerely,

Shabd Singh
Lesgislative Advocacy Manager
The Climate Reality Project

555 11th Street, NW, Suite 601
Washington, DC 20004

202-567-6800

www.climaterealityproject.org

Document Number 2022-15616

Dear Mr. Davon Collins,

While I am heartened to hear that the new US Postal Service fleet will include more electric vehicles than initially planned, I'm writing to demand the fleet be as close to 100% electric as possible.

At a time when climate change is devastating communities across the nation, investing in gas-powered vehicles that lock in carbon emissions for years to come is the wrong choice for the planet, for the nation, and for taxpayers.

We know that pollution from fossil-fueled transportation is the largest single source of climate pollution in the United States – and transportation pollution is also making us sick. In fact, exhaust from cars is responsible for up to 4 million new cases of pediatric asthma each year globally.

It's also an issue of justice. Another study by the Union of Concerned Scientists showed that African Americans and Latinos are exposed to roughly 40% more air pollution from vehicles than white people in California.

It's critical that the new fleet to be as close to 100% electric as possible and this Supplemental Environmental Impact Statement provides a good opportunity to revisit your previous analysis.

Sincerely,

r	a	NY
Pat	A	IL
Rita	A	CA
Mike	A	CA
J	A	OH
Glory	A	NY
Julie	A Putney	WI
Rosemary	A Seifert-Graf	MA
Lauren	A.	NY
Harald and Liv	Aamodt	PA
Harald	Aamodt	PA
Johanna	Abate	CA
Ibn-Umar	Abbasparker	NJ
Linda	Abbott	NY
Katie	Abbott	OR
G D	Abbott	WA
Basil	Abbott	TX
Barry	Abel	MA
Judith	Abel	KS
Mimi	Abers	CA

(Additional names listed in letter received)

August 15, 2022

Mr. Davon Collins, Environmental Counsel
United States Postal Service
475 L'Enfant Plaza SW, Office 6606
Washington, DC 20260-6201

NRDC's Comments on the U.S. Postal Service's Notice of Intent to Prepare a Supplemental Environmental Impact Statement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement

Dear Mr. Collins:

The Natural Resources Defense Council (NRDC) appreciates the opportunity to comment on the U.S. Postal Service's (USPS) Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement (SEIS).[1] NRDC is a national non-profit organization founded in 1970 dedicated to protecting public health and the environment, with more than 3 million members and activists nationwide. NRDC works in both state and federal forums to reduce emissions from both the electric sector and transportation sector, the latter of which is a sector that accounts for the largest share of greenhouse gas (GHG) emissions in the United States. Additionally, this sector is responsible for emissions of large quantities of health-harming air pollutants, like nitrogen oxides (NOx), which contribute to the formation of particulate matter pollution and ground-level ozone, and lead to soot and smog.

In January of 2015, the Postal Service began the process of replacing its aging delivery vehicle fleet of roughly 212,000 vehicles. This fleet is largely comprised of vehicles that were specifically designed and built for the Postal Service's delivery operations, in the case of some vehicles, over 30 years ago. This process unlocked a key opportunity for the Postal Service to

[1] 87 Fed. Reg. 35,581 (June 10, 2022); 87 Fed. Reg. 43,561 (July 21, 2022) (extending public comment period).

substantially mitigate the harmful transportation-related pollution caused by its operations. Instead of embracing this and prioritizing investments in the electrification of its fleet, the Postal Service issued funding and a ten-year contract to Oshkosh Defense ("Oshkosh") for the purchase of up to 90 percent of internal combustion engine (ICE) vehicles, doing so prior to conducting the National Environmental Policy Act (NEPA) mandated evaluation of the environmental impacts of this action.

The Postal Service's replacement of its aging delivery fleet over the next ten years is vital to public safety, minimizing fuel and maintenance costs, reducing GHG emissions, and addressing air pollution. For this reason, NRDC welcomes the opportunity to provide comment on additional considerations that should be addressed in a SEIS, as the Postal Service expands the criteria for the vehicles it intends to replace alongside the planned replacement of the Long Life Vehicles (LLV) and Flexible Fuel Vehicles (FFV), that the agency previously sought comment on in its August 2021 NGDV Draft Environmental Impact Statement (DEIS).

The way in which the Postal Service conducted its original environmental review was deficient at every step. The agency received comments and feedback from multiple entities critical on this very point, urging them to avoid issuing a final decision that would be based on obsolete data, would ignore the latest in vehicle technology advancements, would make use of inflated costs, and would misrepresent benefits. Despite this, on January 7, 2022, the Postal Service issued the NGDV FEIS committing to the purchase plan laid out in the preferred alternative. Then in the months following this decision, the agency proceeded to alter its "preferred alternative" multiple times to adjust the mix of ICE and Battery Electric Vehicle (BEV) powertrains in the NGDV contract from 10 percent, to 20 percent, to not less than 50 percent of a smaller acquisition of NGDVs, further highlighting the baselessness on which its original analysis lied upon. Although these continuous shifts have gone in the right direction, they continue to make clear that the concerns shared by multiple parties about the agency's previously preferred procurement strategy were merited, including that the current commitments would have also been possible under the agency's previous financial condition and that this would have been known by the agency much earlier had a more thorough review been conducted initially.

Additionally, since most of NRDC's comments on the deficiencies within the DEIS for the Purchase of NGDVs were inadequately addressed by the Postal Service when they previously engaged in this acquisition process, this submission will also include additional information to both supplement our original comments on the DEIS and to provide new information to the record.

Failure to maximize the number of battery electric vehicles (BEVs) in the Postal Service's fleet will lock in decades of fossil fuel vehicles operating in communities across America, resulting in higher maintenance and fuel costs, worse air quality, and increased climate impacts. Therefore, the Postal Service must use the supplemental review process to redo the original NGDV procurement environmental review to improve accuracy and comply with NEPA requirements and address the additional considerations it has identified since issuing the NGDV FEIS and Record of Decision.

The Postal Service Needs to Redo the NGDV EIS

The Postal Service manages one of the largest civilian fleets in the world.[2] It owns and operates a fleet of roughly 212,000 delivery vehicles, most of which were designed and built specifically for the agency. These purpose-built vehicles have exceeded their expected service lives, average over $5,000 per vehicle in annual maintenance costs, and lack basic safety features such as airbags and anti-lock brakes. Shifting delivery needs, including increases in parcels and decreases in letter volume, also no longer match the purpose for which the vehicles were designed.

For these reasons, it is important that the Postal Service replace these vehicles, but only do so after fully conducting a NEPA-compliant environmental review, that makes use of accurate and current data and supported assumptions and trends, and that evaluates reasonable alternatives to its "Preferred Alternative," as described in the NGDV FEIS. The Postal

[2] USPS operates 231,541 vehicles in the United States. *See* United States Postal Service, *Postal Facts.* Available at: https://facts.usps.com/postal-service-has-more-than-200000-vehicles/

Service's original analysis failed to do this, as pointed out in our comments filed on October 18, 2021, for the NGDV DEIS, as well as by others.

For example, since NRDC submitted comments on the DEIS, the Postal Service has received correspondence from both the U.S. Environmental Protection Agency (EPA)[3] and the White House Council on Environmental Quality (CEQ)[4] – two federal entities with expertise in conducting environmental analyses – expressing serious concerns about the USPS' procurement process and its flawed approach to its environmental review for the NGDV contract.

EPA found that the Postal Service's DEIS was "inadequate and preclude[d] meaningful consideration of the proposed action and alternatives," and directed the Postal Service to address several deficiencies it identified and to make a new DEIS available for public. Certain deficiencies identified by the EPA included the fact that the contract was awarded prior to the NEPA process, that critical features of the contract were not disclosed in the EIS, that certain data and economic assumptions were missing in the EIS, and that the EIS failed to consider a single feasible alternative to the proposed action.

Following the release of the FEIS, EPA determined that the Postal Service's FEIS was inconsistent with the requirements of NEPA and its implementing regulations, specifically highlighting deficiencies, such as the FEIS not disclosing essential information underlying the key analysis of Total Cost of Ownership (TCO), in addition to finding fault with the analysis' underestimated GHG emissions, its failure to consider more environmentally protective feasible alternatives, and that the analysis inadequately considered impacts on communities with environmental justice concerns.[5] CEQ also found similar deficiencies, and on February 2, 2022, sent a letter to the Postal Service communicating "grave concerns" with the adequacy of the

[3] Arroyo, Vicki. "*EPA Letter to USPS*." Washington: U.S. EPA, February 2, 2022. https://context-cdn.washingtonpost.com/notes/prod/default/documents/cb839d93-acf3-4390-8106-508a98e25b48/note/2b41bc0f-ccdb-4107-b59c-afdbd475640c.#page=1

[4] Mallory, Brenda. "*CEQ Letter to USPS*." Washington: White House Council on Environmental Quality, 2 Feb. 2022. https://www.whitehouse.gov/wp-content/uploads/2022/02/USPS_letter_02022022.pdf

[5] Arroyo (n3).

agency's environmental review for the procurement of its NGDVs and echoed EPA's calls for a SEIS.[6]

Additionally, the U.S. Postal Service's Office of Inspector General ("Inspector General") released a March 2022 report[7] that detailed the suitability and benefits of electric vehicles for the USPS' long-term delivery needs. This report arrived at conclusions on route suitability, potential long-term cost savings, and other conclusions that ran contrary to those in the Postal Service's Record of Decision which rejected a higher percentage of BEV deployment as being a viable option – a point the Postal Service has since backtracked on. Most notably, the Inspector General's report affirmed that "electric vehicle technology is capable of meeting the Postal Service's needs," and that the adoption of electric delivery vehicles could save the agency money in the long-term,[8] especially given that the total cost of ownership of electric fleets is lowered by the lower maintenance costs of BEVs compared to ICE vehicles, the increased uptime for the overall fleet, and the assortment of financial incentives that exist at the state and federal level to promote electric powertrain technology – especially in the medium- and heavy-duty sectors.

Furthermore, lawmakers in Congress have also raised numerous concerns with the EIS and the overall process that the Postal Service engaged in when conducting its initial analysis. These concerns resulted in congressional oversight actions – including an April 5, 2022, U.S. House of Representatives Oversight and Reform Committee hearing,[9] public statements from lawmakers urging the agency to reevaluate its flawed analysis, a congressional oversight committee letter requesting the Inspector General review the Postal Service's compliance with NEPA,[10] and other actions to try and seek a remedy for their concerns. While many of these

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[6] Mallory (n4).
[7] "*RISC Report on Electric Delivery Vehicles and the Postal Service*." Arlington: Office of the Inspector General USPS, March 17, 2022. https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf
[8] Ibid., 1.
[9] "*It's Electric: Developing the Postal Service Fleet of the Future.*" It's Electric: Developing the Postal Service Fleet of the Future. House Committee on Oversight and Reform, April 5, 2022. https://oversight.house.gov/legislation/hearings/it-s-electric-developing-the-postal-service-fleet-of-the-future.
[10] "*Letter to USPS on NGDV EIS and NEPA Compliance.*" Washington: House Committee on Oversight and Reform, March 14, 2022. https://oversight.house.gov/sites/democrats.oversight.house.gov/files/2022-03-14.CBM%20et%20al.%20to%20Whitcomb-USPS%20IG%20re%20USPS%20NEPA%20Compliance.pdf

concerns appeared to go ignored by Postal Service leadership, the concerns related to the agency's compliance with NEPA during the procurement process did make its way up, and the Inspector General indicated in its report that the office will be doing additional work in response to the request.

The Postal Service has not revoked the record of decision or Final EIS, and work continues under the contract with Oshkosh. This ongoing work unlawfully limits the alternatives available to the Postal Service in the SEIS. According to Oshkosh, the Postal Service *cannot modify* its initial order of 5,000 delivery vehicles to be produced in the first year of the contract, and that initial batch will consist of 4,000 gas-powered vehicles and 1,000 electric vehicles.[11] That irretrievable commitment of resources forecloses the Postal Service from considering a 100% electric fleet as an alternative in the SEIS process. If the Postal Service intends to purchase 50,000 vehicles from Oshkosh under this SEIS process, as it has announced,[12] the maximum percentage of EVs in that fleet could only be 92%. However, the Postal Service should consider a 100% EV alternative for the 50,000 NGDVs to comply with NEPA's requirement to evaluate alternatives. Additionally, Oshkosh has explained that the Postal Service has only until March 2023 to modify the mix of EVs and gas-powered vehicles for the remaining 45,000 vehicles in the order without causing production delays.[13] Unless the Postal Service can complete the SEIS before that time or takes actions to change that deadline, such as by revoking the record of decision, the Postal Service may have further locked in its decision on the vehicle mix before completing the legally required NEPA review.

The flawed record of decision did repeatedly make one important point that the Postal Service should now honor—that the "Postal Service will acquire more BEV NGDVs should additional funding become available."[14] In the FEIS, the Postal Service explained that

[11] *See* Quigley Decl., ¶ 18, *NRDC v. DeJoy*, No. 22-cv-3442-AT, ECF No. 42 (S.D.N.Y. July 12, 2022).
[12] "*Next Generation Delivery Vehicle (NGDV) Supplemental Environmental Impact Statement Scoping.*" U.S. Postal Service, July 20, 2022. https://uspsngdveis.com/.
[13] *See* Quigley Decl., ¶ 18.
[14] ROD at 1-2; *see also id.* at 2 ("the acquisition of more BEV NGDV should additional funding become available"); *id.* at 3 ("[T]he Postal Service has ensured flexibility to increase the number of BEVs purchased to account for changing circumstances, such as the receipt of additional funding from whatever source."); *id.* at 5 (describing flexibility to purchase more EVs "through the receipt of additional funding").

"additional funding" could close the gap to allow for a fully electric fleet, noting a $2.3 to $3.3 billion gap.[15] And the Postal Service explained it "would accelerate its electric vehicle strategy by increasing the percentage of BEV powertrains if . . . it receives additional funding for this purpose."[16] According to the FEIS, the Postal Service would be able to "reduce environmental impacts . . . through the acquisition of more BEV NGDVs should additional funding become available."[17] Upon passage of the Inflation Reduction Act, the $3 billion in additional funding the Postal Service indicated it needed to go fully electric and reduce the environmental impacts of its fleet was allocated for this purpose.[18] The Postal Service must stick to its word and use this funding to increase its percentage of electric vehicles; and even on the flawed original analysis this amount should be sufficient for the Postal Service to adopt a fully electric delivery fleet, rather than the 40 percent BEV fleet the agency expects it will procure. To be clear, all of this additional funding from Congress should be supplementary to the funding needed to meet the Postal Service's commitment of 40 percent BEVs, rather than supplant the funding the agency previously dedicated to hitting this minimum fleet mix target.

For these reasons and more, it is important that the Postal Service correct the original analysis and the underlying assumptions in that analysis, including by revoking the record of decision and Final EIS to avoid unlawfully limiting the range of alternatives in the SEIS process, prior to beginning its review of new considerations that have developed that affect its overall fleet procurement strategy.

[15] FEIS at i.
[16] *Id.* at 3-1.
[17] *Id.* at 7-1.
[18] *See Inflation Reduction Act of 2022*. Bill (2022). Sec. 70002

Potential Delivery Network Refinements and Route Optimization Efforts

One of the considerations that the Postal Service seeks comment on is the following:

> *"In response to potential delivery network refinements and route optimization efforts being considered for the postal delivery network, the SEIS would analyze the potential impacts to the delivery fleet from such changes, including whether the changed route length and characteristics warrant an increase in the minimum number of BEV NGDVs to be procured under the Proposed Action set forth in the FEIS."*

As the Postal Service prepares to acquire a new delivery fleet, make refinements to its current delivery network and routes, and begin to analyze the potential environmental impacts of the updated preferred alternative for its procurement strategy, the agency should take a thorough look at the considerable variation among delivery routes and other factors (such as route length, local energy prices, the ratio of charges to vehicles and other points raised in these comments) that can make a route either more or less suitable to BEV deployment. For example, in Table 2 in Appendix C of the FEIS, the Postal Service has detailed data on which LLVs are the oldest and incurring the highest maintenance costs and thus should presumably be the highest priority to replace.[19] By cross-referencing this data with an analysis of which routes are easiest to electrify, the Postal Service could outline a vehicle replacement schedule coupled with BEV deployment that maximizes cost reduction benefits. Identifying easy to electrify routes could be based on a few simple variables such as route length, duty cycle, and operational environment.

Additionally, incorporating staggered deployment over the next ten to fifteen years as BEV technology improves and upfront costs decline will more accurately reflect the long-term benefits of BEVs. We are pleased that the Postal Service has acknowledged this and intends to keep this in mind as a part of the agency's updated procurement strategy, since as correctly noted by the agency, there will be changes to the cost profile and market availability of current

[19] "*Final Environmental Impact Statement.*" Washington: United States Postal Service, December 2021. https://uspsngdveis.com/documents/USPS+NGDV+FEIS_Dec+2021.pdf

and future BEV technology.[20] This is especially notable given the steps that the United States has taken towards addressing battery supply chain challenges, such as invoking the Defense Production act to secure the critical minerals supply chains needed for BEV batteries, and the billions in federal-level investments via legislation, like the bipartisan Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act of 2022 (IRA), to accelerate and support domestic battery supply chains. Actions like these will reduce the gap between supply and demand and will positively impact the price of BEVs, making them increasingly cost-competitive on a total cost of ownership basis compared to ICE vehicles.[21]

The agency should also make use of a BEV deployment strategy that prioritizes replacing vehicles on suitable routes in environmental justice communities and in communities with air quality concerns, as well as on routes well suited for electrification—of which are the vast majority of Postal Service routes according to the FEIS and the Inspector General's analysis. Doing this will allow the Postal Service the ability to maximize BEV cost-saving benefits through lower fuel and maintenance costs and target these benefits to the communities that need it most, while also strategically delaying BEV deployment for the miniscule portion of routes currently harder to electrify. Now that the Postal Service has indicated the SEIS will only analyze 50,000 NGDVs and 34,500 commercially available vehicles, it is even more important that the Postal Service prioritize deployment of EVs to environmental justice communities and to explain the criteria the Postal Service is using to determine where to deploy these vehicles.

With or without the additional considerations, the Postal Service's delivery fleet procurement warrants an increase in the percentage of BEV NGDVs. In the Postal Service's Record of Decision, the agency put forth explanations for why BEVs would not be a larger share of the proposed fleet, citing insufficient charging infrastructure, incompatible route length or type, and cost, but never backed these claims with substantive calculations or supportive

[20] We are concerned, however, that the Postal Service may not actually be able to take advantage of these changes because it has left in place the contract with Oshkosh Defense for the purchase of up to 165,000 vehicles, according to the USPS's presentation at the August 8, 2022, public hearing. The Postal Service must consider alternatives through this SEIS process that would allow it to take advantage of lower BEV costs on future orders.

[21] "*Global Supply Chains of EV Batteries.*" International Energy Agency, July 2022. https://iea.blob.core.windows.net/assets/4eb8c252-76b1-4710-8f5e-867e751c8dda/GlobalSupplyChainsofEVBatteries.pdf

analysis. As previously noted, once the record of decision was issued, the agency then proceeded to continuously increase the percentage of the BEV mix.

For this reason, we find the agency's proposed deployment of a total of 40 percent new battery electric delivery vehicles to appear baseless, especially given the fact that this number has changed multiple times since the record of decision was released and each time vague reasons, like "delivery network and route optimization improvements" were listed as the rationale, with zero specifics provided. These specifics must be provided in the SEIS. The also agency claimed that the ultimate number, configuration, and timing of the NGDVs procured would depend on the final needs of the Postal Service and the supplier's production and delivery capabilities without analyzing other reasonable alternative mixes of powertrains. This baselessness is even more apparent when paired with Inspector General's analysis, which points to the overwhelming suitability of electric vehicles to meet the Postal Service's needs for delivery vehicles and to do so in a manner that could save the agency money in the long term – at least for certain delivery routes. Given this, the agency should certainly be capable of looking at and planning for the procurement of fleet mixes that are significantly higher than 40 percent – especially since Congress has allocated more funding towards this cause.

Additionally, in its original review, the Postal Service claimed that the timing, type, and number of NGDVs and their deployment were based on the "best available current information" for the preparation of the FEIS, but we know this is not accurate since the inaccurate assumptions the agency makes in its analysis on battery range alone refute this. For example, in the Postal Service's Record of Decision, the agency claimed that 12,500 routes could not be electrified based on the assumed 70-mile range of BEVs. First, the average Postal Service delivery route is 24 miles and only two percent of delivery routes are 70 miles or longer.[22] Second, even with if a 70-mile range reflects current battery technology (which it does not) and that battery technology will not improve over the ten-year life of the contract (which it will), BEV technology is still more than capable of meeting the Postal Service's requirements for

[22] *"RISC Report on Electric Delivery Vehicles and the Postal Service."* Arlington: Office of the Inspector General USPS, March 17, 2022. https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf

delivery vehicles. Specifically, to this point, EPA has data going back 10 model years that shows the consistent trend in the increase in battery range - starting at just 68 miles in 2011 and not climbing above 200 miles until the 2016 model year. Although this data was specific to light-duty, the trend it illustrates is the same across vehicle classes[23] Third, 9 percent of the Postal Service's delivery routes are between 40 miles and 70 miles long and the Inspector General predicts that these routes would be good candidates for BEVs, due to the likely cost savings per-mile compared to the NGDV ICE vehicles that could be deployed on this route.[24] And now the Postal Service is only proposing to analyze the purchase of 84,500 new vehicles through this SEIS, which allows the Postal Service to avoid any route-length limitations from a small number of routes that exceed 70 miles.

The Inspector General's report also asserts that of the roughly 177,000 routes served by Postal Service-owned delivery vehicles across the country, that only around 2,600 of these routes (1.5 percent of the total) may be poorly suited to electric vehicle deployment because they are longer than the assumed 70-mile range of an electric NGDV or include terrain limitations like steep slopes, which can reduce the range of a fully charged battery. This again reaffirms the point that BEVs are more than capable of meeting the Postal Service's requirements for delivery vehicles – and certainly at a higher composition of the fleet than the agency originally committed to.

One of the gravest of errors in the Postal Service's original analysis, were the assumptions on BEV range, which are simply wrong. There are currently multiple commercial "off-the-shelf" (COTS) van-type (class 2b-3) vehicles on the market that are similar in size to a postal delivery vehicle and are rated to reach at least 100 miles on a single charge,[25] certainly enough to warrant some consideration for the delivery routes that far exceed the average. Unfortunately, the Postal Service claims that in its original analysis they "considered" and

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[23] Edelstein, Stephen. *"EPA Finds Median Range of EVs Dropped in 2021."* Green Car Reports, January 17, 2022. https://www.greencarreports.com/news/1134758_epa-finds-median-range-of-evs-dropped-in-2021#:~:text=The%20median%20range%20of%20new,in%20a%20short%20blog%20post.

[24] *"RISC Report on Electric Delivery Vehicles and the Postal Service."* Arlington: Office of the Inspector General USPS, March 17, 2022. https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf

[25] Ibid., 5.

rejected all COTS van-types, reasoning that because they were all left-hand-drive (LHD) vehicles, they could not support curb-side delivery. These initial claims are also walked back in the agency's notice of intent to conduct an SEIS, as the Postal Service now shares that it intends to acquire up to 20,000 left hand-drive COTS vehicles within the next two years, to be more responsive to "dynamic market conditions" and a "critical need to accelerate the replacement of aged and high-maintenance LLVs and FFVs in the near term." The Postal Service also shares that this procurement will include "as many BEVs as are commercially available and consistent with [the agency's] delivery profile." In doing this, the agency should make available the underlying data and assumptions it uses to evaluate how many of the 20,000 COTS vehicles are consistent with its delivery profile and the agency should clearly address and share details on the limitations on the current market availability for BEVs that they believe warrants the procurement of up to 14,500 right-hand drive COTS ICE vehicles, rather than COTS BEVs or purpose-built NGDV BEVs. Based on the Postal Service's July announcement, only about 8,800 of these COTS vehicles, or 25 percent of the COTS portion of the fleet, would be EVs. The Postal Service must consider higher percentage EV fleets for the COTS purchase of the analysis. Additionally, the Postal Service must explain how long it plans to use the COTS vehicles for. It is unclear from the July announcement what the Postal Service expects the vehicle life will be for COTS vehicles and whether these purchases are intended to be stopgap measures or longer-term investments.[26]

The Postal Service at the very least must properly consider alternatives that would acquire BEVs for all routes under 70 miles and alternatives that would use hybrids or COTS electric vehicles with longer battery ranges to serve appropriate routes longer than 70 miles, and we reiterate that the Postal Service should consider these alternatives in the SEIS process—particularly now that the Postal Service is evaluating a smaller number of vehicles, which allows it to avoid any route-length limitations. We appreciate that, per the Notice of Intent these comments are responding to, that the acquisition of LHD COTS are a consideration that are

[26] According to the Postal Service's analysis in the Final EIS, "the body and frame of COTS ICE have been found to last eight to 12 years on average, while the body and frame of the NGDVs are designed to last a minimum of 20 years." FEIS at iv.

once again under review in the SEIS, as the Postal Service seeks to accelerate its replacement of the aged and high-maintenance LLV and FFVs.[27] The Postal Service should also consider an alternative for EVs that use different battery sizes, such as a smaller battery size for vehicles deployed in areas with short routes and a larger battery size for vehicles deployed in areas with long routes, to minimize EV cost.

Additionally, the FEIS claims that the proposed battery electric NGDVs weighing 8,877 pounds (lbs) with a 95 kilowatt-hour (kWh) battery can travel about 70 miles on a single charge. Confusingly, the FEIS also claims that a commercial-off-the-shelf (COTS) BEV weighing 9,428 lbs. with a 67-kWh battery has a 108-mile range. Since the COTS BEV and battery electric NGDVs use similar battery chemistries, the larger 95 kWh battery in the lighter vehicle should have a longer range than the smaller 67 kWh battery in the heavier vehicle. Further, commercially available Class 3 BEVs with similar battery sizes have much longer ranges than what is included in the FEIS. For example, the Ford Lightning Electric Transit Cargo Van is available with a 140-mile range 86 kWh battery or 170-mile range 105 kWh battery.[28] Both versions can fully charge in under three hours using a DC fast charger and are commercially available. Additionally, General Motors has made commercially available an all-electric delivery van called the BrightDrop Zevo 600 which also boasts a significant range at around 250 miles on a full charge and is in use by FedEx. Again, this demonstrates how the Postal Service's original analysis is premised on questionable and incorrect data, inaccurately representing the capabilities and benefits of BEV technology. The Postal Service must correct these deficiencies and use current information on these costs and trends to conduct an adequate SEIS review.

There are also various case studies and examples of battery technology meeting postal service needs in parts of the world that experience extreme environmental conditions that have historically been seen as unfavorable to BEV technology. One example is Posten Norge, the

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[27] *"Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions FEIS."* Federal Register. United States Postal Service, June 10, 2022. https://www.federalregister.gov/documents/2022/06/10/2022-12581/notice-of-intent-to-prepare-a-supplement-to-the-next-generation-delivery-vehicles-acquisitions-final.

[28] Lightning eMotors, *Lightning Electric Transit Cargo Van*. Available at: https://californiahvip.org/wp-content/uploads/2021/07/FT3-43-86Cargo_specsheet_2021.pdf

Norwegian postal service, which continues to make investments towards going fully electric, including in regions of the country that experience frigid weather year-round (with average highs in the negative degrees Celsius range).[29]

As the Postal Service ponders the first of its considerations for comment, it should consider our comments above, as well as make available for comment in the resulting SEIS, specific details of the potential delivery network refinements and route optimization efforts the agency intends to explore. Only by making this information available can the public provide the best information and data to help address the question of potential impacts to the delivery fleet from such changes.

Charging Infrastructure Considerations

The cost and strategic siting of charging infrastructure is an important consideration to determine the percentage of the fleet mix of BEV and ICE NGDVs for procurement and deployment purposes.

In the Postal Service's FEIS the agency claimed that "for BEVs, interior and exterior construction to accommodate charging infrastructure and charging stations would be needed.[30] However, the agency then acknowledged that "[s]pecific Postal Service facility locations where new vehicles would be deployed and where alterations may be needed are not known at this time."[31] The analysis claimed that the cost of charging infrastructure was a reason to limit the deployment of BEV NGDVs. However, the agency also claimed that "[t]he extent and types of alterations necessary for each Postal Service facility location [were] not known at [that] time."[32] The ease and cost of installing infrastructure is largely location-specific, depending on the existing distribution system, the number of desired charging stations, supportive utility programs, and local permitting processes. Since the agency's original analysis failed to evaluate

[29] Toll, Micah. *"Regenerative Braking: How It Works and Is It Worth It in Small EVs?"* Electrek, April 24, 2018. https://electrek.co/2018/04/24/regenerative-braking-how-it-works/.
[30] FEIS at 4-4.
[31] *Ibid.*
[32] *Ibid.*

where BEVs would be deployed and which facilities would need to be altered, its claims that charging infrastructure is a barrier to the procurement and use of a substantial amount of BEVs is unsupported. This fact is further affirmed by the agency's claims in its Notice of Intent that an SEIS needs to be conducted given the "potential delivery network refinements and route optimization efforts" being considered, among other considerations. And with the announcement that the Postal Service now "intends to pursue a multiple step acquisition process" and therefore "anticipates evaluating and procuring smaller quantities of vehicles over shorter time periods,"[33] it is even more important for the Postal Service to consider alternatives, impacts, and costs based on where it intends to employ the delivery vehicles, both NGDV and COTS, that it intends to acquire and deploy through the SEIS.

Additionally, the total number of charging stations that will be needed to support this fleet is likely lower than the Postal Service projected, especially since vehicles can share charging stations and due to other considerations like the frequency of which the vehicles will need to charge. According to the Inspector General's report, the Postal Service only considered a one-to-one ratio of chargers to vehicles – an assumption not previously disclosed in the DEIS or FEIS. As that report demonstrates, it is possible that vehicles on many of the routes would not need to plug into a charger each night, and so one charging station per vehicle may be excessive and contrary to how real-world BEV charging would occur for an electrified Postal Service Fleet. In addition, even if every vehicle required charging every night, dual charging stations are readily available where one station can charge two vehicles simultaneously on one circuit. The Inspector General's report also makes note that the General Services Administration (GSA), the federal agency that leases out the vehicles used most in federal program fleets – although not the Postal Service – has determined that agencies do not need a one-to-one charger ratio for vehicles that do not require a full charge every night.[34]

[33] 87 Fed. Reg. at 43,561.

[34] *"RISC Report on Electric Delivery Vehicles and the Postal Service."* Arlington: Office of the Inspector General USPS, March 17, 2022. https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf

For example, the Postal Service's own estimates show that a NGDV with an electric powertrain would deplete only 20 percent of battery capacity on an average route. In the agency's EIS, it stated that the average USPS delivery vehicle travels around 21 miles per day,[35] and that "BEV NGDV would be expected to discharge around 20 percent of battery capacity under average conditions because of the low average delivery route mileage."[36] The agency's analysis also assumes an expected BEV range of 70 miles on a single charge and suggests that the vehicle will use about 14 miles of range a day. So, on average, a BEV as considered in the Postal Service's analysis could charge once every 3 or 4 days without depleting the battery. Even though the Inspector General's report assumes a 24-mile average postal delivery route, the conclusion is still the same – a one-to-one ratio of chargers to vehicles is excessive. Therefore, the Postal Service could rotate the charging of vehicles based on their battery levels. However, it is important to note that, as discussed in more detail throughout these comments, the actual ranges of these vehicles will be higher than 70 miles per charge.

Additionally, the Postal Service incorrectly asserted in its FEIS that "actual mileage is expected to be significantly less because of the frequent and repetitive starts and stops required for business and residential delivery."[37] This is not accurate. In fact, depending on the vehicle's use, the range could increase due to regenerative braking converting friction into energy,[38] especially given the fact that regenerative braking is actually more effective in frequent "stop-and-go" situations where there is repeated braking. Additionally, the Postal Service's FEIS asserts that "low vehicle speed and precision stops required for delivery operations would minimize the opportunity to capture energy through regenerative braking." While it is true that lower driving speed means less energy can be captured, this is just a product of natural physics, since a slower moving vehicle means less kinetic energy to convert. This shouldn't be an excuse to dismiss this technology, especially since it still offers additional maintenance benefits that should be considered by the agency in its review. There are also

[35] EIS at G-2.
[36] EIS at 3-2
[37] EIS at 4-38.
[38] Jessica Shea Choksey, *What is Regenerative Braking?*, J.D. Power, January 2021. Available at: https://www.jdpower.com/cars/shopping-guides/what-is-regenerative-braking

various factors and operating conditions that influence regenerative braking performance at low speeds. Given this, it is important that the Postal Service's SEIS thoroughly review the considerations that impact the efficiency of regenerative braking at low speeds and that it conducts an analysis to detect the lowest speed threshold at which regenerative braking is effective in the BEVs under consideration, prior to making assumptions or decisions around this that influences the mix of BEV to ICE powertrains the agency acquires.[39]

The Postal Service's Record of Decision also states that its NGDV requirements "include the ability to charge to a minimum driving range of 70 miles within eight hours."[40] However, based on the data that the Postal Service has provided, even with a fully depleted battery, using a standard Level 2 charger—found in many homes and grocery store parking lots—the proposed BEVs could charge within 4 to 10 hours.[41] Moreover, since 84 percent of the Postal Service's delivery fleet travels less than 32 miles per day, most BEVs could easily recharge to the "minimum driving range of 70 miles" well below or within 8 hours.[42]

Because of these considerations, the Postal Service should consider alternatives for vehicle procurement that involve different charger-to-vehicle ratios for EVs, such as a 1-charger-for-1.5 vehicles or 1-charger-per-2 vehicles alternative, to make sure that the Postal Service considers the lowest cost, feasible versions of EV procurement. The Inspector General report explained that the EIS did not consider such alternatives; the SEIS should correct that deficiency.

[39] Heydari, Shoeib. "Maximizing Energy Harvesting in Electric Vehicles through Optimal Regenerative Braking Utilization." Dissertation, ScholarWorks, 2020. https://scholarworks.unr.edu/bitstream/handle/11714/7668/Heydari_unr_0139D_13326.pdf?sequence=1&isAllowed=y

[40] FEIS at 3-2.

[41] U.S. Department of Transportation, assuming a 60-kWh battery being fully discharged and 7- 19 kW, Level 2 charger. https://www.transportation.gov/rural/ev/toolkit/ev-basics/charging-speeds

[42] *"RISC Report on Electric Delivery Vehicles and the Postal Service."* Arlington: Office of the Inspector General USPS, March 17, 2022. https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf

Total Cost of Ownership Considerations Require Transparency & More Accurate Data

The Postal Service has repeatedly referred to cost as a major constraint for its fleet upgrade. In its Record of Decision, it states that although it fully recognizes that BEVs would provide environmental benefits compared to ICE vehicles, that the significant cost differential between the BEV and ICE vehicles and the Postal Service's financial condition were some of the determining factors for why the agency decided to move forward with its preferred alternative of purchasing a maximum of 90 percent gas-powered vehicles – a number we acknowledge has since changed per the agency's updated SEIS announcement. Even still, in its original analysis, the agency concluded that the 100 percent BEV alternative would cost $2.3 to $3.3 billion more than the agency's original preferred alternative, since the BEV NGDVs had a higher total cost of ownership ("TCO") compared to the internal combustion engine ("ICE") NGDVs.[43] However, without knowing each variable's underlying cost assumptions, it is difficult to substantiate that this is in fact the true cost difference between the two technologies. Light number crunching would suggest that the errors the Postal Service made in its calculations are multibillion dollar errors and immediately calls into question their topline number of $2.3 to $3.3 billion. For example, research from Atlas Public Policy has shown that electrifying the Postal Service Fleet could yield some $4.3 billion in savings, so without the Postal Service's exact numbers, their TCO calculations remain questionable.[44] Further to this point, the agency's analysis assumed gasoline process at $2.19 per gallon, based on the nationwide average on October 12, 2020. This amount is well below the $3.48 that most Americans are paying now, and pales in comparison to the electric equivalent of $1.35 in fueling costs. Given this, these cost estimates are also gravely inaccurate, understated, and significantly skews the agency's TCO calculations.

Additionally, since the total cost of deploying BEVs instead of ICE vehicles is closely tied to the length of a delivery route, until the Postal Service completes its delivery network refinements and route optimization efforts, it is hard for the agency to appropriately gauge what the true TCO would be for this technology – a feat made even more difficult with the

[43] Ibid., 19.
[44] Di Filippo, James, Nick Nigro, and Charles Satterfield. Rep. Federal Fleet Electrification Assessment. Washington, D.C.: Atlas Public Policy, 2021. https://atlaspolicy.com/federal-fleet-electrification-assessment/

agency's use of inflated and obsolete data. For example, the Inspector General's report specifically calls out the Postal Service's model inputs for TCO as having a higher assumed cost for charging infrastructure. The Postal Service's TCO model predicts a cost of $18,000 per charger based on previous experience installing chargers in 2017 and 2018 and on estimates that it received for additional charger installation in 2018. This differs from the Inspector General's assumed costs of around a total of $7,300 per level 2 charger.[45] Additionally, the Rocky Mountain Institute (RMI) authored a 2019 report on charging infrastructure costs that priced a commercial level 2 charger between $2,500 to $4,900, with an outlier of $7,210[46] – a cost closer in alignment with the Inspector General's cost findings.

The Record of Decision and FEIS also failed to provide any details on the timeline of vehicle purchases and replacements, aside from noting that acquisitions would occur over ten years starting in 2023. However, given the expected improvements in BEV technology detailed above, the timing of vehicle replacements and purchases are a crucial factor in the technical and cost assessment.

The previously mentioned flawed assumptions about the range capabilities of these BEV delivery trucks is important to note, especially given that the most expensive component for an EV is the battery.[47] The Postal Service's analysis of EV batteries (which will be discussed later in these comments) was flawed in multiple respects, most notably, the assumption that BEV delivery trucks would only be capable of a 70-mile-per-charge range. Not only does this static assumption not account for expected advancements in battery technology over the course of the decade-long contract period, but it does not even reflect current EV battery technology either. BEV cost savings compared to ICE vehicles are also strongly influenced by the number of operational years, longer-life BEVs, such as the proposed NGDVs, can expect to realize even

[45] *"RISC Report on Electric Delivery Vehicles and the Postal Service."* Arlington: Office of the Inspector General USPS, March 17, 2022. https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf

[46] Chris Nelder and Emily Rogers, *Reducing EV Charging Infrastructure Costs*, Rocky Mountain Institute, 2019, https://rmi.org/ev-charging-costs.

[47] Arroyo, Vicki. *"EPA Letter to USPS."* Washington: U.S. EPA, February 2, 2022. https://context-cdn.washingtonpost.com/notes/prod/default/documents/cb839d93-acf3-4390-8106-508a98e25b48/note/2b41bc0f-ccdb-4107-b59c-afdbd475640c.#page=1

higher returns on investment. For example, since the total cost of deploying BEVs is tied closely to the delivery route, the longer the route, the more money saved. If the route is long enough, the cost savings will make up for the higher upfront costs of acquiring the BEVs and related charging infrastructure.[48]

There are also numerous studies that have compared the TCOs of BEV and ICE medium- and heavy-duty vehicles, and while estimates vary, the overwhelming consensus is that short-haul Class 2b-3 BEV delivery vehicles are at or very near TCO parity with their ICE counterpart.[49] In fact, this segment is often referenced as the most cost-effective electrification opportunity in the near term.[50] For example, a recent comprehensive TCO analysis by the California Air Resources Board ("CARB")[51] found that BEV Class 2b cargo vans—similar to the proposed NGDVs—without incentives will save fleets almost $5,000 over the vehicles' life in 2025. Moreover, these savings are expected to grow as BEV technology matures through 2030.[52] The analysis also found that in 2025 a BEV cargo van's cost savings exceeds the higher up-front price differential in as early as year eight of operation, indicating that BEVs can recoup their higher purchase prices relatively quickly.[53] Notably, the CARB analysis includes charging infrastructure costs in the TCO.

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[48] *"RISC Report on Electric Delivery Vehicles and the Postal Service."* Arlington: Office of the Inspector General USPS, March 17, 2022. https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf

[49] Goldman School of Public Policy, University of California Berkeley, *2035 The Report, Transportation, Plummeting Costs and Dramatic Improvements in Batteries can Accelerate our Clean Transportation Future*, April 2021. Available at: https://www.2035report.com/transportation/; Chad Hunter et al, *Spatial and Temporal Analysis of the Total Cost of Ownership for Class 8 Tractors and Class 4 Parcel Delivery Trucks*, National Renewable Energy Laboratory, September 2021. Available at: https://www.nrel.gov/docs/fy21osti/71796.pdf; ICF International, *Comparison of Medium- and Heavy-Duty Technologies in California*, December 2019. Available at: https://caletc.com/assets/files/ICF-Truck-Report_Final_December-2019.pdf

[50] Jimmy O'Dea, *Ready for Work, Now Is the Time for Heavy-Duty Electric Vehicles*, December 2019. Available at: https://www.ucsusa.org/sites/default/files/2019-12/ReadyforWorkFullReport.pdf

[51] California Air Resources Board, *Draft Advanced Clean Fleets Total Cost of Ownership Discussion Document*, September 9, 2021. Available at: https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf

[52] 2025 was the earliest year modeled in the analysis. Given the substantial relative savings in 2025, it is appropriate to assume that battery electric Class 2b cargo vans are likely cost-competitive on a TCO basis with their ICE counterparts well before 2025.

[53] *Id.*

Yet contrary to the best available information, some of which was shared in our original comments, the Postal Service advanced a TCO comparison in its FEIS that showed substantially higher costs for BEV NGDVs, even while acknowledging that "BEVs are generally more mechanically reliable than ICE vehicles and would require less scheduled maintenance," and that "the BEV Hypothetical Maximum" would have a beneficial impact on energy use through reduction in fuel consumption, since BEV NGDVs would not require gasoline and would save about 135 million gallons of fuel annually." Additionally, the claim that a change in the agency's financial condition would enable greater BEV deployment undermines the agency's earlier argument that route characteristics and operational use are limiting factors – as addressed earlier in our comments. Even still, it is important that the agency live up to this commitment as it receives additional funding for this purpose, including the $3 billion in funding that was included in the Inflation Reduction Act (IRA) for the purpose of electrifying the Postal Service's fleet.

There is another potential cost to the Postal Service from the purchase of gas-powered vehicles—lost revenue. The largest source of the Postal Service's revenue is from shipping and packages, including from online and traditional retailers. Retailers and consumers seeking to reduce their carbon footprint may choose alternatives to using the Postal Service based on the fleet makeup.[54] For example, several Package Coalition members – a coalition of businesses which includes Amazon, Etsy, and Zappos, among other businesses with business models relying on affordable and reliable package delivery options – have made commitments signaling that sustainable shipping practices are a priority for their companies and within their business models. Another example of this commitment can be seen in a comment made by the vice president of corporate social responsibility and sustainability at the National Retail Federation, who stated, EVs "reduce the carbon footprint. They meet a consumer desire. They meet the retailer's desires to go to net zero. That seems like a no-brainer business decision."[55] The Postal

[54] *See* Andrew Adam Newman, *Gassed mile: How the USPS's decision not to purchase more electric vehicles could collide with retailers*, Retail Brew (July 15, 2022), https://www.retailbrew.com/stories/2022/07/15/gassed-mile-how-the-usps-s-decision-not-to-purchase-more-electric-vehicles-could-collide-with-retailers.
[55] *Id.*

Service should include the potential for losing revenue from acquiring gas-powered vehicles in its analysis.

To comply with NEPA's requirements, inform the public, and reach an informed decision on the procurement of NGDVs, the Postal Service must update and disclose the specifics in its total cost of ownership calculation. The Postal Service must use current information on the cost of gasoline and use multiple government projections on future gasoline costs. The Postal Service must disclose information on battery cost assumptions. And the Postal Service must correct and disclose its calculations for maintenance costs of EVs and gas-powered vehicles—according to congressional testimony by staff of the General Services Administration, the Postal Service's model, maintenance costs for EVs in the EIS were *higher* than those for gas-powered vehicles, which is inconsistent with research, interviews, and Postal Service documents.[56]

The Agency's Original NGDV Analysis Insufficiently Quantified BEV Benefits

An additional assumption that the agency should factor into its evaluation of its newly identified considerations is that BEVs are a flexible charging load that can provide grid benefits. Because BEV NGDV charging would occur overnight when people are sleeping, and there is spare capacity on the grid, they would spread the costs of maintaining the system over a greater volume of electricity sales, reducing the per-kilowatt-hour price of electricity to the benefit of all customers. In coordination with delivery route needs and combined with managed charging, BEV NGDVs that are stationary when renewable generation peaks could provide significant opportunities to lower the cost of meeting renewable energy goals. High levels of renewable energy penetration could result in "negative valleys" (requiring excess renewable energy to be exported or curtailed) but managed BEV charging could reduce or eliminate negative valleys, obviating the need to export excess renewable generation or curtailment.

Moreover, as battery electric NGDVs age, their emissions will decline further as they plug into an increasingly clean electric system. For example, the U.S. Energy Information

[56] Transcript at 14. https://docs.house.gov/meetings/GO/GO00/20220405/114593/HHRG-117-GO00-Transcript-20220405.pdf

Administration's short term energy outlook forecasts increasing percentages of electricity generation coming from renewable sources, mainly due to increasing solar capacity expansions.[57] In contrast, emissions from ICE NGDVs will grow as their emission control systems degrade and deteriorate over time.

These additional BEV benefits, while substantial, were neglected in the Postal Service's initial analysis and further prejudiced the proposal against battery electric NGDVs.

The Postal Service should also include reductions in emissions as a benefit of electric vehicles, which the original EIS did not according to congressional testimony from General Services Administration staff.[58] Wherever possible, the Postal Service should monetize, analyze, or contextualize the emissions reductions of EVs. And these calculations must be accurate, especially for greenhouse gas emissions, and address the methodological flaws identified by the EPA in its letters on the original EIS.[59]

Thoroughly Analyze the Implications of Procurement on the Postal Service Workforce

As part of the current network, Postal Service delivery vehicles operate from almost 19,000 facility locations around the country. It is important that the Postal Service thoroughly analyze and understand the impact that possible delivery network refinement and route optimization efforts will have on its workforce, in addition to the potential impacts these changes would have to its delivery fleet, especially since the agency's initial and flawed analysis also did not consider impacts from the production, as opposed to the operation, of the Postal Service's custom-built vehicles.

In a May 2022 keynote speech at the National Postal Forum, Postmaster General and CEO Louis DeJoy shared that the Postal Service's initiative to reinvent its delivery network and

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[57] *"Short-Term Energy Outlook."* U.S. Energy Information Administration (EIA), August 9, 2022. https://www.eia.gov/outlooks/steo/report/electricity.php.

[58] Transcript at 14. https://docs.house.gov/meetings/GO/GO00/20220405/114593/HHRG-117-GO00-Transcript-20220405.pdf

[59] *See* EPA letter, Feb. 2, 2022, at 8-9: https://cdxapps.epa.gov/cdx-enepa-II/public/action/eis/details?eisId=354079

improve its route structure will touch almost 500 network mail processing locations, 10,000 delivery units, 1,000 transfer hubs, and almost 100,000 carrier routes. Additionally, it was shared that the Postal Service would be aggregating much of its carrier base into Sort and Delivery Centers and that large carrier operations will be placed inside of Postal Service mail processing plants, which will reduce transportation and mail handlings, among other resulting impacts he claims will provide systemwide benefits.[60] Although the Postal Service asserts that these refinements will not change its retail presence, there isn't any indication given that this will also be the same for its workforce – especially for those employed in the sorting operations at any plants that will be impacted by shifts to larger, modernized facilities. Any thorough review should take this change into account.

Accelerating the Replacement of the Long Life Vehicles (LLV) and Flexible Fuel Vehicles (FFV)

The second consideration that has developed that the SEIS intends to address and requests comment on is the following:

> *"In response to its need to accelerate the replacement of aged and high-maintenance Long Life Vehicles (LLV) and Flexible Fuel Vehicles (FFV) in furtherance of its Universal Service Obligation, the Postal Service intends to analyze the potential impacts of replacing the remainder of its LLV/FFV fleet with a combination of NGDV and Commercial Off-the-Shelf (COTS) vehicles."*

In the agency's updated Notice of Intent for the SEIS, the Postal Services states that it "proposes to procure within a two-year period: (1) up to 20,000 left-hand drive (LHD) Commercial Off-the-Shelf (COTS) vehicles, including as many BEVs as are commercially available and consistent with [the agency's] delivery profile; and (2) up to 14,500 right-hand drive ICE COTS vehicles." The Postal Service also states that it anticipates that because of its "critical and

[60] *"Transcript of Postmaster General Louis DeJoy's Keynote Address During the 2022 National Postal Forum."* United States Postal Service, May 18, 2022. https://about.usps.com/newsroom/national-releases/2022/0518-video-and-transcript-of-pmg-louis-dejoys-keynote-address-during-2022-national-postal-forum.htm.

immediate need for delivery vehicles to fulfill [its] universal service mission, and the limitations on the current market availability for BEVs that can support [the agency's] daily delivery requirements," that it will be necessary for the agency to procure some ICE vehicles. This statement already indicates a level of bias and prejudice by the agency on the ability of BEV powertrains to meet the agency's immediate needs, and this bias should be avoided during the agency's environmental review. Any thorough analysis by the agency should include a COTS alternative with 100% EVs for whatever number of COTS vehicles it considers purchasing in the SEIS. The agency should also provide details on what consistency within its delivery profile looks like, so that the public can provide thorough comments and recommendations that best satisfies this requirement.

Additionally, the SEIS should provide detailed information about how the COTS vehicle acquisition figures were determined and should take a thorough look at the considerable variation among the qualifying delivery routes and other factors (such as route length, delivery points, local energy prices, the ratio of charges to vehicles and other points raised earlier in these comments) that can make a route either more or less suitable to BEV LHD COTS and BEV NGDV deployment.

Prior delivery acquisition strategy audit reports – such as the one from the Inspector General's office in August of 2020 – concluded that "fleet management best practices and industry standards for vehicle operations showed most commercial fleet acquisition strategies favor standardization or customization of COTS vehicles rather than purpose-build vehicles." This report also notes that the Postal Service has purchased LDH COTS vehicles to replace right-hand and left-hand drive vehicles" within the fleet in the past, noting that employing this acquisition strategy has in the past allowed the Postal Service to keep costs down.[61] As the Postal Service begins its analysis to determine the fleet mix of BEV or ICE COTS powertrains versus BEV or ICE NGDVs to meet the needs of accelerating the replacement of the aged and high-maintenance LLV/FFVs, it should do so making use of updated cost and technological data and assumptions, rather than relying on previous data compiled during prior acquisitions –

[61] Rep. *Audit Report: Delivery Vehicle Acquisition Strategy*. Washington, D.C.: United States Postal Service, 2020. https://www.uspsoig.gov/sites/default/files/document-library-files/2020/19-002-R20.pdf

especially as it relates to BEV powertrains, which are increasingly becoming more affordable, continue to increase in range capability year after year, and were likely not evaluated in the previous acquisition strategy along with the ICE, Mild Hybrid or Plug-in Hybrid Electric Vehicles (PHEVs) that were considered.

Assessment of the Environmental Impacts from Replacing other High-Maintenance non-Long Life Vehicles and Flexible Fuel Vehicles

The final consideration that has developed that the SEIS intends to address and requests comment on is the following:

> *Assessing "the potential impacts from replacing other aged and high-maintenance non-LLV/FFV postal delivery vehicles. This analysis would include consideration of the acquisition of: (1) up to 60,000 right-hand drive non-NGDV purpose-built vehicles with ICE and BEV powertrains to place on routes currently utilizing personally owned vehicles (POVs), for rural route growth, and for routes that require a vehicle less than 111 inches tall; and (2) the acquisition of up to 26,000 left-hand drive COTS with ICE and BEV powertrains to replace existing COTS delivery vehicles that will reach the end of their service lives within the next ten years."*

In the Postal Service's previous review for the NGDVs, there were serious inadequacies with its analysis of emissions reductions. It failed to address the urgency of transitioning to zero-emission vehicles, such as BEVs, or to describe the inequitable harm caused by ICE vehicle pollution. It is important that in its supplemental review, that the Postal Service addresses this for both the NGDVs procurement to replace the LLV/FFVs and for the vehicle acquisitions related to replacing its non-LLV/FFV fleet.

For example, in the agency's previous review for the EIS, when emission reductions from BEVs were quantified, the agency grossly undervalued them in the final proposed action. Additionally, the agency's analysis failed to monetize the air quality benefits and ignored the

impact new ICE vehicles will have on locking in higher emissions over the lifetime of these long-life assets. These mistakes should not be replicated in the agency's SEIS.

Additionally, in the original analysis for the NGDVs procurement, the agency failed to analyze the emission impact of its proposed acquisition plan. The analysis provided a basic comparison of emission reduction benefits from the proposed action and the alternatives considered, but it completely lacked any significant analysis. This was a glaring omission given the size of the proposed purchase and the longevity of the anticipated vehicle turnover rate.

ICE vehicles emit large quantities of nitrogen oxide ("NOx") pollution, which contributes to the formation of both particulate matter ("PM") pollution and ozone (i.e., smog).[62] Smog and PM emissions are toxic and dangerous to those closest to the source of pollution; exposure to fossil fuel exhaust can lead to premature death and other devastating health impacts, including asthma and respiratory impacts,[63] pregnancy complications and adverse reproductive outcomes,[64] cardiac and vascular impairments,[65] and heightened cancer risk.[66] Finally, ICE

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[62] EPA, *Nitrogen Dioxide (NO_2) Pollution*, https://www.epa.gov/no2-pollution (last accessed July 28, 2021).

[63] Stephanie Lovinsky-Desir et al., *Air pollution, urgent asthma medical visits and the modifying effect of neighborhood asthma prevalence*, 85 Pediatric Research 36 (Oct. 2018), *available at* https://doi.org/10.1038/s41390-018-0189-3; Gayan Bowatte et al., *Traffic related air pollution and development and persistence of asthma and low lung function*, 113 Env't Int'l 170 (Apr. 2018), *available at* https://www.sciencedirect.com/science/article/pii/S0160412017319037.

[64] Jun Wu et al., *Association Between Local Traffic-Generated Air Pollution and Preeclampsia and Preterm Delivery in the South Coast Air Basin*, 117 Envtl.
Health Persp. 1773 (Nov. 2009), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2801174/; Qi Yan et al., *Maternal serum metabolome and traffic-related air pollution exposure in pregnancy*, 130 Env't Int'l 104872 (2019), *available at* https://doi.org/10.1016/j.envint.2019.05.066; Li Fu et al., *The associations of air pollution exposure during pregnancy with fetal growth and anthropometric measurements at birth: a systematic review and meta-analysis*, 26 Envtl. Sci. and Pollution Res. 20137 (2019), *available at* https://doi.org/10.1007/s11356-019-05338-0.

[65] Kimberly Berger et al., *Associations of Source-apportioned Fine Particles with Cause-specific Mortality in California*, 29 Epidemiology 639 (Sept. 2018), *available at* https://pubmed.ncbi.nlm.nih.gov/29889687/; Stacey Alexeef et al., *High-resolution mapping of traffic related air pollution with Google street view cars and incidence of cardiovascular events within neighborhoods in Oakland, CA*, 17 Envtl. Health (May 2018), *available at* https://doi.org/10.1186/s12940-018-0382-1; J.E. Hart et al., *Ischaemic Heart Disease Mortality and Years of Work in Trucking Industry Workers*, 70 Occupational and Envtl. Med. 523 (Aug. 2013), *available at* https://pubmed.ncbi.nlm.nih.gov/22992341/.

[66] Cal. Air Res. Bd., Cal. EPA, *Supplement to the June 2010 Staff Report on Proposed Actions to Further Reduce Diesel Particulate Matter at High-Priority California Railyards* (July 5, 2011), *available at* http://www.arb.ca.gov/railyard/commitments/suppcomceqa070511.pdf; Press Release, Int'l Agency for Res. on Cancer, Diesel Engine Exhaust Carcinogenic (June 12, 2012), *available at* https://www.iarc.who.int/wp-content/uploads/2018/07/pr213_E.pdf; L. Benbrahim-Tallaa *et al*, *Carcinogenicity of Diesel-Engine and Gasoline-*

vehicles generate GHG emissions that contribute to global climate change, which exacerbates local air quality issues through various means; climate-driven increases in ozone are predicted to cause premature deaths, hospital visits, lost school days, and acute respiratory symptoms, and wildfires made more frequent and more severe by climate change further increase emissions of particulate matter and ozone precursors resulting in additional adverse local health outcomes.[67] Emissions from ICE vehicles disproportionately impacts low-income communities and communities of color that often live near freeways, ports, railyards, warehouses, and other facilities that generate significant levels of localized vehicle exhaust.[68] Yet none of these life-or-death impacts were evaluated in the EIS and they must be evaluated in the SEIS for both the NGDV procurement and the vehicles the agency plans to procure to address the second and third considerations raised for vehicle acquisitions related to accelerating the replacement of the LLV/FFVs and non-LLV/FFV postal delivery vehicles.

Additionally, where emission impacts were reviewed in the original analysis, the agency's emission reduction calculations appeared to be irrelevant to the final proposal and made use of flawed methodology. As the Postal Service undergoes its environmental assessment, it is important that it monetize and contextualize the air pollution reduction benefits for various fleet mix scenarios (such as, identifying and valuing avoided hospital visits, avoided respiratory and cardiovascular diseases, avoided premature mortality, etc.), which would further demonstrate the benefits of BEVs relative to ICE NGDVs and further make the case for a higher percentage of BEVs in the fleet mix.

Engine Exhausts and Some Nitroarenes, 13 The Lancet Oncology 663 (June 2012), *available at* http://doi.org/10.1016/S1470-2045(12)70280-2.

[67] Neal Fann et al., *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment* at Ch. 3 (U.S. Global Change Res. Program 2016), *available at* https://health2016.globalchange.gov/air-quality-impacts; Health and Envtl. Impacts Division, EPA, *Quantitative Health Risk Assessment for Particulate Matter* (June 2010), *available at* https://www3.epa.gov/ttn/naaqs/standards/pm/data/PM_RA_FINAL_June_2010.pdf.

[68] Arlene Rosenbaum et al., *Analysis of Diesel Particulate Matter Health Risk Disparities in Selected US Harbor Areas*, 101 Am. J. Pub. Health 217 (Dec. 2011), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222501/; Michelle Bell & Keita Ebisu, *Environmental inequality in exposures to airborne particulate matter components in the United States,* 120 Envtl. Health Persp. 1699 (Dec. 2012), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3546368/.

Conclusion

It is important that Postal Service correct its original analysis and the underlying assumptions in that analysis, prior to beginning its review of any of the new considerations that may have developed that affect its overall fleet procurement strategy, that it is requesting comment on in its Notice of Intent.

The Postal Service missed a critical opportunity with its NGDV acquisition to participate in the whole-of-government approach to take meaningful action to address the transportation sector-related emissions that are impacting our climate and public health. This decision was made following a deeply flawed and deficient environmental review process, that made use of poor and unsubstantiated data and resulted in a contract being awarded in an opaque and non-NEPA-compliant manner. The entire review and the resulting FEIS was arbitrary and capricious, made use of improperly accounted for charging infrastructure needs, costs, and route electrification feasibility, ignored currently available data and technology for its BEV TCO calculations, improperly calculated emission reduction benefits, and failed to incorporate those benefits into the determination of its final action. In addition, the review failed to include purchase and replacement schedules, which should have been a critical factor in the decision-making process, given the rapid improvements in BEV technology and the deterioration of USPS's current fleet. These deficiencies were grave and must be corrected in the SEIS.

Sincerely,

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Frank Sturges, *Attorney*
Patricio Portillo, *Clean Vehicles and Fuels Senior Advocate*
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August 15, 2022

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Re: Notice of Intent To Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement

Dear Mr. Collins:

The Northeast States for Coordinated Air Use Management (NESCAUM) is submitting these preliminary comments in response to the United States Postal Service (USPS) "Notice of Intent To Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement" [87 Fed. Reg. 35581 (June 10, 2022)]. NESCAUM previously submitted a letter to the USPS on February 22, 2022[1] requesting that the USPS hold a public hearing and supplement its December 2021 environmental impact statement (EIS).[2] Our letter indicated a need for the USPS to have more complete information providing a fuller assessment of the opportunities for zero-emission vehicles (ZEVs) in the Next Generation Delivery Vehicles (NGDV). Based on our review of the EIS at that time, we determined that the USPS would benefit from learning about NESCAUM's work with states on ZEVs and pertinent information on technology capability and cost savings that would support a much higher percentage of ZEVs in the NGDV fleet than previously envisioned by the USPS. NESCAUM appreciates the opportunity to provide that information for the supplemental EIS, and we include the key points from our February 22, 2022 letter in these comments to inform the scope of the supplemental EIS.

As background, NESCAUM is the regional association of state air pollution control agencies in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. NESCAUM serves as a technical and policy advisor to its member agencies on a wide range of air pollution, climate, and clean transportation issues and facilitates multi-state initiatives to improve air quality and mitigate climate change. NESCAUM's focus on clean transportation includes working closely with states on adoption and implementation of California's emission standards for new cars and trucks. NESCAUM also facilitates and guides the Multi-State ZEV Task Force, which now includes 17 states, the District of Columbia, and the Canadian province of Quebec.[3] Established in 2013, the Task Force drives ZEV adoption

[1] NESCAUM letter to USPS, Re: USPS NGDV EIS (February 22, 2022), https://www.nescaum.org/documents/nescaum-usps-ngdv-eis-letter-20220222-final.pdf.
[2] United States Postal Service, *Final Environmental Impact Statement, Next Generation Delivery Vehicle Acquisitions* (December 2021), https://uspsngdveis.com/documents/USPS+NGDV+FEIS_Dec+2021.pdf.
[3] Multi-State ZEV Task Force members include the states of California, Colorado, Connecticut, Hawaii, Maine, Maryland, Massachusetts, Nevada, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, and Washington; the District of Columbia; and the Canadian province of Quebec.

through analysis and peer-to-peer discussion of innovative policies and programs, rapid dissemination of tested models, and development of consensus recommendations for state action. With NESCAUM's support, the Task Force developed two action plans for light-duty ZEVs and a regional strategy for charging infrastructure deployment.[4] These activities can provide USPS with additional context on state-level activities that are accelerating the penetration of light-duty ZEVs within their fleets and in other areas.

More recently, NESCAUM has worked over the past two years with the Task Force to develop a *Multi-State Medium- and Heavy-Duty ZEV Action Plan* as required by a Memorandum of Understanding (MOU) signed by a bipartisan coalition of 17 state governors and the mayor of the District of Columbia.[5] These jurisdictions are working together to promote opportunities and implement policies that will greatly reduce greenhouse gas emissions (GHGs) and harmful air pollution by accelerating the market for zero-emission trucks, vans, and buses. Collectively, they constitute 43 percent of the U.S. population, nearly half of the nation's economy, and 36 percent of the nation's medium- and heavy-duty (MHD) vehicles.

To achieve a timely transition and ensure near-term progress, the MOU jurisdictions committed to strive to make 100 percent of sales of new MHD vehicles ZEVs by no later than 2050, and at least 30 percent of sales by 2030. The final action plan was released on July 27, 2022.[6] It provides additional useful information for the supplemental EIS on the status and expected development of the MHD vehicle market, and the many market-enabling initiatives participating jurisdictions will be pursuing to accelerate the introduction of MHD ZEVs.

Widespread rapid electrification of light-duty and MHD vehicles is needed to avoid the worst effects of climate change and improve air quality and health outcomes, especially in frontline and overburdened communities near freight hubs, bus depots, and trucking corridors that are disproportionately impacted by emissions from diesel trucks and buses and more vulnerable to the effects of climate change. As one of the largest vehicle purchasers in the United States, the USPS has a tremendous opportunity to lead the way. By transitioning to ZEVs, the Postal Service fleet can provide significant public health and environmental benefits to communities across the country and advance environmental justice for frontline and overburdened communities, while also stimulating substantial economic growth and creating new employment opportunities.

Development of the *Medium- and Heavy-Duty ZEV Action Plan* was informed by input from public and private sector experts and stakeholders, including equity and environmental justice organizations, truck and bus manufacturers, industry and technology experts, charging and fueling providers, utility companies, public and private fleet representatives, commercial financing experts, environmental advocates, and others.[7] This broad input helped shape and

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[4] The most recent action plan for zero-emission light-duty vehicles was released in 2018. *See* ZEV Task Force, *Multi-State ZEV Action Plan* (2018), www.nescaum.org/documents/2018-zev-action-plan.pdf. *See also* NESCAUM, *Northeast Corridor Regional Strategy for Electric Vehicle Charging Infrastructure 2018 – 2021* (May 2018), www.nescaum.org/documents/northeast-regional-charging-strategy-2018.pdf.

[5] Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding (updated March 29, 2022), https://www.nescaum.org/documents/mhdv-zev-mou-20220329.pdf.

[6] ZEV Task Force, *Multi-State Medium- and Heavy-Duty Zero-Emission Vehicle Action Plan* (July 27, 2022), https://www.nescaum.org/documents/multi-state-medium-and-heavy-duty-zev-action-plan.pdf.

[7] A summary of the engagement and development process is available at: https://www.nescaum.org/documents/multi-state-mhd-zev-action-plan-development-process-summary.pdf.

refine the Action Plan's recommendations and inform the participating jurisdictions on a number of key issues, including off-the-shelf ZEV technology capabilities and the realistic potential cost savings in specific fleet applications. This information would be invaluable to the USPS in its decision-making process. For example, the final EIS scenarios were bounded by 10 percent ZEV and 100 percent ZEV scenarios, with no clear consideration of other ZEV percentage scenarios in between the two bounds. Additional scenarios would be more informative of near-term cost and economic benefits by considering a greater share of ZEVs on local mail routes most amenable to current ZEV technologies.

Many of USPS's competitors have announced plans for significant ZEV purchases for their future fleets in recognition that current ZEV technologies and their associated lower total costs of ownership improve the economics of fleet operations. These applications are well suited for electrification because many fleet vehicles serve predictable routes, travel less than one hundred miles per day, and return to a centralized depot, which enables fleets to strategically deploy vehicles and manage vehicle charging operations.

The jurisdictions that worked with NESCAUM on the *Multi-State Medium- and Heavy-Duty ZEV Action Plan* are considering adopting a range of market-enabling policies to encourage the rapid deployment of electric truck fleets, such as regulatory sales and fleet purchase requirements, vehicle and infrastructure purchase incentives, electric utility charging infrastructure investment programs and rate reform, and public charging/fueling infrastructure planning and deployment. Several states already have legislative or other requirements to transition their agency and transit fleets to ZEVs and may also consider adopting policies to promote or require third-party zero-emission shipping. Many local jurisdictions are considering policies to provide ZEVs with special access to loading and unloading zones and dedicated road lanes in congested locations. At the same time, it is anticipated that federal and state emissions requirements for new and existing MHD vehicles will continue to increase in stringency as the market transitions to ZEVs. Companies that recognize and embrace the transition-in-progress will be best situated to take advantage of the opportunities it presents.

There are currently 79 ZEV models available in the light-duty vehicle segment[8] and more than 125 different zero-emission models currently available across Class 2b-8 vehicle segments in North America, with this number expected to exceed 240 models by 2023.[9] USPS should be able to find suitable off-the-shelf vehicles for its operations among the many available options. Statewide vehicle contracts are a useful starting point to find model availability and price. For example, Massachusetts offers several electric vehicles on their statewide contract, including sedans, SUVs, pickup trucks, cargo vans, and more.[10]

Many of the NESCAUM states recognize the increasing availability of ZEVs in the market to serve their needs and have adopted, or are pursuing, ZEV fleet purchase requirements and goals. The state efforts include the following:

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[8] Alliance for Automotive Innovation. *Get Connected: Electric Vehicle Quarterly Report* (1st quarter 2022), https://www.autosinnovate.org/posts/papers-reports/Get%20Connected%202022%20Q1%20Electric%20Vehicle%20Report.pdf.

[9] CALSTART, *Global Commercial Drive to Zero, Zero-Emission Technology Inventory Tool*, Version 5.9, https://globaldrivetozero.org/tools/zero-emission-technology-inventory/.

[10] Electric & Hybrid Electric Vehicles on MA Statewide Contract, https://www.mass.gov/doc/greening-your-fleet-with-statewide-contracts-32522/download.

- Connecticut
    - Under Connecticut General Statutes § 4a-67d (2022), the state has set the following state purchase requirements for its cars and light-duty trucks:
        - 50% will be battery electric vehicles starting in 2026;
        - 75% beginning in 2028; and
        - 100% beginning in 2030.
    - Also under Connecticut General Statutes § 4a-67d (2022), beginning in 2024, the state will no longer buy or lease diesel-fueled transit buses.
    - Under Connecticut General Statutes § 22a-202 (2022), the state has set the following requirements for school buses:
        - Beginning in 2035, 100% of school buses for all school districts in the state are to be zero-emission or alternative fuel school buses;
        - As of 2040, 100% of school buses for all school districts in the state will be zero-emission school buses; and
        - Beginning in 2030, 100% of the school buses that provide transportation for school districts in environmental justice communities will be zero-emission school buses.
- Maine
    - Under 5 Maine Revised Statutes §1830, sub-§12 (2022), the state has set a goal of 50% of annual light-duty vehicle leases or purchases for state fleets to be plug-in hybrid electric vehicles and ZEVs by 2025, and 100% by 2030.
    - Under 20-A Maine Revised Statutes §5401, sub-§15-A (2022), at least 75% of annual school bus acquisitions are to be ZEVs by 2035, to the extent practicable.
    - Under 30-A Maine Revised Statutes §125, sub-§2 (2022), and 30-A Maine Revised Statutes §3111 (2022), Maine counties and municipalities by 2035 are to increase the share of their light-duty vehicle purchases or leases to be 100% plug-in hybrid electric vehicles and ZEVs annually, to the extent practicable.
- Massachusetts
    - Under Massachusetts Executive Order No. 594 (2021), state agencies have the following fiscal year targets to acquire ZEVs so that the total state fleet consists of:
        - 5% ZEVs in 2025;
        - 20% ZEVs in 2030;
        - 75% ZEVs in 2040; and
        - 100% ZEVs in 2050.
    - Starting in the following fiscal years, all listed vehicle acquisitions must be ZEVs:
        - Fiscal year 2023, all vehicles with a gross vehicle weight rating (GVWR) of 8,500 pounds (lb) or less;
        - Fiscal year 2025, all vehicles with a GVWR of 14,000 lb or less; and
        - Fiscal year 2030, all vehicles with a GVWR of more than 14,000 lb.
- New Jersey
    - Under New Jersey Statutes 48:25-3 (2022), the following ZEV fleet purchase goals apply:

    - 25% of state-owned non-emergency light-duty vehicles must be ZEVs by December 31, 2025; 100% of these vehicles must be ZEVs by December 31, 2035 and thereafter; and
    - 10% of new buses purchased by the New Jersey Transit Corporation must be ZEV by December 31, 2024; 50% of new buses must be ZEV by December 31, 2026; and 100% must be ZEV by December 31, 2032.
- New York
    - The New York State 2022-2023 budget[11] requires that:
        - Beginning on July 1, 2027, New York State school districts may only purchase or lease zero emission school buses when entering new purchase or lease contracts; and
        - No later than July 1, 2035, every New York State school district shall only operate and maintain zero emission school buses.
- Rhode Island
    - Rhode Island Executive Order 15-17 (December 8, 2015) sets a goal of a minimum of 25% of new light-duty state fleet purchases and leases will be zero-emissions vehicles by 2025.

Local communities also are increasingly deploying ZEVs in their municipal fleets. These include ZEVs in high demand applications, such as police vehicles and ambulances.

- The New York City Police Department is buying up to 250 Tesla Model 3 vehicles and placed an order for 184 all-electric Mustang Mach-E vehicles for law enforcement and emergency response use;[12]
- Paterson, New Jersey, is purchasing two electric ambulances and two fast charging stations, along with a number of other electric vehicles for the city's fleet;[13]
- Westport, Connecticut found that a Tesla Model 3 police vehicle saved the city money over the purchase of a conventional police vehicle when accounting for operational savings despite the higher upfront purchase price;[14]
- Numerous Massachusetts towns and cities are adding electric vehicles to their police departments and other municipal fleets;[15] and

[11] New York State Bill No. S8006-C/A9006-C, Subpart A, § 3638 (2022).
[12] StreetsBlog NYC, *City Moves Ahead with Plan to Buy 250 Tesla Squad Cars — And Just Bought 184 Electric Ford Mustangs!* (December 21, 2021), https://nyc.streetsblog.org/2021/12/29/city-moves-ahead-with-plan-to-buy-250-tesla-squad-cars.
[13] Tap into Paterson, *Paterson Officials Unveil First Electric Vehicle Charging Station* (June 30, 2022), https://www.tapinto.net/towns/paterson/sections/green/articles/paterson-officials-unveil-first-electric-vehicle-charging-station.
[14] CleanTechnica, *Tesla Police Vehicle Brings Huge Monetary Savings To Westport, Connecticut* (June 2, 2021), https://cleantechnica.com/2021/06/02/tesla-police-vehicle-brings-huge-monetary-savings-to-westport-connecticut.
[15] Wicked Local North, *Mass. cities are adding electric vehicles to their fleets: How it's going* (January 5, 2022), https://www.police1.com/vehicle-incidents/articles/mass-cities-are-adding-electric-vehicles-to-their-fleets-how-its-going-eOZRQ8kh4qQZ25wI/; Daily Hampshire Gazette, *Easthampton police get OK for Tesla vehicles* (May 23, 2022), https://www.gazettenet.com/Easthampton-Police-receives-City-Council-approval-for-appropriation-of-$89k-toward-the-purchase-of-two-Teslas-46445449.

- Bangor, Maine is adding electric vehicles to its police fleet.[16]

The USPS's recent announcement to deploy a greater percentage of electric vehicles in the NGDV fleet is an important step forward, but it still falls well short of achieving the full benefits from electrifying a much greater portion of the NGDV fleet. The USPS supplemental EIS is now an opportunity to revisit the final EIS's assumptions in order to meaningfully evaluate the potential for electric vehicles to cost effectively serve most, and potentially all, of USPS needs in the NGDV fleet. NESCAUM recommends that the supplemental EIS take a sufficiently broad view of the capabilities of ZEVs that includes updated assumptions of fuel, maintenance, and battery costs, driving range, infrastructure cost and availability, utility recharging incentives, state policy trends, realistic operational needs, and other key factors. The assumptions should reflect a reasonable range of scenarios that fairly consider technology, infrastructure, and policy trends over the decadal procurement period envisioned by NGDV. The supplemental EIS should provide sufficient detail on its assumptions, basic data, and methodologies that will allow others to independently recreate the USPS analyses and conclusions. This would include distributions of route lengths, data about locations and infrastructure of postal facilities, service cost assumptions, utility rate structures and electricity cost, grid mix assumptions, utility rate information for reasonable recharging scenarios (e.g., incorporating flexible demand charge structures rather than fixed-rate), and other detailed information needed for meaningful evaluation of the supplemental EIS results.

To further inform the supplemental EIS, we are attaching to these comments the *Multi-State Medium- and Heavy-Duty Zero-Emission Vehicle Action Plan* (July 2022) and our most recent light-duty vehicle *Multi-State ZEV Action Plan, 2018-2021* (June 2018). These will provide the USPS with a greater understanding of the level of activity and commitments being undertaken across multiple states that will significantly influence the future of transportation electrification in the United States. NESCAUM and the states we work with welcome this opportunity to provide additional information on technology readiness and the economic, public health, and environmental benefits of ZEVs that could serve the USPS fleet and provide a healthier and cleaner environment for all.

Paul J. Miller
Executive Director

cc: NESCAUM Directors
EPA Regions 1 & 2

Encs: Multi-State Medium- and Heavy-Duty ZEV Action Plan (July 2022)
Multi-State ZEV Action Plan, 2018-2021 (June 2018)

[16] Bangor Daily News, *A new Bangor police car is piquing interest as the department's 1st electric vehicle* (September 16, 2021), https://www.bangordailynews.com/2021/09/16/news/bangor/a-new-bangor-police-car-is-piquing-interest-as-the-departments-1st-electric-vehicle/.

BLUEGREEN ALLIANCE

CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

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July 25, 2022

Response to United States Postal Service Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement

Dear Mr. Collins,

Thank you for the opportunity to comment on the United States Postal Service Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement.

The BlueGreen Alliance (BGA) unites labor unions and environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs and build a clean, prosperous, and equitable economy. BGA has been closely following the progress of the Postal Service's Next Generation Delivery Vehicles (NGDV) contract with Oshkosh Defense, given the contract's significant implications for the climate and for workers.

The NGDV contract represents an opportunity to rebuild the largest non-defense federal fleet to advance climate progress, improve air quality in our neighborhoods, support workers & their communities, and model responsible procurement practices. The turnover of the aging fleet can also restore the independent agency's financial stability in the long term through the significant total cost of ownership savings that come with electrification.

The Postal Service's recent announcement of its intention to increase the share of electric vehicles in its NGDV fleet demonstrates an improved commitment to using updated and pertinent data to make logical choices to build a modern Postal Service. BGA applauds this announcement. We hope to see continued growth in the EV share of the future fleet as the expected findings of the Supplemental Environmental Impact Statement demonstrate the significant environmental, health, and cost savings that could come with electrification.

Despite this positive development, however, there remain significant issues with the NGDV contract—namely its lack of consideration for the workers who will be building the vehicles and their components, and the communities where they are built. These issues are attributable to critical considerations missing from the Postal Service's Final Environmental Impact Statement, namely:

1. The expected environmental and ecological impacts of building a manufacturing plant from the ground up on a former warehouse site in South Carolina, as compared to assembling the NGDV fleet in an existing or expanded facility in Wisconsin;
2. The expected socioeconomic impacts on workers and communities resulting from the planned placement of the NGDV fleet manufacturing facility in South Carolina, where Oshkosh Defense employees will not fall under the longstanding collective bargaining agreement between the United Auto Workers (UAW) and Oshkosh Defense in all its Wisconsin facilities; and
3. The expected socioeconomic benefits that may accrue to workers and communities through successful development of a resilient domestic supply chain for a NGDV fleet built with U.S.-made components, which include but are not limited to batteries, glass, steel, tires, and lights.

These considerations will significantly impact the Postal Service and the public's understanding of how the environmental and socioeconomic benefits of the NGDV contract are distributed. They should be incorporated into the Supplementary Environmental Impact Statement.

Thank you,

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August 15, 2022

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Re: Notice of Availability to announce the availability of the Draft Supplemental Environmental Impact Statement (Draft SEIS) and solicit comments on the Draft SEIS.

Dear Mr. Collins:

The undersigned organizations submit the following comments on the United States Postal Service's ("USPS") Notice of Availability of the Draft SEIS. After careful review of the Notice and prior documents prepared for this vehicle procurement, we remain concerned about the trajectory of the forthcoming environmental review. It is also our understanding that the proposed decision has been dramatically expanded to cover even more vehicles than those anticipated in the Next Generation Delivery Vehicle (NGDV) Program. Accordingly, given the importance of a decision to undertake an even larger vehicle program than the one approved earlier this year, which was one of the largest, if not the largest, fleet turnover programs in history, we respectfully request that the USPS undertake a compliant environmental review and produce an EIS that takes into consideration both the public and the planet's health.

As noted in the Record of Decision (ROD), the USPS has the largest civilian fleet in the world, consisting of over 210,000 vehicles, "[t]he majority of [which] are on the road delivering mail at least six days per week in *every community*."[1] The USPS has both an opportunity and a responsibility to lead the way in our transition to a significant percentage of zero-emissions vehicles. This is especially true considering that transportation is the largest source of climate pollution in the U.S. and air pollution from fossil fuel vehicles harms people's health, especially in low-income communities and communities of color. By upgrading to high levels of electric vehicles in its fleet, the USPS can bring cleaner air to almost every community in the country.

I. A DECISION OF THIS IMPORTANCE REQUIRES A RIGOROUS ANALYSIS.

As we face daunting air pollution challenges throughout the nation, in addition to the impacts of climate pollution, we cannot afford to have government agencies spend billions of dollars on internal combustion engine ("ICE") vehicles. Thus, we appreciate the USPS is reconsidering its decision to have such a heavy bent towards combustion vehicles. The notices

[1] ROD, Appendix A, at 2-1 (emphasis added).

and press releases provide very few details regarding the forthcoming analysis, but the following sections provide some preliminary input. We also incorporate by reference all the prior comments submitted, which critique the prior environmental review.

II. THE USPS MUST HAVE A LAWFUL ALTERNATIVES ANALYSIS.

USPS should analyze a full set of alternatives that captures the benefits of procuring higher numbers of electric NGDVs. In contrast with the Final EIS, which used strawman alternatives to dismiss a high percentage of BEVs,[2] this analysis should consider whether BEVs can meet most, if not all, of USPS's needs.

A. USPS should analyze a 100% BEV alternative.

USPS should analyze whether an all-BEV fleet can meet the needs of the Postal Service, with limited exceptions allowed on a case-by-case basis. The Postal Service has already acknowledged that 95% of current routes are BEV-compatible.[3] Given the high compatibility that already exists, it is likely that fulfilling the remainder of the NGDV order can also be done with a BEV fleet in a way that is cost effective for USPS.

According to the USPS Office of Inspector General ("OIG"), the placement of BEVs could go even further. The OIG report on electrification found that the average postal route length is currently around 24 miles, with only 1.5 percent of routes that are 70 miles or longer.[4] The Postal Service determined that a 70-mile range was a minimum requirement for the NGDV fleet, given that a single charge would not only be used to move the vehicle but would also account for ancillary uses such as air conditioning, cameras, and sensors.[5] The OIG report found that there were *multiple off-the-shelf van types on the market* that could reach 100 miles on a single charge.[6]

As noted in our earlier comments, and confirmed by the OIG report, the 70-mile minimum range USPS estimates is overly conservative, even for currently constructed vehicles. Under normal operating conditions most vehicles should average well above that. Moreover, USPS could simply require its manufacturer to produce more energy-dense, higher-range batteries for the small percentage of routes that are longer than 70 miles. Some manufacturers have options regarding the energy density of the battery prototype they select for a given vehicle,

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[2] See Comments of Earthjustice, Center for Biological Diversity, and Sierra Club, Final EIS, at B-46, https://uspsngdveis.com/documents/USPS%20NGDV%20Acquisitions%20NEPA%20Record%20of%20Decision_2.23.22.pdf

[3] Final EIS, at 3-2.

[4] USPS Office of Inspector General, Electric Delivery Vehicles and the Postal Service, Report Number RISC-WP-22-003 (March 17, 2022), at 5-6, https://www.uspsoig.gov/sites/default/files/document-library-files/2022/RISC-WP-22-003.pdf

[5] Id.

[6] USPS Office of Inspector General, Electric Delivery Vehicles and the Postal Service, Report Number RISC-WP-22-003 (March 17, 2022), at 5-6.

and they make that determination based on cost, desired range, reliability, and other factors.[7] USPS should give direction to its manufacturer to install higher-range batteries for the small number of longer routes.

Additionally, USPS plans to study "route optimization" in this SEIS. If 98.5% of routes are already known to be BEV compatible, we encourage USPS to optimize its route design so the other 1.5% fall within normal BEV range. An ICE vehicle should be used only if, after thorough review, the agency determines that a route cannot reliably be serviced by a BEV. These exceptions should be rare and justified on a case-by-case basis.

Finally, prices of EV batteries, the most expensive component of EVs, are falling dramatically, and this trend justifies more BEVs in all NGDV orders. They have fallen from over $1,000/kilowatt-hour (kWh) in 2010 to approximately $132/kWh in 2021.[8] Analysts believe that they will further drop to $61-72/kWh by 2030, a projection several auto manufacturers have endorsed.[9] This means that batteries will get further range at lower prices. Analysts believe EVs will reach price parity with ICE vehicles, even without tax rebates and incentives, when battery prices reach $100/kWh. This is projected to happen in 2025, if not sooner—well within the timeline of the NGDV contract.[10] EV battery range is likely to continue to improve in the next three years, and prices will continue to fall. USPS should take these trends into account in its analysis, as less expensive, more efficient batteries will likely exist in the next few years. It should commit to a technological review of options on the market before placing future orders.

B. USPS should analyze a 95% BEV alternative.

In the Final EIS, USPS concedes that only 12,500 routes—approximately 5% of current routes—are longer than the 70-mile range of a BEV.[11] The OIG report puts the number even lower, at 1.5%.[12] Thus, even if USPS does not revise its technical assumptions or increase its conservative range estimates, it is clear that 95% of routes can be serviced by BEVs. USPS

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[7] For example, Tesla has the ability to make its Model 3 car with both Lithium Iron Phosphate (LFP) and Nickel Cobalt Aluminum Oxide (NCA) batteries. Wayland, Michael, CNBC, Tesla will change the type of battery cells it uses in all standard-range cars (Oct. 20, 2021), https://www.cnbc.com/2021/10/20/tesla-switching-to-lfp-batteries-in-all-standard-range-cars.html.

[8] MacIntosh et al., Electric Vehicle Market Update, ERM for Environmental Defense Fund (2022), p. 20-22, https://www.sustainability.com/globalassets/sustainability.com/thinking/pdfs/2022/ev_market_report_v6_11april22.pdf.

[9] *Id.*

[10] *Id.; see also* Gearino, Dan, *Inside Clean Energy: How Soon Will An EV Cost the Same as a Gasoline Vehicle? Sooner Than You Think.*, INSIDE CLIMATE NEWS, July 30, 2020, https://insideclimatenews.org/news/29072020/inside-clean-energy-electric-vehicle-agriculture-truck-costs.

[11] Final EIS, at 3-2.

[12] OIG report, at 5.

should therefore consider this alternative that features the maximum number of BEVs compatible with current postal routes, according to the agency's own admission.

C. USPS should select a Preferred Alternative that aligns with its analysis of the maximum feasible amount of BEVs

In choosing a Preferred Alternative, USPS should base its decision on the maximum number of BEVs it deems feasible to order, taking into count all relevant factors, including route compatibility, air quality and climate benefits, and fuel savings. One defect in the Final EIS was the wide discrepancy between the percentage of BEV-compatible routes it determined (95%) and the ultimate number of BEVs it chose (10%). This large difference speaks to the controlling weight given to one factor above the rest: cost.

Indeed, the primacy of cost considerations is evident from the Final EIS. Its Cover Sheet stated that "the Proposed Action is the most achievable given the Postal Service's financial condition as the BEV NGDV has a significantly higher total cost of ownership than the ICE NGDV, which is why the Proposed Action does not commit to more than 10% BEVs."[13] From the beginning, the FEIS did not take BEVs seriously by assuming costs would be an overriding limitation. At least one federal court has held that failing to analyze alternatives because of resource constraints is not a legitimate reason for failing to analyze an alternative that would meet the agency's purpose and need.[14] USPS should not have excluded certain alternatives because of *ex ante* cost concerns.

To correct this issue in the SEIS, USPS should undertake a proper total cost of ownership analysis with up-to-date information on battery and gasoline prices, and it should be transparent about how it reached its conclusions about what it deemed feasible.

D. USPS should use any newly appropriated funding to add to its prior commitments to purchase electric vehicles.

In Section 70002 of the proposed Inflation Reduction Act, the Postal Service was allocated an additional $3 billion to purchase zero-emission delivery vehicles and related infrastructure.[15] When the proposed legislation is enacted, USPS should use these funds to supplement its previously announced decision to purchase 40% of its initial order as BEVs; it should not replace funding that has already been allocated for this purpose. Accordingly, the final percentage of BEVs in the initial order should be significantly higher than 40%. The Postal

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[13] FEIS, at i.

[14] "It is not lost on the Court that agencies must work within limited budgets and, in the real world of resource constraint, cannot pursue all their policy goals at once. Rather, they must prioritize based on what they can afford to do. In this case, it seems that FWS chose only to consider options that 'would not result in changes to current management strategies" because considering changes to that scheme would require the expenditure of resources that the agency did not have. . . . . But NEPA's requirement to consider appropriate alternatives takes that option off the table. . . ." *Public Employees for Environmental Responsibility v. U.S. Fish and Wildlife Service*, 177 F. Supp. 3d 146, 154-155 (D.D.C. 2016).

[15] Inflation Reduction Act of 2022, HR 5376, Section 70002.

Service should show how many additional BEVs can be purchased from the funding in the Inflation Reduction Act. And given the urgency of replacing the oldest, dirtiest vehicles, the Postal Service should use enough of the new funding to maximize the number of BEVs in its initial order.

III. PROPER COMPARISON OF THE SEIS ALTERNATIVES DEMANDS UPDATING ASSUMPTIONS USED IN THE TOTAL COST OF OWNERSHIP (TCO) CALCULATION.

USPS will contravene NEPA's purpose if it uses outdated data to consider project alternatives in the SEIS. NEPA commits the federal government to avoiding or mitigating environmental damage through informed decision-making about the environmental impacts of its actions.[16] Commitment to informed decision-making includes requiring careful consideration of project alternatives during EIS (and SEIS) processes.[17] Agencies must use reliable data sources and act with professional and scientific integrity when they analyze environmental factors.[18] Though agencies do not need to undertake new research for an EIS,[19] they must gather all information "essential to [making] a reasoned choice among alternatives."[20] They must use sufficiently current data to allow a "hard look" at the environmental impacts of proposed plans.[21]

USPS should use current gas prices to analyze project alternatives. USPS based its FEIS proposal to purchase predominantly ICE vehicles on BEVs being infeasibly expensive, costing approximately $2.3 billion more than ICE vehicles.[22] USPS's total cost of ownership (TCO) analysis of ICE vehicles relied on predicted gas prices that are drastically different from reality. Rather, it must update that information for the SEIS. If the cost difference between the ICE-dominant and BEV-dominant SEIS alternatives informs USPS's decision to purchase majority ICE vehicles rather than BEVs, the SEIS should not use outdated and inaccurate gasoline prices to calculate cost.[23]

A. USPS used outdated and inaccurate gas prices to calculate the TCO in the DEIS.

Gas prices have risen precipitously since the date USPS chose the average national cost it used in the EIS. USPS used the October 12, 2020 average national cost of $2.19 per gallon to

[16] *See* 42 U.S.C. § 4321; *Id.* § 4331; § *Id.* § 4332.
[17] 42 U.S.C. § 4332.
[18] *See* 40 C.F.R. § 1502.23.
[19] *Id*.
[20] 40 C.F.R. § 1502.22, *quoted in* Backcountry Against Dumps v. Chu, 215 F. Supp. 3d 966, 984 (S.D. Cal. 2015).
[21] *See* Northern Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1083 (9th Cir. 2011).
[22] ROD, at 3-1–3.
[23] *Id*.

analyze the proposals.[24] However, when USPS published its Draft EIS in August of 2021,[25] the average national cost was between $3.159 and $3.139 per gallon.[26] The week that included February 23, 2022, the day USPS published its Record of Decision and the day before Russian invaded Ukraine, the average national price was $3.53 per gallon.[27] USPS then published the Notice of Intent to prepare the SEIS in June of 2022.[28] That week, the average national price was $4.876 per gallon, over double the October 2020 value.[29]

In addition to using an outdated current gas price, the future gas price predictions that USPS used were also inaccurate. USPS relied on predictions that gas prices would roughly plateau from 2020 through 2022, decline from 2023 through 2024, and only rise above 2020 levels in 2026.[30] However, the yearly average cost in 2021 was $3.008,[31] already 137% of the October 2020 value. USPS's chart shows an increase in gas prices after 2026, and it only increases to between 116% and 118% of 2020 values in 2041.[32] On August 1, 2022, the gas price was $4.192,[33] already a staggering 191% of the October 2020 value and 196% of USPS's prediction for 2022. For an agency using between 110 million and 180 million gallons of gas a year, these errors amount to billions of dollars of inaccuracies in the TCO throughout the lifetime of the program.

B. USPS's use of outdated gas costs prevents it from fully considering project alternatives.

An outdated gas cost leads to an incorrectly low TCO for ICE vehicles. A lower gas cost biases USPS towards purchasing ICE, given that USPS's main reason for not investing in BEVs is their higher cost. USPS acknowledges that investing in BEVs is better for the environment and would lower the agency's negative environmental impacts.[34] It also claims that its preferred plan

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[24] ROD, at B-158.
[25] UNITED STATES POSTAL SERV., DRAFT ENVIRONMENTAL IMPACT STATEMENT: UNITED STATES POSTAL SERVICE: NEXT GENERATION DELIVERY VEHICLE ACQUISITIONS (August 2021).
[26] *Weekly U.S. Regular All Formulations Retail Gasoline Prices*, U.S. ENERGY INFO ADMIN., https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM_EPMR_PTE_NUS_DPG&f=W (last updated Aug. 1, 2022).
[27] *Id*.
[28] Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement, 87 Fed. Reg. 35581, 35581 (June 10, 2022).
[29] *Id.*
[30] ROD, at B-160.
[31] *U.S. Regular All Formulations Retail Gasoline Prices (Annual)*, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=emm_epmr_pte_nus_dpg&f=a (last updated July 11, 2022).
[32] ROD, at B-160. The chart and table purporting to show the same data have a variation of approximately 2% between their predicted 2040 levels.
[33] *Weekly U.S. Regular All Formulations Retail Gasoline Prices*, U.S. ENERGY INFO ADMIN., https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM_EPMR_PTE_NUS_DPG&f=W (last updated Aug. 1, 2022).
[34] *See* ROD, at 2–3.

supports the environment and accounts for changing circumstances like cost by allowing flexibility in the number of BEVs that USPS will purchase.[35] Flexibility alone is not enough. Flexibility should help the agency adapt to the unknown, not help it avoid taking a hard look at its actions when information is already available.

An incorrectly low TCO for ICE vehicles improperly restricts consideration of alternatives. USPS has argued that keeping the older gas price does not hinder its comparison of EIS alternatives; it claims updating the gas price would not meaningfully change the $2.3 billion gap between alternatives that drove USPS's choice of ICE vehicles.[36] However, USPS cannot predict the outcome of a comparison it used stale data to make.[37] Further, the $2.3 billion gap does not account for massive investments announced in EV infrastructure.[38] The high cost of charging and other infrastructure that a BEV-dominant fleet would require is a substantial component of the $2.3 billion cost difference.[39] Assuming USPS's calculation of the $2.3 billion gap does not account for external investments in EV infrastructure, the real gap is at least hundreds of millions of dollars less.[40] Once the gap narrows so dramatically, USPS may no longer be able to claim that updating gas costs will have no meaningful impact. Updating the gas cost will change the TCO calculation in a way that impacts how USPS weighs the alternatives.

IV. A PROPER ENVIRONMENTAL JUSTICE ANALYSIS IS CRITICAL TO COMPLY WITH NEPA.

The USPS has failed to do a substantiated and real environmental justice analysis related to its vehicle program. In fact, the prior EIS concluded that the proposed action and the alternatives would have a negligible impact on environmental justice, which is disingenuous.[41] It

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[35] ROD, at 2–3.
[36] *See id.* at 4–5.
[37] *See* Lands Council v. Powell, 395 F.3d 1019, 1031 (9th Cir. 2005).
[38] Fact Sheet: Biden-Harris Administration Catalyzes More Than $700 Million in Private Sector Commitments to Make EV Charging More Affordable and Accessible, THE WHITE HOUSE (June 28, 2022), https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/28/fact-sheet-biden-harris-administration-catalyzes-more-than-700-million-in-private-sector-commitments-to-make-ev-charging-more-affordable-and-accessible/; Jay Landers, *Electric Vehicle Charging Infrastructure Receives Federal, State Support*, AM. SOC'Y OF CIVIL ENG'RS (Mar. 24, 2022), https://www.asce.org/publications-and-news/civil-engineering-source/civil-engineering-magazine/article/2022/03/electric-vehicle-charging-infrastructure-receives-federal-state-support#:~:text=Electric%20vehicle%20charging%20infrastructure%20receives%20federal%2C%20state%20support,-3%2F24%2F2022&text=Signed%20into%20law%20by%20President,for%20electric%20vehicle%20charging%20infrastructure.
[39] *See, e.g.*, ROD, at 3-1–3.
[40] *See, e.g.*, Fact Sheet: Biden-Harris Administration Catalyzes More Than $700 Million in Private Sector Commitments to Make EV Charging More Affordable and Accessible, *supra* note 38.
[41] DEIS, at 65.

is well known that low-income communities and communities of color breathe some of the worst air in the country. According to the American Lung Association, people of color are 1.5 times more likely to live in an area with poor air quality than white people, and studies show that long-term exposure to even small amounts of air pollution make someone 8% more likely to die from COVID-19.[42]

Yet the prior DEIS for its NGDV program states that "[s]ince deliveries would continue to be made to the more than 161 million delivery points regardless of socioeconomic status, both the Proposed Action and Alternatives would result in no impact on minority or low-income populations in terms of mail service or disproportionately high adverse economic effect."[43] The DEIS also stated that

> [b]oth the Proposed Action and Alternatives would result in negligible beneficial impacts on air quality due to higher emission controls as compared to the high-maintenance and end-of-life delivery vehicles being replaced. Both the Proposed Action and Alternative 1.2 would result in negligible beneficial impacts on air quality due to better gas mileage of the newly purchased vehicles as compared to the high-maintenance and end-of-life delivery vehicles being replaced. Such beneficial impacts would occur *regardless of race or socioeconomic status*.[44]

This conclusion is overly simplistic, because a distribution of BEVs across the nation "regardless of minority or income status" does not equate to an equal distribution of beneficial or negative impacts in environmental justice communities. Take for example the South Coast Air Basin, which is home to more than 17 million people—about half the population of the state of California.[45] The South Coast consists of all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, and it is also home to the most ozone-polluted city in the nation. The region has been classified by the U.S. Environmental Protection Agency ("EPA") as an extreme nonattainment area for 1-hour and 8-hour ozone pollution, a moderate nonattainment area for the 1997 federal PM2.5 standards, and a serious nonattainment area for the 2006 and 2012 federal PM2.5 standards.[46] But given the South Coast's large size, the USPS could deploy BEVs vehicles in the South Coast without providing benefits to any environmental justice communities.

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[42] *See* https://www.lung.org/blog/environmental-justice-air-pollution.
[43] DEIS, at 37.
[44] DEIS, at 37 (emphasis added).
[45] *See* http://www.aqmd.gov/nav/about.
[46] 40 CFR § 81.305; 75 Fed. Reg. 24409 (May 5, 2010); 77 Fed. Reg. 30088 (May 21, 2012); 83 Fed. Reg. 25776 (June 4, 2018); 85 Fed. Reg. 57733 (Sep. 16, 2020).

There is also a likelihood that under the 10%, 40%, or other low-level BEV scenarios, most of the benefits of BEVs will end up in California due to its anticipated Advanced Clean Fleets Rules,[47] since the DEIS states that BEVs will be placed on

> routes located in mild temperature ranges, routes with frequent and numerous curb-line stops as they best recapture the vehicle's motion (kinetic) energy via regenerative braking to recharge the battery, and *routes in locations with compromised air quality and/or states with proactive BEV policies and regulations*.[48]

The SEIS must consider that this likely concentration of BEVs in California would result in few to no benefits in other environmental justice communities across the country, such as those in Louisiana's "Cancer Alley," Kansas City, and Florida. At a minimum, the new analysis needs to acknowledge that if USPS does not raise overall BEV numbers, skewed to the benefits of 100% BEVs will likely be concentrated in California and not other disproportionately impacted communities. Moreover, the USPS has also failed to produce a procurement schedule, which would be important to understand the benefits in environmental justice communities. Without one, we cannot assess whether environmental justice have been prioritized in the rollout of the new vehicles.

The USPS has a great opportunity to address environmental injustice by providing zero-emissions vehicles to disproportionately impacted communities first, but it needs a robust, accurate, and ultimately lawful analysis to make this goal a reality.

V. PENDING SUPPLEMENTAL ENVIRONMENTAL REVIEW, USPS SHOULD PAUSE ITS CONTRACT WITH OSHKOSH DEFENSE, LLC, AND PAUSE ITS EXISTING VEHICLE ORDER.

NEPA requires agencies to complete environmental review prior to committing resources,[49] which includes preparing environmental documents before pursuing contractual work.[50] The USPS continues to implement significant efforts with Oshkosh despite clear NEPA violations in the prior review. The Notice provides significant new information and an approach, which requires pausing moving forward. There is no reason the USPS should continue work under the old environmental review, which the agency itself admits is outdated and incomplete. As such, pausing work on the Oshkosh contract is critical to NEPA compliance and ensuring a thoughtful and fair supplemental environmental review.

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[47] *See* California Air Resources Board, Advanced Clean Fleets Regulation Workshop at 39 (Sept. 9, 2021) https://ww2.arb.ca.gov/sites/default/files/2021-09/210909acfpres_ADA.pdf (noting regulation will apply to the federal government fleets).

[48] DEIS, at 23 (emphasis added).

[49] *See* 40 C.F.R. § 1502.2(f) ("Agencies shall not commit resources prejudicing selection of alternatives before making a final decision"), *see also id*. § 1506.1 (headed "Limitations on actions during NEPA process").

[50] *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9th Cir. 2000).

VI. ADDITIONAL PUBLIC PROCESS.

We appreciate that the USPS will hold another public hearing after the Draft SEIS is submitted. We encourage the Postal Service to engage with people across the country as it makes it decisions. We also encourage the agency to do a listening tour for the Postmaster General, Board of Governors and other relevant staff on its vehicles. The implications of these decisions are massive, and it will be important for staff working in the confines of Washington DC to understand what people think about its proposal for its fleet. The overwhelming majority of people who have participated in this public process so far have wanted a heavy concentration of zero-emission vehicles, yet that did not permeate the decision-making process previously. It is imperative that this supplemental review do a better job of **engaging and listening** to stakeholders.

We appreciate the consideration of these comments, and we look forward to working with the USPS to advance a lawful and scientifically sound environmental review.

Sincerely,

Beto-Lugo Martinez
Atenas Mena
CleanAirNow

Katherine Garcia
Sierra Club

Scott Hochberg
Maya Golden-Krasner
Center for Biological Diversity

Adrian Martinez
Yasmine Agelidis
Candice Youngblood
Earthjustice

August 15, 2022

Mr. Davon Collins
Environmental Counsel
United States Postal Service
475 L'Enfant Plaza SW,
Washington, DC 20260-6201,
NEPA@usps.gov

Re: Notice of Intent To Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement

Dear Mr. Collins:

The undersigned organizations write to submit comments on the United States Postal Service's (Postal Service) Notice regarding the Draft SEIS regarding its vehicle program. We remain deeply concerned about the current trajectory of the Postal Service's vehicle fleet procurement strategy, which is bent heavily towards adding tens of thousands of gas guzzling trucks into the fleet. While we appreciate the Postal Service recognizing it needs to procure significantly more zero-emission vehicles than the paltry minimum of 10% electric vehicles committed to earlier this year, the Postal Service's 40% minimum zero-emission vehicle proposal still remains too little to address serious issues of air and climate pollution.

Importantly, the Biden Administration has pledged to cut climate pollution in half by 2030, advance environmental justice, and electrify the federal fleet. Given these commitments, we ask the Postal Service to select a 100% electric fleet and deploy those vehicles in communities overburdened by pollution first. Congress also recently reaffirmed the importance of this transition by passing the Inflation Reduction Act, which dedicates $3 billion to deploying zero-emission delivery vehicles and related infrastructure, and will allow the Postal Service to move beyond the 40% proposal towards a 100% clean fleet.

As you note in the prior EIS, the Postal Service has the largest civilian fleet in the world, consisting of over 230,000 vehicles, "[t]he majority of [which] are on the road delivering mail at least six days per week in *every community*."[1] The Postal Service has both an opportunity and a responsibility to lead the way in our transition to 100 percent zero-emissions vehicles. This is especially true considering that transportation is the largest source of climate pollution in the U.S. and air pollution from fossil fuel vehicles harms people's health, especially in low-income communities and communities of color. By upgrading to electric vehicles, the Postal Service can bring cleaner air to almost every community in the country.

This decision made in the coming year will directly impact every community in the country for decades. Harms associated with continued reliance on internal combustion vehicles will be magnified in the low-income communities and communities of color who already carry a disproportionate air pollution burden. Our communities cannot afford to invest in additional vehicles that will increase dangerous air pollution. But the Postal Service can afford this

[1] DEIS at 19 (emphasis added).

transition: The upfront cost and the total cost of ownership of electric vehicles will be increasingly favorable over diesel and gasoline vehicles in the coming years. Indeed, most of the vehicles that make up the Postal Service fleet – including delivery trucks and vans – tend to be concentrated in urban areas where average trip distances are short, making electrification especially feasible and cost-effective.[2]

The Postal Service's plans to purchase tens of thousands of new fossil fuel vehicles to add to its fleet are also unsupported by adequate analysis. We also encourage the Postal Service to use the best scientific and technical information in making decisions in the supplemental environmental review. The prior analysis was so deeply flawed that we lack confidence that the decision the Postal Service made was fully informed. Using accurate and scientifically sound assessments will be crucial to fixing these flaws. Moreover, while the Postal Service completes this new review, we ask that it not proceed with ordering any new combustion vehicles.

Importantly, the current Postal Service proposal also fails to comply with the commitments President Biden has already made to advance environmental justice by cutting climate pollution in half by 2030. This includes establishing the Justice40 Initiative, which will ensure that federal agencies work with states and local communities to deliver at least 40 percent of the overall benefits from Federal investments in climate and clean energy to disadvantaged communities.[3] Adding tens of thousands of gas guzzling trucks will also leave the Postal Service behind as the rest of the federal fleet advances to zero-emissions technology.[4] Accordingly, the Postal Service must make decisions today that put the U.S. on a path to an all-electric, zero-emissions transportation future.

Thank you for your consideration of these comments. We urge you to commit to purchasing 100 percent battery electric vehicles for the postal fleet and reiterate our request for a final EIS that complies with NEPA and the spirit of the current administration's Executive Orders.

Sincerely,

California Electric Transportation Coalition
CALSTART
Center for Biological Diversity
Chispa LCV
CleanAirNow
Coltura
Dream.Org

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[2] Roush Industries for Environmental Defense Fund, Medium and Heavy-Duty Electrification Costs for MY 2027- 2030 (2022), http://blogs.edf.org/climate411/files/2022/02/EDF-MDHD-Electrification-v1.6_20220209.pdf

[3] Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, 86 Fed. Reg. 7619 (Jan. 27, 2021).

[4] *Id.*

Earthjustice
Ecology Center
Elders Climate Action
Environmental Defense Fund
GreenLatinos
IndigoJLD
League of Conservation Voters
Pacific Environment
Peoples Collective for Environmental Justice
Plug In America
Sierra Club
West Long Beach Association
Zero Emission Transportation Association (ZETA)

cc: Louis DeJoy, United States Postmaster General

COMMENTS OF THE ATTORNEYS GENERAL OF NEW YORK, CALIFORNIA, COLORADO, CONNECTICUT, DELAWARE, THE DISTRICT OF COLUMBIA, ILLINOIS, MAINE, MARYLAND, MICHIGAN, NEW JERSEY, NEW MEXICO, NORTH CAROLINA, OREGON, PENNSYLVANIA, RHODE ISLAND, VERMONT, AND WASHINGTON, THE CORPORATION COUNSEL OF THE CITY OF NEW YORK, AND THE DISTRICT COUNSEL OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

August 15, 2022

Mr. Davon Collins
Environmental Counsel
United States Postal Service
475 L'Enfant Plaza SW
Office 6606
Washington, DC 20260-6201
NEPA@usps.gov

Re: Notice to Postpone Public Hearing and Extend Public Comment Period for Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement, 87 Fed. Reg. 43,561 (July 21, 2022), and Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement, 87 Fed. Reg. 35,581 (June 10, 2022)

Dear Mr. Collins:

New York, California, Colorado, Connecticut, Delaware, the District of Columbia, Illinois, Maine, Maryland, Michigan, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, through their Attorneys General, the City of New York through its Corporation Counsel, and the Bay Area Air Quality Management District through its District Counsel (States) submit these comments on the United States Postal Service's (Postal Service) July 21, 2022 revised Notice of Intent (Notice) to prepare a supplement to the Next Generation Delivery Vehicles (NGDV) Acquisitions Final Environmental Impact Statement (Final EIS).[1] The States strongly support preparation of a Supplemental EIS and the Postal Service's commitment to a greater percentage of battery electric vehicles. However, the scope of topics identified in the Notice should be significantly expanded to address deficiencies in the Final EIS and Record of Decision (ROD).

[1] 87 Fed. Reg. 43,561 (July 21, 2022).

In particular, the total cost of ownership analysis must be redone with data that accurately reflect electric vehicle costs and performance and the cost of fuel for both electric and gas-powered vehicles. The analysis must also pay greater attention to environmental justice impacts and addressing the climate crisis, including state and local climate laws and plans.

Because the Postal Service's Supplemental EIS is critical to informed decisionmaking, which NEPA requires before the Postal Service irretrievably commits resources to a final action, no additional work to produce gas-powered vehicles should occur under the existing contract with Oshkosh Defense, LLC (Oshkosh), nor should any additional contracts or orders be made with Oshkosh or others until the Postal Service completes this Supplemental EIS and issues a new ROD.

Statutory and Regulatory Background

The National Environmental Policy Act (NEPA)[2] "is our basic national charter for protection of the environment,"[3] with two fundamental purposes: (1) to guarantee that an agency takes a "hard look" at the consequences of its actions *before* the action occurs by ensuring that "the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts," and (2) to ensure that "the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision."[4] NEPA requires the preparation of a detailed EIS for any "major federal action significantly affecting the quality of the human environment."[5] In preparing the EIS, NEPA requires federal agencies to take a "hard look," which involves considering the direct, indirect, and cumulative impacts of their proposed actions.[6] When a proposed action has a potential adverse impact on minority or low-income populations, agencies must include an environmental justice analysis as part of this hard look.[7]

NEPA requires accurate and current information, which the agency must disclose to the public. "[A]n agency may not rely on incorrect assumptions or data."[8] These "disclosure requirement[s] obligate the agency to make available to the public

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[2] 42 U.S.C. § 4321, *et seq.*
[3] *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 734 (9th Cir. 2020).
[4] *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349-50 (1989).
[5] 42 U.S.C. § 4332(2)(C).
[6] *Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 973 (9th Cir. 2002).
[7] *See* Exec. Order No. 12898, § 1-101, 59 Fed. Reg. 7,629 (Feb. 16, 1994); *Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1330 (D.C. Cir. 2021) (reviewing challenge to agency's environmental justice analysis under NEPA).
[8] *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005).

high quality information, including accurate scientific analysis, expert agency comments and public scrutiny, before decisions are made and actions are taken."[9]

NEPA further requires that federal agencies provide a "detailed statement" regarding the "alternatives to the proposed action."[10] This requirement "lies at the heart of any NEPA analysis."[11] Agencies must explore and evaluate all reasonable alternatives that relate to the purposes of the project and discuss the reasons for eliminating any alternatives from detailed study.[12] The existence of "a viable but unexamined alternative renders [an] environmental impact statement inadequate."[13]

NEPA prohibits an agency from committing resources to a particular course of action prior to completing its environmental review,[14] meaning the agency must "prepare NEPA documents … before any irreversible and irretrievable commitment of resources."[15] This "point of commitment" constituting an irreversible and irretrievable commitment of resources can occur when an agency "sign[s] the contract" with a project proponent "and then work[s] to effectuate the Agreement."[16]

The Postal Service is an "independent establishment of the executive branch of the Government of the United States,"[17] and, as an agency of the federal government, is subject to the requirements of NEPA.[18] The Postal Service has recognized its NEPA obligations by, among other things, promulgating agency-specific NEPA procedures in 39 C.F.R. Part 775, in which the Postal Service recognizes its responsibilities to "[i]nterpret and administer applicable policies, regulations, and public laws of the United States in accordance with the policies set forth in [NEPA] and the NEPA Regulations."[19] These regulations stress that the Postal Service's policy must "[e]mphasize environmental issues and alternatives in the consideration of proposed actions," to "identify and assess reasonable alternatives to proposed actions in order to avoid or minimize adverse impacts on the environment," and to "[u]se all practicable means to protect, restore, and enhance the

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[9] *Ctr. for Bio. Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1167 (9th Cir. 2003).
[10] 42 U.S.C. § 4332(2)(C)(iii).
[11] *California ex rel. Lockyer v. U.S. Dep't of Agric.*, 459 F. Supp. 2d 874, 905 (N.D. Cal. 2006).
[12] *See* 40 C.F.R. § 1502.14.
[13] *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 814 (9th Cir. 1999).
[14] *See* 40 C.F.R. § 1502.2(f) ("Agencies shall not commit resources prejudicing selection of alternatives before making a final decision"), *see also id.* § 1506.1 (headed "Limitations on actions during NEPA process").
[15] *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9th Cir. 2000).
[16] *Id.*
[17] 39 U.S.C. § 201.
[18] 42 U.S.C. § 4332; 40 C.F.R. § 1500.3(a); *see Akiak Native Cmty. v. U.S. Postal Serv.*, 213 F.3d 1140 (9th Cir. 2000); *Chelsea Neighborhood Ass'ns v. U.S. Postal Serv.*, 516 F.2d 378 (2d Cir. 1975).
[19] 39 C.F.R. § 775.2(a).

quality of the human environment."[20] The Postal Service regulations state that the consideration of alternatives in an EIS "is vitally important."[21]

The NEPA regulations recognize that an EIS should be supplemented where necessary to evaluate all potential environmental impacts,[22] and the Postal Service has determined it must do so here.

In issuing the Final EIS and ROD, the Postal Service violated NEPA by committing resources to a contract with Oshkosh before completing its environmental review and adopted a ROD based on a flawed and incomplete analysis of impacts and alternatives. These flaws in the Final EIS, substantial changes to the action, and significant new circumstances and information, require the Postal Service to prepare this Supplemental EIS before any further activity occurs under this program, including production of vehicles under the existing order or further orders.

Factual Background

A. The States' Strong Interest in NEPA Review of the Postal Service's Action

The States have a strong interest in preventing the adverse environmental and public health impacts of fossil fuel development and combustion, including air quality degradation and public health harms associated with the use of fossil fuel-powered vehicles. The transportation sector accounts for a significant percentage of emissions of both criteria pollutants and greenhouse gases, and Postal Service facilities are often located within environmental justice communities who are exposed to disproportionate emissions from mail delivery vehicles.[23]

The States also have a strong interest in preventing and mitigating harms that climate change poses to human health and the environment, including increased heat-related deaths, damaged coastal areas, increased wildfire risk, disrupted ecosystems, more severe weather events, and longer and more frequent droughts.[24] The States have long been leaders in adopting laws and plans to reduce greenhouse gas emissions and slow the pace of climate change, including policies to promote the electrification of the transportation sector. As a result, the States have strong

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[20] *Id*. § 775.2(c), (e), (f).
[21] *Id*. § 775.11(c)(5).
[22] 40 C.F.R. §§ 1502.9(d)(1), (2) (An Agency must prepare a supplement when: (i) The agency makes substantial changes to the proposed action that are relevant to environmental concerns; or (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts; and may prepare a supplement "when the agency determines the purposes of the Act will be furthered by doing so.").
[23] *See* First Amended Complaint, *California v. U.S. Postal Serv.*, Civil Case No. 3:22-cv-02583-JD, Doc. 79, ¶¶ 30-33 (N.D. Cal. filed Apr. 28, 2022) (Attachment 1).
[24] *See Massachusetts v. EPA*, 549 U.S. 497, 521 (2007).

interests in preventing adverse impacts to these state and local laws and policies—including adopted policies, targets, statutes, and regulations aimed at reducing greenhouse gas emissions and associated climate harms.

Finally, the States have a strong interest in the Postal Service's compliance with NEPA to provide timely and accurate information so commenters and residents can participate in public decision-making processes.

B. The Final EIS and Record of Decision and Subsequent Developments

The Postal Service awarded a contract to Oshkosh in February 2021 to produce 50,000 to 165,000 Next Generation Delivery Vehicles. At the same time, the Postal Service placed an order that funded the production design, assembly tooling, and factory start-up costs, for this contract—committing more than $480 million before completing NEPA analysis. After making this commitment, the Postal Service began its NEPA review, eventually issuing its Final EIS in December 2021.[25]

In early February 2022, before the Postal Service had issued its ROD, the U.S. Environmental Protection Agency (EPA), Council on Environmental Quality (CEQ), members of Congress, and citizens groups wrote letters to the Postal Service identifying serious flaws with its NEPA process. EPA's letter identified numerous substantive flaws in the Final EIS analysis and requested that the Postal Service address these flaws in a supplemental EIS. In particular, EPA stated that (1) critical features of the Postal Service's contract with Oshkosh were not disclosed in the Final EIS; (2) the Final EIS underestimated greenhouse gas emissions from internal combustion engine vehicles and overestimated those from battery electric vehicles; (3) the Final EIS did not disclose data and other essential information underlying total cost of ownership analysis that drove the Postal Service's decision-making; (4) the Final EIS failed to consider a single feasible alternative to the Proposed Action—particularly alternatives that are more environmentally protective; and (5) the Final EIS inadequately considered impacts on environmental justice communities. Despite these critical flaws in its NEPA process and analysis, the Postal Service nonetheless proceeded with issuing its ROD on February 23, 2022. The ROD rejected EPA's call for supplemental analysis without adequately addressing the numerous flaws identified by EPA and others.

On March 21, 2022, the Postal Service's Office of Inspector General issued a report entitled "Electric Delivery Vehicles and the Postal Service."[26] The report found that electric vehicles are capable of meeting most of Postal Service's needs, particularly on longer routes. The Inspector General's total cost of ownership model

[25] *See* 87 Fed. Reg. 994 (Jan. 7, 2022).

[26] *See* U.S. Postal Service, Office of Inspector General, Electric Delivery Vehicles and the Postal Service, Report No. RISC-WP-22-003 (Mar. 17, 2022) [hereinafter, IG Report], *available at* https://www.uspsoig.gov/document/electric-delivery-vehicles-and-postal-service.

projected that electric vehicles are likely to be more affordable to own than gasoline-powered vehicles in certain cases, even in the absence of any financial incentives. About a week before issuing this report, the Inspector General received a congressional request to review the Postal Service's compliance with NEPA with respect to its Next Generation Delivery Vehicle Acquisitions program. According to publicly available sources, this review has not been completed or its findings issued.

Meanwhile, on April 5, 2022, the House Committee on Oversight and Reform held a hearing on the Postal Service's delivery fleet, where it heard testimony from representatives from the Postal Service, its Inspector General, and other stakeholders. The next day, the President signed the Postal Service Reform Act of 2022. This significant overhaul of the Postal Service's financial requirements for funding pension and medical benefits is projected to save the Postal Service billions of dollars in costs over the coming decade.[27]

On April 28, 2022, the States and others filed suit in the United States District Court for the Northern District of California challenging the Postal Service's defective NEPA analysis.[28] The States' complaint alleged that the Postal Service violated NEPA by (1) making "an irreversible and irretrievable commitment of resources" before completing the NEPA process by signing contracts with Oshkosh to procure vehicles six months before even releasing its draft environmental review, and a year prior to issuing the Final EIS and Record of Decision; (2) failing to consider and evaluate reasonable alternatives to its action that would largely continue the status quo by replacing 90 percent of its fleet with fossil-fuel powered, internal combustion engine vehicles, evaluating only 10 percent electric and 100 percent electric vehicle options, while arbitrarily rejecting any consideration of vehicle fleets with a larger mix of electric vehicles; (3) failing to take a "hard look" at these alternatives, including air quality, environmental justice, and climate harms, by simply assuming that any upgrade to its vehicle fleet would have positive impacts on the environment; (4) failing to ensure the scientific integrity of its analysis by relying on unfounded assumptions regarding the costs and performance of electric vehicles, infrastructure, and gas prices, and refusing to identify the source of the data relied upon in the Final EIS; and (5) failing to consider inconsistencies of its preferred alternative with the States' laws and policies to reduce fossil fuel consumption and to electrify the transportation sector.

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[27] *See* Congressional Budget Office, Estimated Budgetary Effects of Rules Committee Print 117-32 for H.R. 3076, the Postal Service Reform Act of 2022, as Posted on February 3, 2022, and as Amended by Amendment #1, the Manager's Amendment, as Posted on February 4, 2022 (Feb. 4, 2022) [hereinafter CBO Report], *available at* https://www.cbo.gov/system/files/2022-02/hr3076_rules.pdf.

[28] *See California v. U.S. Postal Serv.*, Civil Case No. 3:22-cv-02583-JD (N.D. Cal.).

This litigation was related to a similar action brought by a coalition of citizen groups,[29] and these claims remain pending. Additionally, another coalition of citizen groups and unions filed suit in federal district court in New York.[30]

In early August 2022, Congress passed the Inflation Reduction Act. Section 70002 contains approximately $3 billion in funding for the Postal Service zero-emissions delivery vehicles and associated infrastructure. Once enacted, this legislation will close the purported gap in funding that the Postal Service identified in the Final EIS and ROD between the cost of gas-powered replacement vehicles and a battery electric delivery vehicle fleet.

C. Proposed Supplemental EIS Scope

The Postal Service announced its intention to prepare a Supplemental EIS and published a draft scope on June 10, 2022 in the *Federal Register*.[31] The June 10 notice identified several issues requiring supplementation of the Final EIS, including network changes that could increase the minimum number of electric vehicles acquired under the NGDV program,[32] the need to accelerate replacement of Long-Life Vehicles (LLVs) and Flexible Fuel Vehicles (FFVs) with a combination of NGDV and up to 37,000 left-hand-drive commercially available vehicles, and additional acquisition of up to 86,000 other non-LLV/FFV vehicles.

On July 21, 2022, the Postal Service published a revised draft scope (Notice) which identified several significant changes to the proposed Supplemental EIS. First, the Notice states that the Postal Service proposes to modify its preferred alternative to the purchase and deployment of only 50,000 NGDV, with at least 50 percent of those having battery electric powertrains. Any additional NGDV acquisitions beyond these 50,000 would require future supplements to the EIS to address then-current technology, costs, availability and Postal Service operations.[33] Second, the Notice states that the Postal Service has a critical need to accelerate replacements of LLVs and FFVs and thus proposes to acquire within a two-year period: (1) up to 20,000 left-hand-drive commercial vehicles, including "as many BEVs as are commercially available and consistent with [the Postal Service's] delivery profile," and (2) up to 14,500 right-hand-drive gas-powered vehicles. In summary, the revised Notice states that the Supplemental EIS would evaluate the potential environmental impacts of 50,000 NGDVs and an additional 34,500 commercial vehicles, with at least 40 percent

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[29] *CleanAirNow v. DeJoy*, Case No. 3:22-cv-02576-JD (N.D. Cal. filed Apr. 28, 2022).
[30] *NRDC v. DeJoy*, Case No. 1:22-cv-03442-AT (S.D.N.Y. filed Apr. 28, 2022).
[31] 87 Fed. Reg. at 35,581.
[32] *Id.*; *see also* U.S. Postal Serv., Press Release, USPS Delivery Network Improvement Plan Offers Potential to Expand Number of Electric Vehicles in Postal Fleet (June 1, 2022) at 2 (stating that the Postal Service "anticipates taking advantage of the flexibility built into the contract with Oshkosh Defense to increase the number of BEVs purchased in the initial delivery order.").
[33] 87 Fed. Reg. at 43,561.

of the total quantity having battery electric powertrains.[34] Additional vehicle acquisitions beyond these 84,500 to be analyzed in the Supplemental EIS would be addressed in future supplements.[35]

Comments on Supplemental EIS Process and Scope

The States provide the following comments on the Notice:

1. USPS should pause its unlawful contract with Oshkosh and existing 50,000-vehicle order while the supplemental NEPA review is completed.

NEPA requires that an agency complete its environmental review, including preparation of environmental documents such as an EIS, before committing resources to a particular course of action,[36] including advancing work under a contract.[37] Here, the Postal Service executed its contract with Oshkosh before issuing even a draft EIS, committing $480 million of public resources before NEPA review was completed. After issuing the Final EIS and ROD, the Postal Service placed an initial order for Oshkosh to produce up to 50,000 vehicles beginning in August 2023. The Postal Service continues to march forward with its Oshkosh contract despite a defective and inadequate NEPA process, which is currently under investigation by the Postal Service's own Inspector General and is the subject of three lawsuits. Moreover, the Notice states that the Postal Service is proposing a material increase in the percentage of battery electric vehicles for acquisition under this initial 50,000-vehicle order. The Postal Service should use the Supplemental EIS as an opportunity to avoid further NEPA violations, not compound its unlawful approach to environmental review of these major acquisitions.

To avoid additional NEPA violations and ensure the Supplemental EIS fully informs this major purchasing decision, the Postal Service should pause its Oshkosh contract, including its current 50,000-vehicle order, until the Supplemental EIS is completed. This pause is critical because the Notice has identified significant new information and alternatives requiring supplementation, and there are numerous issues the Postal Service should consider, detailed below, that may dramatically alter the acquisitions.

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[34] *Id.*

[35] *Id.*

[36] *See* 40 C.F.R. § 1502.2(f) ("Agencies shall not commit resources prejudicing selection of alternatives before making a final decision"), *see also id.* § 1506.1 (headed "Limitations on actions during NEPA process").

[37] *Metcalf v. Daley*, 214 F.3d at 1143.

2. The Supplemental EIS should assess a reasonable range of alternatives for the entire vehicle acquisition program, including NGDV vehicles acquired under the Oshkosh contract and additional commercial vehicles proposed for purchase in the next two years.

Under Item 1 of the June 2022 proposed scope, the Postal Service stated it would assess whether "changed route length and characteristics warrant an increase in the minimum number of BEV NGDVs to be procured under the Proposed Action set forth in the FEIS."[38] In the July 2022 revised Notice, the Postal Service states that it proposes to modify its acquisition to procure a "significantly higher percentage of [battery electric vehicles]" due to "favorable cost benefit impacts expected from the changes to both our operational strategy and our acquisition planning horizon."[39] In analyzing these changes and proposed increase in battery electric vehicles, the Postal Service should assess the number of battery electric vehicles in the entire vehicle acquisition program, including the order of 50,000 NGDV vehicles for production beginning in August 2023, any subsequent orders of the up to 115,000 additional vehicles covered by the contract with Oshkosh, and the additional commercial vehicles it now proposes to acquire.

The Postal Service's current order with Oshkosh of 50,000 vehicles only requires a minimum of 20 percent battery electric vehicles, approximately 10,000. Even if the Postal Service increases the number to 50 percent, up to 25,000 of the vehicles already ordered could be gas-powered. The Postal Service has made no commitment to a percentage of battery electric powertrains for the up to 115,000 additional NGDV still covered by the Oshkosh contract. The Notice suggests the Postal Service no longer intends to acquire these 115,000 NGDVs beyond its initial 50,000-vehicle order, but the Notice does not state that the Postal Service intends to cancel or modify this contract. Therefore, given a signed contract that includes the possibility of such acquisition, the Postal Service should analyze these 115,000 vehicles as part of its discussion of alternatives.

The Postal Service should also assess a reasonable range of alternative powertrain mixes for the 20,000 left-hand-drive commercial vehicles and up to 14,500 right-hand-drive gas-powered vehicles proposed for acquisition within two years. The States support acquiring as many of the left-hand-drive commercial vehicles with electric powertrains as possible, but NEPA requires that the Postal Service's analysis also consider whether battery electric powertrains are available for the 14,500 right-hand-drive vehicles, currently proposed to be gas-powered. If all 14,500 commercially available right-hand-drive vehicles are gas-powered—and even if 20,000 commercially available left-hand-drive vehicles are battery electric—it could result

[38] 87 Fed. Reg. at 35,581.
[39] 87 Fed. Reg. at 43,561.

in 42 percent of near-term acquisitions being gas-powered, and put thousands of gas-powered trucks on the road for years to come.

In summary, the Postal Service must reassess the entire vehicle acquisition program's minimum battery electric vehicle purchase, including the vehicles already ordered, the additional 115,000 vehicles potentially to be acquired under the contract with Oshkosh, and the additional 34,500 commercially available vehicles proposed for near-term acquisition.

When analyzing alternatives for each of these segments of vehicle procurement, the Postal Service should consider a more realistic range of battery electric alternatives than it examined in the Final EIS and ROD. NEPA requires that the Postal Service provide a "detailed statement" regarding the "alternatives to the proposed action."[40] The requirement to consider reasonable alternatives "lies at the heart of any NEPA analysis,"[41] and "[t]he existence of a viable but unexamined alternative renders" an EIS inadequate.[42] As EPA observed in its comment letter on the Final EIS, the Postal Service examined *no* feasible alternative mixes of battery- and gas-powered vehicles besides 10 percent and 100 percent. At the same time, the Postal Service stated that only 5 percent of its routes would be unsuited to battery electric vehicles, suggesting that battery electric vehicles could be suitable on at least 95 percent of routes, and certainly many more than only 10 percent of routes the Postal Service previously selected in the ROD.

The Notice indicates that the Postal Service will not simply rely on the extreme range of 10 percent or 100 percent battery electric alternatives it examined in the Final EIS, but will also consider a 50 percent battery electric alternative for NGDVs and an overall 40 percent battery electric alternative for the 86,500 vehicles proposed for acquisition. However, given the need to electrify its fleet and meet its stated goal of 20,000 battery electric commercially available right-hand-drive vehicles, the Supplemental EIS should also consider minimum 80 percent and 95 percent battery electric alternatives for the entire vehicle acquisition program.

3. The Supplemental EIS should account for significant increases in the cost of fuel in assessment of the total cost of ownership.

The cost of fuel was a significant factor in the total cost of ownership analysis in the Final EIS and ROD. The Postal Service's selection of its preferred alternative was based in significant part on estimates that gasoline would cost $2.71/gallon, the

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[40] 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.14(a); 39 C.F.R. § 775.11(c)(5); *see also id.* §§ 775.8(a)(4), 775.11(b)(2)(iv)-(v).
[41] *California ex rel. Lockyer v. U.S. Dept. of Agric.*, 459 F. Supp. 2d 874, 905 (N.D. Cal. 2006).
[42] *W. Watersheds Project v. Abbey*, 719 F.3d 1035, 1050 (9th Cir. 2013) (internal quotations and citations omitted).

average price of fuel in 2021.[43] However, fuel prices have increased dramatically since then; for example, as of August 12, 2022, the national average gas price was $3.97 per gallon.[44] In the longer term, the 2022 Annual Energy Outlook projects that national average fuel prices for gasoline will exceed the Final EIS figure in *every* future year, rising above $3.00/gal in nominal dollars by 2027 and $4.00/gal in nominal dollars by 2035.[45] Therefore, the Supplemental EIS must consider the increasing price of gasoline on (1) the existing order of 50,000 vehicles, (2) any remainder of up to 115,000 vehicles under the Oshkosh contract potentially to be acquired, and (3) any additional vehicles proposed for acquisition in the Notice, particularly the 14,500 gas-powered vehicles proposed for near-term purchase.

4. The Supplemental EIS should include updated information on battery electric vehicle performance and infrastructure.

The Notice anticipates that changes in the Postal Service's operations will favor the use of more battery electric vehicles. To ensure that the Postal Service's analysis takes the "hard look" required by NEPA, the Supplemental EIS must use current information on battery electric vehicles performance and infrastructure. The Final EIS used older battery performance and cost data, but in this quickly evolving area, current data are critical to making informed decisions. For example, detailed comments on the Notice from the California Air Resources Board (CARB) provide cost data for comparable battery electric vehicles procured through state contracts in California at prices significantly lower than the figures the Postal Service used in its Final EIS.[46] The CARB comments also provide information on a number of postal agencies in other countries, including in right-hand-drive markets, with recent or anticipated vehicle acquisition programs that the Supplemental EIS should examine for more accurate cost data.[47] The Supplemental EIS analysis should consider the mileage range offered by current battery technology, the costs of charging infrastructure, and the ratio and number of chargers necessary to support a fleet at higher percentages of electrification.

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[43] *See* U.S. Postal Service, Record of Decision & Record of Environmental Consideration, Next Generation Delivery Vehicles Acquisitions 5 (Feb. 23, 2022) [hereinafter ROD], https://uspsngdveis.com/documents/USPS%20NGDV%20Acquisitions%20NEPA%20Record%20of%20Decision_2.23.22.pdf.

[44] Am. Automobile Ass'n, Gas Prices, https://gasprices.aaa.com (visited Aug.12, 2022).

[45] U.S. Energy Information Admin., Annual Energy Outlook 2022, Table 12. Petroleum and Other Liquids Prices, Case:AEO2022 Reference Case, *available at* https://www.eia.gov/outlooks/aeo/data/browser/#/?id=12-AEO2022&region=0-0&cases=ref2022&start=2020&end=2050&f=A&linechart=ref2022-d011222a.3-12-AEO2022~ref2022-d011222a.87-12-AEO2022&ctype=linechart&sid=ref2022-d011222a.87-12-AEO2022&sourcekey=0. (last visited August 12, 2022).

[46] *See* Cal. Air Resources Board, Letter to Jennifer Beiro-Reveille, U.S. Postal Serv., at 17-20 (Jul. 29, 2022).

[47] *Id.* at 20-22.

In addition, the Supplemental EIS should provide comparisons to other battery electric vehicles used by other delivery companies such as FedEx and Amazon, which have both committed to significantly electrifying their delivery vehicle fleets. Comparisons to other delivery companies should examine both NGDVs and the 34,500 commercially available vehicles proposed for near-term purchase.

5. The Supplemental EIS must account for inconsistencies with approved state and local laws, policies, and plans.

The NEPA regulations require that "[t]o better integrate environmental impact statements into State, Tribal, or local planning processes," an EIS "shall discuss any inconsistency of a proposed action with any approved State, Tribal, or local plan or law[,] and [w]here an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law."[48] The Postal Service's delivery fleet is the largest civilian public vehicle fleet in the country, deployed in every state and locality across the nation and thus affects every state and local government's greenhouse gas requirements and initiatives. However, the Final EIS does not analyze this issue, a glaring omission that could undermine numerous States' requirements to address climate change.

Many of the States have adopted laws, regulations, policies and plans to reduce greenhouse gas emissions and fossil fuel consumption to mitigate the devastating consequences of global climate change, as well as to electrify the transportation sector. For example, New York's Climate Leadership and Community Protection Act requires the state to reduce economy-wide greenhouse gas emissions 40 percent below 1990 levels by 2030 and at least 85 percent below 1990 levels by 2050.[49] The City of New York has committed to reducing greenhouse gas emissions 80 percent below 2005 levels by 2050[50] and has issued numerous plans describing its path to achieving this goal, all of which call for increased electrification of the transportation sector.

California's laws and plans include (1) California's statutory target of reducing greenhouse gas emissions by 40 percent below 1990 levels by 2030;[51] (2) the California Air Resources Board's plan to reduce fossil fuel consumption by 45 percent by 2030 to meet this target; (3) California's policies to phase out the sale of new conventional passenger cars and trucks by 2035 and achieve 100 percent zero-emission medium and heavy duty vehicle sales by 2045;[52] and (4) California's policy to achieve carbon neutrality by 2045.[53] Local requirements are often complementary or stricter. For example, the Bay Area Air Quality Management District has set a target that 90

[48] 40 C.F.R. § 1506.2(d).
[49] *See* N.Y. Envtl. Conserv. L. § 75-0107(1).
[50] *See* NYC Admin. Code § 24-803.
[51] Cal. Health & Safety Code § 38566.
[52] Cal. Executive Order N-79-20.
[53] Cal. Executive Order B-55-18.

percent of vehicles in the Bay Area should be zero emissions by 2050, with an interim target of 1.5 million such vehicles by 2030. Access to electric vehicle charging stations will increase as governments work to meet these targets.

Similarly, Connecticut must reduce the level of greenhouse gas emissions in the state by at least 45 percent below the 2001 level by 2030 and by at least 80 percent below the 2001 level by 2050.[54] Washington must reduce overall greenhouse gas emissions in the state by 45 percent below 1990 levels by 2030[55] and set a statewide target that all publicly and privately owned passenger and light duty vehicles of model year 2030 or later that are sold, purchased, or registered in Washington State be electric vehicles.[56] New Mexico has enacted an Energy Transition Act, which sets standards for electric utilities of 50 percent renewable energy by 2030, 80 percent by 2040, and zero-carbon resources by 2050. Pennsylvania has adopted a Climate Action Plan to comply with the governor's commitment to reach a 26 percent reduction in greenhouse gases by 2025 and an 80 percent reduction by 2050.[57] New Jersey's Global Warming Response Act requires the state to reduce greenhouse gas emissions from their 2006 levels by 80 percent by 2050.[58] Among many actions Oregon has taken to combat climate change, it has established a policy to reduce greenhouse gas emissions by 45 percent below 1990 levels by the year 2035, and 80 percent below by 2050, and has enacted a requirement that the state's electric utilities transition to 100 percent renewable energy by 2040.[59]

In Rhode Island, these laws and plans include, among others: Rhode Island's 2021 Act on Climate which, *inter alia*, mandates greenhouse gas emission reductions to 45 percent below 1990 levels by 2030; 80 percent below 1990 levels by 2040, and to net-zero emissions by 2050.[60] As of 2026, there will be a statutory right to bring actions, including actions against the State and its agencies, for failure to comply with the 2021 Act on Climate.[61] In Maryland, the Climate Solutions Act of 2022 requires the State to reduce greenhouse gas emissions 60 percent below 2006 levels by 2031.[62]

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[54] Conn. Gen. Stat. § 22a-200a(a).
[55] Wash. Rev. Code § 70A.45.020(1)(a)(ii).
[56] S.B. 5974, 67th Leg., Reg. Sess. (Wash. 2022).
[57] *See* Pa. Executive Order 2019-01, *available at* https://www.governor.pa.gov/newsroom/executive-order-2019-01-commonwealth-leadership-in-addressing-climate-change-and-promoting-energy-conservation-and-sustainable-governance/ and https://www.dep.pa.gov/Citizens/climate/Pages/PA-Climate-Action-Plan.aspx.
[58] N.J.S.A. 26:2C-37.
[59] Executive Order No. 20-04; Or. Rev. Stat. § 469A.410.
[60] *See* R.I. Gen Laws § 42-6.2-9.
[61] *See* R.I. Gen Laws § 42-6.2-9.
[62] Md. Code Ann., Env't § 2-1204.1.

Having failed to address the inconsistencies of its NGDV program with these state and local laws, policies and plans, the Postal Service must do so now when preparing the Supplemental EIS.

6. The Supplemental EIS should account for other significant new information and developments that have arisen since issuance of Final EIS and ROD.

Several developments after the issuance of the Final EIS or ROD present significant new information and changed circumstances that the Supplemental EIS must address.

A. Postal Service Reform Act of 2022 and Inflation Reduction Act of 2022

The Supplemental EIS must address the Postal Service's significantly changed financial situation following enactment of the Postal Service Reform Act of 2022 (HR 3076) and Inflation Reduction Act of 2022 (HR 5376). In the Final EIS and ROD, the Postal Service's selection of an only 10 percent battery electric vehicle alternative was based largely on the purported higher costs and alleged lack of funding for electric vehicles.[63] However, the enactment on April 6, 2022 of the Postal Service Reform Act has dramatically changed the Postal Service's financial outlook. This major law restructured pre-funding obligations that have for years saddled the Postal Service with unsustainable pension and medical costs. As a result, the Congressional Budget Office estimates billions of dollars in cost savings to the Postal Service between 2022-2031.[64]

The enactment of the Inflation Reduction Act of 2022 will even more dramatically transform the Postal Service's ability to electrify its vehicle fleet. In the ROD, the Postal Service stated that a 100 percent battery electric fleet would cost $2.3 billion more than its 90 percent gas-powered alternative.[65] The Inflation Reduction Act recently passed by Congress will provide the Postal Service with $3 billion in funding for zero-emission delivery vehicles and infrastructure, which should close any purported gap in necessary funding and support the Postal Service's ability to electrify its fleet to the maximum extent operationally possible.

Therefore, the Supplemental EIS should assess the impact of this additional available funding on the Postal Service's ability to acquire more battery electric vehicles overall, and to do so more quickly.

[63] *See* ROD, at 5.
[64] CBO Report, at 1.
[65] *See* ROD, at 5.

B. Litigation

Several lawsuits have been filed challenging the Final EIS and ROD on the basis of procedural and substantive violations of NEPA.[66] The claims in these suits echo the serious problems identified by CEQ, EPA, members of Congress and others earlier this year. A copy of the current amended complaint filed by the States is appended as **Attachment 1** to this letter. As proposed, the Supplemental EIS scope does not address the numerous deficiencies identified in the complaint, nor the letters from various agencies and groups following the Final EIS. The Postal Service should use this opportunity to address the deficiencies in its existing analysis of the NGDV program and undertake a lawful and complete analysis of the additional vehicle acquisitions it is proposing under the Notice.

NEPA requires the Postal Service to take a "hard look" at the environmental impacts of its proposed acquisition program, identifying and analyzing the direct, indirect, and cumulative impacts of the NGDV program and the expanded acquisitions proposed in the Supplemental EIS scope.[67] Because this proposed action has a potential adverse impact on minority or low-income populations, the Postal Service should include an environmental justice analysis as part of this hard look.[68] As detailed in the litigation, the Final EIS and ROD were woefully deficient in this area. The Supplemental EIS must include a comprehensive and updated analysis of air quality, environmental justice, and climate impacts with respect to the various alternatives, along with updated information regarding gas prices and battery electric vehicle performance.

C. Postal Service Inspector General Report

The Postal Service Inspector General's report issued in March 2022, after issuance of the current ROD, found that electric vehicles could generally meet the Postal Service's needs. For example, the Inspector General found that the average 24-mile postal route was well within the ability of current electric vehicle technology, and even the 2 percent of routes that are 70 miles or longer could be more suited to electric vehicles because the Postal Service saves money on each mile driven compared to gas-powered vehicles.[69] The Supplemental EIS should address this conclusion and analysis, and should address missing or inadequate areas identified by the Inspector General.

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[66] *See California v. U.S. Postal Serv.*, Civil Case No. 3:22-cv-02583-JD (N.D. Cal.); *CleanAirNow v. DeJoy*, Case No. 3:22-cv-02576-JD (N.D. Cal.); *NRDC v. DeJoy*, Case No. 1:22-cv-03442-AT (S.D.N.Y.).

[67] *Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d at 973.

[68] *See* Exec. Order No. 12898, § 1-101, 59 Fed. Reg. 7,629 (Feb. 16, 1994); *Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th at 1330 (reviewing challenge to agency's environmental justice analysis under NEPA).

[69] *See* IG Report, at 1.

Additionally, the Inspector General is currently responding to a congressional request to examine NEPA compliance of the Final EIS and ROD.[70] If this review is completed before the Postal Service issues its Draft Supplemental EIS, the document should address issues identified by the Inspector General's review.

7. The Postal Service should commit to 90 percent or more battery electric vehicles in its initial order.

The Postal Service should pause its production of vehicles while it completes the supplemental NEPA analysis. In the meantime, the Postal Service should also commit to 90 percent or more battery electric vehicles for its first 5,000-vehicle order, which is slated for production in the fall of 2023. This would demonstrate the Postal Service's seriousness of intent to electrify its fleet and would represent a significant initial effort in replacing its existing gas-powered fleet with battery electric vehicles.

Conclusion

In conclusion, the States appreciate the opportunity to comment on the proposed scope for the Postal Service's Supplemental EIS. We support preparation of this supplemental analysis, but have identified a number of areas to expand this NEPA review to address existing deficiencies in the Final EIS and ROD and to avoid duplicating them for this Supplemental EIS. While the Postal Service prepares its final scope and drafts the Supplemental EIS, there should be no further actions for vehicle production under the existing NGDV contract that would lock in production of gas-powered vehicles, and no order for the purchase of up to 34,500 commercially available vehicles proposed in the Notice. NEPA requires an agency to complete its analysis before taking an action, and the Postal Service must comply with this fundamental environmental protection.

[70] *See* IG Report, at 2.

Respectfully submitted,

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IN THE UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

STATE OF CALIFORNIA, STATE OF NEW YORK, COMMONWEALTH OF PENNSYLVANIA, STATE OF COLORADO, STATE OF CONNECTICUT, STATE OF DELAWARE, STATE OF ILLINOIS, STATE OF MAINE, STATE OF MARYLAND, PEOPLE OF THE STATE OF MICHIGAN, STATE OF NEW JERSEY, STATE OF NEW MEXICO, STATE OF NORTH CAROLINA, STATE OF OREGON, STATE OF RHODE ISLAND, STATE OF VERMONT, STATE OF WASHINGTON, DISTRICT OF COLUMBIA, CITY OF NEW YORK, and the BAY AREA AIR QUALITY MANAGEMENT DISTRICT,

Plaintiffs,

v.

UNITED STATES POSTAL SERVICE, and LOUIS DEJOY, in his official capacity as United States Postmaster General,

Defendants.

Case No. 3:22-cv-02583-JD

FIRST AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

INTRODUCTION

1. The United States Postal Service has one of the largest civilian vehicle fleets in the world. Its vehicles are on the road, six days a week, in every community in the United States.

While they play a critical role delivering the nation's mail, these vehicles also pollute the air in the communities where they operate and emit significant amounts of greenhouse gases. As its current vehicle fleet nears the end of its useful life, the Postal Service has been presented with a tremendous opportunity to convert its fleet to zero-emission, electric vehicles, a change that would alleviate pollution in overburdened communities and help tackle the climate crisis.

2. Given the transformational nature of this change and its significant environmental and public health implications, the Postal Service was obligated to follow a process mandated by the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321, *et seq*., to take a "hard look" at the impacts of its "Next Generation Delivery Vehicle Acquisitions" program – to look before it leaps. The Postal Service failed to do so here. Instead, the Postal Service first chose a manufacturer with minimal experience in producing electric vehicles, signed a contract, and made a substantial down payment for new vehicles. Only then did the Postal Service publish a cursory environmental review to justify the decision to replace 90 percent of its delivery fleet with fossil-fuel-powered, internal combustion engine vehicles, despite other available, environmentally preferable alternatives. In doing so, the Postal Service failed to comply with even the most basic requirements of NEPA.

3. In particular, the Postal Service violated well-established legal precedent prohibiting "an irreversible and irretrievable commitment of resources" before completing the NEPA process by signing contracts with a defense company (Oshkosh Defense, LLC) to procure vehicles six months before even releasing its draft environmental review, and a year prior to issuing the Final Environmental Impact Statement ("Final EIS") and Record of Decision.

4. The Postal Service also failed to consider and evaluate reasonable alternatives to its action. During its environmental review, the Postal Service put forward a proposed action that would largely continue the status quo by replacing 90 percent of its fleet with fossil-fuel powered, internal combustion engine vehicles. The Postal Service then evaluated only 10 percent electric and 100 percent electric vehicle options, while arbitrarily rejecting any consideration of fleets with a larger mix of electric vehicles.

5. The Postal Service further failed to take the required "hard look" at these alternatives. Specifically, the Postal Service did not properly evaluate several environmental impacts of its action, including air quality, environmental justice, and climate harms, by simply assuming that any upgrade to its vehicle fleet would have positive impacts on the environment.

6. The Postal Service also failed to ensure the scientific integrity of its analysis by relying on unfounded assumptions regarding the costs and performance of electric vehicles, infrastructure, and gas prices, and refusing to identify the source of the data relied upon in the Final EIS.

7. Finally, the Postal Service failed to consider inconsistencies of its Preferred Alternative with Plaintiffs' laws and policies to reduce fossil fuel consumption and to electrify the transportation sector.

8. Accordingly, Plaintiffs State of California, State of New York, Commonwealth of Pennsylvania, State of Colorado, State of Connecticut, State of Delaware, State of Illinois, State of Maine, State of Maryland, People of the State of Michigan, State of New Jersey, State of New Mexico, State of North Carolina, State of Oregon, State of Rhode Island, State of Vermont, State of Washington, District of Columbia, the City of New York, and the Bay Area Air Quality Management District (collectively, "Plaintiffs") seek a declaration that the Postal Service's Final EIS and Record of Decision for its Next Generation Delivery Vehicle Acquisitions program violated NEPA, request that the Court vacate and set aside the Final EIS and Record of Decision, and enjoin actions by the Postal Service under its Next Generation Delivery Vehicle Acquisitions program until it has complied with NEPA.

JURISDICTION AND VENUE

9. This Court has jurisdiction pursuant to 28 U.S.C. § 1331 (action arising under the laws of the United States), 28 U.S.C. § 1346 (civil action against the United States), 39 U.S.C. § 401 (authorizing suits against the Postal Service), and 39 U.S.C. § 409 (suits by and against the Postal Service). An actual controversy exists between the parties within the meaning of 28 U.S.C. § 2201(a), and this Court may grant declaratory relief, injunctive relief, and other relief pursuant to 28 U.S.C. §§ 2201–02 and its equitable powers.

10. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(e)(1)(C) and 39 U.S.C. § 409 because this is the judicial district in which Plaintiffs State of California and the Bay Area Air Quality Management District reside, and this action seeks relief against agencies and/or officers of the United States.

11. Pursuant to Civil Local Rules 3-5(b) and 3-2(c), there is no basis for assignment of this action to any particular location or division of this Court.

PARTIES

12. Plaintiff STATE OF CALIFORNIA brings this action by and through Attorney General Rob Bonta. The Attorney General is the chief law enforcement officer of the State and has the authority to file civil actions in order to protect public rights and interests, including actions to protect the natural resources of the State. Cal. Const. art. V, § 13; Cal. Gov't Code §§ 12511, 12600-12612. This challenge is brought in part pursuant to the Attorney General's independent constitutional, statutory, and common law authority to represent the people's interests in protecting the environment and natural resources of the State of California from pollution, impairment, or destruction. *Id.*; *D'Amico v. Bd. of Med. Exam'rs*, 11 Cal. 3d 1 (1974).

13. Plaintiff STATE OF NEW YORK brings this action by and through Attorney General Letitia James. The Attorney General is the chief legal officer of the State of New York and brings this action on behalf of the State and its citizens and residents to protect their interests, and in furtherance of the State's sovereign and proprietary interests in the conservation and protection of the State's natural resources and the environment.

14. Plaintiff the COMMONWEALTH OF PENNSYLVANIA is a sovereign state of the United States of America. This action is brought on behalf of the Commonwealth by Attorney General Josh Shapiro, the "chief law officer of the Commonwealth." Pa. Const. art. IV, § 4.1. Attorney General Shapiro brings this action on behalf of the Commonwealth pursuant to his statutory authority. 71 Pa. Stat. § 732-204.

15. Plaintiff STATE OF COLORADO brings this action by and through Attorney General Phil Weiser. The Attorney General of Colorado is authorized to appear for the State and prosecute and defend all actions in which the State is a party or is interested. Colo. Rev. Stat. §

24-31-101(1)(a) (2021). Attorney General Phil Weiser brings this action in defense of the State's interest in protecting the public health and environment.

16. Plaintiff STATE OF CONNECTICUT brings this action by and through Attorney General William Tong. The Attorney General of Connecticut is generally authorized to have supervision over all legal matters in which the State of Connecticut is a party. He is also statutorily authorized to appear for the State "in all suits and other civil proceedings, except upon criminal recognizances and bail bonds, in which the State is a party or is interested ... in any court or other tribunal, as the duties of his office require; and all such suits shall be conducted by him or under his direction." Conn. Gen. Stat. § 3-125.

17. Plaintiff STATE OF DELAWARE is a sovereign state of the United States of America. This action is brought on behalf of the State of Delaware by Attorney General Kathleen Jennings, the "chief law officer of the State." *Darling Apartment Co. v. Springer*, 22 A.2d 397, 403 (Del. 1941). Attorney General Jennings also brings this action on behalf of the State of Delaware pursuant to her statutory authority. Del. Code Ann. tit. 29, § 2504.

18. Plaintiff STATE OF ILLINOIS brings this action by and through Attorney General Kwame Raoul. The Attorney General is the chief legal officer of the State of Illinois (Ill. Const., art V, § 15) and "has the prerogative of conducting legal affairs for the State." *EPA v. Pollution Control Bd.*, 372 N.E.2d 50, 51 (Ill. Sup. Ct. 1977). He has common law authority to represent the People of the State of Illinois and "an obligation to represent the interests of the People so as to ensure a healthful environment for all the citizens of the State." *People v. NL Indus.*, 604 N.E.2d 349, 358 (Ill. Sup. Ct. 1992).

19. Plaintiff STATE OF MAINE brings this action by and through its Attorney General, Aaron M. Frey. The Attorney General of Maine is a constitutional officer with the authority to represent the State of Maine in all matters and serves as its chief legal officer with general charge, supervision, and direction of the State's legal business. Me. Const. art. IX, Sec. 11; Me. Rev. Stat. tit. 5, §§ 191 *et seq*. The Attorney General's powers and duties include acting on behalf of the State and the people of Maine in the federal courts on matters of public interest. The Attorney General has the authority to file suit to challenge action by the federal government that threatens

the public interest and welfare of Maine residents as a matter of constitutional, statutory, and common law authority.

20. Plaintiff STATE OF MARYLAND brings this action by and through its Attorney General, Brian E. Frosh. The Attorney General of Maryland is the State's chief legal officer with general charge, supervision, and direction of the State's legal business. Under the Constitution of Maryland, and as directed by the Maryland General Assembly, the Attorney General has the authority to file suit to challenge action by the federal government that threatens the public interest and welfare of Maryland residents. Md. Const. art. V, § 3(a)(2); Md. Code Ann., State Gov't § 6-106.1.

21. By and through Michigan State Attorney General Dana Nessel, Plaintiff PEOPLE OF THE STATE OF MICHIGAN brings this action to defend their sovereign and proprietary interests. MCL 14.28. Conserving Michigan's natural resources is of "paramount public concern." Mich. Const. art IV, § 52.

22. Plaintiff STATE OF NEW JERSEY is a sovereign state of the United States of America and brings this action on behalf of itself and as a trustee, guardian and representative of the residents and citizens of New Jersey. The Attorney General is authorized to file civil suits to vindicate the State's rights and interests, and as he deems necessary to protect the public. N.J. Stat. Ann. § 52:17A-4; *Alexander v. New Jersey Power & Light Co*., 21 N.J. 373, 380 (1956); N.J. Stat. Ann. § 23:2A-2. Acting Attorney General Matthew J. Platkin brings this action in defense of the State's sovereign interest to protect the public health and the environment.

23. Plaintiff STATE OF NEW MEXICO brings this action by and through Attorney General Hector Balderas. The Attorney General of New Mexico is authorized to prosecute in any court or tribunal all actions and proceedings, civil or criminal, when, in his judgment, the interest of the State requires such action. NMSA 1978, § 8-5-2. Under the Constitution of New Mexico, "protection of the state's beautiful and healthful environment is ... declared to be of fundamental importance to the public interest, health, safety and the general welfare." N.M. Const. art. XX, § 21. This provision "recognizes that a public trust duty exists for the protection of New

Mexico's natural resources ... for the benefit of the people of this state." *Sanders-Reed ex rel. Sanders-Reed v. Martinez*, 350 P.3d 1221, 1225 (N.M. Ct. App. 2015).

24. Plaintiff STATE OF NORTH CAROLINA brings this action by and through Attorney General Joshua H. Stein. The North Carolina Attorney General is the chief legal officer of the State of North Carolina. The Attorney General is empowered to appear for the State of North Carolina "in any cause or matter … in which the state may be a party or interested." N.C. Gen. Stat. § 114-2(1). Moreover, the Attorney General is authorized to bring actions on behalf of the citizens of the state in "all matters affecting the public interest." *Id*. § 114-2(8)(a).

25. Plaintiff STATE OF OREGON brings this suit by and through Attorney General Ellen Rosenblum. The Oregon Attorney General is the chief legal officer of the State of Oregon. The Attorney General's duties include acting in federal court on matters of public concern and upon request by any State officer when, in the discretion of the Attorney General, the action may be necessary or advisable to protect the interests of the State. Ore. Rev. Stat. § 180.060(1).

26. Plaintiff STATE OF RHODE ISLAND brings this action by and through Attorney General Peter F. Neronha. The Attorney General is the chief law enforcement officer of the State and has the authority to file civil actions in order to protect public rights and interests, including actions to protect the natural resources of the State. R.I. Const. art. I, § 17; R.I. Gen. Laws R.I. § 10-20-1, *et seq.* This challenge is brought in part pursuant to the Attorney General's independent constitutional, statutory, and common law authority to represent the people's interests in protecting the environment and natural resources of the State of Rhode Island from pollution, impairment, or destruction. *Id.; Newport Realty, Inc. v. Lynch*, 878 A.2d 1021 (R.I. 2005).

27. Plaintiff STATE OF VERMONT brings this action by and through Attorney General Thomas J. Donovan, Jr. The Attorney General is the chief legal officer of the State of Vermont. *See* Vt. Stat. Ann. tit. 3, § 152 ("The Attorney General may represent the State in all civil and criminal matters as at common law and as allowed by statute."). Vermont is a sovereign entity and brings this action to protect its own sovereign and proprietary rights. The Attorney General's powers and duties include acting in federal court on matters of public concern. This challenge is

brought pursuant to the Attorney General's independent constitutional, statutory, and common law authority to bring suit and obtain relief on behalf of the State of Vermont.

28. Plaintiff STATE OF WASHINGTON is a sovereign entity and brings this action to protect its sovereign and proprietary rights by and through its Attorney General, Robert W. Ferguson. The Attorney General is the chief legal adviser to the State of Washington, and his powers and duties include acting in federal court on matters of public concern. *See* WASH. REV. CODE § 43.10.030. This challenge is brought pursuant to the Attorney General's statutory authority to bring suit and obtain relief on behalf of the State of Washington.

29. Plaintiff the DISTRICT OF COLUMBIA is a municipal corporation empowered to sue and be sued and is the local government for the territory constituting the permanent seat of the government of the United States. The District is represented by and through its chief legal officer, the Attorney General for the District of Columbia, Attorney General Karl Racine. The Attorney General has general charge and conduct of all legal business of the District and all suits initiated by and against the District and is responsible for upholding the public interest. D.C. Code § 1-301.81(a)(1).

30. Plaintiff the CITY OF NEW YORK brings this action by and through the Corporation Counsel Hon. Sylvia O. Hinds-Radix. The Corporation Counsel is the chief legal officer of the City of New York and brings this action on behalf of the City and its residents to protect New York City's sovereign and proprietary interest in the conservation and protection of its natural resources and the environment and the health of its residents. *See* New York City Charter Chap. 17, § 394.

31. Plaintiff BAY AREA AIR QUALITY MANAGEMENT DISTRICT ("BAAQMD"), acting to protect the public health, welfare, and resources of the State of California, brings this action by and through its Acting District Counsel, Adan A. Schwartz. BAAQMD is a body corporate and politic, organized pursuant to Chapter 4 of Part 3 of Division 26 of the California Health and Safety Code ("Health & Saf.") with the power to bring this action in its own name and on behalf of the People of the State of California. Health & Saf. Code §§ 40700, 40701 and 42403(a). BAAQMD is the governmental agency charged with the primary responsibility for

controlling air pollution from non-vehicular sources, adopting and enforcing BAAQMD rules and regulations relating to air pollution, and maintaining healthy air quality in the San Francisco Bay Area. Health & Saf. Code §§ 39002, 40000, 40200, 40702 and 42402.

32. Plaintiffs have a strong interest in preventing the adverse environmental and public health impacts of fossil fuel development and combustion, including air quality degradation and public health harms associated with the use of fossil fuel powered vehicles. Not only does the transportation sector account for a significant percentage of emissions of both criteria pollutants and greenhouse gases, but Postal Service facilities are often located within environmental justice communities that are exposed to disproportionate emissions from mail delivery vehicles. For example, in the San Francisco Bay Area, tailpipe emissions from 5.3 million light duty vehicles account for approximately 31% of the region's carbon monoxide and 12% of its nitrogen oxides, as well as 28% of the region's greenhouse gas emissions. The Postal Service operates a major mail distribution facility at 675 7th Street in West Oakland, a site that contributes to the heavy pollution burden already experienced in neighboring communities from industrial facilities, an adjacent port, highways, and distribution centers. The Postal Service's San Francisco Processing & Distribution Center is located in the Bayview neighborhood, where the population is predominantly Black, Hispanic or Latino, and Asian, and which is already overburdened by air pollution and the related negative health effects from multiple industrial facilities operating in and around the neighborhood.

33. Transportation is currently the largest in-state source of greenhouse gas emissions in Delaware, as well as a significant source of carbon monoxide, nitrous oxide, and particulate matter, which disproportionately affects communities near highways and industrial centers.

34. Likewise, in New York City, a 2016 study estimated that fine particulate (PM 2.5) emissions from vehicle traffic alone caused 320 premature deaths in the City each year (5,850 life years lost), as well as 870 asthma-related emergency room visits and cardiovascular or respiratory hospitalizations.[1] The health impacts were especially severe in neighborhoods where poverty is

[1] *See* Iyad Kheirbek, *et al.*, *The contribution of motor vehicle emissions to ambient fine particulate matter public health impacts in New York City: a health burden assessment*,

very high, such as East New York, Brooklyn, where a major Postal Service distribution facility is located at 1050 Forbell Street. Those neighborhoods are burdened with 70% more PM 2.5 emissions from trucks and buses, and over eight times as many asthma-related emergency room visits attributable to those emissions, compared to low poverty neighborhoods.

35. Plaintiffs also have a strong interest in preventing and mitigating harms that climate change poses to human health and the environment, including increased heat-related deaths, damaged coastal areas, increased wildfire risk, disrupted ecosystems, more severe weather events, and longer and more frequent droughts. *See Massachusetts v. EPA*, 549 U.S. 497, 521 (2007). For example, California is already experiencing the adverse effects of climate change, including increased risk of wildfires, a decline in the average annual snowpack that provides approximately 35 percent of the State's water supply, increased erosion of beaches and low-lying coastal properties from rising sea levels, and increased formation of ground-level ozone (also known as smog), which is linked to asthma, heart attacks, and pulmonary problems, especially in children and the elderly. In Washington, warmer temperatures have led to diminished snowpack, harming downstream communities that rely on snowmelt for hydroelectric power, drinking water, and agriculture.[2]

36. For these reasons, among others, Plaintiffs have long been leaders in adopting laws and plans to reduce greenhouse gas emissions and slow the pace of climate change, including policies to promote the electrification of the transportation sector.

37. For example, California's laws and plans include (1) California's statutory target of reducing greenhouse gas emissions by 40 percent below 1990 levels by 2030, Cal. Health & Safety Code § 38566; (2) the California Air Resources Board's plan to reduce fossil fuel consumption by 45 percent by 2030 to meet this target; (3) California's policies to phase out the sale of new conventional passenger cars and trucks by 2035 and achieve 100% zero-emission

Environmental Health Vol. 15, Article 89 (2016), https://doi.org/10.1186/s12940-016-0172-6 (article) and https://a816-dohbesp.nyc.gov/IndicatorPublic/Traffic/index.html (infographic).

[2] *See* H.A. Roop, *et al.*, Univ. Wash. Climate Impacts Group, *Shifting Snowlines and Shorelines* (2020), https://cig.uw.edu/wp-content/uploads/sites/2/2020/02/CIG_SnowlinesShorelinesReport_2020.pdf.

medium and heavy duty vehicle sales by 2045, Executive Order N-79-20; and (4) California's policy to achieve carbon neutrality by 2045, Executive Order B-55-18. Local requirements are often complementary or stricter. For example, the Bay Area Air Quality Management District has set a target that 90 percent of vehicles in the Bay Area should be zero emissions by 2050, with an interim target of 1.5 million such vehicles by 2030. Access to electric vehicle charging stations will increase as governments work to meet these targets.

38. Connecticut must reduce the level of greenhouse gas emissions in the state by at least 45 percent below the 2001 level by 2030 and by at least 80 percent below the 2001 level by 2050. Conn. Gen. Stat. § 22a-200a(a).

39. Pursuant to the Climate Leadership and Community Protection Act, New York must reduce economy-wide greenhouse gas emissions 40 percent below 1990 levels by 2030 and at least 85 percent below 1990 levels by 2050. *See* N.Y. Envtl. Conserv. L. § 75-0107(1).

40. Washington must reduce overall greenhouse gas emissions in the state by 45 percent below 1990 levels by 2030. Wash. Rev. Code § 70A.45.020(1)(a)(ii).

41. In response to the dangers posed by greenhouse gases, New Mexico has enacted an Energy Transition Act, which sets standards for electric utilities of 50% renewable energy by 2030, 80% by 2040, and zero-carbon resources by 2050.

42. Pennsylvania has adopted a Climate Action Plan to comply with the governor's commitment to reach a 26 percent reduction in greenhouse gases by 2025 and an 80 percent reduction by 2050. Executive Order 2019-01.[3]

43. In Rhode Island, these laws and plans include, among others: Rhode Island's 2021 Act on Climate which, *inter alia*, mandates greenhouse gas emission reductions to forty-five percent (45%) below 1990 levels by 2030; eighty percent (80%) below 1990 levels by 2040, and to net-zero emissions by 2050. *See* R.I. Gen Laws § 42-6.2-9. As of 2026, there will be a statutory right to bring actions, including actions against the State and its agencies, for failure to comply with the 2021 Act on Climate. *See* R.I. Gen Laws § 42-6.2-9.

[3] https://www.governor.pa.gov/newsroom/executive-order-2019-01-commonwealth-leadership-in-addressing-climate-change-and-promoting-energy-conservation-and-sustainable-governance/ and https://www.dep.pa.gov/Citizens/climate/Pages/PA-Climate-Action-Plan.aspx.

44. Effective June 1, 2022, Maryland law requires the State to reduce greenhouse gas emissions 60 percent below 2006 levels by 2031, and to achieve net-zero greenhouse gas emissions by 2045. Climate Solutions Now Act of 2022, 2022 Md. Laws, ch. 38, §§ 3-4.

45. The City of New York has committed to reducing greenhouse gas emissions 80 percent below 2005 levels by 2050, *see* NYC Admin. Code § 24-803, and has issued numerous plans describing its path to achieving this goal, all of which call for increased electrification of the transportation sector.

46. The Postal Service failed to consider the impacts of its decision on state and local government laws and policies. The Postal Service's procurement of a new gas-powered fleet will adversely impact Plaintiffs by continuing substantial and unnecessary emissions of air pollutants, including greenhouse gases; adversely affecting public health; and undermining and increasing the costs of Plaintiffs' efforts to address these critical problems.

47. Plaintiffs also rely upon the Postal Service's compliance with the procedural requirements of NEPA in order to obtain timely and accurate information about activities that may have significant adverse effects on the environment, so that Plaintiffs and their residents can meaningfully participate in the decisionmaking process. The Postal Service's failure to comply with NEPA adversely affects Plaintiffs by thwarting public participation and by failing to adequately protect the environment. An adequate NEPA review that identifies and evaluates those impacts would provide additional information that could result in a different decision regarding the program – a termination of the program, modification of the program, or other mitigations that would redress Plaintiffs' injuries.

48. Therefore, Plaintiffs have suffered legal wrong because of the Postal Service's action, have been adversely aggrieved by the approval of the Final EIS and Record of Decision, and have standing to bring this action.

49. Defendant UNITED STATES POSTAL SERVICE is "an independent establishment of the executive branch" of the U.S. government, 39 U.S.C. § 201, and bears responsibility, in whole or in part, for the acts complained of in this Complaint.

50. Defendant LOUIS DeJOY is the United States Postmaster General and bears responsibility, in whole or in part, for the acts complained of in this Complaint.

STATUTORY BACKGROUND

I. NATIONAL ENVIRONMENTAL POLICY ACT.

51. NEPA "is our basic national charter for protection of the environment." *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 734 (9th Cir. 2020). NEPA has two fundamental purposes: (1) to guarantee that an agency takes a "hard look" at the consequences of its actions before the action occurs by ensuring that "the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts," and (2) to ensure that "the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349-50 (1989).

52. To achieve these purposes, NEPA requires the preparation of a detailed EIS for any "major federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). In preparing the EIS, NEPA requires federal agencies to take a "hard look," which involves considering the direct, indirect, and cumulative impacts of their proposed actions. *Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 973 (9th Cir. 2002). When a proposed action has a potential adverse impact on minority or low-income populations, agencies should include an environmental justice analysis as part of this "hard look" under NEPA. *See* Exec. Order No. 12898, § 1-101, 59 Fed. Reg. 7,629 (Feb. 16, 1994); *Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1330 (D.C. Cir. 2021) (reviewing challenge to agency's environmental justice analysis under NEPA). Moreover, "an agency may not rely on incorrect assumptions or data." *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005). Fundamentally, these "disclosure requirement[s] obligate the agency to make available to the public high quality information, including accurate scientific analysis, expert agency comments and public scrutiny, before decisions are made and actions are taken." *Ctr. for Bio. Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1167 (9th Cir. 2003).

53. NEPA further requires that federal agencies provide a "detailed statement" regarding the "alternatives to the proposed action." 42 U.S.C. § 4332(2)(C)(iii). This requirement "lies at the heart of any NEPA analysis." *California ex rel. Lockyer v. U.S. Dep't of Agric.*, 459 F. Supp. 2d 874, 905 (N.D. Cal. 2006). Agencies must explore and evaluate all reasonable alternatives that relate to the purposes of the project, and must briefly discuss the reasons for eliminating any alternatives from detailed study. *See* 40 C.F.R. § 1502.14. The existence of "a viable but unexamined alternative renders [an] environmental impact statement inadequate." *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 814 (9th Cir. 1999).

54. A fundamental requirement of NEPA is that an agency must not commit resources to a particular course of action prior to completing its environmental review. *See* 40 C.F.R. § 1502.2(f) ("Agencies shall not commit resources prejudicing selection of alternatives before making a final decision"), *see also id.* § 1506.1 (headed "Limitations on actions during NEPA process"). The Ninth Circuit has construed this requirement "as requiring agencies to prepare NEPA documents … before any irreversible and irretrievable commitment of resources." *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9th Cir. 2000). "The point of commitment" constituting an irreversible and irretrievable commitment of resources can occur when an agency "sign[s] the contract" with a project proponent "and then work[s] to effectuate the Agreement." *Id.*

55. The Postal Service is an "independent establishment of the executive branch of the Government of the United States," 39 U.S.C. § 201, and, as an agency of the federal government, the Postal Service is subject to the requirements of NEPA. 42 U.S.C. § 4332; 40 C.F.R. § 1500.3(a); *see Akiak Native Cmty. v. U.S. Postal Serv.*, 213 F.3d 1140 (9th Cir. 2000); *Chelsea Neighborhood Ass'ns v. U.S. Postal Serv.*, 516 F.2d 378 (2d Cir. 1975).

56. The Postal Service has recognized its NEPA obligations by, among other things, promulgating agency-specific NEPA procedures in 39 C.F.R. Part 775, in which the Postal Service recognizes its responsibilities to "[i]nterpret and administer applicable policies, regulations, and public laws of the United States in accordance with the policies set forth in [NEPA] and the NEPA Regulations . . . ." 39 C.F.R. §§ 775.2(a). These regulations stress that the Postal Service's policy is to "[e]mphasize environmental issues and alternatives in the

consideration of proposed actions," to "identify and assess reasonable alternatives to proposed actions in order to avoid or minimize adverse impacts on the environment," and to "[u]se all practicable means to protect, restore, and enhance the quality of the human environment." *Id.* § 775.2(c), (e), (f). In addition, the regulations state that the consideration of alternatives in an EIS "is vitally important." *Id.* § 775.11(c)(5).

57. Courts review the Postal Service's compliance with NEPA under an arbitrary and capricious standard of review. *See Akiak*, 213 F.3d at 1144.

II. POSTAL SERVICE HISTORY, OPERATIONS, AND GOVERNING LAWS.

58. The United States Constitution empowers Congress to "establish Post Offices and post Roads." U.S. Const., art. I, § 8, cl. 7. In 1789, Congress established the first Post Office under the Constitution and made the Postmaster General subject to the President's direction. U.S. Postal Serv., The United States Postal Service: An American History 1, 4 (2020), https://about.usps.com/publications/pub100.pdf.

59. The Postal Service has played "a vital yet largely unappreciated role in the development of" the United States. *U.S. Postal Serv. v. Council of Greenburgh Civic Assocs.*, 453 U.S. 114, 121 (1981). During the early years of this country's development, "the Post Office was to many citizens situated across the country the most visible symbol of national unity." *Id.* at 122. Since its beginnings in the pre-Revolutionary period, the Postal Service "has become the nation's oldest and largest public business." *U.S. Postal Serv. v. Flamingo Indus. (USA) Ltd.*, 540 U.S. 736, 739 (2004) (citations and quotations omitted).

60. Since its founding, "the Postal Service's efforts to deliver mail quickly and reliably have been a force for innovation in the American transportation sector." USPS Office of Inspect. Gen., *Electric Delivery Vehicles and the Postal Service*, at 3 (Mar. 17, 2022). The Postal Service has spurred nationwide adoption of the stagecoach, nationwide expansion of railroads, nationwide use of air transportation, and the development of electric vehicles. *Id.*

61. In 1970, Congress passed the Postal Reorganization Act ("PRA"), *see* Pub. L. No. 91-375, 84 Stat. 719, in large part to "convert the Post Office Department into an independent

establishment in the Executive Branch of the Government freed from direct political pressures." H.R. Rep. No. 91-1104, at 1 (1970) (Conf. Rep.), *as reprinted in* 1970 U.S.C.C.A.N. 3649, 3650.

62. The PRA renamed the agency the U.S. Postal Service, restructured its operations, removed it from the Cabinet to ensure its political independence, provided that the Postmaster General would be appointed by a newly-established Board of Governors rather than the President, and stated it had the power "to sue and be sued in its official name." 39 U.S.C. § 401(a). The PRA provides that "[t]he United States Postal Service shall be operated as a basic and fundamental service provided to the people by the Government of the United States, authorized by the Constitution, created by Act of Congress, and supported by the people." *Id.* § 101(a). The PRA further affirms that the Postal Service's "basic function" is "to bind the Nation together through the personal, educational, literary, and business correspondence of the people." *Id.* To do so, the Postal Service "shall render postal services to all communities." *Id.*

63. The Postal Service operates around the clock to process and deliver mail via a highly integrated and complex system through which an average of 425 million pieces of mail moved every day. U.S. Postal Serv., Fun Facts, 1 Day in the Postal Service, https://facts.usps.com/one-day/. The Postal Service delivers to "more than 163 million city, rural, PO Box and highway delivery points." U.S. Postal Serv., FY 2021 Annual Report to Congress 14, https://about.usps.com/what/financials/annual-reports/fy2021.pdf.

64. The Postal Service touches the lives of virtually all people in the United States. For example, 18 percent of Americans, and 40 percent of senior citizens, pay their bills via the mail. Nearly 20 percent of Americans who receive tax refunds do so through the mail.[4] The Department of Veterans Affairs fills about 80 percent of veterans' prescriptions by mail, sending 120 million prescriptions a year. Every day, more than 330,000 veterans receive a package of prescriptions in the mail.[5] More than half of the people who receive medication by mail are over

[4] Sam Berger & Stephanie Wylie, *Trump's War on the Postal Service Hurts All Americans*, Ctr. For Am. Progress (Aug. 19, 2020), https://www.americanprogress.org/issues/democracy/news/2020/08/19/489664/trumps-war-postal-service-hurts-americans/.

[5] Hope Yen, "Lawmakers: Postal changes delay mail-order medicine for vets," ABC News (Aug. 14, 2020), https://abcnews.go.com/Politics/wireStory/lawmakers-postal-delay-mail-order-medicine-vets-72374343.

the age of 65. In rural areas, where more than a third of post offices are located and where private mail carriers often do not deliver, the Postal Service provides a vital link to more than 14 million people without broadband access. In 2020, the Postal Service delivered approximately 543 million pieces of election mail, including 135 million ballots, allowing millions of Americans to securely vote in local, state, and national elections. U.S. Postal Serv., FY 2021 Annual Report to Congress, at 22-23.

65. The PRA provides that it "shall be the responsibility of the Postal Service to maintain an efficient system of collection, sorting, and delivery of the mail nationwide." 39 U.S.C. § 403(b)(1). The PRA further requires that "[i]n selecting modes of transportation, the Postal Service shall give highest consideration to the prompt and economical delivery of all mail. Modern methods of transporting mail by containerization and programs designed to achieve overnight transportation to the destination of important letter mail to all parts of the Nation shall be a primary goal of postal operations." 39 U.S.C. § 101(f).

66. The Postal Service has adopted new transportation technologies when necessary to carry out its mission—from boats, to airplanes, to motorized delivery vehicles. U.S. Postal Serv., The United States Postal Service: An American History, at 12-24, 40, 57, 80-81, 110-118.

67. In 2021, the Postal Service had 212,327 delivery and collection vehicles in its inventory. U.S. Postal Serv., FY 2021 Annual Report to Congress, at 28.

FACTUAL AND PROCEDURAL BACKGROUND

I. THE POSTAL SERVICE'S NEXT GENERATION VEHICLE DELIVERY ACQUISITIONS PROGRAM.

68. The Postal Service has one of the largest civilian vehicle fleets in the world, consisting of approximately 212,000 vehicles that are on the road delivering mail at least six days per week to more than 163 million delivery points in every community in the United States. Most of these vehicles, known as Long Life Vehicles, were manufactured between 1986 and 1994 and are now beyond their intended service life and becoming increasingly expensive and dangerous to operate and maintain.

69. To address this problem, the Postal Service launched its Next Generation Delivery Vehicle Acquisitions program to evaluate, test, and eventually purchase up to 165,000 new purpose-built vehicles over the next ten years.

70. On February 23, 2021, the Postal Service announced a contract award to a defense contractor, Oshkosh Defense, LLC ("Oshkosh"), for the future production of these vehicles. The contract covers non-recurring engineering and tooling costs and allows the Postal Service to order between 50,000 and 165,000 Next Generation Delivery Vehicles over a ten-year period. The Postal Service has claimed that the contract requires the company to be able to support two powertrain alternatives: (1) a modern and efficient internal combustion engine, and (2) a battery electric vehicle powertrain. At the time the contract was awarded, though, Oshkosh did not manufacture any electric vehicles. The contract was allegedly "contingent on the satisfactory completion of the NEPA process." However, the Postal Service provided as much as $482 million to Oshkosh under the contract prior to initiating the NEPA process.

71. In June 2021, Oshkosh announced that it would open a new facility in Spartanburg, South Carolina, to construct vehicles for the Postal Service under this contract.

II. NEPA PROCESS FOR THE PROGRAM.

72. On August 26, 2021, the Postal Service announced the availability of a draft EIS for its Proposed Action—namely, to "purchase and deploy[] up to 165,000 Next Generation Delivery Vehicles ("NGDVs") over a ten-year period." *See* 86 Fed. Reg. 47,662 (Aug. 26, 2021). The stated purpose and need of the Proposed Action in the draft EIS were "to replace the end-of-life and high-maintenance long life vehicles ("LLVs") and flexible fuel vehicles ("FFVs") with vehicles with more energy-efficient powertrains, updated technology, reduced emissions, increased cargo capacity and improved loading characteristics, improved ergonomics and carrier safety, and reduced maintenance costs," and "to enable the Postal Service to meet its Congressional mandate to maintain efficient nationwide delivery of the mail and to provide prompt, reliable, and efficient services to patrons."

73. In evaluating the Proposed Action and alternatives, the Draft EIS considered (1) the purchase and deployment of custom-made vehicles with 90% gas-powered, internal-combustion

engines and 10% electric vehicles (Alternative 1, or the "Preferred Alternative"); (2) the purchase and deployment of 100% custom-made electric vehicles (a different "scenario" under Alternative 1); (3) an alternative of purchasing 100% commercial off-the-shelf gas-powered vehicles with right-hand drive (Alternative 1.1); (4) an alternative of purchasing 100% commercial off-the-shelf electric vehicles with left-hand drive (Alternative 1.2); and (5) the required "No Action Alternative" of attempting to maintain the Postal Service's existing fleet.

74. The Postal Service accepted comments on the draft EIS until October 18, 2021. Comments critical of the Draft EIS were submitted by the United States Environmental Protection Agency ("EPA"), the Bay Area Air Quality Management District, the International Union, United Automobile, Aerospace & Agricultural Implement Workers of America, and several non-governmental organizations, among others.

75. For example, EPA explained that while the Postal Service identified a clear need to update its vehicle fleet, "we do not believe a proper analysis was conducted that would support the Postal Service's preferred alternative." In particular, EPA stated that the draft EIS lacked adequate data and presented biased cost and emissions estimates to support its Preferred Alternative, thereby precluding "meaningful consideration of the proposed action and alternatives."

76. The Bay Area Air Quality Management District also commented that the 10 percent electric requirement in the Preferred Alternative was insufficient, given that this proposal (1) would negatively impact the region's progress in improving local air quality and reducing GHG emissions, especially in vulnerable communities; (2) did not reflect current and rapidly expanding electric vehicle technology; (3) would unnecessarily delay the transition to clean technologies, and (4) would likely cost the Postal Service and taxpayers more money in the long term because gas-powered vehicles are more expensive than electric vehicles to operate and maintain.

77. On January 7, 2022, the Postal Service released the Final EIS with minimal changes from the draft EIS. 87 Fed. Reg. 994 (Jan. 7, 2022).

78. In the Final EIS, the Postal Service decide to move forward with its Preferred Alternative of procuring custom-made, right-hand-drive delivery vehicles with 90 percent internal

combustion engines and 10 percent battery electric vehicles. The Final EIS noted that the actual delivery vehicle types purchased would be contingent, in part, "upon the supplier's production and delivery capabilities."

79. The Final EIS stated that the Preferred Alternative was chosen because battery electric vehicles involved a higher total cost of ownership and would have limited range rendering their use infeasible on longer rural routes, despite comments and evidence submitted to the agency contradicting these conclusions. In fact, the Final EIS assumes fuel costs for gas-powered vehicles of $2.19 per gallon, grossly underestimating even current gasoline prices, let alone future ones. The Final EIS rejected an alternative of 100 percent battery electric vehicles as infeasible, and evaluated no other percentage of electric powertrains between the 10 percent it selected and the 100 percent it rejected.

80. The Final EIS relied on acquisition and maintenance cost data at least in part based on the contract awarded to Oshkosh, which was not provided to the public, despite requests for the Postal Service to make this information public as required by NEPA.

81. The Final EIS failed to fully evaluate environmental justice impacts from the program.

82. The Final EIS did not evaluate environmental impacts from the construction and renovation of the Spartanburg, South Carolina production facility that Oshkosh had announced would be built to meet the demands of its contract.

83. The Final EIS did not consider the inconsistency of the Preferred Alternative with State and local laws and plans that require reductions in greenhouse gas emissions and fossil fuel consumption, including from the transportation sector.

84. On February 2, 2022, EPA Associate Administrator Vicky Arroyo wrote to the Postal Service to express the agency's disapproval of the Final EIS. In particular, EPA wrote that its "concerns with the draft EIS were not adequately addressed and the final EIS remains seriously deficient," and "preparation of a supplemental EIS is particularly important to maintain the integrity of the NEPA process." For example, using well-established metrics for estimating

greenhouse gas emissions, EPA calculated that carbon dioxide emissions from the use of gas-powered vehicles would be 2.5 times greater than what the Postal Service had estimated.

85. On the same day, the White House Council on Environmental Quality ("CEQ"), the federal agency responsible for implementing NEPA, wrote to the Postal Service to express similar concerns. In a letter addressed to Defendant DeJoy, CEQ Chair Brenda Malloy reiterated EPA's "grave concerns" with the adequacy of the Final EIS, criticized the Postal Service's decision to contract with Oshkosh prior to completing the NEPA review, and urged the Postal Service to redo its analysis.

86. On February 4, 2022, these concerns were echoed in a letter to the Postal Service signed by several members of Congress, who wrote to express "strong opposition to the failure of the United States Postal Service (USPS) to plan to electrify its fleet of mail delivery vehicles and contribute to the fight against climate change." The letter continued: "After an unjustifiable, truncated, and deficient process, it is unacceptable that the USPS intends to cling to an overwhelmingly fossil fuel-powered fleet whose emissions are endangering our planet."

87. On February 23, 2022, the Postal Service signed the Record of Decision, which finalized the NEPA process, incorporated the findings and analysis of the Final EIS, and announced the agency's determination that it would implement the Preferred Alternative. *See* 87 Fed. Reg. 14,588 (Mar. 15, 2022).

88. On March 17, 2022, the United States Postal Service Office of Inspector General released a report titled "Electric Delivery Vehicles and the Postal Service," which found that "electric vehicle technology is generally capable of meeting the Postal Service's needs" and is generally more cost-effective than using gas-powered vehicles. Contrary to the findings in the Final EIS and Record of Decision, the Inspector General found that the average 24-mile postal route was well within the ability of current electric vehicle technology, and even the 2 percent of routes that are 70 miles or longer could be more suited to electric vehicles because the Postal Service saves money on each mile driven compared to gas-powered vehicles.

FIRST CAUSE OF ACTION

(Violation of NEPA:

Irreversible Commitment of Resources

42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.2(f); 39 C.F.R. § 775.11(b)(2)(vi))

89. Paragraphs 1 through 88 are realleged and incorporated herein by reference.

90. Plaintiffs have a right of action to declare unlawful and set aside agency action that is arbitrary and capricious, exceeds the agency's statutory authority, and violates NEPA.

91. A fundamental requirement of NEPA is that agencies must not commit resources to a particular course of action prior to completing their environmental review. *See* 40 C.F.R. § 1502.2(f) ("Agencies shall not commit resources prejudicing selection of alternatives before making a final decision"), *see also id.* § 1506.1 (Limitations on actions during NEPA process); 39 C.F.R. § 775.11(b)(2)(vi) (EIS must "[s]erve to assess the environmental impact of proposed actions, rather than to justify decisions already made"). As the Ninth Circuit has found, agencies are required to prepare NEPA documents "*before* any irreversible and irretrievable commitment of resources." *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9th Cir. 2000) (emphasis added). "The point of commitment" constituting an irreversible and irretrievable commitment of resources can occur when an agency "sign[s] the contract" with a project proponent "and then work[s] to effectuate the Agreement." *Id.*

92. Here, the Postal Service awarded a contract for the manufacture of Next Generation Delivery Vehicles to Oshkosh in February 2021, roughly six months before the agency even issued its Draft EIS, and a year before it finalized the EIS and issued the Record of Decision. The Final EIS states that "[a]t the time of awarding the contract, the Postal Service placed an order that funds the production design, assembly tooling, and factory start-up costs to support the production of both vehicle types in parallel" – even though Oshkosh had only minimal experience producing electric vehicles. The Final EIS notes that the type of vehicles ultimately purchased will, in part, "be contingent upon the supplier's production and delivery capabilities." According

to CEQ, the Postal Service committed more than $480 million to begin engineering and factory construction for its procurement decision before completing this NEPA process.

93. In the Record of Decision, the Postal Service incorporated the Final EIS's findings and analysis and determined that it would implement the Preferred Alternative.

94. Accordingly, the Postal Service's issuance of the Final EIS and Record of Decision was arbitrary and capricious, did not demonstrate reasoned decision-making, exceeded the Postal Service's statutory authority, and was contrary to the requirements of NEPA, 42 U.S.C. § 4332(2)(C), 40 C.F.R. § 1502.2(f), and 39 C.F.R. § 775.11(b)(2)(vi), the Final EIS and Record of Decision should be held unlawful and set aside, and the Postal Service should be enjoined from taking action under its Next Generation Delivery Vehicle Acquisitions program until it has complied with NEPA.

SECOND CAUSE OF ACTION

(Violation of NEPA:

Failure to Consider Reasonable Alternatives

42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.14; 39 C.F.R. § 775.11(c)(5))

95. Paragraphs 1 through 94 are realleged and incorporated herein by reference.

96. Plaintiffs have a right of action to declare unlawful and set aside agency action that is arbitrary and capricious, exceeds the agency's statutory authority, and violates NEPA.

97. NEPA requires that Defendants provide a "detailed statement" regarding the "alternatives to the proposed action." 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.14(a); 39 C.F.R. § 775.11(c)(5); *see also* 30 C.F.R. §§ 775.8(a)(4), 775.11(b)(2)(iv)-(v). The requirement to consider reasonable alternatives "lies at the heart of any NEPA analysis." *California ex rel. Lockyer v. U.S. Dept. of Agric.*, 459 F. Supp. 2d 874, 905 (N.D. Cal. 2006). "The existence of a viable but unexamined alternative renders" an EIS inadequate. *W. Watersheds Project v. Abbey*, 719 F.3d 1035, 1050 (9th Cir. 2013) (internal quotations and citations omitted).

98. Here, the Postal Service failed to consider reasonable alternatives to its Preferred Alternative of procuring 90% gas-powered vehicles and 10% electric vehicles.

99. While the Postal Service put forward 100% electric vehicle alternatives for both custom-made and commercial off-the-shelf vehicles, it summarily rejected these alternatives as impractical and infeasible without any legitimate justification for doing so. The Postal Service claims to have identified at least 12,500 delivery routes where length, environmental conditions, or facility constraints do not allow for electric vehicles. However, these routes account for only 5% of the agency's total delivery routes, and the Postal Service's assumptions regarding the infeasibility of using electric vehicles for the vast majority of its routes have no factual basis. The Postal Service unreasonably failed to consider alternatives that would have involved a greater mix of electric vehicles that could still meet its delivery needs.

100. Nor does the Postal Service's reliance on alleged cost constraints provide a legitimate basis for its failure to consider reasonable alternatives under NEPA.

101. In the Record of Decision, the Postal Service incorporated the Final EIS's findings and analysis and determined that it would implement the Preferred Alternative.

102. Accordingly, the Postal Service's issuance of the Final EIS and Record of Decision was arbitrary and capricious, did not demonstrate reasoned decision-making, exceeded the Postal Service's statutory authority, and was contrary to the requirements of NEPA, 42 U.S.C. § 4332(2)(C), 40 C.F.R. § 1502.14, and 39 C.F.R. § 775.11(c)(5), the Final EIS and Record of Decision should be held unlawful and set aside, and the Postal Service should be enjoined from taking action under its Next Generation Delivery Vehicle Acquisitions program until it has complied with NEPA.

THIRD CAUSE OF ACTION

(Violation of NEPA:

Failure to Take a "Hard Look"

42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.16(a)(1); 39 C.F.R. § 775.11(c)(6))

103. Paragraphs 1 through 102 are realleged and incorporated herein by reference.

104. Plaintiffs have a right of action to declare unlawful and set aside agency action that is arbitrary and capricious, exceeds the agency's statutory authority, and violates NEPA.

105. As discussed above, a fundamental requirement of NEPA is that federal agencies take a "hard look" at the environmental consequences of a proposed activity before acting. *See* 42 U.S.C. § 4332; *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 350 (1989) ("The sweeping policy goals" of NEPA are "realized through a set of action-forcing procedures that require that agencies take a hard look at environmental consequences, and that provide for broad dissemination of relevant environmental information") (cleaned up). When preparing an EIS, an agency must disclose and consider any "environmental impacts of the proposed action and reasonable alternatives to the proposed action and the significance of those impacts." 40 C.F.R. § 1502.16(a)(1); 42 U.S.C. § 4332(2)(C); 39 C.F.R. § 775.11(c)(6); *see also* 40 C.F.R. § 1508.1(g).

106. Here, the Final EIS fails to take the required "hard look" at numerous environmental impacts from the Proposed Action and alternatives, including impacts related to air quality, environmental justice, and climate. Instead, the Final EIS simply assumes that because there will be no change to the overall number of vehicles and because the agency will ultimately be replacing older model vehicles with more fuel-efficient engines, there will be no negative impacts. This analysis is flawed for several reasons.

107. The Final EIS fails to properly consider the specific impacts of continued fossil fuel use on environmental justice communities that are located near postal facilities and that are already suffering from significantly degraded air quality. *See Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1330-31 (D.C. Cir. 2021).

108. The Final EIS is silent about the potential impacts from the development of a new production facility in Spartanburg, South Carolina, that Oshkosh has announced would be built to meet the demands of its contract. The development of this facility and production of these vehicles are part of the action the Postal Service is undertaking and will clearly cause environmental impacts. 42 U.S.C. § 4332(2)(C). These impacts from the new facility are "reasonably foreseeable and have a reasonably close causal relationship to the proposed action," and the Postal Service must consider them. *See* 40 C.F.R. § 1508.1(g) (defining "effects" or "impacts" of a proposed action or alternatives).

109. The Final EIS also significantly underestimates the climate impacts of maintaining a massive fleet of gas-powered vehicles for potentially the next several decades, rather than electrifying its fleet in the near term. Moreover, the conclusion that "[n]o effects of climate change are expected" is inconsistent with even the estimates in the Final EIS and is contrary to Ninth Circuit precedent. *See Center for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1224 (9th Cir. 2008) (finding that "simply because the Final Rule may be an improvement over the [prior] standard does not necessarily mean that it will not have a 'significant effect' on the environment").

110. In the Record of Decision, the Postal Service incorporated the Final EIS's findings and analysis and determined that it would implement the Preferred Alternative.

111. Accordingly, the Postal Service's issuance of the Final EIS and Record of Decision was arbitrary and capricious, did not demonstrate reasoned decision-making, exceeded the Postal Service's statutory authority, and was contrary to the requirements of NEPA, 42 U.S.C. § 4332(2)(C), 40 C.F.R. § 1502.16(a)(1), and 39 C.F.R. § 775.11(c)(6), the Final EIS and Record of Decision should be held unlawful and set aside, and the Postal Service should be enjoined from taking action under its Next Generation Delivery Vehicle Acquisitions program until it has complied with NEPA.

FOURTH CAUSE OF ACTION

(Violation of NEPA:

Failure to Maintain Scientific Integrity

42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.23)

112. Paragraphs 1 through 111 are realleged and incorporated herein by reference.

113. Plaintiffs have a right of action to declare unlawful and set aside agency action that is arbitrary and capricious, exceeds the agency's statutory authority, and violates NEPA.

114. NEPA requires that federal agencies "shall ensure the professional integrity, including scientific integrity, of the discussions and analyses in environmental documents," "shall make use of reliable existing data and resources," and "shall identify any methodologies used and

shall make explicit reference to the scientific and other sources relied upon for conclusions in the statement." 40 C.F.R. § 1502.23.

115. The Final EIS fails to ensure the scientific integrity of its analysis by relying upon unsupported assumptions and undisclosed methodologies to justify its Preferred Alternative. Many of the Final EIS's statements do not reflect electric vehicle technology available today or developments in this rapidly expanding industry, but instead incorrectly assume that conditions today will continue decades into the future.

116. For example, the Final EIS claims that, if used on "routes that exceed 70 miles," electric vehicles "might not have sufficient power to complete the route, especially as the battery ages and has less capacity," despite the current availability of electric vehicles that far exceed such mileage on a single charge and rapid advances in battery technology. Moreover, such routes constitute just five percent of the Postal Service's total delivery routes. The Final EIS also fails to account for declining electric vehicle costs and proliferating charging infrastructure, while grossly underestimating costs for gasoline and assuming that such fuel costs will remain largely constant several years into the future. The Final EIS further ignores that many other private delivery fleets are rapidly adopting electric vehicle fleets that are well suited to meet similar needs. And, in many areas of the Final EIS, such as the economic analysis that estimates a "total cost of ownership" for different vehicles, the document does not provide the underlying data or sources of information necessary to evaluate or replicate the results.

117. Taken as a whole, the Final EIS presents information regarding environmental impacts and costs that is incomplete and biased in favor of its Preferred Alternative, at the expense of providing the public and decision makers with accurate information to allow for a meaningful consideration of the Proposed Action and alternatives.

118. In the Record of Decision, the Postal Service incorporated the Final EIS's findings and analysis and determined that it would implement the Preferred Alternative.

119. Accordingly, the Postal Service's issuance of the Final EIS and Record of Decision was arbitrary and capricious, did not demonstrate reasoned decision-making, exceeded the Postal Service's statutory authority, and was contrary to the requirements of NEPA, 42 U.S.C. §

4332(2)(C) and 40 C.F.R. § 1502.23, the Final EIS and Record of Decision should be held unlawful and set aside, and the Postal Service should be enjoined from taking action under its Next Generation Delivery Vehicle Acquisitions program until it has complied with NEPA.

FIFTH CAUSE OF ACTION

(Violation of NEPA:

Failure to Consider Inconsistencies with State Laws and Plans

42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1506.2(d))

120. Paragraphs 1 through 119 are realleged and incorporated herein by reference.

121. Plaintiffs have a right of action to declare unlawful and set aside agency action that is arbitrary and capricious, exceeds the agency's statutory authority, and violates NEPA.

122. "To better integrate environmental impact statements into State, Tribal, or local planning processes," NEPA provides that an EIS "shall discuss any inconsistency of a proposed action with any approved State, Tribal, or local plan or law[,] and [w]here an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law." 40 C.F.R. § 1506.2(d).

123. Here, the Final EIS fails to discuss the inconsistency of the Preferred Alternative with numerous State and local laws and plans to reduce greenhouse gas emissions and fossil fuel consumption to mitigate the devastating consequences of global climate change, as well as to electrify the transportation sector.

124. In the Record of Decision, the Postal Service incorporated the Final EIS's findings and analysis and determined that it would implement the Preferred Alternative.

125. Accordingly, the Postal Service's issuance of the Final EIS and Record of Decision was arbitrary and capricious, did not demonstrate reasoned decision-making, exceeded the Postal Service's statutory authority, and was contrary to the requirements of NEPA, 42 U.S.C. § 4332(2)(C) and 40 C.F.R. § 1506.2(d), the Final EIS and Record of Decision should be held unlawful and set aside, and the Postal Service should be enjoined from taking action under its Next Generation Delivery Vehicle Acquisitions program until it has complied with NEPA.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court:

1. Issue a declaratory judgment that the Postal Service violated NEPA in issuing the Final EIS and Record of Decision;

2. Issue an order vacating and setting aside the Final EIS and Record of Decision unless and until the Postal Service complies with applicable law;

3. Issue an order enjoining action by the Postal Service under its Next Generation Vehicle Acquisition Program until it has complied with NEPA;

4. Award Plaintiffs their costs, expenses, and reasonable attorneys' fees; and

5. Award such other relief as the Court deems just and proper.

Dated: June 10, 2022

Respectfully submitted,

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**Application for admission pro hac vice forthcoming*

B3 Public and Agency Scoping Comments and Responses

Table B3-1
Summary of EPA, Other Agency, and Public Scoping Comments Timely Received in Response to the NOI of the Draft SEIS, and Postal Service Responses

No.	Postal Service Response to Comments
1	**There have been significant legal and policy changes since the previous EIS was published that will affect the benefits and costs of BEVs relative to ICE delivery vehicles. In particular, the Inflation Reduction Act (IRA) will dramatically change the costs and benefits of BEVs relative to ICE NGDVs. The legislation provides the Postal Service with $3 billion to support the purchase of BEVs and the installation of necessary infrastructure (battery charging stations). The legislation also creates tax incentives for the purchase of both new and used electric vehicles, provides $2 billion in grants to produce electric and alternative fuel vehicles, and supplies $3 billion in loans to expand or establish manufacturing facilities for low emissions vehicles. These are projected to drive battery and BEV production costs down over time. The IRA is also expected to dramatically affect the carbon intensity and the cost of electric power in the future. Therefore, it is reasonably foreseeable that the Total Cost of Ownership (TCO) will decrease for BEVs, and the carbon emissions will be dramatically lower.**
	See Section 3-2.3 (Financial Considerations) for discussion regarding how the Inflation Reduction Act impacted our development of alternatives. See also Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding our adoption of a multi-step vehicle acquisition process, which should allow us to benefit from any changes in BEV pricing or market supply resulting from passage of the IRA.
2	**Also, the Postal Service should consider the federal and state regulatory environment that its new vehicles will face, such as under California's forthcoming Advanced Clean Fleets rule.**
	We regularly evaluate proposed and forthcoming regulations that potentially might affect our fleet, including California's Advanced Clean Fleets Rule, for which we submitted a comment on October 17, 2022. If any forthcoming federal or state vehicle regulations are determined to be applicable to the Postal Service fleet, we will strive to comply to the extent possible given our statutory mandates to be self-supporting and to deliver to over 165 million addresses at least six days per week. See also Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding our adoption of a multi-step vehicle acquisition process, which should allow us to more readily adapt to any changing regulatory environments as we proceed with replacing our entire delivery fleet.
3	**Based on the review of the NOI, EPA recommends the Postal Service consider a range of alternatives that fully explores the feasibility of acquiring a higher percentage of BEVs, as well as an alternative for right-hand drive COTS vehicles that includes BEVs.**
	See Section 3 (Description of Alternatives), which includes two Alternatives with BEV commitments of 62 percent. Both Alternatives' BEV commitments are significantly higher

No.	Postal Service Response to Comments
	than the 10 percent minimum BEV commitment from our Record of Decision, as well as the 50 percent minimum BEV commitment proposed in our July 21, 2022 SEIS Notice of Intent. See Section 3-3.2 (RHD COTS ICE Vehicle Acquisition) for discussion of factors which led us to include a portion of RHD COTS ICE vehicles in the Preferred Alternative's vehicle mix notwithstanding the lack of RHD COTS BEV options.
4	**Based on the review of the NOI, EPA recommends the Postal Service revise and improve its modeled total cost of ownership in a transparent fashion.**
	See Section 3-2.3 (Financial Considerations) for discussion regarding the upfront cost factors affecting the mix of vehicles in our proposed Alternatives.
5	**Based on the review of the NOI, EPA recommends the Postal Service use its potential delivery network refinements and route optimization efforts to refine assumptions about total cost of ownership.**
	See Section 3-2.3 (Financial Considerations) for discussion regarding upfront cost factors affecting the mix of vehicles in our proposed Alternatives. See also Section 1-4 (Actions Not Included in the Proposed Action) for explanation regarding limited inclusion of potential delivery facility network optimization under development in this SEIS.
6	**Based on the review of the NOI, EPA recommends the Postal Service, incorporate an update to the final EIS emissions modeling that reflects the proposed acquisition of right-hand drive and left-hand drive COTS vehicles.**
	The SEIS includes complete air quality modeling for the proposed vehicles in the Alternatives, including the RHD and LHD COTS vehicle models in Alternative 1. See Section 4-6 (Air Quality) and Appendix F for detailed discussion of the modeling, including methodology and assumptions.
7	**Based on the review of the NOI, EPA recommends the Postal Service revise its social costs of greenhouse gas (SC-GHG) analysis by refining the start date, using annual estimates, updating emissions modeling, and including cumulative present value totals.**
	All new emissions modeling was completed for this SEIS as described in Section 4-6 (Air Quality) and Appendix F. The social cost of GHG analysis for the SEIS, provided in Section 4-6, was refined (relative to the analysis provided in the NGDV FEIS) in accordance with these recommendations. The Postal Service calculated cumulative emissions estimates on an annual basis from 2023 (Year 1 of implementation) through 2050, and applied the social cost values (in U.S. dollars) per ton of CO_2, CH_4, and N_2O provided by both the Interagency Working Group[1] (IWG) and EPA[2]. Moreover, the Postal Service employed a total of seven separate discount scenarios (four discount rate scenarios for the IWG method: 2.5 percent, 3 percent, 5 percent, and 95th percentile of estimates based on a 3 percent discount rate and three discount rate scenarios for the EPA method: 1.5 percent, 2.0 percent, and 2.5 percent). 1. IWG. "Technical Support Document (TSD): Social Cost of Carbon, Methane, and Nitrous Oxide: Interim Estimates under Executive Order 13990." February 2021. 2. EPA. "Supplementary Material for the Regulatory Impact Analysis for the Supplemental Proposed Rulemaking, "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate

No.	Postal Service Response to Comments
	Review" - EPA External Review Draft of Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances." September 2022.
8	**Based on the review of the NOI, EPA recommends the Postal Service reflect science-driven climate policy in the supplemental EIS and acquisition commitments.**
	The primary statutory mission of the Postal Service is to deliver mail and packages to 165 million delivery addresses six and sometimes seven days per week, in a financially self-sufficient manner. As such, our first responsibility is to ensure that we devote our limited resources to investments that enable us to obtain mission-capable vehicles that support our primary mission. That said, to the extent this recommendation infers that our EIS and acquisition commitments should reflect the climate policy of the current Administration, they do. By way of example, consider the following: Section 3 (Description of Alternatives), which includes two Alternatives with BEV commitments of 62 percent. Both Alternatives' BEV commitments are significantly higher than the 10 percent minimum BEV commitment from our Record of Decision, as well as the 50 percent minimum BEV commitment proposed in our July 21, 2022 SEIS Notice of Intent. In addition, as noted in Section 1-2.2 (Rationale for Preparing This SEIS), even after accounting for Inflation Reduction Act funds, most of the funding for our significant BEV commitment will come from our own revenues. As stated in the Biden-Harris Administration's December 20, 2022 press release in response to the announcement of our Preferred Alternative, "USPS demonstrates how it is leading by example for the Federal Government in achieving President Biden's charge to electrify the U.S. Government's 650,000 vehicles."
9	**Based on the review of the NOI, EPA recommends the Postal Service consider how targeted BEV deployment could mitigate potential disproportionate adverse impacts from ICE vehicle deployments, including to planned multifunctional distribution centers in communities with environmental justice concerns, consistent with either existing Postal Service deployment criteria and NEPA processes, or revised deployment criteria developed to address equity issues associated with these acquisitions and the distribution center realignment.**
	See Section 4-11 (Environmental Justice) for the potential effects of the Alternatives on communities with environmental justice concerns, including effects from both deployment of many vehicles at potential major deployment sites (i.e., "Candidate Sites") and from individual delivery vehicles serving communities with environmental justice concerns nationwide. The Preferred Alternative would have a beneficial effect on the air quality of the 84 percent of communities around Candidate Sites that have EJ concerns. Ultimately, the Postal Service supports delivery to every community in the U.S., and decisions regarding vehicle allocations are based on matching an appropriate vehicle to the characteristics of the route itself and the available infrastructure (electric or fuel) to support Postal Service operations upon the route. See also Section 1-4 (Actions Not Included in the Proposed Action) for explanation regarding limited inclusion of potential delivery facility network optimization under development in this SEIS; delivery facility network optimization will be considered in a separate NEPA assessment if deemed appropriate.

No.	Postal Service Response to Comments
10	**SEIS should analyze human health impacts from ICE vehicle emissions, particularly as they impact low-income communities and communities of color.**
	See Section 4-11.3 (Environmental Justice, Environmental Consequences) for a discussion of anticipated air emission reductions that could benefit communities with environmental justice concerns, including some of the health effects associated with air pollution.
11	**SEIS should consider impacts on environmental justice communities and urban areas and should prioritize the deployment of BEVs to such communities.**
	See Section 4-11 (Environmental Justice) for the potential effects of the Alternatives on communities with environmental justice concerns, including effects from both deployment of many vehicles at particular large existing facilities (i.e., "Candidate Sites") and from individual delivery vehicles serving communities with environmental justice concerns nationwide. Additionally, as noted in Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment), the Postal Service anticipates that the Candidate Sites, which are predominantly located near areas with environmental justice concerns, would predominantly host BEVs.
12	**The EPA recommends the Postal Service supplemental EIS consider a range of alternatives that fully explores the feasibility of acquiring as high a percentage of BEVs as reasonably possible.** **Consistent with NEPA, the supplemental EIS should include a reasonable range of alternatives, including alternatives consistent with national policies aimed at achieving clean, zero-emission vehicles in Federal fleets,1 as well the U.S. economy-wide target under the Paris Agreement to reduce net GHG emissions to 50-52 percent below 2005 levels by 2030.2** **Accordingly, the Postal Service supplemental EIS should consider an alternative for the 50,000 acquisition that discusses the feasibility of acquiring 70% BEVs, to attain "dramatically positive effects" for public health, address the climate crisis, and improve American competitiveness, as stated by the Council on Environmental Quality (CEQ).3** **EPA recommends a similar alternative be considered for the proposed 20,000 LHD COTS acquisition, in addition to a 100% EV alternative.** **Finally, EPA recommends the proposed 14,500 RHD COTS acquisition consider a range of reasonable alternatives involving BEV acquisition, given available RHD COTS BEVs currently on the market.**
	See Responses to Comments 3 & 8 above for discussion regarding the significant BEV commitments in our Preferred Alternative and Alternative 2, our consideration factors for including RHD COTS ICE vehicles in our Preferred Alternative, as well as the consistency of our Preferred Alternative with the Administration's policy priorities. See Section 3-2 (Consideration Factors for Alternatives) for discussion of why all action Alternatives included a proportion of ICE vehicles and why the Postal Service determined that the BEV percentages proposed were most appropriate for the quantity of vehicles being considered in this SEIS and why Alternatives with higher BEV percentages would not better satisfy our Purpose and Need at this time. As noted in Section 3-2.4 (Vehicle Procurement Strategy), the Postal Service will supplement the EIS for additional NGDV procurements as we replace our aging fleet.

No.	Postal Service Response to Comments
13	**As the range of reasonable alternatives is developed, EPA recommends the Postal Service fully disclose acquisition options available for each proposal covered in the supplemental EIS to help the public and decision-makers understand and account for existing limitations and opportunities, consistent with EPA's further recommendations below.**
	In the descriptions of our Alternatives, we have indicated where acquisition options or supply availability has been a factor in the development of our Alternatives (see, e.g., Section 3-3.2 (RHD COTS ICE Vehicle Acquisition)). However, we will not disclose detailed commercially sensitive information regarding our vehicle pricing, solicitations or market research.
14	**To avoid public confusion, EPA also recommends that the Postal Service clarify whether and to what extent the revised proposals address personally-owned vehicles, and any implications for its analysis.**
	See Section 1-2 (Overall Vehicle Acquisition Strategy). Delivery POVs are a component of our delivery fleet. Delivery POVs are owned by mail carriers who typically serve rural routes and are reimbursed for their POV use through the Postal Service's Equipment Maintenance Allowance. Under the Preferred Alternative and Alternative 2, new vehicles would replace existing LLVs as well as a minimal number of delivery POVs. See Section 4-6.3 (Air Quality, Environmental Consequences) for the air impacts associated with delivery POVs.
15	**Since the final EIS was published, several vehicles are now listed on the US Department of Energy's (DOE) website for alternative fuel vehicles for Federal fleets.** **The EPA recommends updating the analysis of alternatives to consider vehicles from DOE's list, utilizing different size vehicles where appropriate. The NOI was unclear about whether and to what extent the Postal Service was considering the use of different vehicle configurations. Where appropriate, the Postal Service should optimize over vehicle size and should mitigate the adverse environmental impacts of vehicle emissions, by choosing vehicles with the lowest tailpipe emissions available to meet the local requirements.**
	We continually assess the vehicle market as new and updated vehicles are introduced. We consider vehicles first and foremost based on their operational abilities in the context of our Universal Service Mission to deliver the nation's mail. Additionally, we must consider the impact potential vehicles will have upon the delivery methods of our employees as they deliver to 165 million delivery points six days a week. That said, our Preferred Alternative and Alternative 2 both commit to 62 percent vehicles with no tailpipe emissions. See also Section 3-3 (Alternative 1 – (Preferred Alternative) Mixed Fleet with Increased BEV Commitment), which describes how our Preferred Alternative includes a mix of three different vehicle models, in multiple powertrain, size and LHD/RHD configurations.
16	**The EPA recommends the Postal Service use the supplemental EIS to revise and improve its modeled total cost of ownership (TCO).** **Since the release of the final EIS and ROD, the U.S. Government Accounting Office, the U.S. Postal Service Office of the Inspector General, and states have questioned core Postal Service assumptions and decisions in the final EIS. [5]** **Many of these concerns relate to modeled TCO, which the EPA expects will be a key input to the supplemental EIS and related decision-making.**

No.	Postal Service Response to Comments
	The EPA recommends the Postal Service use the supplemental EIS to revise and improve its modelled TCO analysis from the final EIS. The EPA continues to recommend that the Postal Service disclose all relevant assumptions underlying the TCO analysis.
	See Section 3-2.3 (Financial Considerations) for discussion of financial factors that affected our development of Alternatives, including an updated assessment of the current ICE-BEV upfront acquisition cost differential. For a summary of our areas of disagreement with GAO's recommendations, see pp. 21-22 of GAO's April 2023 report (No. GAO-23-106677). For a discussion of our responses to recommendations posed by the Office of Inspector General, see Management's Comments to the OIG's White Paper on Delivery Vehicles (Project No. 22-107), available at: https://www.uspsoig.gov/reports/audit-reports/next-generation-delivery-vehicles-environmental-impact-statement.
17	**The supplemental EIS TCO analysis should also address the following concerns:** **(a) Gasoline prices. Gasoline prices and forecasts have changed significantly in the last few months. In its ROD, the Postal Service noted that it used the Annual Energy Outlook from the US EIA, with a baseline of October 2020 and stated that accounting "for continual fluctuations in TCO components such as gasoline, utility, and charging infrastructure prices was not warranted." EPA recommends that these TCO calculations be updated for the supplemental EIS. The cost of petroleum derived fuels relative to electric power is of overriding importance in any credible analysis of the economics of ICE vs BEVs. EIA's projections are based on a rigorous, well documented methodology, and include numerous alternative scenarios that can help inform the analyses within the supplemental EIS. EPA recommends updating the alternatives analysis to include higher gasoline price forecasts, as well as future uncertainty in prices.**
	See Section 3-2.3 (Financial Considerations), which includes a current ICE-BEV upfront acquisition cost differential.
18	**The supplemental EIS TCO analysis should also address the following concerns:** **(b) Ratio of chargers to vehicles. The assumption of a one-to-one ratio of chargers to vehicles should be revised. GAO noted that this assumption increased the cost of a BEV by several thousand dollars. Relaxing it should significantly reduce the TCO for BEVs.**
	We have considered using charger ratios other than one-to-one and, for the time being, have rejected making any such change. As it stands now, in the opinion of our engineering experts, there is a lack of compelling data regarding battery conditioning needs and the impact on battery range from not continuously keeping BEVs connected to their chargers, particularly with respect to battery conditioning energy needs in very hot or very cold climates. For example, it is known that without battery conditioning from a connected charger, the traction battery will draw battery energy in order to keep the battery in the optimal temperature range, which in turn, decreases range, by even greater amounts, the more extreme the ambient temperature. We are currently unwilling to risk degrading our BEV ranges and thus compromising our Universal Service Mission based on limited existing data. In addition, we do not have resources to manage movement of vehicles that need charging if dedicated chargers are not available - any change from one-to-one will incur additional costs for managing vehicle movement between charging stations across hundreds of sites. Finally,

No.	Postal Service Response to Comments
	a lack of dedicated charging stations also severely restricts operational flexibility to handle day-to-day operational adjustments – for example, if a BEV would need to be fully-charged to service a longer-than-expected delivery day on account of accident, weather, personnel, or requires increased utilization and same-day operational optimization. As better data becomes available, and we become more experienced in the management and use of BEVs, we will continue to assess optimal charger ratios and adjust as appropriate. Even in recent case studies published by the National Renewable Energy Laboratory, other federal entities, such as the National Park Service, are leveraging 1:1 EV-to-EVSE ratios. From the Grand Teton case study:[1] "EVSE must be installed throughout GRTE to support these vehicles with an ideal EV to EVSE ratio of 1:1 to ensure each vehicle has its own dedicated EVSE. This will ensure vehicles are always charged and capable of supporting their mission." 1. Boyce, Leidy, Jesse Bennett, and Ranjit Desai. "Grand Teton National Park Federal Fleet Tiger Team EVSE Site Assessment." 2022.
19	**The supplemental EIS TCO analysis should also address the following concerns:** **(c) The terminal value of NGDVs and Commercial Off-the-Shelf (COTS) vehicles. EPA recommends incorporating the terminal value of vehicles proposed for purchase. The NGDVs—or at minimum, their components—retain value at the end of the 20-year period of analysis. The difference between the upfront purchase price of the NGDV and this terminal value is the total amount these vehicles will depreciate over the period the Postal Service is using them. Due to the ongoing electrification of the transportation sector and the valuable critical minerals stored in a high-voltage battery, the terminal value of a BEV will almost certainly be greater than the terminal value of a conventional ICE vehicle. The difference between these values will impact the TCO calculation for a BEV. Particularly now that COTS vehicles are included in the analysis, vehicle terminal value should be considered in TCO calculations and decisions deriving from the supplemental EIS.**
	See Section 3-2.3 (Financial Considerations) for explanation that, in light of the IRA funding, the BEV commitments in our Alternatives were based on the upfront acquisition cost differential between ICE and BEV, and therefore terminal values were not considered. See also Section 3 (Description of Alternatives) for description of Preferred Alternative with significantly higher BEV commitment than in the NGDV FEIS Record of Decision.
20	**The supplemental EIS TCO analysis should also address the following concerns:** **(d) The risk of gas price fluctuation and likelihood of BEV cost decreases. There is real business risk associated with locking in a reliance on gasoline to power the fleet, since the future cost of gasoline is unknown and could be much higher than the scenario modeled. As discussed above, recent events have shown that the final EIS gas price assumptions are probably far too low. In contrast, the future cost of electricity is not as variable since the performance and costs of renewable technologies provide a low "back stop" cost that is likely to come down over time. Moreover, the amount of cost reductions from innovation and learning by doing is likely to improve the TCO for BEVs but not the already established technology of ICEs. These differences should be incorporated and disclosed into the alternatives analysis and TCO calculations.**

No.	Postal Service Response to Comments
	See Section 3-2.4 (Vehicle Procurement Strategy) for a discussion of our proposed multi-step vehicle acquisition strategy, which should provide us with increased flexibility to adapt to changing costs and technologies as we continue to replace our delivery fleet. See also Section 3 (Description of Alternatives) for description of Alternatives with significantly higher BEV commitments than in the Record of Decision.
21	**In GAO's comments on Fleet Management (GAO-22-105931), GAO noted that DOE offers technical guidance by providing engineers and other experts to help fleet managers minimize installation costs for charging stations.** **EPA recommends incorporating DOE's technical guidance into the TCO analysis.**
	See Section 3-2.3 (Financial Considerations) for explanation that, in light of the IRA funding, the BEV commitments in our Alternatives were based on the upfront acquisition cost differential between ICE and BEV. See also Response No. 18 above for discussion as to how our charging needs are conservative and unique due to our Universal Service Mission. We will continue to actively participate in available agency forums to learn and share general information, technical guidance and best practices.
22	**The EPA recommends the Postal Service use its potential delivery network refinements and route optimization efforts to refine assumptions.** **The EPA supports the Postal Service supplementing its NGDV final EIS to limit its preferred alternative to 50,000 vehicles and purchase a significantly higher percentage of BEVs, particularly in light of both its operational strategy and shorter planning horizon. The SEIS should discuss in detail the potential operational strategy impact on increasing BEV acquisition, including route length changes and efficiencies, as well as streamlining charging infrastructure. In that vein, the EPA acknowledges that the Postal Service "anticipates taking advantage of the flexibility built into the contract with Oshkosh Defense to increase the number of BEVs purchased in the initial delivery order." This supplement provides an important opportunity to better align the minimum number of BEVs to be procured with science-based climate policy goals, including increasing not only the 50,000 NGDV purchases, but also the 20,000 LHD COTS and 14,500 RHD COTS proposals. Route optimization efforts would be expected to influence projections for several components of the previous EIS modeling, including fuel expenses, which vary by region, especially for electricity. In addition, if the new route optimization changes modify the projected annual miles traveled by each vehicle, then depreciation expenses – typically the most significant line item in TCO calculations – are also subject to change since vehicles that travel more miles depreciate more quickly. Moreover, vehicles that are confined to specific routes are likely subject to insurance premiums that differ from vehicles operating nationwide.** **EPA recommends the Postal Service use this new route optimization effort to, among other things, update previous assumptions about TCO, taking account of regional variation in fuel prices, the effects of updated projections for annual miles traveled on depreciation, and potential impacts to insurance premiums.**
	See Section 3-2.3 (Financial Considerations) for explanation that, in light of the IRA funding, the BEV commitments in our Alternatives were based on the acquisition cost differential between ICE and BEV.

No.	Postal Service Response to Comments
	See also Section 3 (Description of Alternatives) for description of Preferred Alternative with significantly higher BEV commitment than in the NGDV FEIS Record of Decision. See also Section 1-4 (Actions Not Included in the Proposed Action) for discussion of our plans to consider impacts from delivery facility network optimization in a separate NEPA assessment if deemed appropriate.
23	**The route optimization effort is expected to impact GHG emissions from both BEV and ICE vehicles. EPA recommends the Postal Service update its analysis of the carbon intensity of gasoline and electricity. The Postal Service previously used a national average for the carbon intensity of electricity; however, concentrating BEVs in particular regions could result in highly variable intensities depending on the location. Some state programs (such as the Low Carbon Fuel Standards promulgated in several states) provide valuable incentives for low carbon electricity as a transportation fuel. These subsidies are effectively financed by conventional fossil fuels, and their net impact on the prices facing the Postal Service for electricity and gasoline can be significant. [7]** **EPA recommends the Postal Service update its analysis of the carbon intensity of gasoline and electricity. As emphasized in previous comments, different assumptions here can have notable impacts on several components of the analysis. Other local considerations related to route optimization include state incentive programs.**
	The SEIS analysis is a programmatic nationwide analysis based on the nationwide number of vehicles and miles of travel per vehicle, rather than based on regional or local data. Therefore, the analysis was performed at a nationwide level using nationwide emission data from the MOVES3 model and the average carbon intensity for gasoline and electricity from the GREET model. Because of the uncertainty of vehicle deployment plans in particular regions, a local-based analysis was not performed.
24	**The EPA recommends the Postal Service supplemental EIS incorporate an update to the final EIS emissions modelling that includes COTS.** **The updated NOI introduces several new options for vehicles to be incorporated into the supplemental EIS, including both RHD and LHD COTS vehicles. In the ROD, the Postal Service argued against updating its MOVES modeling to account for vehicle-specific considerations, as it was "unlikely to produce information that significantly changes the relative environmental costs and benefits between the ICE NGDV and the BEV NGDV."** **The EPA recommends updating the emissions modeling from the final EIS to include these new COTS vehicles, as well as reflecting any light-duty vehicle acquisitions considered under the alternatives. This includes providing all modeled assumptions used to achieve the MOVES results highlighted. These new proposed acquisitions represent a significant departure from the previous analysis and should be appropriately accounted for. Given these additional vehicles under consideration, a better-tailored model could change the relative differences across alternatives.**
	See Response No. 6 above for discussion regarding incorporation of both LHD and RHD vehicle types in the Preferred Alternative. See Section 4-6.3.1 (Analysis Methodology) for explanation of assumptions and methodologies employed in calculating vehicle emissions.

No.	Postal Service Response to Comments
	See Section 4-6.3.2 (Air Quality Environmental Consequences, Alternative 1) for emissions calculations for Preferred Alternative, including the new COTS vehicles.
25	**The EPA recommends the Postal Service revise its SC-GHG analysis by refining the start date, using annual estimates, and including cumulative present value totals.** **In its final EIS, the Postal Service presents the climate impact estimates starting only in 2030, and only in five-year increments.** **To ensure the climate damages of each alternative are disclosed accurately, comprehensibly, and usefully to the public and decision-makers, EPA recommends the Postal Service refine the start date, use annual estimates, and include cumulative present value totals -- sums of annual discounted impacts. This would enable comparisons between the total benefits of potential GHG reductions with the costs of achieving them.**
	See Response No. 7 above for discussion of updated SC-GHG calculations.
26	**The EPA recommends the supplemental EIS and acquisition commitments consider science-driven climate policy.** **EPA supports the Postal Service's commitment to acquire a significantly higher percentage of BEVs for its 50,000 NGDV acquisition, and as many BEVs as commercially available for its 20,000 left-hand drive (LHD) COTS acquisition proposal. The supplemental EIS provides an opportunity for the Postal Service to frame its new proposals, including its proposed 14,500 right-hand drive (RHD) ICE COTS acquisition, in the context of science-based greenhouse gas (GHG) emissions reduction targets necessary to avoid the worst consequences of climate change, including national policies aimed at transitioning Federal fleets to clean zero-emission vehicles to address the climate crisis. The Postal Service leadership can also help make meaningful progress towards the U.S. economy-wide target under the Paris Agreement to reduce net GHG emissions to 50-52 percent below 2005 levels by 2030.** **The EPA recommends the Postal Service ensure its supplemental EIS explicitly discusses the impact of its proposed acquisitions on the ability of the federal government, states, and local governments to achieve climate policy goals. In addition, EPA recommends Postal Service decision-makers maximize the purchase of BEVs under its proposed NGDV and LHD COTS acquisitions as well as consider BEVs in its proposed RHD COTS acquisition, consistent with those goals and factoring in substantial new funding for BEV acquisition and charging infrastructure in the Inflation Reduction Act.**
	See Response No. 8 above.
27	**The EPA recommends the Postal Service discuss equitable vehicle deployment issues and whether an increase in BEV purchases may be warranted to mitigate potential adverse impacts in communities with existing environmental justice concerns.** **The supplemental EIS will address NGDV and COTS vehicle acquisitions that have the potential to affect communities with environmental justice concerns. Communities with environmental justice concerns are disproportionately affected by, and vulnerable to, climate change,[10] and will be disproportionately affected by GHG emissions from ICE vehicles, wherever they occur. Locally, communities with environmental justice concerns are already burdened with high levels of traffic-related**

No.	Postal Service Response to Comments
	pollutants and other non-pollution burdens, and the continued or increased presence of such pollutants will have a disproportionate impact not experienced by the broader population. **These potential local, adverse impacts of the proposed acquisitions may be particularly disproportionate in communities that will host multifunctional distribution centers. According to Postmaster General's keynote address during the 2022 National Postal Forum,[11] the Postal Service plans to simplify current infrastructure by replacing and centralizing a network of existing processing facilities into single multifunctional distribution centers. Plans are already underway with 60 multifunctional distribution centers and early initiatives in the cities of Atlanta, Charlotte, and Indianapolis.[12] These distribution centers may modify the delivery routes considered in the supplemental EIS. Potential delivery network refinements and route optimization efforts identified in the NOI may have environmental justice implications. By aligning the Postal Service's facilities network, the Postal Service will reduce the number of trips the fleet vehicles will take to serve its customers. The result of this effort could concentrate potential impacts to communities with environmental justice concerns by rerouting vehicle trips and increasing vehicle emissions at a single geographical location.** **Pursuant to the environmental justice goals outlined in Executive Orders 12898 and 14008, EPA recommends the SEIS discuss EJ concerns in detail, including whether an increase in the minimum number of BEV NGDVs and COTS vehicles to be procured may be warranted to address any potential disproportionate adverse impacts from the GHG and other air pollutant emissions of the acquired vehicles, taking into consideration the potential future location of multifunctional distribution centers in communities with existing environmental justice concerns. EPA also recommends discussing the equitable distribution of BEV NGDVs and COTS vehicles in potentially affected communities with EJ concerns.**
	See Response No. 9 above for discussion regarding potential effects of the Alternatives on environmental justice communities.
28	**Postal Service should consider disclosing climate change impacts from the vehicle acquisitions on communities with environmental justice concerns.**
	See Section 4-6.3 (Air Quality, Environmental Consequences) for potential effects of the Preferred Alternative on climate change (i.e., via GHG emissions), and Section 4-11.3.1 (Environmental Justice, Environmental Consequences) for potential effects of the Preferred Alternative on communities with environmental justice concerns.
29	**Postal Service should consider opportunities in Postal Service deployment criteria, or revised criteria developed to address equity issues associated with these acquisitions, that promote the equitable distribution of BEV NGDVs or COTS vehicles in potentially affected communities with environmental justice concerns and mitigate potential adverse impacts in those communities.**
	See Response No. 11 above. As noted in Section 4-11 (Environmental Justice), about 84 percent of Candidate Sites are located in EJ communities.
30	**Postal Service should disclose potential impacts in combination with potential future location of multifunctional distribution centers in areas with environmental justice concerns:**

No.	Postal Service Response to Comments
	• **Identification of people of color, low-income and indigenous communities within the geographic scope of potential multifunctional distribution center locations that may bear disproportionately high and adverse effects, including the sources of data and a description of the methodology and criteria utilized.** • **Identification of environmental indicators such as particulate matter, air toxic respiratory hazard index, and traffic proximity/volume using EPA's environmental justice screening tool and other reasonably available data sources.[13] Atlanta neighborhoods, for example, with these concerns include Five Points, West End, Battle Hill Haven, Stratford, Lakewood Park, Roseland, Thomasville, and Adamsville. Charlotte neighborhoods with these concerns include Atando Junction, Biddleville, Greenville, Hoskins, Enderly Park, Newell, Sharonbrook, Hebron, Starmont, Paw Creek, Junker, and Yorkmont Park. Indianapolis neighborhoods with these concerns include North Indianapolis, Wolfington, Flackville, Glendale, Ben Davis, Snacks, Brightwood, Holida, and Brendonwood.** • **Information on how affected communities were or will be meaningful engaged and included in the decision-making process on EV and ICE deployments, including in the proposed location of multifunctional distribution centers.**
	See Section 4-11 (Environmental Justice) and Appendix D for a detailed, site-specific analysis (including methodology) of environmental justice concerns in communities where Candidate Sites are located, and the potential effects of the Alternatives on those communities. Notably, the Preferred Alternative would have a beneficial effect on the air quality of the 84 percent of communities around Candidate Sites that have EJ concerns. With respect to vehicle deployment decisions, the Postal Service supports delivery to every community in the U.S., and decisions regarding vehicle allocations are based on matching an appropriate vehicle to the characteristics of the route itself and the available infrastructure (electric or fuel) to support Postal Service operations upon the route.
31	**The USPS NGDV solicitation or award process was flawed or should be modified, revoked or redone.**
	See FEIS Section 1-3.2 (NGDV Acquisition Strategy) for summary of NGDV solicitation process. We are aware of no flaws in the NGDV's procurement process that would rise to the level warranting a modification, revocation or repeat of a competitive, multi-year solicitation.
32	**USPS contract with Oshkosh violates NEPA due its being pre-decisional and USPS should refrain from spending additional money or doing additional work on the NGDV pending SEIS.**
	We do not agree with this opinion. The Postal Service's award to Oshkosh was expressly contingent on the Postal Service's satisfactory completion of the NEPA process. We also note that the Office of Inspector General concurred with our assessment, finding in its April 6, 2023, audit report on the NGDV FEIS (Report No. 22-107-R23, p. 5) that "the Postal Service's NGDV acquisition process and EIS followed NEPA procedural requirements."
33	**USPS should withdraw its ROD.**
	We do not agree that there is any deficiency with the FEIS that would rise to the level warranting a withdrawal of the ROD.

No.	Postal Service Response to Comments
34	**SEIS is a sham process designed to aid USPS in its NGDV litigation.**
	See Section 1-2.2 (Rationale for Preparing This SEIS) for discussion regarding our reasons for preparing this SEIS.
35	**FEIS was legally insufficient for reasons including deficient range of reasonable alternatives and consideration of potential environmental impacts.**
	We do not agree that the FEIS contained any material deficiencies. For a more detailed response to questions raised with respect to the FEIS, see pages 1 to 11 of the NGDV Record of Decision.
36	**USPS is pre-deciding choice of NGDVs by proceeding with order of 50,000 NGDVs pending SEIS.**
	See Section 1-2.1 (Acquisition Process to Date) for discussion of NGDV ordered pursuant to the NGDV Record of Decision.
37	**USPS request that comments be as specific as possible regarding vehicle type, model and manufacturer violates NEPA as it limits the scope.**
	We do not agree as our request for certain types of information neither limited our consideration of potential Alternatives during the scoping phase nor the range of comments that could be submitted by interested parties.
38	**USPS should consider Inspector General's findings and recommendations.**
	See Appendix C to the OIG's audit report on the NGDV for our detailed consideration of and responses to the OIG's findings and recommendations. For example, in the air quality analysis, we included, as recommended by the OIG, reasonable estimates for starting and refueling emissions, upstream criteria pollutant emissions and electrical grid losses, and accounted for future emissions reductions associated with greening of the U.S. power grid.
39	**USPS should not attempt to use false sense of urgency to justify procurement of ICE over BEV. Instead, the need should justify acceleration of electrification.**
	See Section 3-2 (Consideration Factors for Alternatives) for discussion that our real urgent need is but one of multiple factors considered in the development of our Alternatives. See also Sections 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) and 3-4 (Alternative 2 – NGDV Only with Increased BEV Commitment) for description of our Preferred Alternative which includes a significantly increased commitment to fleet electrification.
40	**USPS should consider BEV vehicle models expected or planned to come to market in near future.**
	See Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to such changing market conditions as the expected increased availability of BEV options in the future.
41	**There are large numbers of ZEV and BEV models in both light-, medium- and heavy-duty configurations, which USPS should consider using to increase its BEV/ZEV proportion.**

No.	Postal Service Response to Comments
	See Response No. 15 above, discussing our consideration of multiple vehicle models. See also Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment), which describes how our Preferred Alternative includes a mix of three different vehicle models, in multiple powertrain, size and LHD/RHD configurations.
42	**USPS should consider employing broader mix of vehicles, including different sizes, hybrids, fuel types and vehicle ranges. USPS should not restrict itself to single vehicle type to perform in all situations.**
	See Response No. 15 above, discussing our consideration and testing of multiple vehicle models. See also Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment), which describes how our Preferred Alternative includes a mix of three different vehicle models, in multiple powertrain, size and LHD/RHD configurations.
43	**USPS should consider electric cargo bikes.**
	We are currently testing and evaluating electronic bike options. If we should find them feasible, they will be considered for inclusion in future procurements. See also Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to technology improvements.
44	**USPS should consider autonomous vehicles.**
	We are currently testing and evaluating autonomous vehicle technologies. While we do not believe that the technology is currently mature enough for widescale application, we will continue to evaluate and consider for inclusion in future procurements as appropriate. See Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to technology improvements.
45	**USPS should consider other vehicle manufacturers, including Workhorse, Rivian, Arrival, Canoo and GM.**
	As part of its normal fleet management practice, the Postal Service continually considers and evaluates potential vehicle offerings from multiple suppliers, including through market research and pilot programs. With respect to this Draft SEIS, see also Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment), which describes how our Preferred Alternative includes a mix of three different vehicle models, made by three different manufacturers.
46	**USPS should use U.S.-made components.**
	As an independent establishment of the executive branch of the United States Government, the Postal Service is not subject to most “Buy American” laws, but our domestic preference policies are similar to those followed by executive agencies operating under the Buy American Act, Trade Agreements Act, and other domestic preference statutes. For any major Postal Service vehicle purchases, offerors receive an evaluation preference if their proposed vehicles - and the majority of the components in their proposed vehicles - are manufactured in the United States. For the NGDV, a significant majority of the vehicle components will be sourced from U.S. manufacturers.

No.	Postal Service Response to Comments
47	**BEVs purchased by USPS should be American-made.**
	As an independent establishment of the executive branch of the United States government, the Postal Service is not subject to most "Buy American" laws, but our domestic preference policies are similar to those followed by executive agencies operating under the Buy American Act, Trade Agreements Act, and other domestic preference statutes. For any major Postal Service vehicle purchases, offerors receive an evaluation preference if their proposed vehicles are domestically manufactured. Furthermore, for the NGDV, the Postal Service specifically required that offerors build the NGDV in the United States. As a result, the NGDV supplier will be building both BEV and ICE NGDV in Spartanburg, South Carolina. Similarly, for our COTS vehicle purchases, domestic manufacturers receive a preference during the procurement sourcing decision process. Although we prefer domestic sources, we do not always get a domestic offer that satisfies all of our performance, safety, and ergonomic requirements. For example, we have not found a domestic source for a Right-Hand Drive (RHD) COTS delivery vehicle that satisfies all of our operational requirements. In addition, as we are expected to compete with other commercial delivery carriers in a very limited vehicle market, we must be cognizant of the restrictions and limitations we place on our suppliers or we risk losing the ability to purchase modern vehicles for our carriers and customers.
48	**USPS should import RHD vehicles from RHD markets such as the United Kingdom in order to obtain more BEV options.**
	See Section 3-6.2 (Import of RHD COTS Vehicles from International Source).
49	**USPS should use funding provided from Inflation Reduction Act to fully or greatly electrify fleet.**
	See Section 3-2.3 (Financial Considerations) for discussion of use of IRA funds. See also Sections 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) and 3-4 (Alternative 2 – NGDV Only with Increased BEV Commitment) for description of our two Alternatives which both include a significant commitment to fleet electrification.
50	**USPS should publicly disclose what percentage of BEVs is being funded by the Inflation Reduction Act and what percentage is being funded from its own resources.**
	As a general matter, we do not publicly disclose detailed information regarding commercially sensitive matters such as procurements. As stated in Section 1-2.2 (Rationale for Preparing This SEIS), most of the electric vehicle funding will come from Postal Service revenues even after factoring in the IRA funding.
51	**SEIS should account for USPS's improved financial situation as a result of the Postal Service Reform Act of 2022.**
	See Section 3 (Description of Alternatives) for description of Alternatives with significantly higher BEV commitments than in the Record of Decision.
52	**SEIS should consider benefits to be obtained from state and local policies designed to encourage or promote ZEV vehicles, such as priority lanes and loading zones and zero-emission shipping requirements.**

No.	Postal Service Response to Comments
	See Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to any market condition changes resulting from the widescale implementation of such policies.
53	**USPS should consider environmental and socioeconomic impacts from the manufacture of NGDVs in South Carolina and/or using non-union labor.**
	See Section 1-4 (Actions Not Included in the Proposed Action) for discussion regarding environmental impacts to be considered in this SEIS. See also Response No. 47 above for discussion of our domestic preference policies.
54	**USPS should consider environmental impacts from production and procurement of BEV batteries.**
	See Section 1-4 (Actions Not Included in the Proposed Action) for discussion regarding environmental impacts to be considered in this SEIS.
55	**USPS should charge BEVs with solar.**
	We have added on-site renewable energy production at some facilities, such as a 1,500 MW solar installation at our Anaheim, California processing and distribution facility, and will continue to evaluate renewable energy opportunities. With respect to BEV charging infrastructure solicitations, we will consider any solar-powered offers proposed.
56	**USPS should consider Biden Administration's commitment to electrifying federal fleet and combatting climate change.**
	See Response No. 8 above.
57	**USPS should hold a public hearing to hear from members of the public, experts and other stakeholders.**
	The Postal Service held a three-hour virtual public hearing on August 8, 2022. A copy of the transcript and written comments received during this Public Hearing are presented in Appendix B2 of the Draft SEIS. We will also hold a public hearing during the comment period for this Draft SEIS.
58	**USPS should conduct multiple public hearings across the nation in order to receive feedback from potentially impacted communities.**
	Over the course of the two public comment periods, we will hold at least two public hearings which will be accessible virtually and telephonically for all interested parties nationwide. In addition, interested parties will be able to submit feedback via electronic or U.S. mail.
59	**USPS should reconsider EPA and CEQ critiques of the FEIS.**
	In preparation of this SEIS, we have considered comments submitted regarding the FEIS where appropriate and enhanced assumptions and methodologies. See, for example, Section 4-6 (Air Quality), which includes updated emissions modeling using MOVES3 and updated Social Cost of GHGs estimations using cumulative totals. See also Section 4-11 (Environmental Justice), which includes a more detailed analysis of potential effects on communities with environmental justice concerns.

No.	Postal Service Response to Comments
60	**SEIS should consider different timeframes for procurements.**
	See Section 3 (Description of Alternatives), which describes Alternatives that would take place over six-, eight-, and ten-year periods.
61	**SEIS should consider multiple scenarios and alternatives.**
	See Section 3 (Description of Alternatives), which describes Alternatives that include different vehicle mixes, BEV commitments, total quantities, and time periods.
62	**SEIS should consider broader mix of ICE and BEV vehicles.**
	See Sections 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) and 3-4 (Alternative 2 – NGDV Only with Increased BEV Commitment) for description of our two Alternatives which both include a significantly higher BEV commitment than the No-Action Alternative. In addition, the No-Action Alternative (Section 3-5) continues to retain the flexibility to have a broad mix of BEV and ICE NGDV so long as at least 10 percent are BEV.
63	**SEIS should account for changes and improvements in vehicle technology, particularly BEVs and ZEVs.**
	See Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to improvements in vehicle technology.
64	**SEIS should consider the full environmental impact for the maximum quantity permitted under contract with Oshkosh.**
	For the full environmental impact of the maximum quantity under the NGDV contract, see the sections of the FEIS relating to the Proposed Action – for example, Section 4-6.3.2 (Air Emissions, Proposed Action – 90% ICE NGDV with at least 10% BEV NGDV).
65	**USPS should acquire as many left-hand drive COTS vehicles as it can in order to maximize BEV percentage.**
	See Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) for description of Preferred Alternative which includes a significant proportion of LHD COTS vehicles. See also Section 3-3.3 (Additional COTS Vehicle or NGDV Acquisition) which explains how we expect to increase pace of electrification through LHD COTS vehicle proportion. See also Sections 3-3.1 (NGDV Acquisition) and 3-3.2 (RHD COTS ICE Vehicle Acquisition), which explain why RHD vehicles are generally preferred to LHD.
66	**USPS should consider full or mostly ZEV or BEV alternative.**
	See Sections 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) and 3-4 (Alternative 2 – NGDV Only with Increased BEV Commitment) for description of our two Alternatives which both include a significantly higher BEV commitment than the No-Action Alternative. See also Section 3-2 (Consideration Factors for Alternatives) for explanation of why a proportion of ICE vehicles remained necessary for the procurement under consideration in this SEIS.

No.	Postal Service Response to Comments
67	**SEIS should consider a 100% BEV alternative to the 50,000 NGDV already ordered.**
	See Section 3-2 (Consideration Factors for Alternatives) for explanation for why a portion of ICE vehicles remained necessary for the procurement under consideration in this SEIS. In particular, the Postal Service's urgent need (Section 3-2.1) explains why a proportion of ICE vehicles, including all-wheel drive models, is necessary in the initial purchase. As a result, none of the Alternatives proposed include a change to the ICE-BEV mix of vehicles already ordered pursuant to the existing ROD. See also Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment for description of our Preferred Alternative which includes a significantly increased commitment to fleet electrification.
68	**USPS should consider using energy stored in EV batteries as a distributed energy resource such as providing power during a grid outage.**
	To accomplish our statutory Universal Service Mission, we believe it is critical to maintain our vehicles in a state of readiness at all times. As a result, mail service is among the first government services restored to areas affected by natural disasters. We therefore envision no role for our delivery fleet to serve as public energy sources at this time.
69	**USPS should consider employing different and cheaper battery sizes and charging configurations (for example, by not using 1:1 vehicle to charging station ratios or by using chargers of different capacities such as Level 1 and Level 2).**
	The battery size is driven by the vehicle manufacturer and based on the vehicle's design needs. Our requirement is for range capability of the vehicle. See also Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) which describes the Preferred Alternative which incorporates two different types of electric vehicles. See Response No. 18 above for discussion regarding charging station ratios. As we gain greater experience with the use, management and deployment of BEVs, we will continue to evaluate using charging stations of varying capacities. Finally, as a general matter, standardization within our vehicle fleet, in terms of vehicle capabilities and capacities, enables managers to more effectively and efficiently accomplish our Universal Service Mission. Introducing multiple sizes of vehicles with differing ranges would introduce a substantial level of operational risk that would reduce our ability to meet that mission.
70	**USPS should consider climate change and benefits of electrification.**
	Based on CEQ's 2023 interim NEPA Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, the SEIS quantified the direct and indirect GHG emissions of Alternatives 1 and 2 and the No-Action Alternative, and estimated social cost of GHG. The social cost of GHG is a tool used to assess the economic impacts of climate change by monetizing climate damages or benefit. This tool was used to compare the benefits of electrification among the proposed Alternatives and the No-Action Alternative (see, for example, Table 4-6.4.SC-GHG of Alternative 1 from 2023-2050). See also Response No. 8 above regarding our Preferred Alternative and the Biden-Harris Administration's climate policy.

No.	Postal Service Response to Comments
71	**SEIS should consider public health and employee health benefits from electrification.**
	See Sections 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) and 3-4 (Alternative 2 – NGDV Only with Increased BEV Commitment) for description of our two Alternatives that both include a significantly higher BEV commitment than the No-Action Alternative. The significant reductions in criteria pollutant emissions under Alternatives 1 and 2, including pollutants associated with the aggravation and development of respiratory health conditions such as asthma, are discussed in Sections 4-6.3.2 and 4-6.3.3 (Air Quality, Environmental Consequences) for Alternative 1 and Alternative 2, respectively.
72	**USPS competitors are electrifying their fleets.**
	See Sections 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) and 3-4 (Alternative 2 – NGDV Only with Increased BEV Commitment) for description of our two Alternatives which both include a significant 62 percent BEV commitment.
73	**SEIS should fully present all data and key assumptions.**
	While we do not publicly disclose commercially sensitive information such as vehicle prices, this SEIS contains significant detail regarding the operational capabilities, fuel consumption and air emissions for all vehicle types considered. See, for example, Table 3-3.1 (NGDV Specifications), which provides detailed vehicle data, and Appendix F, which provides detailed methodology and assumptions for the air quality analysis.
74	**According to analysis by Atlas Public Policy, USPS would save money through electrification.**
	See Section 3-2.3 (Financial Considerations) for a discussion of the financial factors considered in development of our Alternatives. Our financial analyses are based on data (for example, vehicle prices and infrastructure costs) which are not publicly available. As such, we have no comment on analyses or opinions developed by third parties using alternate sources and assumptions.
75	**USPS charging infrastructure costs were inflated or did not account for economies of scale. USPS should consult competitor and public workgroup infrastructure costs for comparison.**
	We do not agree. Ultimately, our BEV charging infrastructure costs will be based on competitive solicitations in the open market.
76	**USPS should consider full life cycle costs when comparing vehicle alternatives.**
	See Section 3-2.3 (Financial Considerations) for discussion of financial factors considered in developing Alternatives. See also Section 1-4 (Actions Not Included in the Proposed Action) for discussion regarding vehicle-related factors not considered in comparing the Alternatives.
77	**USPS TCO analyses do not comport with ICE-BEV TCO analyses done by others which found TCO savings from BEVs.**
	See Response No. 74 above.
78	**SEIS should consider higher gas prices and fuel price volatility.**

No.	Postal Service Response to Comments
	See Sections 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) and 3-4 (Alternative 2 – NGDV Only with Increased BEV Commitment) for description of our two Alternatives which both include a significantly higher BEV commitment than the No-Action Alternative. See also Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to changes in market conditions.
79	**SEIS should account for falling battery prices**
	See Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to changes in market conditions, such as changes in battery prices.
80	**USPS should consider prices for ZEVs and BEVs negotiated by other federal or state agencies, or which are lower due to incentive programs.**
	While almost all GSA vehicle offerings are not currently suitable for mail delivery, we do benchmark vehicle pricing with the GSA when applicable.
81	**SEIS should consider cost savings from lower electric vehicle maintenance and explain why it's been reported that it has estimated BEV maintenance as being higher than ICE.**
	Any reports that we estimated that BEVs will require more maintenance than ICE are erroneous. As stated in the FEIS, Section 4-1.1.4, we have determined that BEVs are generally more mechanically reliable than ICE vehicles and would require less scheduled maintenance since BEVs have fewer moving parts (no engine or conventional transmissions) and fluids to change.
82	**USPS should manage BEV charging to reduce costs (e.g., charging at night) and update TCO calculations accordingly.**
	As mail delivery is conducted during the day, BEVs will generally be charged at night to accommodate the Postal Service loading and delivery cycle. That factor has been included in all financial considerations. See also Section 4-8 (Utilities and Infrastructure).
83	**USPS should consider potential state regulations that would require USPS to use ZEVs**
	See Response No. 2 above.
84	**SEIS should consider benefits from regenerative braking.**
	While we anticipate that our BEV drivers will employ techniques such as “one-pedal driving,” the low speed and precision stops required for delivery operations, along with the relatively short distances between delivery stops, will minimize the opportunity to capture energy through regenerative braking. See also Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to improvements in vehicle technologies.

No.	Postal Service Response to Comments
85	**The fuel efficiency of the NGDV ICE is too low compared to older vehicles it would replace.**
	We do not agree. The ICE NGDV's larger size and increased functionality (e.g., the inclusion of air conditioning) make comparisons difficult. See also Table 3-3.1 (NGDV Specifications). The SEIS applies a lower fuel efficiency for NGDV based on our unique drive cycle to be conservative with respect to the environmental benefits. The actual manufacturer-provided fuel efficiency for the NGDV is much higher and significantly better than our current aging LLVs and FFVs.
86	**SEIS should analyze potential changes to air impacts resulting from route optimization changes, including the additional miles needed for vehicles to reach and return from their new delivery routes.**
	See Section 1-4 (Actions Not Included in the Proposed Action) for explanation regarding limited inclusion in this SEIS of potential delivery facility network optimization under development. It is assumed that no change in delivery route lengths would occur under Alternatives 1 or 2, or the No-Action Alternative. Additionally, in the event that future route optimization efforts could result in longer delivery routes, the SEIS includes a sensitivity analysis to assess potential effects to air quality that would result from increasing routes by three or ten miles. See details in Section 4-6.3.2 (Air Quality, Environmental Consequences, Alternative 1) and Table F-10.a in Appendix F.
87	**NGDV's weight of 8,501 lbs was an attempt to avoid more stringent emission standards.**
	The weight of 8,501 lbs was the supplier's estimated weight for the NGDV at the time proposals were submitted. The actual NGDV weight now that vehicle design is near complete is 8,700 lbs. See Table 3-3.1 (NGDV Specifications).
88	**SEIS should consider greening of the electricity grid in calculating its emissions.**
	The SEIS utilizes the latest GREET model to estimate the indirect upstream emissions associated with electricity consumption of the proposed BEV NGDV and COTS BEVs. The GREET model incorporates updated projections of the national electricity generation mix by 2050, taking into account future decarbonization efforts. According to the U.S. Department of Energy's "The Inflation Reduction Act Drives Significant Emissions Reductions and Positions America to Reach Our Climate Goals" report from August 2022, the latest net-zero emission goal is to reduce GHG emissions by 50 to 52 percent by 2030, compared to 2005 levels. The Postal Service reviewed how the GHG emission rates generated by GREET for BEV NGDV and COTS BEVs change over this timeframe, and determined they also decrease by 50 percent by 2030 as compared to a 2005 baseline year.
89	**SEIS should consider renewably-generated liquid fuels for use in its ICE vehicles.**
	Postal Service delivery vehicles primarily fuel at local gas stations along their delivery routes. In the event there is any widescale distribution of renewably-generated liquid fuels, we will consider whether such fuels can be safely utilized within our vehicles.
90	**USPS should provide leadership on ZEV and BEV vehicle front and spur ZEV market.**

No.	Postal Service Response to Comments
	See Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) for description of our Preferred Alternative, which includes a significantly higher BEV commitment than the No-Action Alternative. Spurring the ZEV market, beyond the BEV commitments included in the Alternatives under consideration, is not a factor of our Purpose and Need.
91	**USPS should conduct a fleet electrification study to optimize adoption of electric vehicles.**
	See Sections 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) and 3-4 (Alternative 2 – NGDV Only with Increased BEV Commitment) for description of our two Alternatives which both include a significantly higher BEV commitment than the No-Action Alternative.
92	**SEIS should consider reductions in low-carbon fueling costs due to incentive and low carbon fuel standard programs.**
	See Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to changes in market conditions.
93	**USPS should consider how mail providers around the world are transitioning to ZEVs.**
	See Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) for description of our Preferred Alternative which includes a significantly higher BEV commitment than the No-Action Alternative and demonstrates a major movement towards our transitioning to ZEVs.
94	**Conversion to an electric fleet will assist retailers in meeting commitments to reduce direct and indirect greenhouse gas emissions; failure to electrify may make USPS less competitive in attracting retailers' business.**
	See Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) for description of our Preferred Alternative which includes a significantly higher BEV commitment than the No-Action Alternative.
95	**SEIS should correct miscalculations such as finding that the majority of ICE GHG emissions come from upstream processes rather than combustion of the fuel.**
	The SEIS includes entirely new modeling for all Alternatives. To provide one example, as shown in Table F-4.d (Appendix F), the direct emissions of CO_2e from a 2025 ICE NGDV in 2025 (not including hot starts) are 8.64 tpy on a rural route (transit + delivery), and 3.15 tpy on a city route. The indirect emissions for each ICE NGDV in 2025 are 1.50 tpy (see Table F-6b in Appendix F). Thus, the majority of ICE GHG emissions come from fuel combustion.
96	**SEIS should reassess emissions calculations so as not to underestimate ICE emissions and overestimate BEV emissions.**
	We do not agree that the FEIS underestimated ICE emissions or overestimated BEV emissions. However, in response to stakeholder feedback, including EPA and Postal Service OIG, we have enhanced our air emissions analysis. The SEIS inputs, calculations, and assumptions in the modeling for ICE vehicle and BEV air emissions were refined from those used in the FEIS. Direct emissions were estimated using the new MOVES3 model to predict emission factors for each vehicle type, driving mode (e.g., curb-line vs. non-curb-line, and

No.	Postal Service Response to Comments
	delivery vs. transit segments), road type (e.g., rural vs. city), and vehicle manufacture year. Indirect emissions were estimated using the GREET model to predict emission factors for each vehicle type using the specific fuel efficiency and vehicle technology year.
97	**SEIS should consider social cost of carbon, including cumulative and relative analyses.**
	The SEIS considers social cost of carbon, including cumulative and relative analyses. See Section 4-6.3 (Air Quality, Environmental Consequences) and Appendix F.
98	**SEIS should evaluate different route characteristics.**
	The SEIS considers the route characteristics for the routes that require vehicle replacements. See Appendix F for explanation regarding route characteristics chosen for air quality impact analyses. The SEIS also includes a sensitivity analysis to assess potential effects to air quality that would result from increasing routes by three or ten miles. See details in Section 4-6.3.2 (Air Quality, Environmental Consequences, Alternative 1) and Table F-10.a in Appendix F.
99	**USPS should optimize its routes so that they fall within BEV ranges.**
	By statute, we must support our Universal Service Mission, which means every address in the nation. While route optimization is not being considered in this SEIS, we expect that routes will be optimized to meet universal service obligations, and minimize network transportation and operational impacts to support our core service mission.
100	**SEIS should clearly document how many delivery routes cannot be served by ZEVs or BEVs.**
	See Section 3-2.2 (Route Suitability) for information regarding number of delivery routes not currently optimal for ZEVs or BEVs.
101	**SEIS should provide more information regarding routes deemed not suitable for BEVs.**
	See Section 3-2.2 (Route Suitability) for information regarding factors considered in determining BEV route suitability.
102	**SEIS should disclose what factors, data, and assumptions are evaluated to determine whether a BEV procurement is consistent with the USPS delivery profile.**
	See Section 3-2.2 (Route Suitability) for information regarding factors considered in determining BEV route suitability. See also Sections 3-3.1 (NGDV Acquisition) and 3-3.3 (Additional COTS Vehicle or NGDV Acquisition) for information regarding factors considered in using BEV NGDV and COTS BEVs, respectively, for delivery.
103	**If USPS does not increase BEV percentages, deployments of BEVs will be skewed to locations that require or promote BEVs such as California.**
	See Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) for description of our Preferred Alternative which includes a significantly higher BEV commitment than the No-Action Alternative.
104	**SEIS should account for improving BEV ranges.**

No.	Postal Service Response to Comments
	See Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to changes in vehicle technologies, including any improvements to BEV ranges.
105	**USPS should reevaluate its 70-mile minimum range criteria for BEVs and should not use static battery ranges for a long-term procurement as battery range technology can be expected to improve.**
	See Section 3-2.2 (Route Suitability) for discussion regarding our bases for employing a 70-mile minimum BEV range. For NGDV, the 70-mile battery range is based on the performance at the end of its battery's useful life (i.e., range on a degraded battery), and not the range at procurement.
106	**USPS should reevaluate whether climates previously thought to limit BEV uses still do so given advances in technology and case uses by organizations in very cold and very hot areas.**
	See Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to be more responsive to advances in vehicle technologies, such as BEV capabilities in extreme weather. In addition, as noted in Section 3-2.2 (Route Suitability), we expect our BEV range requirements will change over time as battery technology improves and we gain experience using and maintaining BEVs.
107	**USPS should ensure that battery performance data used in its analyses is up-to-date and does not rely on outdated performance metrics.**
	In support of our Universal Service Mission to reliably deliver the nation's mail, we routinely evaluate vehicle performance.
108	**SEIS should resolve or avoid any inconsistencies with state and local laws, goals, targets and programs to reduce greenhouse gas emissions.**
	We are not aware of any legal inconsistencies for any of the Alternatives under consideration in this SEIS. See Section 3-3 (Alternative 1 (Preferred Alternative) – Mixed Fleet with Increased BEV Commitment) for description of our Preferred Alternative which includes a significant 62 percent BEV commitment. See also Section 4-6.3 (Air Quality, Environmental Consequences) for the significant GHG emissions reductions anticipated under the Preferred Alternative.
109	**SEIS should make clear whether COTS purchases are intended as stop-gap measure or longer-term investment.**
	See Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to consider varying vehicle mixes, including both purpose-built and COTS vehicles.

No.	Postal Service Response to Comments
	For a discussion of factors considered when including COTS vehicles in this particular SEIS, see Sections 3-3.2 (RHD COTS ICE Vehicle Acquisition) and 3-3.3 (Additional COTS Vehicle or NGDV Acquisition).
110	**SEIS should explain the discrepancy between NGDV BEV battery range of 70 miles and COTS BEV battery range of 108 miles, despite their similar battery chemistries.**
	We are not aware of any discrepancies between the battery ranges of BEV NGDV and any particular COTS BEV. Even if two different batteries should share similar chemistries, their ranges will vary based on a wide assortment of factors, including vehicle size, vehicle features, usage, and route characteristics. In addition, as explained in Section 3-2.2 (Route Suitability), we determine BEV ranges using unique Postal Service drive cycles, not the ranges which might apply to more general usage. See also Table 3-3.1 (NGDV Specifications) and Table 3-3.2 (COTS Vehicle Specifications) for both the Postal Service-drive cycle range (i.e., USPS drive cycle) and the manufacturer-provided range (i.e., EPA's UDDS drive cycle). For NGDV, the 70-mile battery range is based on the performance at the end of its battery's useful life, which is longer than the COTS vehicle's useful life. For COTS vehicles, the 77-mile battery range is based on 70% of the manufacturer-provided range to account for comparable degradation over time.
111	**SEIS should account for benefits from regenerative braking and explore ways to take advantage of it notwithstanding its lower driving speeds.**
	See Response No. 84 above. See also Sections 1-2.2 (Rationale for Preparing This SEIS) and 3-2.4 (Vehicle Procurement Strategy) for discussion regarding how our proposed multi-stage vehicle procurement strategy will allow us to consider any improvements in vehicle technology – for example, if regenerative technology should improve to allow for better performance at lower driving speeds.
112	**SEIS should account for increase in ICE vehicles' emissions as their emission control systems degrade and deteriorate over time.**
	Degradation or deterioration of emission control systems would increase estimated emissions over time from both the proposed new ICE vehicles and the aged ICE vehicles to be replaced. Since the Action Alternatives include 62 percent BEVs with substantially lower emissions than ICE vehicles, accounting for increases in the aged ICE vehicles' emissions over time (to account for further deterioration) would likely demonstrate greater emissions reductions relative to existing conditions since over half of them would be replaced with BEVs, making the Postal Service's analysis directionally conservative. Additionally, while LLVs were made between 1987-1994, the MOVES model only produces emission rates for specific vehicle make years up to 30 years preceding the simulation year. If emission rates for simulation years 2025-2030 were used to calculate LLV emissions (i.e., to theoretically capture deterioration over time), those emission rates would actually start encompassing newer vehicles unrepresentative of the existing LLVs (e.g., vehicles with make years 1995-2000) with lower emission rates for most pollutants than the LLVs (make years 1987-1994). Thus, the Postal Service calculated emissions for the 2024-2030 simulation years all using the 2024 emission rate for 1994 vehicles. Finally, the Postal Service conducted a conservative sensitivity analysis of emissions resulting from degradation and deterioration of emission control systems during the project implementation period. The Postal Service ran the calculations using 2030 direct emission

No.	Postal Service Response to Comments
	factors for all proposed new vehicles regardless of make year, and the 2024 direct emission factors for LLVs. Despite not accounting for further degradation of LLVs (as noted above), the change in aggregated annual emissions reductions was negligible.
113	**SEIS should account for personnel impacts resulting from route optimization changes.**
	See Section 1-4 (Actions Not Included in the Proposed Action) for explanation that delivery facility network optimization is not included in this SEIS. See also Section 4-3.3 (Socioeconomics, Environmental Consequences) for expected personnel impacts from the Alternatives under consideration.
114	**USPS should consider how the distribution of its facilities, vehicles, and fleet yards impacts environmental justice or disadvantaged communities and mitigate as needed.**
	See Section 4-11 (Environmental Justice) for a detailed analysis of the Proposed Action's potential effects on communities with environmental justice concerns. Notably, the Preferred Alternative would have a beneficial effect on the air quality of the 84 percent of communities around Candidate Sites that have EJ concerns.

B4 Notice of Availability of Draft SEIS

Table B4-1
NOA Stakeholder Distribution List

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B4 Notice of Availability of Draft SEIS

Example NOA Letter (with Enclosure: June 30, 2023 Federal Register Publication, Postal Service Notice of Availability of Draft Supplemental Environmental Impact Statement for Next Generation Delivery Vehicles Acquisitions)

JENNIFER G. BEIRO-RÉVEILLÉ
SENIOR DIRECTOR, ENVIRONMENTAL AFFAIRS AND CORPORATE SUSTAINABILITY

UNITED STATES POSTAL SERVICE

June 30, 2023

SUBJECT: Notice of Availability of Draft Supplemental Environmental Impact Statement for Next Generation Delivery Vehicle Acquisitions

Dear Sir or Madam:

The Postal Service has prepared a Draft Supplemental Environmental Impact Statement (SEIS) for Next Generation Delivery Vehicle Acquisitions. This SEIS is a supplement to the Postal Service's recent Next Generation Delivery Vehicles Acquisitions Final EIS, for which we published our Record of Decision on February 23, 2022. Pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality's regulations implementing NEPA (40 CFR Parts 1500-1508), and the Postal Service's regulations for NEPA compliance set forth at 39 CFR Part 775, the Postal Service prepared this Draft SEIS to evaluate the environmental impacts of the Proposed Action and Alternatives. A copy of the Notice of Availability of the Draft SEIS is enclosed.

Interested parties may view the Draft SEIS at https://uspsngdveis.com/.

Interested parties may mail or deliver written comments, containing the name and address of the commenter, to Mr. Davon Collins, Environmental Counsel, United States Postal Service, 475 L'Enfant Plaza SW, Office 6606, Washington, DC 20260-6201, or at NEPA@usps.gov. Note that comments sent by mail may be subject to delay due to federal security screening. Faxed comments are not accepted. All submitted comments and attachments are part of the public record and subject to disclosure. Do not enclose any material in your comments that you consider to be confidential or inappropriate for public disclosure.

Sincerely,

Jennifer Beiro-Réveillé

Enclosure

475 L'ENFANT PLAZA SW ROOM 2717
WASHINGTON, DC 20260-4233

VISIT US @ USPS.COM

B4 Notice of Availability of Draft SEIS

NOA Federal Register Publication (June 30, 2023)

Federal Register / Vol. 88, No. 125 / Friday, June 30, 2023 / Notices 42401

account profile used to match with Sender name and address or Sender's representative authority to file an international inquiry for a lost or damaged package.

9. *Click-n-Ship Account Linking Information:* Customer Address Details, Authentication, Customer Contact Name, Currency, Label Metadata, Marketplace Label data, Order ID, Order Status, Shipping Code, Value, IP Address, MAC Address, Device Type, Browser Type, OAuth accessToken, OAuth expiry, OAuth refreshToken, OAuth refreshTokenExpiry, OAuth tokenType, Marketplace Data ID, Marketplace Data Version, Marketplace Data Account Type, Marketplace Data Account Identifier, Marketplace Data Reference ID, Marketplace Data Labels.

RECORD SOURCE CATEGORIES:

Customers, Individual Sender and Sender's representative filing an international inquiry for lost or damaged packages.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND PURPOSES OF SUCH USES:

Standard routine uses 1. through 7., 10., and 11. apply.

POLICIES AND PRACTICES FOR STORAGE OF RECORDS:

Automated database, computer storage media, and paper.

POLICIES AND PRACTICES FOR RETRIEVAL OF RECORDS:

By customer name, customer ID(s), phone number, mail, email address, IP address, text message address, and any customer information or online user information.

By tracking number for International package shipments for which an individual sender or sender's representative is filing an online International inquiry for loss or damage.

POLICIES AND PRACTICES FOR RETENTION AND DISPOSAL OF RECORDS:

1. ACH records are retained up to 2 years.

2. Records stored in the registration database are retained until the customer cancels the profile record, 3 years after the customer last accesses records, or until the relationship ends.

3. For small business registration, records are retained 5 years after the relationship ends.

4. Online user information may be retained for 6 months. Records existing on paper are destroyed by burning, pulping, or shredding. Records existing on computer storage media are destroyed according to the applicable USPS media sanitization practice.

ADMINISTRATIVE, TECHNICAL, AND PHYSICAL SAFEGUARDS:

Paper records, computers, and computer storage media are located in controlled-access areas under supervision of program personnel. Access to these areas is limited to authorized personnel, who must be identified with a badge.

Access to records is limited to individuals whose official duties require such access. Contractors and licensees are subject to contract controls and unannounced on-site audits and inspections. Computers are protected by mechanical locks, card key systems, or other physical access control methods. The use of computer systems is regulated with installed security software, computer logon identifications, and operating system controls including access controls, terminal and transaction logging, and file management software. Online data transmissions are protected by encryption.

For small business registration, computer storage tapes and disks are maintained in controlled-access areas or under general scrutiny of program personnel. Access is controlled by logon ID and password as authorized by the Marketing organization via secure website. Online data transmissions are protected by encryption.

RECORD ACCESS PROCEDURES:

Requests for access must be made in accordance with the Notification Procedure above and USPS Privacy Act regulations regarding access to records and verification of identity under 39 CFR 266.5.

CONTESTING RECORD PROCEDURES:

See Notification Procedures and Record Access Procedures.

NOTIFICATION PROCEDURES:

Customers wanting to know if information about them is maintained in this system of records must address inquiries in writing to the system manager. Inquiries must contain name, address, and other identifying information.

EXEMPTIONS PROMULGATED FOR THE SYSTEM:

None.

HISTORY:

March 8, 2023, 88 FR 14400; December 27, 2018, 83 FR 66768; August 25, 2016, 81 FR 58542; June 30, 2016, 81 FR 42760; June 20, 2014, 79 FR 35389; January 23, 2014, 79 FR 3881; July 11, 2012, 77 FR 40921; October 24, 2011, 76 FR 65756; May 08, 2008, 73 FR 26155; April 29, 2005, 70 FR 22516.

Sarah Sullivan,

Attorney, Ethics and Legal Compliance.

[FR Doc. 2023–13908 Filed 6–29–23; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Notice of Availability of Draft Supplemental Environmental Impact Statement for Next Generation Delivery Vehicles Acquisitions

Pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality's regulations implementing NEPA (40 CFR parts 1500–1508), and the Postal Service's regulations for NEPA compliance set forth at 39 CFR part 775, the U.S. Postal Service announces availability of the Draft Supplemental Environmental Impact Statement (SEIS) which analyzes the environmental impacts of a range of alternatives for a modification to the Postal Service's February 23, 2022, Record of Decision (ROD) to purchase, over ten years, 50,000 to 165,000 purpose-built, right-hand drive vehicles—the Next Generation Delivery Vehicle (NGDV)—to replace existing delivery vehicles nationwide that are beyond the end of their service life. A minimum of 10 percent of those vehicles would be battery electric vehicles (BEVs).

As our Preferred Alternative, the Postal Service proposes in this Draft SEIS to modify the current ROD in three primary ways: (1) substantially increase the minimum BEV commitment to 62 percent, (2) reduce the total number of vehicles proposed for purchase at this time to 106,480, purchased over six years, and (3) include a mix of both NGDV and commercial-off-the-shelf (COTS) vehicles. This Draft SEIS also analyzes an NGDV-only Alternative with 62 percent BEV commitment, purchased over eight years, as well as a "No-Action" Alternative, which would proceed with the existing decision under the ROD.

The Postal Service is soliciting comments on the Draft SEIS during a 45-day public comment period. Comments should be received no later than August 14, 2023.

In addition, the Postal Service will also conduct a virtual public hearing on July 26, 2023. Registration information will be made available 15 days prior to the hearing date at the following website: *http://uspsngdveis.com/*.

Interested parties may view the Draft SEIS and the prior NGDV ROD at *http://*

uspsngdveis.com/. Interested parties may mail or deliver written comments, containing the name and address of the commenter, to: Mr. Davon Collins, Environmental Counsel, United States Postal Service, 475 L'Enfant Plaza SW, Office 6606, Washington, DC 20260–6201, or at *NEPA@usps.gov*. Note that comments sent by mail may be subject to delay due to Federal security screening. Faxed comments are not accepted. All submitted comments and attachments are part of the public record and subject to disclosure. Do not enclose any material in your comments that you consider confidential or inappropriate for public disclosure.

References

1. U.S. Postal Service, Notice of Availability of Record of Decision, Next Generation Delivery Vehicles Acquisitions (87 FR 14588; Mar. 15, 2022).
2. U.S. Postal Service, Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement (87 FR 35581; June 10, 2022).
3. U.S. Postal Service, Notice to Postpone Public Hearing and Extend Public Comment Period for Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement (87 FR 43561; July 21, 2022).

Sarah Sullivan,

Attorney, Ethics & Legal Compliance.

[FR Doc. 2023–13941 Filed 6–29–23; 8:45 am]
BILLING CODE P

SECURITIES AND EXCHANGE COMMISSION

[SEC File No. 270–508, OMB Control No. 3235–0565]

Submission for OMB Review; Comment Request; Extension: Rule 482

Upon Written Request, Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE, Washington, DC 20549–2736

Notice is hereby given that, pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) ("Paperwork Reduction Act"), the Securities and Exchange Commission ("Commission") has submitted to the Office of Management and Budget ("OMB") a request for extension of the previously approved collection of information discussed below.

Like most issuers of securities, when an investment company ("fund") [1] offers its shares to the public, its promotional efforts become subject to the advertising restrictions of the Securities Act of 1933 (15 U.S.C. 77) (the "Securities Act"). In recognition of the particular problems faced by funds that continually offer securities and wish to advertise their securities, the Commission has previously adopted advertising safe harbor rules. The most important of these is rule 482 (17 CFR 230.482) under the Securities Act, which, under certain circumstances, permits funds to advertise investment performance data, as well as other information. Rule 482 advertisements are deemed to be "prospectuses" under Section 10(b) of the Securities Act (15 U.S.C. 77j(b)).

Rule 482 contains certain requirements regarding the disclosure that funds are required to provide in qualifying advertisements. These requirements are intended to encourage the provision to investors of information that is balanced and informative, particularly in the area of investment performance. For example, a fund is required to include disclosure advising investors to consider the fund's investment objectives, risks, charges and expenses, and other information described in the fund's prospectus, and highlighting the availability of the fund's prospectus. In addition, rule 482 advertisements that include performance data of open-end funds or insurance company separate accounts offering variable annuity contracts are required to include certain standardized performance information, information about any sales loads or other nonrecurring fees, and a legend warning that past performance does not guarantee future results. Such funds including performance information in rule 482 advertisements are also required to make available to investors month-end performance figures via website disclosure or by a toll-free telephone number, and to disclose the availability of the month-end performance data in the advertisement. The rule also sets forth requirements regarding the prominence of certain disclosures, requirements regarding advertisements that make tax representations, requirements regarding advertisements used prior to the effectiveness of the fund's registration statement, requirements regarding the timeliness of performance data. In addition, rule 482(b) describes the information that is required to be included in an advertisement, including a cautionary statement under rule 482(b)(4) disclosing the particular risks associated with investing in a money market fund.

On October 26, 2022, the Commission adopted rule and form amendments that modernize the requirements for annual and semi-annual shareholder reports provided by open-end management investment companies.[2] The Commission also adopted amendments to the advertising rules for registered investment companies and business development companies to promote more transparent and balanced statements about investment costs. The advertising rule amendments require that investment company advertisements providing fee and expense figures include: (1) the maximum amount of any sales load or any other nonrecurring fee; and (2) the total annual expenses without any fee waiver or expense reimbursement arrangement. Under the amendments to rule 482, investment company fee and expense presentations in advertisements must include timely and prominent information about a fund's maximum sales load (or any other nonrecurring fee) and gross total annual expenses, based on the methods of computation that the company's Investment Company Act or Securities Act registration statement form prescribes for a prospectus.

Rule 482 advertisements must be filed with the Commission or, in the alternative, with the Financial Industry Regulatory Authority ("FINRA").[3] This information collection differs from many other federal information collections that are primarily for the use and benefit of the collecting agency.

Rule 482 contains requirements that are intended to encourage the provision to investors of information that is balanced and informative, particularly in the area of investment performance. The Commission is concerned that in the absence of such provisions fund investors may be misled by deceptive rule 482 advertisements and may rely on less-than-adequate information when determining in which funds they should invest money. As a result, the

[1] "Investment company" refers to both investment companies registered under the Investment Company Act of 1940 ("Investment Company Act") (15 U.S.C. 80a–1 *et seq.*) and business development companies.

[2] Tailored Shareholder Reports for Mutual Funds and Exchange-Traded Funds; Fee Information in Investment Company Advertisements, Investment Company Act Release No. 34731 (Oct. 26, 2022), 87 FR 72758 (Nov. 25, 2022) (the "Adopting Release").

[3] See note to rule 482(h) under the Securities Act, which states that "those advertisements, unless filed with [FINRA], are required to be filed in accordance with the requirements of § 230.497." See also rule 24b–3 under the Investment Company Act (17 CFR 270.24b–3), which provides that any sales material, including rule 482 advertisements, shall be deemed filed with the Commission for purposes of Section 24(b) of the Investment Company Act upon filing with FINRA.

B5 Draft SEIS Public Hearing Documentation

Draft SEIS Public Hearing PowerPoint Presentation (corrected), July 26, 2023

Next Generation Delivery Vehicle (NGDV) Acquisitions

DRAFT Supplemental Environmental Impact Statement

Public Hearing – 7:00 pm (ET)

July 26, 2023

Welcome! The Postal Service's presentation will begin shortly and will be repeated at 8:30 pm (ET).

UNITED STATES POSTAL SERVICE®

Ways to Submit Comments & Questions

1. **ORAL:** If you wish to speak at this hearing (for up to 2 minutes), please click on the "raise hand" feature to be added to the queue of speakers, who will be unmuted in turn order.
2. **WRITTEN:** All comments typed into this hearing's Q&A box will be recorded and considered.
3. **EMAIL:** Email your comments to NEPA@usps.gov
4. **U.S. MAIL:** Mail your comments to: U.S. Postal Service, 475 L'Enfant Plaza SW, Office 6606, Washington, D.C. 20260 -6201, Attn: Mr. Davon Collins, Environmental Counsel

IMPORTANT: All comments must be received no later than August 14, 2023. All comments submitted are part of the public record and subject to disclosure. A copy of this presentation will be available at uspsngdveis.com.

2

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

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Important References

- **Draft SEIS -** *Currently accepting public comments*
- **Other Related Past References:**
  - NGDV Final EIS (December 2021)
  - NGDV Record of Decision (February 2022)
  - Public Hearing during Scoping Period for Supplemental EIS (August 2022)

References available on project website:
https://uspsngdveis.com/

3 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

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Proposed Action, Purpose, and Need

4 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

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Proposed Action, Purpose, and Need [See Draft SEIS, Section 2]

Proposed Action: Modernization of the Postal Service's Delivery Fleet

The Purpose and Need remain the same as for the original NGDV FEIS:

- **Need:** The Postal Service's existing purpose -built delivery vehicles are now outdated, inefficient, increasingly unreliable, costly to maintain, and lack certain modern safety and operational features. These vehicles are near or at the end of their useful life and are no longer effective in achieving the Postal Service's Universal Service Mission.
- **Purpose:** To replace the end -of-life and high-maintenance vehicles with new vehicles that have more energy -efficient powertrains, updated technology, reduced emissions, increased cargo capacity and improved loading characteristics, improved ergonomics and carrier safety, and reduced maintenance costs.

5 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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National Environmental Policy Act (NEPA)

Overview and Recent Actions to Date

6 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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National Environmental Policy Act Overview

- NEPA is a procedural statute intended to ensure Federal agencies consider the environmental impacts of their major actions in the decision -making process.
- An Environmental Impact Statement (EIS) is a document that informs Federal agency decision -making and the public, and must:
  - include a full and fair discussion of significant environmental impacts;
  - inform of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment; and
  - be concise, clear, to the point, and supported by evidence that the agency has made the necessary environmental analyses.
- The purpose and function of NEPA is satisfied if Federal agencies have considered relevant environmental information and the public has been informed regarding the decision -making process.
- NEPA does not mandate particular results or substantive outcomes.

7 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

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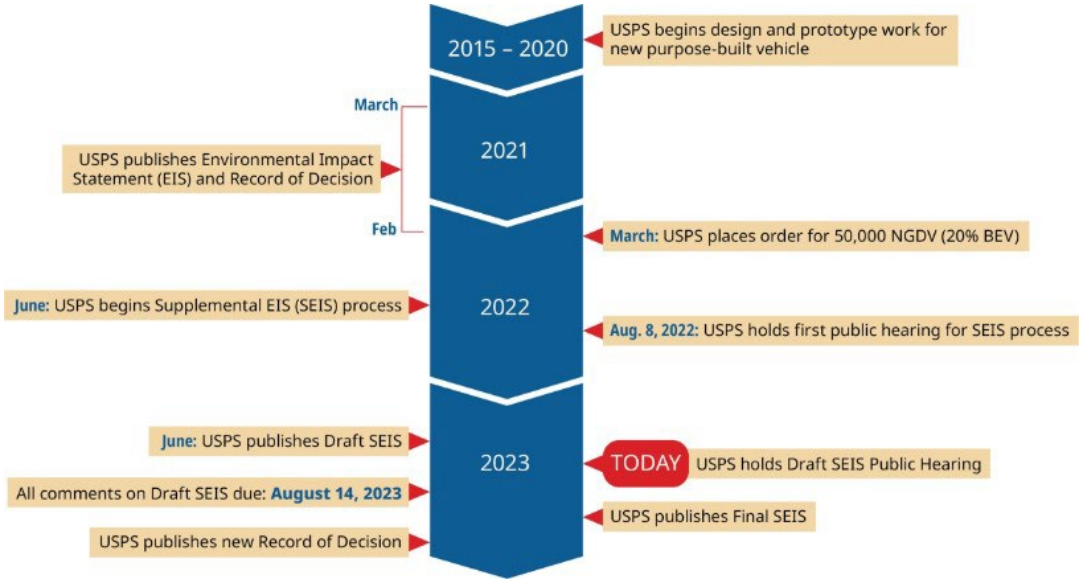
Timeline



8 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

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Why is the Postal Service supplementing its NGDV EIS?

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

9

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Supplemental EIS – Areas of Consideration

[See Draft SEIS, Section 1 -2.2]

Prior Record of Decision (February 2022): To purchase and deploy over a ten -year period 50,000 to 165,000 NGDV to replace its LLV/FFVs (at least 10% battery electric vehicles [BEVs]).

The Postal Service is considering three changes which, if implemented, could potentially affect the composition of the Postal Service delivery fleet.

1. **Multi-step acquisition process** – Consider more frequent vehicle purchases of fewer vehicles over shorter periods of time, rather than over ten years
2. **Inflation Reduction Act of 2022** – Congress appropriated $3 billion to fund zero -emission vehicles and necessary charging infrastructure
3. **Acceleration of vehicle replacements** – Purchase commercial-off-the-shelf (COTS) vehicles to address critical, immediate need
   - Incorporation of COTS, paired with advanced funding and installation of infrastructure, would also allow for accelerated fleet electrification

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

10

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Alternatives

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

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Consideration Factors for Alternatives [See Draft SEIS, Section 3 -2]

1. **Urgent Need** – LLVs in service are 8+ years beyond their 24-year service life
2. **Route Suitability** – not all routes are BEV-compatible
3. **Financial Considerations** – BEVs are significantly more expensive to acquire and require extensive infrastructure investment
4. **Vehicle Procurement Strategy** – smaller, more frequent purchases allows opportunity to increase BEV proportion over time and leverage emerging technologies

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All comments will be addressed in the Final SEIS.

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Alternatives Analyzed in Detail [See Draft SEIS, Section 3]

Alternative	Description
Alternative 1 (Preferred): **Mixed Fleet (NGDV & COTS) with Increased BEV Commitment**	1. 60,000 NGDV (75% BEV) 2. 14,500 RHD COTS ICE Vehicles 3. 31,980 LHD/RHD COTS Vehicles or NGDV (66% BEV) **Total Vehicles: 106,480 (62% BEV)** **Timeframe: Six Years**
Alternative 2: **NGDV Only with Increased BEV Commitment**	1. 106,480 NGDV (62% BEV) **Total Vehicles: 106,480 (62% BEV)** **Timeframe: Eight Years**
No-Action Alternative: **NGDV Only with Existing BEV Commitment per Current ROD**	1. 165,000 NGDV (at least 10% BEV) **Total Vehicles: 165,000 (10% BEV)*** **Timeframe: Ten Years** *Only **106,480 NGDV (over eight years) analyzed in SEIS** to ensure fair comparison with Alternatives 1 and 2.

13 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

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Summary of Key Vehicle Specifications [See Draft SEIS, Section 3]

LLVs – Internal combustion engine (ICE) vehicles currently in service; the LLV is right -hand drive

NGDV – Both ICE and battery electric (BEV) powertrain vehicles are proposed; the NGDV is right -hand drive

COTS Vehicles – Three types, right -hand drive and left -hand drive ICE vehicles, and left -hand drive BEVs are proposed

Design Specifications	LLV	ICE NGDV	BEV NGDV	RHD COTS ICE	LHD COTS ICE	LHD COTS BEV
Gross Vehicle Weight Rating (pounds)	4,450	8,700	8,700	6,834	8,900	9,500
Mileage (USPS Drive Cycle)	8.8 MPG	12.63 MPG	1.28 mi/kWh	12.1 MPG	11 MPG	1.13 mi/kWh (calculated)
Mileage (UDDS Drive Cycle)	N/A	19.21 MPG	2.0 mi/kWh	19/23 MPG (city/highway) (EPA window sticker rating)	18/26 MPG (city/highway) (EPA window sticker rating)	N/A
Range on Single Charge	N/A	N/A	70 miles	N/A	N/A	77 miles

NGDV = Next Generation Delivery Vehicle COTS = commercial-off-the-shelf (vehicle) ICE = internal combustion engine BEV = battery electric vehicle
RHD = right-hand drive LHD = left -hand drive UDDS = Urban Dynamometer Driving Schedule MPG = miles per gallon mi/kWh = miles per kilowatt hour

14 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

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Environmental Analysis

15 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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Summary of Environmental Effects (Alternatives 1 and 2) [See Draft SEIS, Section 4-12.1]

Type and Level of Effect	Resource Area	
Beneficial Effects	• Transportation safety (employee and community) • **Traffic noise** • **Greenhouse gas and other regulated air pollutants (except Sulfur Dioxide) emissions decrease**	• Community emergency services • **Gasoline consumption** • Hazardous waste generation • **Environmental justice communities**
No / Negligible Effects	• Community economics • Employment • Traffic • Accessibility, parking, public transportation	• **Sulfur Dioxide emissions increase** • Community utilities (availability and capacity) • **Electricity consumption** • Solid and hazardous waste treatment and disposal
Minor to Moderate Adverse Effects	• **Backup alarm noise near major vehicle deployment sites (Preferred Alternative only)**	
Significant Effects	• None	

16 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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Air Quality – Methodology [See Draft SEIS, Section 4 -6 and Appendix F]

We modeled **direct** and **indirect** emissions for "criteria" pollutants regulated under the Clean Air Act:

- Used state-of-the-science, EPA-approved "MOVES" and "GREET" models for calculating direct and indirect air emissions, respectively
- Direct emissions = emissions from vehicles themselves (tailpipe, fueling, tire wear & tear)
- Indirect emissions = emissions from production of gasoline and electricity
- Pollutants include:
  - Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Sulfur Dioxide (SO_2), Particulate Matter ($PM_{2.5}$ and PM_{10}), and Volatile Organic Compounds (VOCs), which contribute to smog and respiratory health conditions
  - Greenhouse Gases (GHGs), including Carbon Dioxide (CO_2) and Methane (CH_4), which contribute to climate change

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Air Quality – Vehicle Comparison [See Draft SEIS Appendix F -4 tables]

- All new vehicles would generate fewer emissions (direct + indirect, combined) per pollutant (grams/mile) than an LLV.
- Emissions* from Existing (Aged) and Proposed (New) Vehicles, in pounds/day for **one vehicle**:

Vehicle	Volatile Organic Compounds (VOCs)	Nitrogen Oxides (NO_x)	Carbon Monoxide (CO)	Particulate Matter ($PM_{2.5}$)	Particulate Matter (PM_{10})	Sulfur Dioxide (SO_2)	Greenhouse Gases**
LLV	*0.400*	*0.434*	*2.993*	*0.005*	*0.016*	*0.008*	*106.97*
Personally Owned Delivery Vehicle	*0.064*	*0.058*	*0.810*	*0.003*	*0.014*	*0.004*	*87.25*
NGDV ICE	0.025	0.019	0.093	0.003	0.014	0.006	74.48
NGDV BEV	0.004	0.023	0.013	0.003	0.015	0.020	32.19
RHD COTS ICE	0.026	0.019	0.094	0.003	0.014	0.006	75.19
LHD COTS ICE	0.028	0.021	0.095	0.003	0.014	0.006	76.86
LHD COTS BEV	0.004	0.026	0.014	0.004	0.016	0.023	36.46
% Change from LLV to NGDV or COTS BEV (avg)	**- 99.0%**	**- 94.3%**	**- 99.5%**	**- 24.4%**	**- 3.3%**	**172.5%**	**- 67.9%**
% Change from LLV to NGDV or COTS ICE (avg)	**- 93.5%**	**- 95.4%**	**- 96.9%**	**- 34.9%**	**- 12.4%**	**- 26.0%**	**- 29.4%**

*Based on a rural curbline route, in simulation year 2024 **CO_2e (Carbon Dioxide equivalent)
LLV = longlife vehicle NGDV = Next Generation Delivery Vehicle COTS = commercial-off-the-shelf RHD = right -hand drive LHD = left-hand drive
ICE = internal combustion engine BEV = battery electric vehicle

18 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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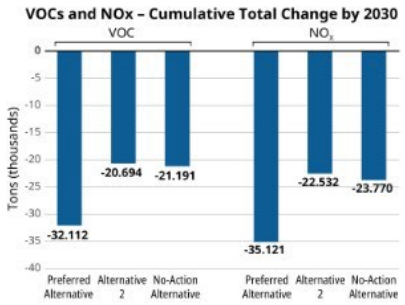
Air Quality – Regulated Pollutants (Except Sulfur Dioxide)

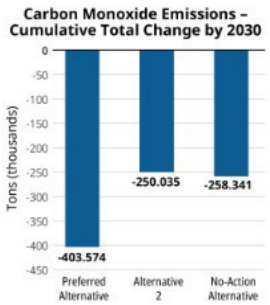
[See Draft SEIS, Section 4 -6.2 and Appendix F]

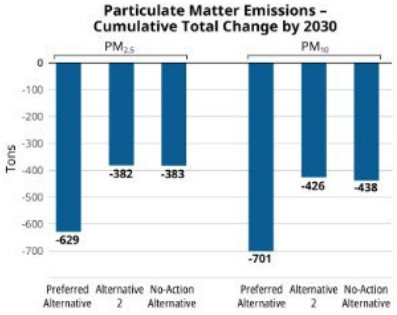
Note: Following the Public Hearing, the charts on this slide were corrected to denote either "Tons (thousands)" or "Tons" in the Y -axes. Previously, the Y -axes indicated "Tons Per Year (thousands)" or "Tons Per Year."

Total regulated pollutant emissions by 2030 would **decrease** under the Preferred Alternative, Alternative 2, and No-Action Alternative.

- Preferred Alternative would have **substantial reduction in total emissions** compared to the No -Action Alternative, due to expedited replacement of LLVs with new ICE vehicles and BEVs.
- Alternative 2 would have total Volatile Organic Compounds (VOCs), Nitrogen Oxides (NO_x), Carbon Monoxide (CO), and Particulate Matter (PM) emissions reductions comparable to No-Action Alternative.







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All comments will be addressed in the Final SEIS.

19

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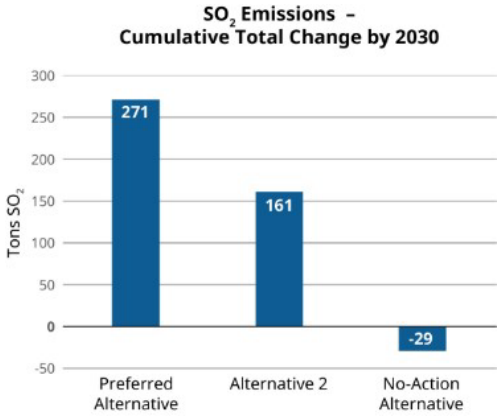
Air Quality – Regulated Pollutants (Sulfur Dioxide)

[See Draft SEIS, Section 4 -6.2 and Appendix F]

Total Sulfur Dioxide (SO_2) emissions by 2030 would **increase** under Preferred Alternative and Alternative 2 and **decrease** under No -Action Alternative.

- Upstream electricity generation for increased BEVs results in increased Sulfur Dioxide (SO_2) emissions.
- Preferred Alternative would result in **highest total increase** due to expedited deployment of BEVs. However, the **annual amount** of relative increase **is negligible** in nationwide context.



Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

20

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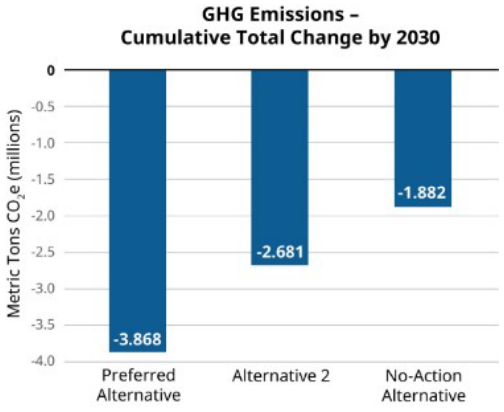
Air Quality – Greenhouse Gases (GHGs)

[See Draft SEIS, Section 4 -6.3 and Appendix F]

Total GHG emissions by 2030 [including Carbon Dioxide (CO_2) and Methane (CH_4)] would **decrease** under the Preferred Alternative, Alternative 2, and No -Action Alternative.

- Preferred Alternative and Alternative 2 would result in greater GHG emission reductions compared with No-Action Alternative.
- Preferred Alternative would result in **highest total GHG emissions reductions** due to the expedited deployment of new ICE vehicles and BEVs.



Greenhouse Gas emissions expressed as Carbon Dioxide Equivalent (CO_2e)

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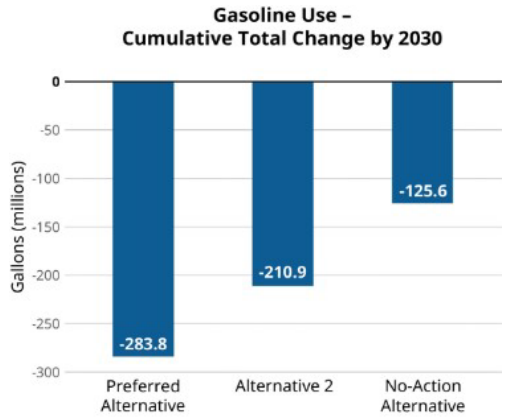
Energy Requirements and Conservation

[See Draft SEIS, Section 4 -9 and Appendix G]

Total gasoline use by 2030 would **decrease** under the Preferred Alternative, Alternative 2, and No -Action Alternative.

- Replacement of LLVs with new ICE vehicles with improved fuel economy will decrease gasoline needs and consumption.
- Increase in BEVs will decrease gasoline needs and consumption.
- Preferred Alternative and Alternative 2 would result in greater total gasoline use reductions compared with No-Action Alternative.
- Preferred Alternative would result in the **highest total gasoline use reductions** due to the expedited deployment of new ICE vehicles and BEVs.



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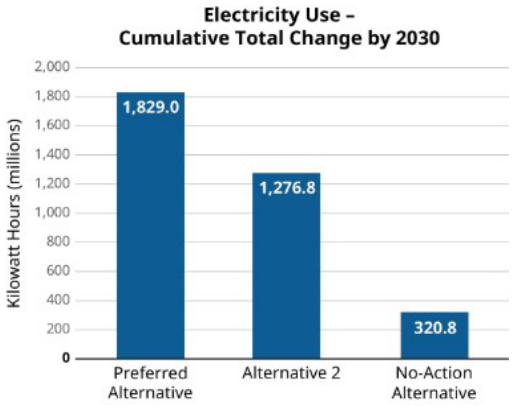
Energy Requirements and Conservation (cont'd)

[See Draft SEIS, Section 4 -9 and Appendix G]

Total electricity use by 2030 would **increase** under the Preferred Alternative, Alternative 2, and No -Action Alternative.

- Increase in BEVs will increase electricity needs and consumption.
- Preferred Alternative and Alternative 2 would result in greater total electricity usage compared with No-Action Alternative.
- Preferred Alternative would result in **highest total electricity use** due to expedited deployment of BEVs.
- All alternatives would have negligible effect on national electricity consumption.



Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

23

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Noise [See Draft SEIS Section 4 -5 and Appendix E]

- **Vehicle/Traffic Noise:**
  - All three alternatives would have **beneficial effect** at slow speeds (<19 miles per hour [mph]), as BEVs are slightly quieter than ICE vehicles.
  - No effect at speeds above 19 mph.
- **Back-up Alarms:** Some COTS vehicles (Preferred Alternative only) have external back -up alarms as a safety feature.
  - This may result in **minor to moderate adverse impacts** to areas adjacent to major deployment sites depending on number of vehicles with such features and time needed to maneuver in reverse.

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order.
All comments will be addressed in the Final SEIS.

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Environmental Justice [See Draft SEIS Section 4 -11 and Appendix D]

- Environmental Justice (EJ) addresses the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision -making that affects human health and the environment.
- Postal Service undertook a screening review of 414 facilities (major deployment candidate sites) that may receive a large number of the new vehicles (100 on average).
- Several tools (including EPA's EJSCREEN and CEQ's Climate and Economic Justice Screening Tool) were used to identify EJ communities around these major deployment sites.
- About 84% of potential major deployment sites are located in EJ communities and would experience beneficial effects of newer, cleaner vehicles.

25 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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Environmental Justice – Air Quality Example

[See Draft SEIS, Section 4 -11 Table 4 -11.3]

Estimated Annual Delivery Vehicle Emissions (lbs/yr) at Avg. Major Deployment Site

	Volatile Organic Compounds (VOCs)	Nitrogen Oxides (NO_x)	Carbon Monoxide (CO)	Particulate Matter ($PM_{2.5}$)	Particulate Matter (PM_{10})	Sulfur Dioxide (SO_2)	Greenhouse Gases**
Existing Conditions	262.2	539.5	3,292.9	3.4	9.5	0.4	68,321.7
Preferred Alternative and Alternative 2	1.2	0.4	34.4	0.9	6.7	0.1	18,465.5
Emissions Change	**-99.5%**	**-99.9%**	**-99.0%**	**-73.0%**	**-29.6%**	**-72.2%**	**-73.0%**

Notes:
** Greenhouse Gases expressed as Carbon Dioxide Equivalent (CO_2e)
Direct emissions estimated for each vehicle type on city routes. Emissions reductions (on a percentage basis) on rural routes would be about the same for most pollutants and greater for particulate matter.
Percentages based on emissions values prior to rounding.
Hypothetical Candidate Site Vehicle Mix Considered:
Existing Conditions: 100 LLVs (delivery personally owned vehicles typically do not serve city routes)
Alternatives 1 and 2: 62 BEVs, 38 ICE vehicles

26 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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Cumulative Effects and Mitigation [See Draft SEIS, Sections 6 and 7]

- Cumulative effects are effects on environment from proposed action when added to other past, present and reasonably foreseeable future actions.
- Because all Alternatives would involve replacement of older, more polluting vehicles, cumulative effects on environmental resources generally are expected to be less than under existing conditions.
- Given the lack of significant adverse environmental effects that would result from either action alternative, as well as the significant environmental benefits that would accrue from the Preferred Alternative, the Postal Service is not proposing to include any additional mitigation measures in this SEIS.

27 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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Public Comments

28 Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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Public Comments

- The Postal Service actively seeks input from the public and interested parties regarding the Draft SEIS.
- The public comment period will end on **Monday, August 14, 2023.**
- All comments will be considered during preparation of the Final SEIS, which we anticipate publishing later this year.

29

Click "Raise Hand" to enter queue to speak for two minutes. Speakers will be unmuted in turn order. All comments will be addressed in the Final SEIS.

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The Presentation will be repeated at 8:30 pm (ET)
Ways to Submit Comments & Questions

Oral Comments

Raise Hand

1. Click the **Raise Hand** icon to be placed in the comment queue, who will be unmuted in turn order
2. When called upon, accept the facilitator's request to come off mute and state your name and affiliation, if desired
3. Provide your comment **(for up to 2 minutes)** then mute your microphone and lower your hand by clicking Raise Hand again
4. You may enter the queue as many times as you would like

*Public hearing is in progress. Please click **Raise Hand** if you are interested in providing a comment.*

Written Comments

Q&A

1. **Zoom Q&A Function Comments**
   Click the **Q&A** button to enter a written comment
   Include your name and affiliation with your written comment, if desired
2. **Email** to NEPA@usps.gov
3. **U.S. Mail** to
   U.S. Postal Service
   475 L'Enfant Plaza SW, Office 6606
   Washington, D.C. 20260 -6201
   Attn: Mr. Davon Collins, Environmental Counsel

30

IMPORTANT: All comments for this public comment period must be received no later than August 14, 2023. All comments submitted are part of the public record and subject to disclosure. A copy of this presentation will be available at uspsngdveis.com. All comments will be addressed in the Final SEIS.

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B5 Draft SEIS Public Hearing Documentation

Draft SEIS Public Hearing Court Reporter Transcript, July 26, 2023

U.S. POSTAL SERVICE

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PUBLIC HEARING ON THE FINDINGS OF THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (SEIS) FOR NEXT GENERATION DELIVERY VEHICLES (NGDV) ACQUISITIONS

+ + + + +

WEDNESDAY
JULY 26, 2023

+ + + + +

The Hearing convened via Videoconference, at 7:00 p.m. EDT, Chris Orr, Facilitator, presiding.

PRESENT
CHRIS ORR, Facilitator
PATRICK ECKER, Executive Manager for Fleet Strategy and Support, U.S. Postal Service

ALSO PRESENT
28 Attendees, including
LAURA KATE BENDER, American Lung Association
BILL BRADLEE, Interfaith Power and Light
BRITT CARMON, Natural Resources Defense Council
JULIA CLARK-RIDDELL, Center for Biological Diversity
MAHLON DORMON
KATHERINE GARCIA, Sierra Club
MATTHEW METZ, Coltura
ANNIE NORMAN, Save the Post Office Coalition
JAMES SIMPSON, Pedal Power Work Bikes
SAM WILSON, Union of Concerned Scientists
CANDICE YOUNGBLOOD, Earthjustice

P-R-O-C-E-E-D-I-N-G-S

7:00 p.m.

MR. ORR: Good evening and welcome to the public hearing for the Postal Service's Draft Supplemental Environmental Impact Statement for Next Generation Delivery Vehicle Acquisitions.

My name is Chris Orr and I will be the meeting facilitator. This hearing is being recorded and the transcriber will produce a transcript of the hearing which will be posted on our website USPSngdveis.com.

We will begin with a presentation, followed by a comment period. We will then repeat the presentation at 8:30 p.m. Eastern followed by another comment period. The public hearing will end at 10:00 p.m. Eastern.

For your awareness, closed captioning is available for use during this meeting. To access this capability, click on the closed captioning icon at the bottom of your screen shown with the CC inside a square.

I will now turn the presentation over

to our Postal Service presenter Patrick Ecker who serves as the Executive Manager for Fleet Strategy and Support.

Patrick.

MR. ECKER: Thank you, Chris. Good evening and welcome to the public hearing for the Draft Supplemental Environmental Impact Statement for the Postal Service's Next Generation Delivery Vehicle Acquisition Program.

My name is Patrick Ecker, the Executive Manager for Fleet Strategy and Support and I will provide an overview of why the Postal Service is conducting this Supplemental Environmental Impact Statement and the findings of the draft document.

I will repeat this overview at the hearing's midpoint at 8:30 p.m. Eastern Time and a copy of the presentation will also be made available afterwards on the program website USPSNGDVEIS.COM. But first, some information about how you may submit comments and questions.

If you wish to be given up to two

minutes to provide an oral comment at any time during or after the presentation, you may click on the raised hand feature. After the presentation we will unmute attendees and order they click the raise hand feature. You may also at any time type your comments and questions into the Q&A feature.

Additionally, you may submit your comments by email or U.S. mail at the addresses provided on this screen. Note that comments must be received no later than August 14, 2023, to be considered.

All submitted comments, whether provided at this hearing verbally or in the Q&A feed, or provided by email or mail, will be recorded and made part of the public record and are, therefore, subject to disclosure.

All submitted comments will be considered by the Postal Service in the Final Supplemental Environmental Impact Statement which will be announced in the Federal Register at a later date.

Some important references are listed on the screen. These include the Draft Supplemental Environmental Impact Statement or supplement, the subject of this hearing. Other related references are the NGDV final EIS, NGDV record of decision, and a transcript and comments from the public hearing held during the scoping period for the draft supplement.

These references can be found on the project website, again USPSNGDVEIS.com. Subsequent slides as applicable include a reference to the draft supplement section where more information can be found.

We'll start off tonight by providing an overview of the proposed action and its purpose and need. Currently, the Postal Service delivery fleet includes both purpose-built, right-hand drive, long-life vehicles, and flexible fuel vehicles, as well as commercial-off-the-shelf vehicles such as the RAM ProMasters and Mercedes Metris.

The purpose-built vehicles currently

account for a majority of the fleet and are past, or nearing the end, of their useful life. For example, while the expected service life of a long-life vehicle is 24 years, they currently average over 30 years in age and thus have high annual maintenance costs.

Importantly, all long-life vehicles do not have certain standard modern safety features. They have no airbags, no air conditioning, no anti-lock brakes, no backup cameras, no intermittent windshield wipers, no blind spot warning systems, and no daytime running lights.

In short, it is vital the Postal Service modernize our delivery fleet to provide our 200,000 mail carriers with appropriate vehicles that allow them to support our daily service mission with advanced safety and security features, better fuel economy, and the amenities we expect in our own personal vehicles.

Next, we'll provide an overview of the National Environmental Policy Act and a timeline of activities related to this project. The

National Environmental Policy Act, or NEPA, is a federal procedural law that is intended to ensure that federal agencies consider the environmental impacts of their major actions in the decision-making process.

The documentation of this process, an Environmental Impact Statement, informed both agency decision makers and the public, and it must do a number of things. It must include a full and fair discussion of the action's significant environment impacts.

It must consider reasonable alternatives that would avoid or minimize adverse impacts, or enhance the quality of the human environment. And it must be concise, clear, to the point, and supported by evidence that the agency has made the necessary environmental analyses.

The purpose and function of NEPA is satisfied if federal agencies have considered relevant environmental information and the public has been informed regarding the decision-making

process. NEPA does not mandate particular results, substantive outcomes, or that an agency choose a course of action with the least environmental impact.

This slide illustrates the prior milestones that have brought us to the draft supplement we are discussing tonight. The delivery fleet modernization process began in 2015 when we initiated the design and prototype work for a new purpose-built vehicle for Postal Service delivery operations.

This step spanned several years. Then once the new purpose-built vehicle and our proposed replacement schedule were ripe for analysis, we prepared the first Next Generation Delivery Vehicle Acquisitions EIS in 2021 culminating with the publication of the Record of Decision in early 2022.

Thereafter, we placed an initial order for 50,000 NGDV of which 20 percent were to be battery electric. As we will discuss in further detail shortly, the Postal Service then

identified several key factors potentially affecting and vehicle acquisition strategy.

So last June we published a Notice of Intent to prepare a supplemental EIS so that we could analyze the potential effects of incorporating these additional considerations into the vehicle acquisition strategy.

The scoping period for this supplement was held last summer to solicit initial public comments including through the first public hearing held last August. Comments received were considered in the draft supplement which we recently published on June 30th.

This public hearing is being held during the second public comment period to receive comments on the draft. All comments are due by August 14th and will be considered in the final supplemental EIS. The Postal Service anticipates publishing a new Record of Decision later this year.

So why is the Postal Service supplementing its NGDV EIS? The prior Record of

Decision signed in February 2022 included the purchase and deployment over a 10-year period of 50,000 to 165,000 NGDV of which at least 10 percent will be battery electric vehicles, BEV, to replace our long-life vehicles and flexible fuel vehicles.

Since that record of decision we have identified three considerations which, if implemented, could potentially affect our vehicle acquisition strategy and the composition of the Postal Service delivery fleet.

The first change under consideration is our adoption of a vehicle purchase strategy whereby we will evaluate and consider more frequent vehicle purchases over shorter time periods rather than over 10 years.

The vehicle purchases would be in smaller quantities to be more responsive to rapid changes in our operating strategy, technology improvements, and market conditions.

The second change under consideration is an increase in the minimum percentage of

battery electric vehicles to be purchased. This consideration is a result of the $3 billion appropriated to the Postal Service under the Inflation Reduction Act of 2022 to fund zero-emission vehicles, and the requisite infrastructure.

Finally, the third change is the purchase of some commercial-off-the-shelf or COTS vehicles to address our critical immediate needs, and accelerate the rate of vehicle replacements.

Also, by incorporating commercial-off-the-shelf vehicles into the vehicle mix, and with the support of advanced funding and installation of infrastructure, we would be able to accelerate fleet electrification.

Now we'll transition to the specific alternatives considered in this supplement. As we began developing the new set of alternatives to consider in this supplemental analysis, we identified four consideration factors that substantively affected our determination of feasible alternatives that should be evaluated in

detail.

First, the Postal Service has an urgent need to rapidly replace long-life vehicles currently in service. Some of them are eight or more years beyond their 24-year-service life and are expensive to maintain. Although the availability of electric vehicles has expanded, the existing market is still limited for the Postal Service's needs for replacement vehicles over the next year few years.

Over the near term commercial-off-the-shelf vehicles can be obtained at a faster pace than the purpose-built NGDV. Based on our outreach to potential suppliers, the right-hand drive and left-hand drive commercial-off-the-shelf gasoline powered vehicles would be available for acquisition in 2023 and 2024 and not require electric vehicle charging infrastructure to be in place at our facilities.

Further, we believe the right-hand drive commercial-off-the-shelf vehicles to be the last ones that will be commercially available to

us in the country and, thus, see great operational value in acquiring them given our need for right-hand-drive vehicles.

Second, not all Postal Service delivery vehicle routes are compatible with electric vehicles as a portion exceed the projected range of the vehicles on a single charge.

In addition, some routes with significant snow fall, cold weather, or challenging terrain would be prioritized for deployment of all-wheel-drive vehicles which are likely to have gasoline powered engines.

Third, electric vehicles are significantly more expensive to acquire. The $3 billion Inflation Reduction Act appropriation to the Postal Service is specifically to fund the purchase of zero emission vehicles and the acquisition of the necessary infrastructure. For example, electric vehicle charging stations.

The Preferred Action and Alternative 2 include the use of the entire $3 billion

appropriation. Importantly, even after accounting for the Inflation Reduction Act funds, most of the funding for the significant electric vehicle commitments in both the Preferred Alternative and Alternative 2 will come from the Postal Service revenues.

Fourth, as previously mentioned, smaller, more frequent purchases of vehicles provide us the opportunity to increase the electric vehicle proportion over time as the market develops.

The Postal Service identified two action alternatives involving acquisition of 106,480 vehicles and a 62 percent electric vehicle acquisition commitment over a period of six to eight years. These two action alternatives and the No-Action Alternative were evaluated in the draft supplement.

Alternative 1 is our Preferred Alternative because it maximizes the number of vehicles that can be acquired and deployed soonest and in the shortest number of years.

Both commercial-off-the-shelf vehicles and NGDV, including gasoline and electric variants, would be acquired resulting in acquisition of 106,480 vehicles in six years.

Alternative 2 includes acquisition of NGDV only, but would take longer, eight years, to implement due to the production capacity of these purpose-built vehicles. As under the Preferred Alternative, 62 percent would be electric vehicles and the remainder would be gas.

The No-Action Alternative is to implement the current record of decision for acquisition of up to 165,000 NGDV of which at least 10 percent would be electric vehicles over 10 years. Only 106,480 NGDV over eight years were analyzed in the supplement to ensure a fair comparison with alternatives 1 and 2 that also address acquisition of 106,480 vehicles.

To provide context for future slides and further explain the proposed alternatives, this slide presents a summary of key specifications for the vehicles analyzed in our

supplement. Acronyms used are defined below the table.

The existing vehicles we would primarily replace are long-life vehicles, or LLV, which are purpose-built gasoline-powered right-hand drive vehicles produced in the late '80s and early '90s.

Importantly, right-hand drive vehicles are generally superior to left-hand drive vehicles in terms of efficiency, performance, and safety for Postal Service routes with significant amounts of curbside deliveries.

The proposed new vehicles considered in the supplement include the purpose-built right-hand drive NGDV with either battery electric or internal combustion; i.e., gasoline power trains, and three types of commercial-off-the-shelf vehicles encompassing both gasoline and electric power trains, and both right-hand drive and left-hand drive vehicles.

As shown in the table, the LLV is the smallest vehicle by weight that we are analyzing.

It was designed over 30 years ago primarily for letter delivery. The proposed replacement vehicles range in gross vehicle weight rating from 6,834 to 9,500 pounds and have ample volume for future anticipated letter and package delivery needs.

Despite the proposed new vehicles being notably larger than the LLV, and having energy consuming features such as air conditioning, which the LLVs do not, they also have substantially better fuel economy. The proposed gasoline-powered vehicles get 25 to 44 percent better gas mileage than the LLV, and the proposed electric vehicles do not use any gasoline.

It is important for us to distinguish here between the standard UDDS drive cycle, and our USPS drive cycle. The UDDS drive cycle is used to represent standard city driving for testing purposes and informs the window stickers you see on vehicles in dealership lots.

However, the Postal Service vehicles,

especially on curb-line mail delivery routes, are constantly accelerating, decelerating, idling, often stopping and starting, and generally traveling at low speeds as they go from house to house and mailbox to mailbox.

This reduces the vehicle's fuel economy compared to the standard UDDS drive cycle, and is why we use our internal drive cycle data in the supplemental analysis to obtain the most accurate results.

Finally, the last row here shows that both of the electric vehicle models would be able to travel at least 70 miles on a single charge which is our minimum operational requirement designed to ensure that our carriers can complete their route without the risk of running out of power mid-route. The supplement also analyzes a small number of personally owned vehicles used for mail delivery.

Section 4 of the Draft Supplemental Environmental Impact Statement described the existing environment, methodology for assessing

environmental impacts in the three alternatives, and the potential effects.

It is important to note that the proposed action is national in scope with vehicles to be distributed across the Postal Service's nationwide delivery network.

The Draft Supplemental Environmental Impact Statement discussion focuses on direct and indirect effects of each alternative in relation to baseline conditions, or the No-Action Alternative and examines the potential effects in terms of the significance of the effect.

Four levels of effect were considered during the analysis. Here we've categorized resource areas according to their anticipated level of effect. We'll review each of these quickly now, and then in future slides provide more detail on the resource areas that are bolded.

Our analysis found that resource areas that would be beneficially affected by the alternatives include transportation safety for

our employees and communities due to the new vehicles' multiple safety features not available in the LLVs.

Traffic noise due to electric vehicles being slightly quieter than gasoline vehicles and comprising a significantly larger percentage of the procurement under Preferred Alternative; air quality due to significantly decreased emissions for greenhouse gases, and most other regulated pollutants analyzed.

Community emergency services due to the increase in road safety from using modern vehicle safety features; gasoline consumption due to the higher fuel economy of the new gasoline-powered vehicles, and the significantly higher electric vehicle percentage.

Hazardous waste generation due to the reduced need to dispose of waste such as used oil due to the higher electric vehicle percentage; and environmental justice communities which we'll discuss later in the presentation.

Resource areas that would experience

either no/negligible effects include community economics, employment, traffic, accessibility, parking, and public transportation all due to the new vehicles being one-for-one replacements of LLVs and personally owned vehicles.

Sulfur dioxide emissions, which we'll explain in a coming slide; community utilities services including utility availability and capacity.

Electricity consumption due to the relatively small demand on the electrical grid resulting from the number of electric vehicles; and solid and hazardous waste treatment and disposal due to the need to dispose of the existing LLVs.

The draft supplement did identify one potential minor to moderate adverse effect that could result from the proposed action which is that externally audible backup alarms from some commercial-off-the-shelf vehicles could adversely affect persons near major vehicle deployment sites that may have a large number of vehicles

with these alarms.

This potential effect would occur under the Preferred Alternative only since commercial-off-the-shelf vehicles are not included in Alternative 2, or the No-Action Alternative.

Importantly, the draft supplement identified no significant adverse effects that could potentially result from the considered alternatives. We also note this alternative has conservatively assumed one-for-one vehicle replacements, though the new vehicles are larger than the vehicles being replaced.

Therefore, there is also the potential for benefits of such factors as fuel consumption and traffic and trip reductions due to the larger vehicles' capacity.

To address potential air quality effects of the two action alternatives and the No-Action Alternative, we modeled direct and indirect emissions using the EPA recommended MOVES and GREET models respectively.

The MOVES model estimates direct emissions including from the vehicle tailpipe, evaporative loss, fueling operation, vehicle start, and brake and tire wear emissions. We ran this model using vehicle categories based on the vehicles weight, engine size, and other factors.

Postal Service specific drive cycles accounted for our unique delivery patterns including driving speeds and starts and stops, and both city and rural roadway types.

The GREET model estimates indirect emissions resulting from the gasoline supply chain for the gasoline powered vehicles, and electricity generation for the electric vehicles. We ran this model using the specific fuel economy value (that is, the gas mileage or miles per kilowatt hour) for each of the vehicles we are analyzing, as well as factors like the year the vehicle was produced, and the years in which it would be operated.

The modeling addressed both criteria pollutants and greenhouse gases. Criteria

pollutants are regulated by the Clean Air Act and including the ozone precursors, volatile organic compounds, and nitrogen oxides, carbon monoxide, particulate matter (both PM2.5 and PM10) and sulfur dioxide.

Greenhouse gases, or GHGs, effectively trap heat from the atmosphere and contribute to climate change. These are calculated as carbon dioxide equivalents, CO2e, and collectively are carbon dioxide, methane, and nitrous oxide.

The modeling in the supplement accounted for USPS specific data regarding the vehicles under consideration, and acquisition schedule, and the various types of Postal Service routes and associated drive cycles.

The model indicates that all proposed new vehicles would generate fewer emissions, direct and indirect combined, per pollutant than an old LLV with the exception of sulfur dioxide. This includes emissions from both vehicle operation and upstream gasoline and electricity production.

This table with each of the existing vehicles in italics, and the proposed new vehicles, gasoline powered internal combustion engine or ICE vehicles, are shown in blue font, while the electric vehicles, or BEVs, are shown in the green font.

For each vehicle type, total emissions, direct and indirect, are shown from one vehicle in pounds per day based on a rural curbline route driven in 2024 as an example.

As you can see, all proposed new vehicles, both gasoline and electric, would be cleaner than the existing aged vehicles. The proposed new electric vehicles are generally comparable or cleaner than the proposed new gas powered vehicles as well depending on the pollutant.

The changes in emissions from replacing one aged LLV with one of the proposed new electric vehicles, and from replacing one aged LLV with one of the proposed new gasoline vehicles are shown in the last two rows of this

table.

For example, replacing an LLV with a new vehicle, either battery electric or gasoline, would reduce volatile organic compounds, nitrogen oxides, and carbon monoxide emissions by over 93 percent.

Replacing an LLV with a new vehicle would reduce particulate matter, which can cause or aggravate such health problems as heart and lung disease, by up to 35 percent. Sulfur dioxide is the most notable difference between gasoline and electric vehicles.

Replacing an LLV with a new gasoline-powered vehicle would decrease sulfur dioxide emissions by about 26 percent. Replacing an LLV with a new electric vehicle would increase sulfur dioxide emissions by over 170 percent, and that's due to the upstream power plant emissions.

Finally, replacing an LLV with an electric vehicle would reduce greenhouse gas emissions by about 68 percent, while replacing an LLV with a new gasoline powered vehicle would

reduce those emissions by about 29 percent.

The model indicates that regulated pollutant emissions, except for sulfur dioxide, would decrease under all three alternatives compared to existing conditions. The three graphs included here show the cumulative total change in emissions for each of the alternatives through the year 2030 which is the end of the implementation period for this action.

The bar graph on the left illustrates the reductions in emissions of volatile organic compounds and nitrogen oxides. The bar graph in the middle illustrates the reductions in emissions of carbon monoxide. And the bar graph on the right illustrates the reductions in emissions for particulate matter.

There are two primary factors for the differences in total pollutant emissions change. First, the Preferred Alternative replaces existing vehicles faster, within six years, while Alternative 2 and the No-Action Alternative would take eight years.

Second, Preferred Alternative and Alternative 2, replace a small amount of personally-owned delivery vehicles in addition to LLVs, while the No-Action Alternative replaces LLVs only.

As shown in each of the graphs, the Preferred Alternative would have a substantial reduction in total emissions compared to the No-Action Alternative due to the expedited replacement of LLVs with new vehicles that produce fewer emissions.

Alternative 2 would have total cumulative pollutant emissions reductions comparable to the No-Action Alternative as they both entail only NGDVs and an eight-year schedule.

Whereas most pollutant emissions would decrease from this proposed action, we found the total sulfur dioxide emissions by 2030 would increase under the Preferred Alternative and Alternative 2, and decrease under the No-Action Alternative.

This is due to fleet electrification since sulfur dioxide emissions primarily result from upstream electricity generation. Thus, since the Preferred Alternative and Alternative 2 have significantly more electric vehicles than the No-Action Alternative, they would generate the most upstream sulfur dioxide.

Since the Preferred Alternative would deploy electric vehicles faster than Alternative 2, it has the largest anticipated sulfur dioxide emissions. However, it is important to note that while sulfur dioxide emissions would increase rather than decrease, these emissions would be negligible in a nationwide context.

For example, Alternative 1 would emit up to 58 tons per year of sulfur dioxide nationwide, which is well below the typical sulfur dioxide de minimis emissions limit of 100 tons per year in a specific nonattainment area.

With respect to greenhouse gases, total emissions would decrease under the Preferred Alternative, Alternative 2, and No-

Action Alternative. The bar graph shows the cumulative total change by 2030 in greenhouse gas emissions representing carbon dioxide, nitrous oxide, and methane, expressed as carbon dioxide equivalent, or C02e for each of the alternatives.

The Preferred Alternative and Alternative 2 would result in greater greenhouse gas emissions reductions compared with the No-Action Alternative. The Preferred Alternative would result in the highest total greenhouse gas emissions reductions due to the expedited deployment of new cleaner vehicles.

Specifically, our modeling indicates the Preferred Alternative would reduce cumulative greenhouse gas emissions by about 3.9 million metric tons by 2030, which is about 2 million metric tons more than under the No-Action Alternative.

On a related topic, we expect gasoline use to decrease substantially. While the existing vehicles proposed for replacement are all gasoline powered, the proposed new vehicles

are mostly electric.

Similar to the air emissions we discussed previously, total gasoline use would decrease under the Preferred Alternative, Alternative 2, and No-Action Alternative.

However, it would decrease more under the Preferred Alternative and Alternative 2 since these alternatives include significantly more electric vehicles than the No-Action Alternative, at 62 percent versus 10 percent.

And gasoline use would decrease the most under the Preferred Alternative since it replaces the LLVs which have the worst gas mileage the soonest, in six years versus eight years.

Total electricity use would increase under the Preferred Alternative, Alternative 2, and the No-Action Alternative due to the increase in electric vehicles. The Preferred Alternative and Alternative 2 would result in greater total electricity uses compared to the No-Action Alternative.

And the Preferred Alternative would result in the highest total electricity use due to expedited deployment of electric vehicles over six years, while Alternative 2 and the No-Action Alternative would not fully deploy their electric vehicles until year eight. All alternatives would have negligible effects on the national electricity consumption.

For noise, the supplement addresses vehicular noise during operation including during the driving cycle. Most Postal Service delivery routes are curb-line routes which have a top speed of around 20 miles per hour on average, and involve stopping at the curb to deliver mail to mailboxes.

At speeds of less than about 19 miles per hour, electric vehicles are quieter than gasoline-powered vehicles by about 3 decibels. Three decibels per vehicle is barely perceptible, yet it would result in beneficial effect at slow vehicle speeds.

At speeds above 19 miles per hour, the

noise of both types of vehicles would be the same due to noise generated by the tires. Because Alternative 1 and Alternative 2 would include 62 percent electric vehicles that would replace gasoline powered LLVs, both alternatives would have a beneficial noise effect at slow speeds.

Some of the commercial-off-the-shelf vehicles proposed under Alternative 1 have externally audible backup alarms as a safety feature. The existing LLVs do not have backup alarms and the NGDV do not have backup alarms that can be heard outside the vehicle.

A minor to moderate adverse noise effect could result if numerous external backup alarms sound at major deployment sites adjacent to residences or other noise sensitive land uses. The effect would depend on the number of vehicles with such features and time needed to maneuver in reverse.

Environmental justice addresses the just treatment and meaningful involvement of all people regardless of income, race, color,

national origin, tribal affiliation, or disability in agency decision making that affects human health and the environment.

In an effort to further expand our understanding of the potential impacts of all alternatives on environment justice communities, the Postal Service undertook a screening review of 414 facilities that are potential major deployment sites that may receive a large number of the new vehicles, about 100 vehicles on average.

Several tools were used to identify environmental justice communities around these major deployment sites. The tools included EPA's EJSCREEN, the Council on Environmental Quality's Climate and Economic Justice Screening Tools, FEMA's National Risk Index, the CDC's Environmental Justice Index, and the Department of Transportation's Equitable Transportation Community Explorer.

Based on the screening, about 84 percent of potential major deployment sites are

located in environmental justice communities and would experience the beneficial effects of the newer, cleaner vehicles.

As an example, we consider the potential air quality implications of replacing LLVs at the major deployment sites. Based on our preliminary data, we expect an average major deployment site to have approximately 100 LLVs that would be replaced with new vehicles.

Assuming those new vehicles are 62 percent electric in line with the total electric vehicle proportion proposed, annual average emissions reductions at each site would be as shown in this table. This covers direct emissions, which are those produced directly by the vehicles.

As you can see, volatile organic compounds, nitrogen oxides, and carbon monoxide would be essentially eliminated, while particulate matter, sulfur dioxide, and greenhouse gases would each be significantly reduced compared to existing emissions.

This would be a beneficial effect to the communities adjacent to the major deployment sites which, as we noted on the prior slide, are quite often communities with environmental justice concerns.

Just a quick note on scale. Because the emissions were calculated for just 100 vehicles at an average major deployment site, the emissions shown here are expressed as pounds per year, whereas the previous bar graph emissions for the much larger quantity of 106,000 vehicles were expressed as tons per year, or 1,000 tons per year.

Cumulative effects are effects on the environment from a proposed action when added to other past, present and reasonably foreseeable future actions. Because all Alternatives would involve replacement of older, more polluting vehicles, cumulative effects on environmental resources generally are expected to be less than under existing conditions.

Given the lack of significant adverse

environmental effects that would result from either action alternative, as well as the significant environmental benefits that would accrue from the Preferred Alternative, the Postal Service is not proposing to include any additional mitigation measures in this SEIS.

This concludes our overview of the Draft Supplemental EIS Findings. We will now transition into public comments. The Postal Service actively seeks input from the public and interested parties regarding the Draft Supplemental Environmental Impact Statement.

The public comment period will end on Monday, August 14, 2023. All questions and comments submitted will be considered as we prepare the Final Supplemental EIS which we anticipate publishing later this year. The notice of availability of the final Supplemental EIS will be announced in the Federal Register at a future date.

I will now open the floor for public comments until 8:30 p.m. Eastern Time when I will

repeat the presentation. As a reminder, if you would like to provide a verbal comment during this hearing, please click the Raise Hand icon and we will call on you in order. Each commenter will have up to two minutes to speak.

You may submit written comments by posting them in the Q&A feature, emailing them to NEPA@USPS.GOV, or mailing them to the address listed on the screen. We will not be responding directly to comments during tonight's hearing, but rather will record them and consider them in the Final Supplemental EIS, which will be announced in the Federal Register at a later date.

And, with that, we will start calling on the individuals with their hands raised.

MR. ORR: Thank you, Patrick. Our first commenter is Julia.

Julia, please remove yourself from mute and go ahead with your comment.

MS. CLARK-RIDDELL: Good evening. My

name is Julia Clark-Riddell, and I am commenting on behalf of the Center for Biological Diversity.

I am here because the Postal Service is refusing to do what is necessary and feasible to address the climate crisis, and what countless members of the public have demanded.

I am here because the Postal Service is refusing to consider a plan to purchase 95 percent battery-electric vehicles for the postal fleet.

We are already living through the disastrous effects of the climate crisis, with record-breaking heat waves affecting millions of people across America, and leading to dozens of heat-related deaths so far.

Transportation is the number one source of greenhouse gas emissions in America. And the Postal Service has a real opportunity to mitigate those emissions by switching to an all-electric delivery fleet. But the Postal Service is refusing to consider purchasing more than 62 percent BEVs. Sixty-two percent BEVs is an

improvement over previous plans, but it is not enough.

The Postal Service has offered no reason for why it hasn't even analyzed the possibility of purchasing the maximum number of electric vehicles that is feasible under USPS constraints.

It is recently admitted that all but a few postal routes are compatible with the range of a BEV, and the agency received $3 billion in funding from the Inflation Reduction Act to purchase electric vehicles, after it previously estimated it needed only $2.3 billion for 100 percent electric fleet.

It is imperative that the Postal Service consider a plan for purchasing 95 percent BEVs. We have run out of time for half-measures. Thank you.

MR. ECKER: Thank you for your comment.

MR. ORR: I'm sorry. Our next commenter is Sam. Sam, you may go ahead with

your comment.

MR. WILSON: Hi. Can you hear me?

MR. ORR: Yes, we can.

MR. WILSON: Great, thank you so much. Good evening, everybody. Thanks to the facilitators for having this public comment this evening.

My name is Sam Wilson, and I'm a senior vehicles analyst with the Union of Concerned Scientists.

We're a national non-profit with mission to center rigorous science in our democracy. Thanks again for the opportunity to comment tonight on this draft SEIS.

So, while we are glad to see that the Postal Service has increased its commitment to zero-emission vehicles in the new delivery fleet, and has recognized that this replacement will have impacts on environmental justice, there are several key significant concerns that remain with the analysis for us.

So, there's no doubt that the most

effective defensible and durable public policy decisions are based on objective and rigorous analysis, and we believe that this fleet modernization plan would greatly benefit from the following improvements.

The first, the current cost assessment of the NGDV and off-the-shelf models is pretty arbitrary in its assumptions and inputs. And this results in inflated cost and deflated benefits of the BEV, or battery-electric vehicle models.

The final SEIS must include a comprehensive, well-documented, accurate, and credible cost-assessment.

By not including a total cost-of-ownership assessment, the SEIS doesn't capture the significant long-term economic benefits that electric vehicles have over ICE models.

The assessment should also include credible fuel cost projections for both fossil fuels and electricity, as well as a more realistic estimate of charger-to-vehicle ratios

and vehicle-charging schedules, as suggested by the Government Accountability Office's April 2023 report.

MR. ECKER: Thank you for your comment.

MR. ORR: Thank you, Sam. Our next commenter is Candice. Candice, please remove yourself from mute and go ahead with your comment.

MS. YOUNGBLOOD: Thank you. My name is Candice Youngblood and I'm an attorney at the non-profit environmental law firm Earthjustice.

This program is a critical step toward the federal government meeting President Biden's climate goals.

While the Supplemental EIS comes a long way from the final EIS, our clients' partners would like to see the Postal Service commit to delivering more clean air benefits to nearly every environmental community, every neighnorhood, with a focus on environmental justice communities.

First, the Postal Service must commit to phasing out gas-guzzling trucks by 2026. In December 2022, the agency announced that all NGDVs purchased after 2026 would be 100 percent electric, but the Supplemental EIS does not reaffirm this commitment in its alternative.

Instead, it is only mentioned as a reasonable assumption in the hypothetical vehicle purchase plan appendix. This agency must commit to the 2026 phase-out, and account for it in a more thorough air quality analysis.

Second, we would like to see the Postal Service dig deeper in its analysis of the projects environmental justice impacts.

The Supplemental EIS concludes that 84 percent of the candidates sites are considered environmental justice communities.

Currently, the analysis focuses on the BEVs benefits relative to the current postal trucks. The agency must conduct a more rigorous analysis on the impacts that the ICE vehicles will have on communities, and include mitigation

methods, such as additional public discourse and process.

The Postal Service should also commit to ensuring that environmental justice communities receive the first BEVs as they are rolled out.

This requires the agency to account for the federal and state regulatory environments these new vehicles will face, such as under California's Advanced Clean Fleets rule.

Under regulations like this, the Postal Service will need to be intentional in its rollout, to ensure that environmental justice communities across the country receive the benefits of the initial BEVs.

MR. ORR: Thank you for your comment, Candice. Our next commenter is Bill. Bill, please remove yourself from mute and begin your comment.

MR. BRADLEE: I thank you. Can you hear me okay?

MR. ECKER: Yes.

MR. BRADLEE: Okay. My name is Bill Bradlee. I'm a senior organizing director for the non-profit, Interfaith Power and Light.

Our mission is to inspire and mobilize people of faith and conscience to take bold and just action on climate change.

I'm here today to speak on behalf of my organization, as well as our state affiliates, and the many people of faith who are part of our national network.

We support the United States Postal Service moving entirely to battery-electric vehicles, and away from internal combustion vehicles, because this will help protect human health and address the growing climate crisis.

The current proposal of 62 percent is a fantastic improvement from the initial meager goal of ten percent.

Still, given the advantages of battery-electric vehicles, and the ability of the federal government's Postal Service to set an important standard for the American public, we

ask that you adopt the 95 percent battery-electric vehicle alternative.

It's also important to highlight that this change can particularly benefit communities of color, and low-wealth communities that we know are most affected by pollution that comes from gas and diesel engines.

Thanks for your consideration and time today.

MR. ECKER: Thank you for your comment.

MR. ORR: Thanks very much. As a reminder, folks, you can rejoin the queue and continue your comments if you wish. If you want to do that, you may raise your hand again and rejoin the queue, and we'll call on you in the order that you queue up. Thanks.

Our next commenter is Matthew. Matthew, please begin with your comment.

MR. METZ: Thank you. I'm Matthew Metz from Coltura's advocacy organization that works on transitioning America off gasoline at

the fastest rate possible.

Our suggestion is that the Postal Service analyze how much gasoline each one of its vehicles is using, and prioritize the vehicles that use the most for the most immediate replacement by electric vehicles.

What we found in our research is that the top ten percent of vehicles in almost any vehicle population use from between a quarter and 40 percent of the total gasoline use by the entire fleet.

So, by taking that approach, the Postal Service can achieve faster gains in carbon reduction and gasoline reduction. Thank you.

MR. ECKER: Thank you for your comment.

MR. ORR: Thank you very much. Our next commenter is Britt. Britt, please remove yourself from mute and begin with your comment.

MS. CARMON: Can you hear me?

MR. ORR: Yes, we can.

MS. CARMON: Thank you. My name is

Britt Carmon and I'm a senior advocate at the Natural Resources Defense Council.

The Postal Service's replacement of its aging delivery fleet over the next ten years is vital, and we appreciate this opportunity to weigh in.

First, we appreciate the agency's plans to increase the percentage of the fleet that would be electric vehicles.

However, this proposed action falls short of what's possible, and we urge the agency to consider alternatives that include greater minimum electrification targets, so that emissions reduction can be maximized.

Failure to do so will decades of fossil fuel vehicles operating in these communities.

Secondly, there's still some underlying assumptions that lack clarity and efficiencies of the analysis, that underestimate the monetary benefits of EVs.

For example, the agency's analysis

opts to use up-front costs to inform their procurement strategy, rather than a total cost of ownership analysis.

Doing so ignores the fact that EVs are typically less expensive than combustion engine vehicles over the lifetime of the vehicle, due to lower operating costs for refueling, maintenance, and repairs.

The agency also continues to use a charger-to-vehicle ratio that unnecessarily drives up the up-front cost assumptions.

Additionally, the agency must reconsider a number of its route suitability assumptions, especially on battery range and operating conditions, as these assumptions ignore that there are commercially available vehicles today that far exceed 70 miles of range, and that operate in parts of the world that experience extreme conditions already.

Lastly, by refusing to review the environmental and economic impacts of the manufacturing of these vehicles, which only exist

due to the Postal Service's decision, the agency is failing to ensure maximum benefit for the federal dollars invested in this effort.

So, thank you so much for your time today, and we look forward to providing comments, written.

MR. ORR: Thank you, Britt. Our next commenter is Annie. Annie, please remove yourself from mute and begin your comment. Thank you.

MS. NORMAN: Hi. My name is Annie Norman, and I'm with the Save the Post Office Coalition. We are a broad coalition of national and local groups with representation from over 300 democracy, postal, labor, climate, and civil rights groups.

Let me start by saying we're glad to see you moving in the right direction, but also say this still falls very short of where we need to be on electric vehicle commitment, and in ensuring the new postal fleet is built by 100 percent union labor.

While this new SEIS carriers a preferred alternative that 62 percent of the total fleet is electric vehicles, that's still 38 percent gas-guzzling trucks with a fuel efficiency of a Hummer.

The people do not want postal trucks polluting frontline black and brown neighborhoods that are already well-documented to face disproportionate levels of environmental pollution, and have that be locked in for the next decade.

Additionally, the Postal Service's continued silence on the issue of Oshkosh Defense's bait-and-switch on UAW members in Wisconsin is wholly unacceptable.

We must ensure the new fleet is built by 100 percent union labor, full-stop.

National climate priorities have particular urgency right now, when we see the force of extreme weather causing so much havoc and loss.

To use DeJoy's own words, it is urgent

that USPS respond with swift, dramatic changes, to ensure a cleaner future for communities, postal workers, and the planet.

Indeed, the Postal Service's own inspector general agreed that 95 percent of routes can be serviced with electric vehicles.

This foot-driving on an urgently needed commitment to climate progress is also just fundamentally at odds with what the people want for their most treasured public institution.

We want a healthy Postal Service that changes with the times and supports union jobs. Thank you.

MR. ECKER: Thank you for your comment.

MR. ORR: Thank you, Annie. Our next commenter is Katherine. Katherine, please remove yourself from mute and begin your comment.

MS. GARCIA: Hello, good evening. I am Katherine Garcia and I'm testifying on behalf of the Sierra Club, as director of the Clean Transportation for All campaign. Thank you for

holding today's hearing.

We strongly recommend that USPS urgently speed up the transition to electric delivery vehicles, given the health-threatening air quality and climate harms from combustion engines.

This is essential for meeting climate goals and improving air quality, especially in over-burdened communities, predominantly areas with low-income residents and people of color. At the same time, Sierra Club is advocating that the shift to a clean energy economy must create good family sustaining jobs.

Postal delivery trucks are the ideal use case for electric vehicles, since the primarily don't travel long distances.

Unfortunately, the SEIS isn't even aligned with the USPS Office of Inspector General's report, which estimated that EVs have sufficient range for over 90 percent of USPS routes.

Today, we're seeing devastating

climate impacts, including extreme heat, catastrophic flooding, and uncontrollable wildfires. At the same time, huge advancements in EV technology.

Given that the Inflation Reduction Act provides the Postal Service with $3 billion to fund the purchase of EVs and charging, the scenarios in this updated SEIS simply does not move us away from fossil fuels as quickly as necessary.

In addition, we're disappointed that USPS is not holding Oshkosh accountable for manufacturing the new vehicles with its existing union workforce.

Considering USPS will receive federal funding through the IRA, the agency must ensure that its electrification efforts are fully leveraged to invest in communities, and create high-quality union jobs.

This is a critical opportunity to transform the postal fleet to be 100 percent union-built electric vehicles. Thank you again

for this opportunity.

MR. ECKER: Thank you for the comment.

MR. ORR: Thank you, Katherine. Our next commenter is James. James, please remove yourself from mute and begin your comment.

MR. SIMPSON: Greetings. I'm James Simpson, a work bike designer and manufacturer of Pedal Power Work Bikes.

This is an appeal for the inclusion of a new class of vehicle to be added to replacement plans and alternatives one and two of the SEIS.

The issue with current routes in congested cities is not just solved by converting over to BEVs. Space management is one of the main issues in densely populated cities where parking is scarce and maneuverability is key to efficiency.

Likewise, the workload each route has is able to be carried in a smaller container, and move more rapidly throughout the city using a work bike.

If considerations were made to add a

new category for our vehicles as a COTS option, we present a prototype in order to bid contracts.

Our company can produce 24,000 vehicles in three years, fueling the urban centers and cutting emissions to nearly zero.

In closing, USPS should consider the option of adding this class of vehicles, in order to expedite the deployment of zero-emissions vehicles in the most crucial areas of commerce.

We hope you will consider working with our company in the near future. Thank you.

MR. ECKER: Thank you for your comment.

MR. ORR: Thank you, James. Our next commenter is Sam. Sam, please remove yourself from mute and begin your comment.

MR. WILSON: Yeah, thanks for the opportunity to finish my comments here again. Sam Wilson, senior vehicles analyst with Union of Concerned Scientists.

The second point that I wanted to make is that the final SEIS should accurately analyze

additional alternatives, including a maximum feasible electrification alternative based on the Postal Service's assumption that around 90 percent of routes could be serviced by battery electric vehicles.

This would allow USPS to better understand the technical and economic balance of fleet electrification.

We plan to submit more detailed comments in writing covering these and other issues that we found in the EIS, such as the BEV NGDVs' battery chemistry and vehicle range assumptions, as well as some strategic suggestions to maximize economic and environmental justice co-benefits. Thanks so much.

MR. ECKER: Thank you.

MR. ORR: Thank you, Sam. If anyone did not finish their comments earlier, or if you have new ones, please raise your hand and get into the queue, and we will provide you an opportunity to finish your comment. At present

we are waiting on further comment.

Okay, our next commenter is Matthew. Matthew, please remove yourself from mute and begin your comment.

MR. Metz: Thank you. One additional point I'd like to make is that the USPS does not have centralized data at this time on how much gasoline all its vehicles are using.

So, we did a public records request and the data they said was spread between 413 different office locations, and I think it's very important for USPS to centralize that data, to really understand how much all of its vehicles are traveling, how much gasoline they're being used, and then really optimize for lowering gasoline consumption from those vehicles.

But until you guys get the data, it's going to be really hard for you to do that.

MR. ECKER: Thank you for your comment.

MR. ORR: Thank you, Matthew. Our next commenter is Candice. Candice, please

remove yourself from mute and begin your comment.

MS. YOUNGBLOOD: Thank you. This is Candice Youngblood with Earthjustice again.

The last point I wanted to make is that the agency's reasoning for acquiring the 14,500 right-hand drive commerical off-the-shelf vehicles is arbitrary.

It neither explains who its competitors are, or the need for securing this alleged last remaining quantity, and the Postal Service is supposed to be working toward an electrified fleet.

In sum, the Postal Service should conduct a more rigorous analysis, for a decision this important, and we are preparing written comments and look forward to seeing the Postal Service's final SEIS. Thank you.

MR. ECKER: All right, thank you for your comments.

MR. ORR: Thank you. Our next commenter is Mahlon -- I hope I have that pronunciation right -- Mahlon Dormon. Please

begin with your comment.

MR. DORMON: Hi, this is Mahlon Dormon. Not a member of a large organization. I just wanted to note that on Table 3-3.3.2, and also elsewhere in the SEIS and in the presentation, EV fuel efficiencies are given in miles-per-kilowatt-hour.

Why not express them in miles-per-gallon equivalent, to make them more directly comparable to the gas mileage of the ICE vehicles?

I also wonder whether -- there seems to be an assumption that there would be more particles introduced into the air by brake wear with EVs, and my understanding of EVs is that the generative braking causes them to put less brake particles into the air, although they will put somewhat more tire particles into the air. That's what I have. Thank you.

MR. ECKER: Thank you for your comments.

MR. ORR: Thank you very much. At

this moment the queue is empty. We await further comment. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat. And when you're asked to remove yourself from mute, please do so and begin with your comment. Thank you. And again, we are waiting for further comment.

(Long pause.)

Ladies and gentlemen, as a reminder, the comment period is still open. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself from mute, please do so and begin with your comment. Currently, we are waiting for further comments. Thank you.

(Long pause.)

Ladies and gentlemen, as a reminder, the comment period is still open. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself

from mute, please do so and begin with your comment. Currently, we are waiting for further comments. Thank you.

(Long pause.)

Okay, our next commenter is Laura. Laura, please remove yourself from mute and go ahead with your comment.

MS. BENDER: Hi. Laura Kate Bender, national assistant vice president for healthy air at the American Lung Association.

(Audio interference.)

Can you hear me?

MR. ORR: It appears you're cutting in and out a little bit, Laura.

MS. BENDER: Let's try this again. Sorry about that.

Laura Kate Bender, national assistant vice president for healthy air at the American Lung Association.

Thanks so much for the opportunity to comment. Thanks for holding this hearing, and thanks for all the work, particularly on building

out additional plans to purchase zero-emission vehicles for the Postal Service.

The Lung Association commented previously in the last iteration of the draft statement, so we certainly appreciate the improvement to this time.

I just wanted to enter into the record -- and I included the link in the Q&A box -- the Lung Association zeroing in on health air report.

So, we obviously care deeply about getting more zero-emission vehicles on the road from a health perspective, because of the many, many health impacts caused by diesel- and gas-powered engines, particularly for communities that are located near places where big trucks, or even medium duty vehicles congregate, and of course what works as mail is getting delivered, and then none more so than the folks driving the vehicles, who are exposed to the pollution throughout their workday.

The Lung Association zeroing in on healthy air report looks at the cumulative

benefits of a nationwide transition to zero-emission vehicles, and alongside clean, non-conventional electricity. Because, of course, we need both.

We found that the total health benefit, the value of the public health benefits of that transition, would total $1.2 trillion by 2050, amount to 110,000 lives saved, 2.7 million asthma attacks avoided, millions more missed days of work avoided, and that's not even counting the greenhouse gas reductions that's just from the reductions in pollutants that drive particulate matter ozone and other emissions.

So, again, thank you so much for the work to build out a stronger plan. Maximizing the number of zero-emission vehicles in the Postal Service's future has really powerful health benefits.

And like I said, I have entered that link to the full report in the Q&A function. Thank you.

MR. ECKER: Thank you for your

comment.

MR. ORR: Thank you, Laura. As a reminder, this presentation and the corresponding comment period will be repeated at 8:30 p.m., Eastern Time, this evening.

The comment period is still open. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself from mute, please do so and begin with your comment. And currently, we are now waiting for further comment. Thank you.

(Long pause.)

Ladies and gentlemen, again as a reminder, the comment period is still open for a few more minutes. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself from mute, please do so and begin with your comment. And currently, we are still waiting for

further comments.

As a reminder, this presentation will be repeated again at 8:30 p.m., Eastern Time.

WRITTEN COMMENT IN THE MEETING'S Q&A BOX: Thank you for holding this hearing and for the work on improving the number of electric vehicles purchased under this plan. I wanted to enter into the record the American Lung Association's report, "Zeroing in on Healthy Air," highlighting the health benefits of a nationwide transition to zero-emission vehicles and clean, non-combustion electricity. The report found that this transition would save 110,000 lives nationwide and avoid 2.7 million asthma attacks by 2050. (Full report available at https://www.lung.org/clean-air/electric-vehicle-report/zeroing-in-on-healthy-air). Maximizing the purchase of zero-emission vehicles is critical for ensuring that communities experience the health benefits of cleaner vehicles. - Laura Kate Bender, American Lung Association.

(Long pause.)

MR. ORR: Ladies and gentlemen, once again as a reminder, the comment period is still open for just a couple more minutes. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself from mute, please do so and begin with your comment. Again, we're currently waiting for further comments. Thank you.

As a reminder, this presentation will be repeated again at 8:30 p.m., Eastern Time.

(Long pause.)

MR. ORR: Ladies and gentlemen, thank you again for attending this evening's public hearing.

As a reminder, the public comment period ends on August 14, 2023. If you have any further comments, you may email them to nepa@usps.gov, or you may send them via the U.S. mail to the following address: U.S. Postal Service, 475 L'Enfant Plaza, SW, Office 6606, Washington, DC, 20260-6201, to the attention of

Mr. Davon Collins, Environmental Counsel.

This concludes the public hearing, and we wish you a pleasant evening. This presentation will be repeated at 8:30 p.m., Eastern. Thank you very much.

(Whereupon, the above-entitled matter went off the record at 8:26 p.m. and resumed at 8:30 p.m.)

MR. ORR: Good evening, and welcome to the public hearing for the Postal Service's draft Supplemental Environmental Impact Statement for Next Generation Delivery Vehicle Acquisitions.

My name is Chris Orr, and I will be the meeting facilitator.

This hearing is being recorded and a transcriber will produce a transcript of the hearing, which will be posted on our website, uspsngdveis.com.

We will begin with a presentation, followed by a comment period. The public hearing will end at 10:00 p.m., Eastern.

For your awareness, closed captioning

is available for use during this meeting.

To access this capability, click on the closed captioning icon at the bottom of your screen, shown with the letters CC inside a square.

I will now turn over the presentation to our Postal Service presenter, Patrick Ecker, who serves as the executive manager for fleet strategy and support. Patrick?

MR. ECKER: Thank you, Chris. Good evening, and welcome to the public hearing for the draft Supplemental Environmental Impact Statement for the Postal Service's Next Generation Delivery Vehicle Acquisitions program.

My name is Patrick Ecker, the executive manager for fleet strategy and support, and I will provide an overview of why the Postal Service is conducting this Supplemental Environmental Impact Statement, and the findings of the draft document.

A copy of this presentation will also be made available afterwards on the project

website, uspsngdveis.com.

But first, some information about how you may submit comments and questions.

If you wish to be given up to two minutes to provide an oral comment at any time during or after the presentation, you may click the raised-hand feature.

After the presentation, we will unmute attendees in the order they clicked the raised-hand feature. You may also at any time type your comments and questions into the Q&A feature.

Additionally, you may submit your comments by email or U.S. mail, at the addresses provided on the screen. Note that comments must be received no later than August 14, 2023, to be considered.

All submitted comments, whether provided at this hearing verbally, or in the Q&A feed, or provided by email or mail, will be recorded and made part of a public record, and are therefore subject to disclosure.

All submitted comments will be

considered by the Postal Service in the final Supplemental Environmental Impact Statement, which will be announced in the Federal Register at a later date.

So, the report references are listed on the screen. These include the draft Supplemental Environmental Impact Statement, or Supplement, the subject of this hearing.

Other references are the NGDV final EIS, NGDV record of decision, and a transcript and comments from the public hearing held during the scoping period for the draft Supplement. These references can be found on the project website. Again, that's uspsngdveis.com.

Subsequent slides, as applicable, include a reference to the draft Supplement section, where more information can be found.

We'll start off tonight by providing an overview of the proposed action, and its purpose and need.

Currently, the Postal Service delivery fleet includes both purpose-built, right-hand-

drive, long-life vehicles, and flexible fuel vehicles, as well as commercial-off-the-shelf vehicles, such as RAM ProMasters, and Mercedes Metrises.

The purpose-built vehicles currently account for the majority of the fleet, and are past or nearing the end of their useful life.

For example, while the expected service life of long-life vehicles is 24 years, they currently average over 30 years in age, and thus, have high annual maintenance costs.

Importantly, our long-life vehicles do not have certain standard and modern safety features. They have no air bags, no air conditioning, no anti-lock brakes, no backup cameras, no intermittent windshield wipers, no blind spot warning systems, and no daytime running lights.

In short, it is vital that the Postal Service modernize our delivery fleet to provide our 200,000 mail carriers with appropriate vehicles that allow them to support our daily

service mission, with advanced safety features and security features, better fuel economies, and the amenities we expect in our own personal vehicles.

Next, we'll provide an overview of the National Environmental Policy Act and a timeline of activities related to this project.

The National Environmental Policy Act, or NEPA, is a federal procedural law that is intended to ensure that federal agencies consider the environmental impacts of their major actions in the decision-making process.

The documentation of this process, an Environmental Impact Statement, informs both agency decision-makers and the public, and it must do a number of things.

It must include a full and fair discussion of the action's significant environmental impacts. It must consider reasonable alternatives that would avoid or minimize adverse impacts, or enhance the quality of a human environment, and it must be concise,

clear, to the point, and supported by evidence, that the agency has made the necessary environmental analysis.

The purpose and function of NEPA is satisfied if federal agencies have considered relevant environmental information, and the public has been informed regarding the decision-making process.

NEPA does not mandate particular results, substantive outcomes, or that an agency choose a course of action with the least environmental impact.

This slide illustrates the prior milestones that have brought us to the draft Supplement we are discussing tonight.

The Delivery Fleet Modernization Process began in 2015, when we initiated the design and prototype work for a new purpose-built vehicle for Postal Service delivery operations. This step spanned several years.

Then, once the new purpose-built vehicle and our proposed replacement schedule

were ripe for analysis, we prepared the first next-generation delivery vehicle acquisition's EIS in 2021, culminating with the publication of the Record of Decision in early 2022.

Thereafter, we placed an initial order for 50,000 NGDV, of which 20 percent were to be battery-electric.

As we will discuss in further detail shortly, the Postal Service then identified several key factors potentially affecting the vehicle acquisition strategy.

So, last June we published a notice of intent to prepare a supplemental EIS, so that we could analyze the potential effects of incorporating these additional considerations into the vehicle acquisition strategy.

The scoping period for this supplement was held last summer, to solicit initial public comments, including through the first public hearing held last August.

Comments received were considered in the draft supplement, which we recently published

on June 30th.

This public hearing is being held during the second public comment period, to receive comments on the draft. All comments are due by August 14th, and will be considered in the final Supplemental EIS. The Postal Service anticipates publishing a new Record of Decision later this year.

So, why is the Postal Service supplementing its NGDV EIS?

The prior Record of Decision, signed in February 2022, included the purchase and deployment over a ten-year period, of 50,000 to 165,000 NGDV, of which at least ten percent would be battery-electric vehicles, or BEVs, to replace our long-life vehicles and flexible-fuel vehicles.

Since that Record of Decision, we have identified three considerations, which, if implemented, could potentially affect our vehicle acquisition strategy, and the composition of the Postal Service delivery fleet.

The first change under consideration is our adoption of a vehicle purchase strategy, whereby we will evaluate and consider more frequent vehicle purchases over shorter time periods, rather than over ten years.

The vehicle purchases would be in smaller quantities, to be more responsive to rapid changes in our operating strategy, technology improvements, and market conditions.

The second change under consideration is an increase in the minimum percentage of battery-electric vehicles to be purchased.

This consideration is a result of the $3 billion appropriated to the Postal Service under the Inflation Reduction Act of 2022, to fund zero-emission vehicles and a requisite infrastructure.

Finally, the third change is the purchase of some commercial-off-the-shelf, or COTS vehicles, to address our critical immediate needs, and accelerate the rate of vehicle replacements.

Also, by incorporating commercial-off-the-shelf vehicles into the vehicle mix, and with the support of advanced funding and installation of infrastructure, we will be able to accelerate fleet electrification.

Now, we'll transition to the specific alternatives considered in this supplement.

As we began developing a new set of alternatives to consider in this supplemental analysis, we identified four consideration factors that substantively affected our determination of feasible alternatives that should be evaluated in detail.

First, the postal service has an urgent need to rapidly replace long-life vehicles currently in service. Some of them are eight or more years beyond their 24-year service life, and are expensive to maintain.

Although the availability of electric vehicles has expanded, the existing market is still limited for the Postal Service's needs for replacement vehicles over the next few years.

Over the near term, commercial-off-the-shelf vehicles can be ordered at a faster pace than the purpose-built NGDV.

Based on our outreach to potential suppliers, the right-hand-drive and left-hand-drive commercial-off-the-shelf, gasoline-powered vehicles, would be available for acquisition in 2023 and 2024, and not require electric vehicle charging infrastructure to be in place at our facilities.

Further, we believe the right-hand-drive commercial-off-the-shelf vehicles to be the last ones that will be commercially available to us in the country, and thus see great operational value acquiring them, given our need for right-hand-drive vehicles.

Second, not all Postal Service delivery vehicle routes are compatible with electric vehicles, as a portion exceed the projected range of the vehicle on a single charge.

In addition, some routes with

significant snowfall, cold weather, or challenging terrain, would be prioritized for deployment of all-wheel-drive vehicles, which are likely to have gasoline-powered engines.

Third, electric vehicles are significantly more expensive to acquire. The $3 billion Inflation Reduction Act appropriation to the Postal Service is specifically to fund the purchase of zero-emissions vehicles, and the acquisitions of the necessary infrastructure. For example, electric vehicle-charging stations.

The preferred action and alternative two include use of the entire $3 billion appropriation.

Importantly, even after accounting for the Inflation Reduction Act funds, most of the funding for the significant electric vehicle commitments in both the preferred alternative and alternative two, will come from Postal Service revenues.

Fourth, as previously mentioned, smaller, more frequent purchases of vehicles

provide us an opportunity to increase the electric vehicle proportion over time, as the market develops.

The Postal Service identified two action alternatives involving acquisition of 106,480 vehicles, and a 62 percent electric vehicle acquisition commitment over a period of six to eight years.

These two action alternatives, and the no-action alternative, were evaluated in the draft supplement.

Alternative one is our preferred alternative, because it maximizes the number of vehicles that can be acquired and deployed soonest, in the shortest number of years.

Both commercial-off-the-shelf vehicles and NGDV, including gasoline and electric, would be acquired, resulting in acquisition of 106,480 vehicles in six years.

Alternative two includes acquisition of NGDV-only, but would take longer -- eight years -- to implement, due to the production

capacity of these purpose-built vehicles.

As under the preferred alternative, 62 percent would be electric vehicles, and the remainder would be gas.

The no-action alternative is to implement the current Record of Decision, for acquisition of up to 165,000 NGDV, of which at least ten percent would be electric vehicles, over ten years.

Only 106,480 NGDV over eight years were analyzed in the supplement, to ensure a fair comparison with alternatives one and two, which also address acquisition of 106,480 vehicles.

To provide context for future slides and further explain the proposed alternatives. This slide presents a summary of key specifications for the vehicles analyzed in our supplement. Acronyms used are defined below the table.

The existing vehicles we would primarily replace are long-life vehicles, or LLVs, which are purpose-built, gasoline-powered,

right-hand-drive vehicles, produced in the late-'80s and early-'90s.

Importantly, right-hand-drive vehicles are generally superior to left-hand-drive vehicles, in terms of efficiency, performance, and safety, for Postal Service routes with a significant amount of curbside deliveries.

The proposed new vehicles considered in the supplement include the purpose-built right-hand-drive NGDV, with either battery-electric or internal combustion, gasoline power trains.

And three types of commercial-off-the-shelf vehicles, encompassing both gasoline and electric power trains, and both right-hand-drive and left-hand-drive vehicles.

As shown in the table, the LLV is the smallest vehicle by weight that we are analyzing. It was designed over 30 years ago, primarily for letter delivery.

The proposed replacement vehicles range in gross vehicle weight rating from 6,834

lbs, to 9,500 lbs, and have ample volume for future anticipated letter- and package- delivery needs.

Despite the proposed new vehicles being notably larger than the LLV, and having energy-consuming features, such as air conditioning, which the LLVs do not, they also have substantially better fuel economy.

The proposed gasoline-powered vehicles get 25 percent to 44 percent better gas mileage than the LLV. And the proposed electric vehicles do not use any gasoline.

It is important for us to distinguish here between the standard UDDS drive cycle and our USPS drive cycle.

The UDDS drive cycle is used to represent standard city driving for testing purposes, and it informs the window stickers you see on vehicles in dealership lots.

However, the Postal Service vehicles, especially on curb-line mail delivery routes, are constantly accelerating, decelerating, idling,

often stopping and starting, and generally traveling at low speeds, as they go from house to house and mailbox to mailbox.

This reduces the vehicle's fuel economy, compared to the standard UDDS drive cycle, and is why we used our internal drive cycle data in the supplemental analysis to obtain the most accurate results.

Finally, the last row shows that both of the electric vehicle models would be able to travel at least 70 miles on a single charge, which is our minimum operational requirement, designed to ensure that our carriers can complete their routes without the risk of running out of power mid-route.

The supplement also analyzes a small number of personally owned vehicles used for mail delivery.

Section 4 of the draft Supplemental EIS describes the existing environment methodology for assessing environmental impacts in the three alternatives, and the potential

effects.

It is important to note that the proposed action is national in scope, with vehicles to be distributed across the Postal Service's nationwide delivery network.

The draft Supplemental Environmental Impact Statement discussion focuses on direct and indirect effects of each alternative, in relation to baseline conditions, or the no-action alternative, and examines potential effects, in terms of the significance of the effect.

Four levels of effect were considered during the analysis. Here, we've categorized resource areas according to their anticipated levels of effect.

We'll review each of these quickly now, and then in future slides provide more detail on the resource areas that are bolded.

Our analysis found that resource areas that would be beneficially affected by the alternatives include transportation safety for our employees and communities, due to the new

vehicles' multiple safety features not available in the LLVs; traffic noise, due to electric vehicles being slightly quieter than gasoline vehicles, and comprising a significantly larger percentage of the procurement order under the preferred alternative; air quality, due to significantly decreased emissions for greenhouse gases and most other regulated pollutants that were analyzed; community emergency services, due to the increase in road safety from using modern vehicle safety features; gasoline consumption, due to the higher fuel economy of the new gasoline-powered vehicles and the significantly higher electric vehicle percentage; hazardous waste generation, due to the reduced need to dispose of waste, such as used oil, due to the higher electric vehicle percentage; and environmental justice communities, which we will discuss later on in the presentation.

Resource areas that would experienced either no or negligible effects, include community economics, employment, traffic, and

accessibility parking and public transportation, all due to the new vehicles being one-for-one replacements of LLVs and personally owned vehicles; sulfur dioxide emissions, which we'll explain in a coming slide; community utility services, including utility availability and capacity; electricity consumption, due to the relatively small demand on the electrical grid resulting from the number of electric vehicles; and solid and hazardous waste treatment disposal, due to the need to dispose of the existing LLVs.

The draft supplement did identify one potential minor-to-moderate adverse effect that could result from the proposed action, which is that externally audible back-up alarms from some commercial-off-the-shelf vehicles, could adversely affect persons near major vehicle deployment sites, that may have a large number of vehicles with these alarms.

This potential effect would occur under the preferred alternative only, since commercial-off-the-shelf vehicles are not

included in alternative two, or the no-action alternative.

Importantly, the draft supplement identified no significant adverse effects that could potentially result from the considered alternatives.

We also note that this analysis has conservatively assumed one-for-one vehicle replacements, though the new vehicles are larger than the vehicles being replaced.

Therefore, there is also the potential for benefits in such factors as fuel consumption and traffic, from trip reductions due to the larger vehicles' capacity.

To addressed potential air quality effects of the two action alternatives, and the no-action alternative, we modeled direct and indirect emissions using the EPA-recommended MOVES and GREET models, respectively.

The MOVES model estimates direct emissions, including from the vehicle tailpipe, evaporative loss, fueling operation, vehicle

start, and brake and tire wear emissions.

We ran this model using vehicle categories based on the vehicles weight, engine size, and other factors, Postal Service-specific drive cycles that accounted for our unique delivery patterns, including driving speed and starts and stops, and both city and rural roadway types.

The GREET model estimates indirect or upstream emissions resulting from the gasoline supply chain, for the gasoline-powered vehicles, and electricity generation for the electric vehicles.

We ran this model using the specific fuel economy value. That is, the gas mileage, or miles-per-kilowatt hour, for each of the vehicles we were analyzing, as well as factors like the year the vehicle is produced, and the years in which it would be operated.

The modeling addressed both criteria pollutants and greenhouse gases.

Criteria pollutants are regulated by

the Clean Air Act, and include the ozone precursors, volatile organic compounds and nitrogen oxides, carbon monoxide, particulate matter, both PM 2.5 and PM 10, and sulfur dioxide.

Greenhouse gases, or GHGs, effectively trap heat in the atmosphere, and contribute to climate change.

These are calculated as carbon dioxide equivalents, CO2E, and collectively are carbon dioxide, methane, and nitrous oxide.

The modeling in the supplement accounted for USPS-specific data regarding the vehicles under consideration and acquisition schedule, and the various types of Postal Service routes and associated drive cycles.

The modeling indicates that all proposed new vehicles would generate fewer emissions, direct and indirect combined, per pollutant, than an old LLV, with the exception of sulfur dioxide.

This includes emissions from both

vehicle operation and upstream gasoline and electricity production.

This table lists each of the existing vehicles in italics, and the proposed new vehicles, gasoline-powered internal combustion engine, or ICE vehicles, are shown in blue font, while the electric vehicles, or BEVs, are shown in green font.

For each vehicle type, total emissions, direct and indirect, are shown from one vehicle in pounds-per-day, based on a rural curb line route driven in 2024, as an example.

As you can see, all proposed new vehicles, both gasoline and electric, would be cleaner than the existing aged vehicles.

The proposed new electric vehicles are generally comparable or cleaner than the proposed new gasoline-powered vehicles as well, depending on the pollutant.

The changes in emissions from replacing one aged LLV with one of the proposed new electric vehicles, and from replacing one

aged LLV with one of the proposed new gasoline vehicles, are shown in the last two rows of this table.

For example, replacing an LLV with a new vehicle, either battery-electric or gasoline, would reduce volatile organic compounds, nitrogen oxides, and carbon monoxide emissions, by over 93 percent.

Replacing an LLV with a new vehicle would reduce particulate matter, which can cause or aggravate such health problems as heart and lung disease, by up to 35 percent.

Sulfur dioxide is the most notable difference between the gasoline and electric vehicles.

While replacing an LLV with a new gasoline-powered vehicle would decrease sulfur dioxide emissions by about 26 percent, replacing an LLV with a new electric vehicle would increase sulfur dioxide emissions by over 170 percent, due to the upstream power plant emissions.

And finally, replacing an LLV with an

electric vehicle would reduce greenhouse gas emissions by about 68 percent, while replacing an LLV with a new gasoline-powered vehicle would reduce those emissions by about 29 percent.

The modeling indicates that regulated pollutant emissions, except for sulfur dioxide, would decrease under all three alternatives, compared to existing conditions.

The three graphs included here show the cumulative total change in emissions through each of the alternatives through the year 2030, which is the end of the implementation period for this action.

The bar graph on the left illustrates the reductions in emissions of volatile organic compounds, and nitrogen oxides. The bar graph in the middle illustrates the reductions in emissions of carbon monoxide, and the bar graph on the right illustrates the reduction in emissions of particulate matter.

There are two primary factors for the differences in total pollutant emission changes.

First, the preferred alternative replaces existing vehicles faster, within six years. The alternative two and the no-action alternative would take eight years.

Second, the preferred alternative and alternative two replace a small amount of personally owned delivery vehicles, in addition to LLVs, while the no-action alternative replaces LLVs only.

As shown in each of the graphs, the preferred alternative would have a substantial reduction in total emissions, compared to the no-action alternative, due to the expedited replacement of LLVs with the new vehicles that produce fewer emissions.

Alternative two would have total cumulative pollutant emissions reductions comparable to the no-action alternative, as they both entail only NGDVs and an eight-year schedule.

Whereas most pollutant emissions would decrease from this proposed action, we found the

total sulfur dioxide emissions by 2030 would increase under the preferred alternative, and alternative two, and decrease under the no-action alternative.

This is due to fleet electrification, since sulfur dioxide emissions primarily result from upstream electricity generation.

Thus, since the preferred alternative and alternative two have significantly more electric vehicles than the no-action alternative, they would generate the most upstream sulfur dioxide.

And since the preferred alternative would deploy electric vehicles faster than alternative two, it has the largest anticipated sulfur dioxide emissions.

However, it is important to note that while sulfur dioxide emissions would increase rather than decrease, these emissions would be negligible in a nationwide context.

For example, alternative one would emit up to 58 tons per year of sulfur dioxide

nationwide, which is well below the typical sulfur dioxide de minimis emissions limit of one hundred tons per year in a specific non-attainment area.

With respect to greenhouse gases, total emissions would decrease under the preferred alternative, alternative two, and no-action alternative.

The bar graph shows the cumulative total change by 2030 in greenhouse gas emissions, representing carbon dioxide, nitrous oxide, and methane, expressed as carbon dioxide equivalent, or CO2E, for each of the alternatives.

The preferred alternative and alternative two would result in greater greenhouse gas emissions reductions, compared with the no-action alternative, and the preferred alternative would result in the highest total greenhouse gas emissions reductions, due to the expedited deployment of new, cleaner vehicles.

Specifically, our modeling indicates the preferred alternative would reduce cumulative

greenhouse gas emissions by about 3.9 million metric tons by 2030, which is about two million metric tons more than under the no-action alternative.

On a related topic, we expect gasoline use to decrease substantially. While the existing vehicles proposed for replacement are all gasoline-powered, the proposed new vehicles are mostly electric.

Similar to the air emissions we discussed previously, total gasoline use would decrease under the preferred alternative, alternative two, and no-action alternative.

However, it would decrease more under the preferred alternative and alternative two, since these alternatives include significantly more electric vehicles than the no-action alternative, at 62 percent versus ten percent.

And gasoline use would decrease the most under the preferred alternative, since it replaces the LLVs, which have the worst gas mileage, the soonest, in six years, versus eight

years.

Total electricity used would increase under the preferred alternative, alternative two, and no-action alternative, due to the increase in electric vehicles.

The preferred alternative and alternative two would result in greater total electricity usage compared to the no-action alternative, and the preferred alternative would result in the highest total electricity use, due to expedited deployment of electric vehicles over six years, while alternative two and the no-action alternative would not fully deploy their electric vehicles until year eight.

All alternatives would see negligible effect on national electricity consumption.

For noise, the supplement addresses vehicular noise during operation, including during the driving cycle.

Most Postal Service delivery routes are curb line routes, which have a top speed of about 20 miles per hour on average, and involve

stopping at the curb to deliver mail to mailboxes.

At speeds less than about 19 miles per hour, electric vehicles are quieter than gasoline-powered vehicles by about three decibels.

Three decibels per vehicle is barely perceptible. Yet, it would result in beneficial effect at slow vehicle speeds.

At speeds above 19 miles per hour, the noise of both types of vehicles would be the same, due to the noise generated by the tires.

Because alternatives one and two would include 62 percent electric vehicles that would replace gasoline-powered LLVs, both alternatives would have a beneficial noise effect at slow speeds.

Some of the commercial-off-the-shelf vehicles proposed under alternative one have externally audible backup alarms as a safety feature. The existing LLVs do not have backup alarms, and the NGDV do not have backup alarms

that can be heard outside the vehicle.

A minor or moderate adverse noise effect could result if numerous external backup alarms sound at major deployment sites adjacent to residences, or other noise-sensitive land uses.

The effect would depend on the number of vehicles with such features, and time needed to maneuver in reverse.

Environmental justice addresses the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, tribal affiliation or disability, and the agency decision-making that affects human health in the environment.

In an effort to further expand our understanding of the potential impacts of our alternatives on environmental justice communities, the Postal Service undertook a screening review of 414 facilities that are potential major deployment sites that may receive a large number of new vehicles, about 100

vehicles on average.

Several tools were used to identify environmental justice communities around these major deployment sites.

The tools included EPA's EJ screen, the Council on Environmental Quality's climate and economic justice screening tool, FEMA's national risk index, the CDC's environmental justice index, and the Department of Transportation's equitable transportation community explorer.

Based on the screening, about 84 percent of potential major deployment sites are located in environmental justice communities, and would experience the beneficial effects of the newer, cleaner vehicles.

As an example, we considered the potential air quality implications of replacing LLVs at a major deployment site.

Based on our preliminary data, we expect an average major deployment site to have approximately 100 LLVs that would be replaced

with new vehicles.

Assuming those new vehicles are 62 percent electric, in line with the total electric vehicle proportion proposed, annual average emissions reductions at each site would be as shown in this table. This covers direct emissions, which are those produced directly by the vehicles.

As you can see, volatile organic compounds, nitrogen oxides, and carbon monoxide, would be essentially eliminated, while particulate matter, sulfur dioxide, and greenhouse gases, would each be significantly reduced compared to existing conditions.

This would be a beneficial effect to the communities adjacent to the major deployment sites, which, as we noted on the prior slide, are quite often communities with environmental justice concerns.

Just a quick note here on scale. Because the emissions were calculated for just 100 vehicles at an average major deployment site,

the emissions shown here are expressed as pounds per year, whereas the previous bar graph, emissions for the much larger quantity of 106,000 vehicles, were expressed in tons per years, or a thousand tons per year.

Cumulative effects are effects on the environment from the proposed action, when added to other past, present, and reasonably foreseeable future actions.

Because all alternatives would involve replacement of older, more polluting vehicles, cumulative effects on environmental resources generally are expected to be less than under existing conditions.

Given the lack of significant adverse environmental effects that would result from either action alternative, as well as the significant environmental benefits that would accrue from the preferred alternative, the Postal Service is not proposing to include any additional mitigation measures in the supplement.

This concludes our overview of the

draft Supplemental EIS findings. We will now transition into public comments.

The Postal Service actively seeks input from the public and interested parties regarding the draft Supplemental EIS.

The public comment period will end on Monday, August 14, 2023. All questions and comments submitted will be considered, as we prepare the final Supplemental EIS, which we anticipate publishing later this year.

The Notice of Availability of the final Supplemental EIS will be announced in the Federal Register at a future date.

We will now open the floor to public comments. As a reminder, if you would like to provide a verbal comment during this hearing, please click the raised-hand icon, and we will call on you in order.

Each commenter will have up to two minutes to speak. You may submit written comments by posting them in the Q&A feature, emailing them to nepa@usps.gov, or mailing them

to the address listed on the slide.

We will not be responding directly to comments during tonight's hearing, but rather will record them and consider them in the final Supplemental EIS, which will be announced in the Federal Register at a later date.

And with that, we will start calling on the individuals with their hands raised.

MR. ORR: Thank you, Patrick. At this moment we have no commenters in queue. However, should you have a comment, as Patrick said, please click the raised-hand icon to be placed in the queue, and we'll address your comment. Thank you.

(Long pause.)

Ladies and gentlemen, as a reminder, the comment period is open. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself from mute, please do so and begin with your comment.

Currently, the queue is empty, and we are waiting for further comments. Thank you.

(Long pause.)

Ladies and gentlemen, once again a brief reminder, the comment period is still open. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself from mute, please do so and begin with your comment.

Currently, the queue is empty, and we're waiting for further comments. Thank you.

(Long pause.)

Ladies and gentlemen, as a reminder, the comment period is still open. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself from mute, please do so and begin with your comment.

Currently, the queue is empty, and we

are waiting for further comments. Thank you.

(Long pause.)

Ladies and gentlemen, again a reminder, the comment period is still open. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself from mute, please do so and begin with your comment.

Currently, the queue is empty, and we are waiting for further comments. Thank you.

(Long pause.)

Ladies and gentlemen, once again a reminder, the comment period is still open. If you wish to make a comment, please click the raised-hand icon, or place a question in the Q&A chat.

When you're asked to remove yourself from mute, please do so and begin with your comment.

Currently, the queue is empty, and we

are waiting for further comments. Thank you.

(Pause.)

Ladies and gentlemen, once again a reminder, the comment period is still open. If you wish to make a comment, please click the raised hand icon or place a question in the Q&A chat. When you're asked to remove yourself from mute, please do so and begin with your comment.

Currently, the queue is empty and we are waiting for further comments. Thank you.

(Pause.)

Ladies and gentlemen, once again the comment period is still open. If you wish to make a comment, please click the raised hand icon or place a question in the Q&A chat. When you're asked to remove yourself from mute, please do so and begin with your comment.

Currently, the queue is empty and we are waiting for further comments. Thank you.

(Pause.)

Ladies and gentlemen, there are approximately 12 minutes left in tonight's public

hearing. The comment period is still open. And if you wish to make a comment, please click the raised hand icon and place a question in the Q&A chat. When you're asked to remove yourself from mute, please do so and begin with your comments.

Currently, the queue is still open and we are waiting for further comments. Thank you.

(Pause.)

Ladies and gentlemen, thank you again for attending this evening's public hearing. As a reminder, the public comment period ends on August 14th, 2023. If you do have any further comments, you may email them to nepa@usps.gov or you may send them via the U.S. mail to the following address, U.S. Postal Service, 475 L'Enfant Plaza, SW, Office 6606, Washington, D.C. 20260-6201, the attention of Mr. Davon Collins, Environmental Counsel.

This concludes the public hearing and we wish you a pleasant evening. Thank you.

(Whereupon, the above-entitled matter went off the record at 9:58 p.m.)

D

Q

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Public Hearing

Before: U.S. Postal Service

Date: 07-26-23

Place: teleconference

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate complete record of the proceedings.

Neal R. Gross

Court Reporter

B5 Draft SEIS Public Hearing Documentation

Public Hearing "Q&A Box" Comments, July 26, 2023

Anonymous Attendee 07:35 PM
How do we unmmute ourself? I don't have those functions below.

Anonymous Attendee 07:36 PM
Will the mute button show up when we're called on?

Sam Wilson 07:37 PM
You'll see the option to unmute pop up when the host makes you a presenter

Bill Bradlee 07:55 PM
Should we also email our comment if we provided spoken comment here today?

Anonymous Attendee 07:59 PM
Use the Space Bar or adjust your settings

Laura Bender 08:08 PM
Thank you for holding this hearing and for the work on improving the number of electric vehicles purchased under this plan. I wanted to enter into the record the American Lung Association's report, "Zeroing in on Healthy Air," highlighting the health benefits of a nationwide transition to zero-emission vehicles and clean, non-combustion electricity. The report found that this transition would save 110,000 lives nationwide and avoid 2.7 million asthma attacks by 2050. (Full report available at https://www.lung.org/clean-air/electric-vehicle-report/zeroing-in-on-healthy-air). Maximizing the purchase of zero-emission vehicles is critical for ensuring that communities experience the health benefits of cleaner vehicles. -Laura Kate Bender, American Lung Association. You'll see the option to unmute pop up when the host makes you a presenter

B6 Public and Agency Draft SEIS Comments and Responses

Summary

- 45,127 sets of comments were timely received in response to the NOA of the Draft SEIS; the vast majority were form letter.
- Comments received during the Draft SEIS Public Hearing are presented in Appendix B5.

Agency and Representative Public Comments Timely Received on the NOA of the Draft SEIS

- U.S. Environmental Protection Agency
- California Air Resources Board
- Eubanks & Associates, PLLC [on behalf of the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW)]
- Multistate (Attorneys General, New York, California Colorado, Connecticut, Delaware, The District of Columbia, Illinois, Maine, Maryland, New Jersey, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington; The Corporation Counsel of the City of New York; and the District Counsel of the Bay Area Air Quality Management District)
- NGO: Natural Resources Defense Council, Union of Concerned Scientists, Coltura, and Zero Emission Transportation Association
- Natural Resources Defense Council (10,694 petition commenters)
- NGO: Earth Justice, CleanAirNow, Center for Biological Diversity, Sierra Club
- U.S. Representatives Emanuel Cleaver II (MO-5) and Sharice Davids (KS-3)
- Sierra Club (6,027 petition commenters)
- Coltura
- Center for Transportation and the Environment

Copies of all agency comments received are presented following this page. Given the volume of common public comments received, a selection of representative public comments is presented.

A summary of the comments timely received from agencies and the public in response to the NOA of the Draft SEIS, and the Postal Service's response to the comments, are presented in Table B6-1 that follows copies of the representative letters and emails received.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
POLICY

August 14, 2023

Mr. Davon Collins
Environmental Counsel
United States Postal Service
475 L'Enfant Plaza SW
Washington, DC 20260-6201

Dear Mr. Collins:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA) and the National Environmental Policy Act (NEPA), the Environmental Protection Agency (EPA) has reviewed the United States Postal Service's (Postal Service) Draft Supplemental Environmental Impact Statement (SEIS) for Next Generation Delivery Vehicle (NGDV) Acquisitions (CEQ No. 20230081). The CAA Section 309 role is unique to EPA. It requires EPA to review and comment on the environmental impact of any proposed federal action subject to NEPA's environmental impact statement requirements and to make its comments public.

The purpose of and need for the proposed action remain the same as originally detailed in the Postal Service's December 2021 Final EIS. It is to replace the end-of-life Long-Life Vehicles (LLV) and Flexible Fuel Vehicles (FFV) with vehicles that have more energy-efficient powertrains, updated technology, reduced emissions, increased cargo capacity, improved loading characteristics, improved ergonomics and carrier safety, and reduced maintenance costs. The Draft SEIS states that the proposed action will replace the Postal Service's existing purpose-built LLV/FFVs which are outdated (averaging 31 years in age), inefficient, increasingly unreliable, costly to maintain, and lack certain modern safety and operational features needed for mail carriers.

Since the Postal Service signed the NGDV record of decision (ROD) in February 2022, three additional considerations have been identified potentially affecting their vehicle acquisition strategy. First, the Postal Service anticipates that the longer-term efforts to fully replace the aging delivery fleet will likely take ten or more years. For this reason, the Postal Service proposes to adjust the vehicle procurement strategy to pursue a multiple-step acquisition process. Second, the Postal Service aims to accelerate the replacement of LLVs in order to ensure that they continue to meet their Universal Service Mission to deliver the nation's mail. Third, during the early stages of preparing this Draft SEIS, the Postal Service was provided $3 billion from the Inflation Reduction Act of 2022 (P.L. No. 117-169 (Aug. 16, 2022)) (IRA) to fund the purchase of zero-emission delivery vehicles (e.g., battery electric vehicles (BEVs)) and the acquisition of the requisite infrastructure (e.g., BEV charging stations) at Postal Service facilities.

The Postal Service has identified the preferred alternative, which includes the purchase and deployment of a mixed fleet of NGDV and commercial off the shelf (COTS) vehicles, with a BEV commitment of 62 percent overall. According to the Draft SEIS, this alternative includes the strategic purchase and deployment of COTS vehicles to supplement the purpose-built NGDV, thus allowing the Postal Service to accelerate the overall replacement of the existing end-of-life and high-maintenance LLVs (as well as cost-ineffective delivery personally owned vehicles (POVs)) to ensure that they continue to meet their Universal Service Mission.

Summary

EPA appreciates the positive shift the Postal Service has taken to substantially increase the minimum BEV commitment. However, EPA has identified additional shortcomings in the analysis that if corrected could provide opportunities to further increase the proposed minimum BEV commitments. EPA has developed recommendations for the Postal Service that would address public health, welfare, and/or environmental quality concerns in the analysis, including technical and cost modeling concerns that would inform the reasonable range of alternatives considered. Generally, key areas of concern include:

- The 2021 Final EIS used a total cost of ownership (TCO) model to help determine the share of BEVs and other vehicles among the alternatives, based on the lifetime costs of vehicles, consistent with best practices. The TCO model is not used in the analysis conducted in the Draft SEIS. Instead, the Draft SEIS analysis relies only on the up-front acquisition cost of vehicles, which results in inappropriately skewing the results toward Internal Combustion Engine (ICE) vehicles over BEVs.
- The Draft SEIS does not account for subsidies from the IRA in the composition of the types and number of vehicles proposed among alternatives. The Government Accounting Office's (GAO) analysis suggests the Postal Service should purchase 90 percent BEVs if using the prevailing cost of gasoline and the reduced costs of charging infrastructure resulting from the IRA subsidies.[1]
- The methodology to determine the composition of alternatives, in terms of the number and proportion of vehicles chosen, is not clear.
- The No Action Alternative for this Draft SEIS is specified as the 2022 ROD. However, only a portion of vehicles from the ROD are analyzed as part of the No Action Alternative.
- Ideally the Postal Service could make greater use of COTS vehicles. The draft SEIS is not clear what factors determined the number of COTS vehicles and the selection of the types of vehicles in the alternatives.
- The analysis should follow best practices when monetizing the climate change damages associated with the expected greenhouse gas (GHG) emissions using the social cost of greenhouse gases (SC-GHG). That is, GHG emissions for each year, not cumulative emissions, should be multiplied by the SC-GHG for that year, and then discounted to the present year.
- The Final SEIS should include a commitment to deploying new BEVs first in the final list of Candidate Sites identified to have environmental justice concerns before deployment occurs in other areas.

The concerns raised herein are substantial in EPA's view. We welcome working collaboratively with Postal Service in the coming months to share our expertise with the goal of addressing these concerns; as you know, in circumstances where deficiencies in an environmental impact statement prevent meaningful analysis, the remedy is supplementation to ensure adequate disclosure and analysis (please see 40 C.F.R. § 1502.9).

We appreciate the opportunity to review this Draft SEIS and look forward to reviewing the Final SEIS. If you have any questions, please contact me or Cindy Barger, Director, NEPA Compliance Division, at 202-564-3169 or by email at barger.cindy@epa.gov.

Sincerely,

Vicki Arroyo

Vicki Arroyo
Associate Administrator

Enclosure

[1] GAO 2020, GAO-20-195G Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs https://www.gao.gov/products/gao-20-195g

Detailed Comments on the
U. S. Postal Service's Draft Supplemental EIS for
Next Generation Delivery Vehicle Acquisitions

EPA has identified the following technical concerns that should be addressed in the Final SEIS.

Cost Modeling

- The 2021 Final EIS used a TCO model to help determine the share of BEVs and choose alternatives, based on the lifetime costs of vehicles, consistent with best practices. The TCO model is not used to conduct the analysis in the Draft SEIS. Instead, the analysis relies only on the up-front acquisition cost of vehicles, which would result in inappropriately skewing the results toward ICE vehicles over BEVs. The TCO includes the acquisition and operating and maintenance costs to compare the costs among alternatives. Please also see our comments below on *Investment and Acquisition Considerations.*

- The current analysis does not account for the lower fuel costs of BEVs, the lower maintenance costs of BEVs, and the risks posed by oil price shocks over time. Additionally, the cost of gasoline and electricity varies across the country. Applying a TCO framework for separate regions of the country will likely show that BEVs are much cheaper over the life of the vehicles for most, if not all, parts of the country. EPA recommends that the Final SEIS incorporates these components in the analysis as appropriate.

- When using the TCO model, the constraints should be clearly documented. For instance, the Draft SEIS states that Postal Service will not use BEVs for routes that exceed 70 miles. However, in the GAO's April 2023 analysis[2] of all routes, the purchasing model selected gas vehicles for 2 percent of routes greater than 70 miles. EPA recommends that any constraints or criteria which fundamentally affect the modeling of the alternatives be identified and included in the analysis and discussed in the Final SEIS.

- If the analysis includes the subsidies provided by the IRA, the optimal, cost-effective strategy (using a TCO framework) would result in a higher percentage of BEVs purchased than the approximately 60 percent proposed by the Postal Service. As noted above, the GAO analysis suggests the Postal Service should purchase 90 percent BEV if using the prevailing cost of gasoline and the reduced cost of charging infrastructure resulting from the IRA subsidies. The GAO report noted that if the average price of charger installation dropped from $18,000 to $12,000, the model recommends mostly BEV if all other costs remain constant. The IRA included $1.71 billion in subsidies for BEV-related infrastructure, or roughly $26,000 per charger installation (based on roughly 66,000 BEVs in alternatives 1 and 2). The IRA subsidy would provide four times more than needed to have the TCO model recommend mostly BEVs. EPA had previously pointed out that the assumption of one charging station for each vehicle was too strict, as some vehicles could be charged while others were out. Additionally, BEVs with low mileage demands will not need a daily charge. Correctly accounting for these costs in the TCO model will increase the optimal purchase of BEVs in all alternatives, including the No Action Alternative. Using the results from the GAO analysis, combined with the $1.29 billion for the purchase of zero-emission vehicles and $1.71 billion for BEV-related infrastructure provided by the IRA, the optimal, cost-effective strategy would be to purchase a much higher percentage of BEVs than the approximately 60 percent proposed by the Postal Service.

- Battery costs are the single largest component of the cost of BEVs. Improvements in battery technology over time promise lower acquisition costs over time. EPA recommends the analysis in the Final SEIS account for the lower costs of BEVs over time.

[2] GAO 2020, GAO-20-195G Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs https://www.gao.gov/products/gao-20-195g

Vehicle Purchase and Replacement Plan

- The Draft SEIS acknowledges in several sections the Postal Service commitment to no longer purchase gasoline powered vehicles by 2026. However, some portions of the Draft SEIS appear to have conflicting statements. For example, Section 6-2, Geographic Extent and Time Frame states, "The deployment of up to 106,480 replacement delivery vehicles over a six- to ten-year period …". EPA recommends that Postal Service remove inconsistent statements to this commitment in the Final SEIS. For clarity, EPA recommends Postal Service clarify in the executive summary that it intends to replace the remaining 100,000 ICE vehicles with BEV at a future date.

- The No Action Alternative is presented as 106,480 (out of a total of 165,000) NGDV with at least 10 percent BEV. However, the initial order of NGDV does not appear to factor into the No Action Alternative. As noted in Section 1-2.1 of the introduction, "in accordance with our ROD, the Postal Service issued a contract modification that changed the initial delivery order mix to 70 percent BEV NGDV (35,000 vehicles), 20 percent ICE two-wheel drive NGDV (10,000 vehicles), and 10 percent ICE all-wheel drive NGDV (5,000 vehicles)." While this initial order was consistent with the 2022 ROD, it does not appear to be accounted for in the No Action Alternative in the Draft SEIS. EPA recommends that the Final SEIS explain why and/or how this order has been excluded. This explanation may include a discussion about any contract variations with the NGDV supplier that would allow this order to be removed.

- According to the 2022 ROD, the current plan is to purchase up to 165,000 NGDV (at least 10 percent BEV) over 10 years. However, Table 3-1.1 (Summary of Alternatives) of the Draft SEIS states that a subset of the full order, or 106,480 NGDV (with 10 percent BEV) over eight years, are analyzed "to ensure a fair comparison against the vehicle quantities proposed under Alternatives 1 and 2." If the plan is to purchase the full 165,000 vehicles over 10 years, EPA believes that the impacts of that plan should be represented in the Final SEIS. EPA recommends that the No Action Alternative in Final SEIS include an analysis of the entire 165,000 NGDV as indicated in the 2022 ROD.

Selection of Specific Commercial-off-the-shelf (COTS) and Right-Hand Drive/Left-Hand Drive (RHD/LHD) Vehicles

- Section 3-3.2 (RHD COTS ICE Vehicle Acquisition) of the Draft SEIS notes that "the 14,500 total was chosen because the Postal Service's outreach to potential suppliers indicated that this would likely be the last remaining quantity of RHD COTS vehicles for sale in the U.S. for the foreseeable future." EPA recommends that the Final SEIS provide a more detailed explanation concerning costs, emissions, and other factors that supported these decisions. EPA also recommends that Postal Service consider the possibility of manufacturers expanding the production of RHD COTS, as appropriate.

- It is not clear why specific COTS LHD ICE vehicles and COTS LHD BEVs were chosen. Since these vehicles are coming from the commercial market, there is an expectation that there should be more choices of LHD vehicles. For example, in Table 3-3.2 in the Draft SEIS, the gross weight of the LHD COTS ICE vehicle selected weighs notably more than the RHD COTS ICE vehicle and because it has a larger engine size, gets fewer miles per gallon (MPG). EPA also anticipates there would be multiple vendors with LHD BEVs available for purchase. With the size of the fleet the Postal Service is replacing, EPA expects the commercial market would adjust to the increased demand from the Postal Service. If acquisition of COTS LHD BEVs is done in phases, this would allow potential vendors to adjust to the increase in demand from the Postal Service.

Route Optimization Efforts

- The Draft SEIS appears to not have fully addressed route optimization and consideration of the redistribution of existing ICE vehicles and the allocation of new ICE vehicles. One central limiting factor for BEV adoption is the 70-mile route limit. For example, under Alternative 1, the Postal Service is planning to retain over 100,000 ICE vehicles and based on the footnotes under Tables G-1 and G-2, the plans are to purchase an additional 40,250 new ICE vehicles for use on routes where BEVs are currently not suitable. The Draft SEIS

does not disclose how many ICE vehicles the Postal Service needs. If the purchase of an additional 40,250 ICE vehicles will result in a surplus of ICE vehicles beyond what is actually needed, some of the ICE vehicles could perhaps be substituted with the purchase of more BEVs, which would provide additional environmental benefits. As the longer-term solution to the Postal Service's vehicle needs are developed, EPA recommends that if a surplus of ICE vehicles results, for the Postal Service to consider replacing more of the ICE vehicles with BEVs.

Replacement of Personally Owned Vehicles (POVs)

- According to Sections 3-3, 3-4 and 4-3.3.2, and Tables C-1, C-2, G-1, and G-2, under Alternatives 1 and 2 the number of delivery POVs to be replaced are 6,218 and 4,400, respectively. The total number of existing delivery POVs is not specified in the Draft SEIS; therefore, the percentage of delivery POVs being replaced overall is not clear. Because of the age and fuel efficiencies of these delivery POVs (which are determined to be primarily ICE), their replacement with government owned BEVs provides environmental benefits. It is possible that additional environmental benefits could be achieved by replacing more of these POVs with BEVs or ICE NDGVs. The EPA recommends that the Final SEIS specify the total number of existing delivery POVs.

Importing Commercial off the Shelf (COTS) and Battery Electric Vehicles (BEVs)

- The Draft SEIS indicates that COTS BEV purchases are limited because of the small availability of supply. Section 3-6.2 of the Draft SEIS states that "Vehicles manufactured for foreign markets are not designed or tested to meet EPA emission standards and U.S. Federal Motor Vehicle Safety Standards. Furthermore, it is the Postal Service's determination that obtaining such approvals would be lengthy and costly, with no guarantee that it would ultimately succeed and therefore is neither technically nor economically feasible. These regulatory obstacles aside, the Postal Service would still need to solicit and obtain vehicles that could meet our demand in terms of price (including any applicable tariffs and shipping costs), quantity, size and operational capabilities, rate of production, and delivery schedule on a competitive basis as those vehicles manufactured for the U.S. market." EPA notes that BEV vehicles are made by numerous manufacturers both in the U.S. and abroad. Therefore, EPA recommends that the Postal Service not limit this option without additional support and data and should consider cost-effective contracts with current manufacturers as appropriate. Additionally, the Draft SEIS is confusing as written because it also acknowledges that BEVs do not produce any emissions. EPA recommends clarifying the Postal Service's concerns with emissions standards.

Investment and Acquisition Considerations

- Section 3-6.1 (Acquisition of a New Purpose-Built Vehicle) of the Draft SEIS states "The Postal Service believes that initiating another purpose-built vehicle solicitation would neither be an efficient use of the Postal Service's limited time and resources, nor would it guarantee a new purpose-built vehicle that is superior to the NGDV in cost or performance. In addition, in the Postal Service's judgment, a new solicitation so soon after the conclusion of the NGDV solicitation would expose the Postal Service to potential legal risk and reputational harm with our suppliers. Finally, if the Postal Service were to engage in a new solicitation, it would undercut the purpose of the project to expeditiously replace our end-of-life and high-maintenance LLVs and FFVs to meet our Universal Service Mission." It is EPA's understanding that the existing contract, while determined to be the most competitive for development and acquisition of a mix of ICE and BEVs, was not the most competitive for BEVs. Furthermore, according to court records there were three other contract bids that had higher rated BEVs. EPA believes that consideration of these potential cost savings may allow the Postal Service to acquire higher quality BEVs at a more competitive price than those associated with the initial purchase from 2022 ROD. For these reasons, EPA recommends that the Postal Service also consider options available under the existing contract that will allow for the purchase of additional BEVs under a new acquisition strategy. This may allow for an increase in the percentage of BEVs from the assumption currently presented in the preferred alternative.

Social Cost of Greenhouse Gases (SC-GHG)

- The monetized climate change damages associated with the expected greenhouse gas (GHG) emissions from the proposed action are not calculated correctly in Appendix F of the Draft SEIS. First, it is incorrect to multiply cumulative emissions by the social cost of GHG (SC-GHG) for the corresponding year. That is, the cumulative emissions for 2025, which is the summation of emissions in years 2023, 2024 and 2025, is not the value of emissions that should be multiplied by the 2025 SC-GHG values for carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). As explained in the 2021 Interagency Working Group on SC-GHG (IWG) report[3], multiplying the SC-GHG in year t (e.g., 2023) by the change in emissions in year t yields the monetized value of future emission changes from a year t perspective. That value represents the present value of damages from GHG emitted for that year. Continuing the example, the estimated emissions for year 2025 is the correct value to multiply by the 2025 SC-GHG value. Second, it is incorrect to sum the SC-GHG values from 2023-2050 and represent that sum as the lifespan total of GHG emitted by the project. Before including in an analysis, that value must be discounted to the present. For the Final SEIS, the Postal Service should calculate the present value of the stream of SC-GHG using the present value year of 2023 (the current year). Furthermore, the monetized value of future GHG emission changes should be discounted at the same rate used to calculate the initial SC-GHG to ensure internal consistency—i.e., future damages from climate change using the SC-GHG at 2.5 percent should be discounted to the base year of the analysis using the same 2.5 percent rate. EPA also recommends including the tables for SC-GHG from 2023-2050 for each alternative using the 2021 IWG numbers in Appendix F. EPA is available to assist with these calculations if requested.

- In addition, direct and indirect air emissions, including GHGs, for each alternative should be calculated over the lifetime of the vehicles, not just the eight-year implementation period, i.e., 2023-2030. In the calculation of SC-GHG, the analysis should not assume GHG emissions in 2030 remain unchanged each year through 2050. EPA recommends that the Postal Service model emissions beyond 2030 and use the Energy Information Administration's (EIA) Annual Energy Outlook (AEO) as a source of modeled emission estimates from the electricity sector (see https://www.eia.gov/outlooks/aeo/). EIA forecasts a 63 percent decrease in the emissions intensity of electric power production between 2022 and 2050 (see Tables 8 and 18 at https://www.eia.gov/outlooks/aeo/tables_ref.php).

Environmental Justice

- EPA notes that the Draft SEIS identifies 349 out of 414 tentative Candidate Sites that fulfilled at least three environmental justice criteria from a variety of screening tools. For analytical purposes the Postal Service assumes 62 percent of the new vehicles would be BEVs, but all new vehicles would generate significant air quality benefits, with the greatest benefits generated from the BEVs. BEVs nearly eliminate volatile organic compounds (VOC), nitrogen oxides (NO_X), and carbon monoxide (CO) emissions, and reduce particulates from sulfur dioxide (SO_2) and CO_2 equivalents (CO_2e) by 30-73 percent compared to the existing vehicle fleet. The Postal Service commits to replacing an equal number of existing end-of-life vehicles with new vehicles and acknowledges that the preferred alternative will accelerate environmental benefits by working toward a six-year deployment timeframe instead of Alternative 2's eight-year timeframe. EPA understands that the Postal Service has not finalized which existing facilities would comprise the list of Candidate Sites. However Postal Service does not specifically commit to deploying new vehicles first to the Candidate Sites that were identified to have environmental justice concerns. EPA continues to recommend the Postal Service commit in the Final SEIS and ROD to deploying new BEVs in the Candidate Sites identified to have environmental justice concerns first, in the opening years of deployment, making a visible difference for communities that have experienced environmental and other burdens longest.

[3] https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf

CALIFORNIA
AIR RESOURCES BOARD

Gavin Newsom, Governor
Yana Garcia, CalEPA Secretary
Liane M. Randolph, Chair

August 14, 2023

Transmitted via email

Mr. Davon Collins
Environmental Counsel
United States Postal Service
475 L'Enfant Plaza SW, Office 6606
Washington, D.C. 20260-6201
Sustainability@usps.gov and *NEPA@usps.gov*

Dear Mr. Collins:

I am writing on behalf of the California Air Resources Board (CARB) regarding the June 2023 Draft Supplemental Environmental Impact Statement[1] (SEIS) prepared by the United States Postal Service (USPS) for USPS Master Contract 3DVPRT-21-B-002. On January 28, 2022, CARB submitted comments regarding the USPS's initial proposal to procure up to 165,000 Next Generation Delivery Vehicles (NGDV) and potentially other Commercial Off-the-Shelf (COTS) vehicles or upfitted COTS of various classes and types (as described in the February 23, 2022 Record of Decision).[2] On July 29, 2022, CARB also submitted comments on the appropriate scope for the present SEIS that here proposes to procure the subset of 106,480 vehicles to be purchased over 6 years (referred to as the "Preferred Alternative" in the June 30, 2023 SEIS).[3] CARB's July 2022 comment letter is attached here as Attachment 1.

CARB appreciates this opportunity to submit comments on the SEIS. Regarding the overall procurement proposal, CARB commends USPS for increasing the proportion of zero emission (ZE) vehicles in its procurement proposal to 31.4% of the existing delivery fleet from its initial 2022proposal, which would have resulted in a ZE delivery vehicle proportion as low as 2.3% of the total USPS owned delivery vehicle fleet.[4] While USPS has made significant progress in increasing the proportion of ZE vehicles in the revised procurement proposal, CARB remains concerned with the remaining number of internal combustion

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[1] USPS, Draft Supplemental Environmental Impact Statement United States Postal Service: Next Generation Delivery Vehicle Acquisitions, 2023, (weblink: *https://uspsngdveis.com/documents/USPS%20Draft%20SEIS%20for%20NGDV%20Acquisitions%20-%20June%202023%20-%20Compiled.pdf*, last accessed 8/7/2023).

[2] January 28, 2022 Letter from CARB to Ms. Jennifer Beiro-Réveillé ("February 2022 CARB Comments").

[3] July 29, 2022 Letter from CARB to Ms. Jennifer Beiro-Réveillé ("July 2022 CARB Comments").

[4] See SEIS at 1-1 (noting total fleet size of 210,000 delivery vehicles); see also SEIS at 3-1 (noting procurement amount of 106,480 vehicles, of which 62% (or 66,018) vehicles would be BEVs).

engine (ICE) vehicles in the proposal, as well as the potential for USPS to not achieve even the percentages stated in the proposal.[5] Foregoing deeper electrification at this critical procurement step still risks entrenching USPS into more expensive and emissive vehicles for decades to come.

CARB remains concerned regarding the National Environmental Policy Act (NEPA) analysis conducted for the revised proposal. Critically, USPS has still not analyzed in the SEIS an alternative involving 100% (or near-100%) ZE vehicles, or any sort of more -stringent alternative for that matter. Rather, USPS continues seeking opportunities to purchase ICEs and indeed highlights steps taken to accelerate the timeframe for those ICE purchases (see USPS Alternative 1).[6] Furthermore, CARB is concerned that the two proposed action alternatives appear nearly identical in terms of their respective electrification percentages, differing only slightly in terms of their procurement schedules – and preventing the SEIS from analyzing a "reasonable range" of alternatives.

CARB also remains concerned about other SEIS-related issues that CARB and others previously raised[7] regarding the December 2021 Final Environmental Impact Statement (FEIS).[8] Several of these concerns persist in the SEIS, and are also discussed in greater detail below.

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[5] CARB notes that USPS appears to reserve discretion to modify their procurement based on conditions that are at least partly within USPS control; the SEIS states: "The actual timeline and quantities of NGDV or COTS vehicles purchased, and delivery vehicle types replaced, would be contingent upon the suppliers' production and delivery capabilities and the Postal Service's operational needs, including individual carrier route needs, and the Postal Service's financial position." It is not clear from the SEIS if these reserved conditions apply solely to substituting one battery-electric vehicle model (BEV) for another BEV model (for example, a NGDV BEV for a COTS BEV), or whether the intent here is to also retain the option to reduce the percentages of BEVs as well.

[6] We also note that USPS has apparently made further ICE procurement decisions on both ICE and BEV vehicles prior to completing the NEPA process. See Reuters, US Postal Service plans to buy 9,250 EV Ford delivery vehicles, 2023, (weblink: *https://www.reuters.com/markets/us/us-postal-service-plans-buy-9250-ev-ford-delivery-vehicles-2023-02-28/*, last accessed 8/7/2023).

[7] CARB, Comment Letter to draft SEIS docket, July 29, 2022.

[8] USPS, Final Environmental Impact Statement United States Postal Service: Next Generation Delivery Vehicle Acquisitions, 2021, (weblink: *https://uspsngdveis.com/documents/USPS+NGDV+FEIS_Dec+2021.pdf*, last accessed July 2022).

Comments Regarding the Revised Procurement Proposal

CARB's prior comments call on USPS to refrain from continuing expenditures on new ICE vehicles, and to instead complete the transition to zero emissions. CARB again calls upon USPS to further advance its transition to ZE delivery technologies.

As explained in detail in CARB's comments on the 2022 FEIS, the full transition to ZE vehicles advances multiple key strategic objectives of both USPS and the United States: fully leveraging available funding, increasing reliability, minimizing costs, and furthering both state and national climate change goals. The USPS should continue to fully leverage the substantial funding from the Inflation Reduction Act[9] to expand ZEV procurement and infrastructure, and not to cover parts and pieces of the procurement that would have already been funded from other sources,[10] such as the base vehicle costs and accompanying supports. CARB again notes that CARB's own regulations would require this electrification outcome in California and in states that choose to adopt California's rules, which underscores the need for full consideration of this course nationally.

USPS is in a uniquely influential leadership position on electrification as the operator of one of the single largest components of the federal fleet, as the direct beneficiary of both funding for the ZE transition and the ongoing operational benefits the transition will bring, and as a vital public service and embodiment of American government.

Comments Regarding the SEIS

The initial FEIS had multiple flaws, including those previously noted by CARB, the United States Environmental Protection Agency (EPA), the Council of Environmental Quality (CEQ) and multiple members of Congress including Congressional oversight committees, the Government Accountability Office[11,12] and USPS's own Office of the Inspector General

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[9] Inflation Reduction Act of 2022, H.R.5376, 117th Cong. (2022).

[10] Letter from Senator Edward Markey el al to Postmaster Louis DeJoy dated November 21, 2022, at page 2 (weblink: *https://www.markey.senate.gov/imo/media/doc/usps_electrification_and_ira_letter.pdf*, last accessed 8/7/2023).

[11] U.S Government Accountability Office, Fleet Management Preliminary Observations on Electric Vehicles in the Postal and Federal Fleets, 2022, (weblink: *https://www.gao.gov/products/gao-22-105931*, last accessed 8/7/2023).

[12] U.S. Government Accountability Office, U.S. Postal Service:
Action Needed to Improve Credibility of Cost Assumptions for Next Generation Delivery Vehicles, 2023, (weblink: *https://www.gao.gov/products/gao-23-106677*, last accessed 8/7/2023).

(OIG).[13] USPS is correct to revisit its prior flawed analyses and its decision to begin procurement even before the initial FEIS was complete. However, the SEIS remains flawed in several aspects.

The Alternatives Analysis Remains Inadequate

NEPA requires agencies to evaluate reasonable alternatives to the proposed action, and to discuss each alternative considered in detail so that reviewers may evaluate their competitive merits.[14] The SEIS contains a nominal total of three alternatives, consisting of two action alternatives and the "no action" alternative (the minimum 10% ZE vehicle procurement proposal previously adopted in 2022). However, the two proposed action alternatives appear nearly identical in terms of their respective electrification percentages, differing only very slightly in terms of their procurement schedules (6 vs. 8 years), and in terms of the type of BEVs used to achieve those procurement schedules (all NGDV, or a combination of COTS and NGDV).

These alternatives are so similar that they are not meaningfully different alternatives. As a result, the SEIS effectively contains only two meaningful alternatives, and one of these is the procurement proposal adopted in 2022. Notably, the SEIS lacks a more-ambitious alternative. This sharply contrasts with USPS's prior FEIS, which included as Alternative 1.2, a 100% BEV alternative.[15] Rather than carrying over that alternative to the SEIS and more broadly considering alternative options for a 100% or near-100% ZEV scenario, the SEIS omits such a more-stringent alternative.

It is not for a lack of options that USPS omits a more-ambitious alternative in the SEIS. USPS has many options for electrifying a higher proportion of its fleet, as shown by the following sources and considerations:

- In its April 6, 2023, Audit Report, the USPS OIG noted that the alternatives analysis for even the 2022 FEIS "was narrow as it did not include other alternatives that were also technically and economically feasible and realistically met the purpose and need for the proposed action."[16] Despite OIG's cautioning, the alternatives analysis in the SEIS is even narrower, including only a single meaningful action alternative, and omitting

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[13] USPS Office of the Inspector General, Next Generation Delivery Vehicles – Environmental Impact Statement Audit Report, Report Number 22-107-R23, 2023 (weblink: *https://www.uspsoig.gov/sites/default/files/reports/2023-04/22-107-r23.pdf*, last accessed 8/7/2023).

[14] 40 CFR 1502.14(a)-(b).

[15] See 2022 FEIS at page 3-6, Alternative 1.2.

[16] USPS OIG Audit Report at 6.

any more-ambitious alternative than the USPS preferred alternative of ZEVs amounting to only 31.4% of the delivery fleet.

- In its July 2022 comments, CARB specifically called for a wider range of alternatives to be considered in the SEIS, and presented several additional options for USPS to consider in developing its alternatives, along with information needed for USPS to consider those options. CARB also cautioned against dismissing alternatives as infeasible or impracticable due to time constraints, particularly where USPS delays in procuring ZE vehicles directly exacerbated these time pressures.
- As the SEIS itself notes, "under our contract with Oshkosh Defense, the Postal Service may order any percentage of BEV NGDV."[17] The SEIS states that 90% of USPS delivery routes are electrifiable. The USPS OIG has determined that 99% of routes are electrifiable.[18] Any of these achievable levels are significantly higher than the SEIS electrification level of 31.4% of the total delivery fleet.
- Even taking into account USPS's stated operational concerns, USPS can still select 100% BEV for the procurement action under consideration in the SEIS because this procurement action only involves replacing just under half of the USPS delivery vehicle fleet. USPS can therefore allocate the ICE vehicles that it will retain in its fleet to serve the more difficult routes today, with an eye toward replacing them later with what are likely to be higher performing ZEV options available when the second half of the delivery fleet replacement is subsequently considered.[19]
- It remains unclear why USPS believes the all-wheel-drive models it plans to purchase cannot be built (or procured as COTS) with ZE powertrains. There are also many examples of ZE all wheel drive large passenger vehicles, pickup trucks and SUVs. As CARB mentioned in an earlier comment letter for example, it appears that USPS could purchase fully electric luxury GM Hummers for less purchase cost (and potentially better winter and rough-terrain performance) in these challenging

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[17] SEIS at page 3-9.

[18] USPS Office of the Inspector General, Electric Vehicles and the Postal Service, 2022, (weblink: *https://www.uspsoig.gov/sites/default/files/reports/2023-01/RISC-WP-22-003.pdf* last accessed 8/7/2023).

[19] The Purpose and Need statement in the SEIS is carried over from the earlier FEIS, and does not indicate that vehicles procured under this action must be suitable for every USPS delivery route (including the small percentage of most difficult routes). However, even with the opportunity to allocate the ZE vehicles to the USPS's easier routes, USPS should still consider ways to electrify its longer routes as well. The USPS OIG has noted that the longer routes are actually where the greatest savings could be realized from electrification—specifically due to higher utilization that better leverages the efficiency of ZE vehicles. USPS itself has historically used a variety of delivery vehicle types to cover its less common route types, and it should continue to do so with ZE vehicles as a major part of that strategy.

condition routes than the BEV NGDVs. USPS does not explain its reasoning in claiming that BEVs are not currently suitable in all-wheel-drive applications, nor in declining to consider COTS BEVs or even requiring all wheel drive in its purpose -built NGDVs.

- USPS dismisses a number of alternatives without developing them sufficiently to adequately consider their potential. For example, USPS states no RHD COTS BEVs are available in the market. Yet USPS is ordering 9,500 Ford e-Transit LHD vans from Ford, which is providing 1000 e-Transit RHD vans to DPD UK.[20] As noted above, Ford produces both RHD and LHD e-Transit vans and is an example where the components to produce a US-specification RHD BEV COTS would not involve the type of clean-slate engineering of the "New Purpose Built Vehicle" alternative, nor would it require "Import of RHD COTS Vehicles from International Source" as USPS terms it in another dismissed alternative. USPS downplays the leverage it holds, through a procurement action of this scale, to drive the market for vehicles meeting USPS needs while realizing economies of scale.
- USPS also has not meaningfully considered in this SEIS the suggestions received that USPS evaluate where non-standard delivery methods could be increased or introduced including cargo bikes, small BEVs and other low speed options being successfully used in a variety of cities, climates and delivery operations.

Despite the evidence from the SEIS and USPS OIG indicating that 90-99% of USPS routes are electrifiable,[21] USPS has not meaningfully evaluated deeper ZE delivery vehicle procurement options. Given that the SEIS contains only two meaningfully different alternatives, and given the SEIS ignores other feasible options available to USPS, the SEIS does not analyze a "reasonable range" of alternatives as required by NEPA. Omitting a more ambitious electrification alternative ignores the reality that each emissions contribution and missed reduction opportunity leads our nation farther from its climate goals, and leads USPS farther from its own sustainability, efficiency, and cost minimization goals.

ICE Vehicle Cost Implications Merit Deeper Delivery Vehicle Electrification

As explained in CARB's July 2022 comment letter, achieving a zero-emission fleet, rather than perpetuating reliance on ICE vehicles, will ultimately be less costly, more consistent with USPS's need to compete with other carriers, better protect communities, and better serve government goals.

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[20] InsideEVs, UK: DPD Ordered 1,000 Ford E-Transit Electric Vans, 2023, (weblink: *https://insideevs.com/news/584340/uk-dpd-ordered-1000-ford-etransit/* last accessed 8/7/2023).

[21] See SEIS at 3-2; see also USPS Office of the Inspector General, Electric Vehicles and the Postal Service, 2022, (weblink: *https://www.uspsoig.gov/sites/default/files/reports/2023-01/RISC-WP-22-003.pdf*, last accessed 8/7/2023).

In terms of cost benefits to USPS, see CARB's July 2022 letter, particularly pages 10--17. Additionally, in the "Financial Considerations" section of the SEIS (Section 3-2.3), CARB notes that USPS continues to focus exclusively on upfront vehicle and infrastructure costs, while ignoring the significant operational cost savings that accompany ZE vehicles. As noted in both CARB's July 2022 comments and in the OIG Audit Report, in the prior FEIS, USPS dramatically underestimated the price of gasoline in the FEIS when calculating lifetime ownership costs, and the SEIS does not appear to resolve that issue; in fact, the SEIS does not include information regarding fuel pricing and other operational costs. Therefore, USPS's cost-related conclusions do not appear to be supported by the record before USPS. Those conclusions therefore should not be relied upon in rejecting alternatives involving higher percentages of ZE delivery vehicles.

In terms of social costs, note that the Social Cost of Greenhouse Gas (SC-GHG) analysis conducted for this SEIS shows dramatically greater social benefits when comparing the No Action alternative to Alternative 1.[22] These "benefits" are more accurately presented as reduced social costs of USPS's fleet operations, since those operations involve existing social costs due to the fleet's GHG emissions. Nevertheless, the advantage of the action alternatives over the No Action alternative is clear – and this further demonstrates the dramatic further cost reductions to the nation that could be achieved if USPS were to electrify even more of its fleet.

Unfortunately, rather than seizing the opportunity to further reduce lifetime costs to both USPS and to society through deeper electrification, USPS's proposal to continue purchasing ICE vehicles locks in decades of avoidable emissions and operating costs. USPS's reasons for purchasing further ICE vehicles are not well explained. USPS makes statements in the SEIS about perceived need to purchase ICE vehicles immediately and statements about ICE vehicles potentially not being available later in the future. But buying dirtier, less efficient ICE vehicles that are apparently not necessary for immediate operations, simply because they might not be available later (when USPS would also have a broader range of higher performance ZE options available), makes little sense.

The Emissions Analysis in the SEIS Remains Deficient

The SEIS perpetuates certain flaws in USPS's emissions analysis, which should be addressed before taking action on the procurement proposal.

First, USPS neglects to fully account for worsening emission rates due to deterioration experienced by ICE vehicles over their complete operational life as compared to more stable overall emissions impacts throughout the life of BEVs. USPS has a history of keeping

[22] See SEIS at 4-24 and 4-30.

vehicles well beyond the period during which they were procured ("implementation period") and USPS seems to be truncating their analysis prior to the ICEs reaching their highest emitting usage period. USPS claims narrowly that both COTS and NGDV ICEs are subject to similar deterioration and are cleaner than the beyond useful life vehicles being replaced. This ignores that BEV vehicles do not experience increasing tailpipe-analogous emissions over their lifetime, and that they draw energy from increasingly-renewable grid sources. It also ignores that non-renewable electricity sources are required to perform continuous monitoring and maintenance, and are not allowed emissions deterioration over time unlike an aging ICE vehicle's increasing emissions prior to scrappage. This ICE emissions deterioration oversight in the USPS analysis unrealistically biases the evaluation in favor of ICE vehicles. USPS states that the current version of the EPA's MOVES vehicle emissions model does not retain deterioration factors for vehicle model years as old as the in-use LLVs. However, EPA has maintained emissions inventory models including prior versions of MOVES that likely provide insight into the deterioration factors for those model years, but the critical point is that BEVs will get cleaner with time as the grid improves while any ICE's tailpipe emissions will deteriorate due to its own powertrain wear and tear. The ample statements from USPS about the maintenance costs of the aging LLVs further underscores that emissions deterioration is likely to accompany the well-documented issues of worsening drivability and reliability.

USPS analysis using the GREET model's average grid emission rates may still underestimate the benefit of a USPS BEV delivery fleet. The marginally available electricity for USPS fleet electrification may be substantially cleaner than the grid-wide average, and dramatically cleaner than the legacy peaker plant emissions rates. The grid-wide new demand for transportation electrification energy and for building electrification energy together are likely to support utility investments in further clean energy supply development at a scale that could not have been served merely by increasing utilization factors on less economical existing legacy fossil generation plants. This path of additional electrical load driving development of additional clean energy resources is especially dynamic as states implement the Advanced Clean Cars II pathway to 100% ZE sales in 2035, and the Advanced Clean Truck ZEV standards' minimum ZE sales schedule. EPA is also considering substantial transportation electrification nationally in the pending 2027+MY Light and Medium Duty and Phase 3 Heavy Duty GHG standards respectively.

Regarding accounting for emissions from vehicle starts, CARB commends USPS for moving beyond their initial position that emissions from vehicle starts cannot be modeled. USPS includes Cold Starts and Hot Starts in the MOVES analysis of the alternatives. CARB has noted a high number of starts in delivery applications and for plug-in hybrid vehicles, and has studied in considerable detail how real vehicles respond to frequent starts in a variety of

situations. For modern gasoline vehicles, the startup emissions can typically be the dominant duty cycle source of tailpipe criteria emissions for the entire day.[23]

Comments Regarding Previously-Raised Concerns

As noted above, CARB remains concerned about several issues with the prior FEIS, which persist in the latest SEIS. These concerns include:

- The USPS focuses on the upfront purchase cost of the alternatives, but does not thoroughly update faulty TCO modeling input assumptions regarding vehicles, infrastructure, maintenance, operations, and relative gasoline vs electricity pricing volatility exposure.[24] For example, the SEIS completely drops the FEIS's explicit discussion of the pricing used to evaluate gasoline against electricity, despite calls for USPS to use better assumptions and more clearly disclose assumptions. As a result, it is impossible for the public to understand how USPS arrived at its cost-related conclusions (which relate directly to USPS's conclusions regarding feasibility).
- The USPS purchases of ICE vehicles early in this procurement could delay urgently needed deployment of ZE delivery vehicles in California disadvantaged communities experiencing disproportionate emissions impacts including those associated with the 112 USPS facilities located[25,26] within designated AB617 communities of the Community Air Protection Program.[27]
- The USPS has not disclosed the specific information and data needed to enable third party replication of USPS modeling and conclusions (for example, of claimed costs and emissions estimates).
- The USPS has continued to make purchasing decisions and orders prior to completing the NEPA process.[28]
- USPS has not fully integrated the effects of network consolidation changes into the SEIS analysis, including the VMT increases.

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[23] CARB, Advanced Clean Cars II Regulations Staff Report: Initial Statement of Reasons, 2022 (weblink: *https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/isor.pdf* last accessed 8/7/2023).

[24] SEIS at 3-2.3 Financial Considerations.

[25] USPS, Leased Facility Inventory Report, California, 2023 (weblink: *https://about.usps.com/who/legal/foia/documents/leased-facilities/ca.csv* last accessed 8/7/2023).

[26] USPS, Owned Facility Inventory Report, California, 2023 (weblink: *https://about.usps.com/who/legal/foia/owned-facilities.htm* last accessed 8/7/2023).

[27] CARB, Community Air Protection Communities, 2022 (weblink: *https://ww2.arb.ca.gov/capp-communities* last accessed 8/7/2023).

[28] See id.

- USPS continues to place unnecessary constraints on timing and vehicle configuration specifics that artificially create the appearance of precluding viable alternatives.
- USPS still has not fully accounted for available programs to offset construction and operational costs, such as the Low Carbon Fuel Standard in California or Clean Fuel Standards in other states, the local, state, national and utility level programs for fleet electrification infrastructure, and leveraging USPS's property leasing relationship practices to help achieve deeper electrification.

For detailed discussion regarding these concerns, please see CARB's July 29, 2022, letter (included here as Attachment 1).

Ensuring Consistency with State Law

As USPS is aware, CARB's Advanced Clean Fleets (ACF) regulation[29] would apply to public fleets, including the USPS fleet in California. CARB notes that the SEIS considers more consolidated rollout locations for BEVs[30] than were considered in the FEIS. USPS must consider its state and local obligations when assessing whether BEV maintenance and support can be solely concentrated at large facilities. CARB notes that the pending provisions of the ACF rule would obligate USPS to electrify 25% of delivery vehicles by 2028 and 100% of delivery vehicles by 2035,[31] well within the useful life of vehicles procured under this SEIS. The geographic spacing of many USPS delivery routes precludes efficient aggregation into large delivery facilities due to the constraints of deadheading time as a fraction of the available worker's shift. Therefore, USPS should develop electrification plans that extend beyond just the large consolidated facilities.

Other Comments Regarding the USPS Procurement Strategy

Addressing Perceived Operational Constraints

USPS comments that infrastructure is easier to implement at scale. CARB notes that innovative charging infrastructure products are rapidly becoming available, including a growing number of above ground and freespan overhead products that allow for flexible

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[29] See *https://ww2.arb.ca.gov/rulemaking/2022/acf2022*.

[30] SEIS at Section 3-3.

[31] CARB, Attachment A-2, Final Regulation Order, Advanced Clean Fleets, Priority and Federal Fleets Requirements, 2022, Section 2015.2(a) (weblink: *https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/acf22/acffroa2.pdf*, last accessed 8/7/2023).

vehicle circulation underneath and are more amenable for retrofitting over tight existing yards.[32]

Conclusion

CARB urges USPS to fully embrace this opportunity to maximize ZE delivery vehicle acquisitions and avoid further committing itself to unnecessary ICE delivery vehicle emissions and operational costs that will be borne by our communities and postal customers for decades. CARB encourages USPS to more meaningfully evaluate substantially higher ZEV percentages for this procurement up to 100% to secure public health and the financial security of the USPS.

If you have any questions, please contact Analisa Bevan, Acting Chief, Mobile Source Control Division at *Analisa.Bevan@arb.ca.gov*.

Sincerely,

Steven S. Cliff, Ph.D., Executive Officer

Attachment

cc: Sydney Vergis, Ph.D., Deputy Executive Officer

Analisa Bevan, Acting Chief, Mobile Source Control Division

William Robertson, Ph.D., Vehicle Program Specialist, Mobile Source Control Division

[32]Businesswire, Eaton Unveils Industry-First Approach to Simplify and Accelerate Fleet EV Charging, Reducing Installation Time by 40%, 2023 (weblink: *https://www.businesswire.com/news/home/20230727456122/en/Eaton-Unveils-Industry-First-Approach-to-Simplify-and-Accelerate-Fleet-EV-Charging-Reducing-Installation-Time-by-40/* last accessed 8/7/2023).

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Via E-mail
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Re: Comments on the Postal Service's Draft Supplemental EIS in Connection with the Agency's Acquisition of Next Generation Delivery Vehicles

Dear Mr. Collins:

On behalf of our client the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America, ("UAW"), we submit the following comments on the United States Postal Service's ("USPS") Draft Supplement to the Next Generation Delivery Vehicle ("NGDV") Acquisitions Final Environmental Impact Statement ("EIS"). *See* 87 Fed. Reg. 35,581.[1]

We explicitly incorporate by reference UAW's previous comments on the Postal Service's DEIS, FEIS, and Notice of Intent to Prepare an SEIS. *See* Attachs. 1, 2, & 3 (without their original attachments that USPS already has in its possession). Because the Draft SEIS has failed to adequately respond to the vast majority of UAW's (and others') comments on the DEIS and FEIS, those critiques remain valid and unaddressed. Because UAW has previously supplied USPS with extensive background information regarding both the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321-4347, and the relevant facts prior to the issuance of the Draft EIS, this comment on the Draft SEIS will first briefly summarize the factual background of that document, and then focus on several glaring legal problems with that document and USPS's process for purported compliance with NEPA.

[1] USPS's NEPA process for this decision has spanned many documents. For clarity, these comments will refer to USPS's NGDV Acquisitions Draft Environmental Impact Statement as the "DEIS." The NGDV Acquisitions Final Environmental Impact Statement is likewise abbreviated to "FEIS." The Notice of Intent to Prepare a Supplemental EIS ("SEIS") will be called the "Notice of Intent to Prepare an SEIS." Finally, the Draft Supplement to the NGDV Acquisitions FEIS will be referred to as the "Draft SEIS."

BRIEF FACTUAL BACKGROUND

A. Notice of Intent to Prepare an SEIS

After the publication of the February 23, 2022 Record of Decision ("ROD"), which memorialized the decision made in the FEIS, USPS placed an initial order for 50,000 NGDV; approximately 20% were to be electric vehicles, and they were anticipated to be deployed for mail delivery service between FY 2024 and FY 2028. *See* Draft SEIS at 1-2. USPS modified that original order in March 2023, changing the initial delivery order mix to include 70% electric vehicles. *Id.*

On June 10, 2022, USPS published its Notice of Intent to Prepare an SEIS for the NGDV acquisition. *See* 87 Fed. Reg. 35,581. USPS subsequently adjusted the scope of the proposed SEIS on July 21, 2022. *See* 87 Fed. Reg. 43,561. USPS accepted comments on the notice and additionally, held a public hearing to provide an overview of the Proposed Action and solicit comments from interested stakeholders. Despite acknowledging that supplemental environmental analysis was necessary, to date, USPS has not withdrawn or suspended the ROD.

In its comments on the Notice to Prepare an SEIS, UAW highlighted its serious concerns with USPS's NEPA process to date, as well as its concern that the SEIS USPS intended to prepare would fall far short of curing the legal deficiencies that infected the FEIS process. Specifically, UAW explained that USPS's refusal to withdraw, or at least suspend, the ROD pending completion of the SEIS process violated NEPA because the ROD (and orders for vehicles placed in reliance on the ROD) irreversibly and irretrievably committed additional agency resources to the proposed action prior to the completion of the mandatory NEPA process. UAW also argued that the scope of the proposed SEIS remained unlawfully narrow and once again excluded alternatives and impacts of significant environmental and socioeconomic importance from analysis. As a result, the SEIS threatened to further compound the obvious NEPA violations that UAW has twice before identified to the agency. Finally, UAW implored USPS to consider in the SEIS the impacts of and alternatives to procuring any new vehicles to be used by the agency using American union labor versus other options, along with the consequent environmental, social, and economic impacts resulting from various options for production and procurement. As UAW concluded, "[i]n the absence of such an examination, USPS will commit the same legal errors with respect to these vehicles that it did for NGDVs and once again fail NEPA's hard look standard."

In total, 88,501 comments were timely submitted by interested parties, including UAW, during the comment period on the notice. With respect to the hearing, 205 entities registered, and 114 unique entities called into the virtual event. The high level of public participation underscores the importance of USPS's decision to stakeholders and citizens.

B. Draft SEIS

In the Draft SEIS, USPS limits the scope of the analysis to the "potential environmental impacts of modifying the Proposed Action in three primary ways": (1) by "substantially increas[ing] the minimum [battery electric vehicles ("BEV")] commitment to 62 percent"; (2) by

"reduc[ing] the total number of vehicles proposed for purchase at this time to 106,480"; and (3) by "includ[ing] a mix of both NGDV and [commercial-off-the-shelf ("COTS")] vehicles to be purchased." Draft SEIS at i. The number of vehicles proposed for purchase is being reduced from the 165,000-vehicle cap in the current ROD pursuant to USPS's "revised procurement strategy." According to USPS, "future additional significant quantities of NGDV purchases would be made pursuant to a separate ROD only after supplemental NEPA analysis." Draft SEIS at 3-3.

The Draft SEIS examined two action alternatives and the No Action Alternative. The No Action Alternative would "proceed with the decision from the [FEIS and] ROD," which would direct USPS to purchase 106,480 NGDV, a minimum of 10% which would be electric vehicles to replace the same number of end-of-life postal vehicles over ten years. The Preferred Alternative (i.e., Alternative 1) would direct USPS to "purchas[e] a mixed fleet of 106,480 NGDV and COTS vehicles to replace" the same number of end-of-life postal vehicles over six years. *Id.* The fleet purchased under Alternative 1 would be comprised of 60,000 NGDV, 75% of which would be electric vehicles; 14,500 commercial-off-the-shelf vehicles; and 31,980 vehicles that are either commercial-off-the-shelf or NGDV, but 62% of which will be electric. *Id.* The "mid-range" alternative (i.e., Alternative 2) would direct USPS to purchase 106,480 NGDV, 62% of which must be electric vehicles, and extend the purchasing period to eight years. *Id.*

Despite UAW and others comments requesting that the SEIS both consider alternatives of procuring vehicles produced by union labor, and examine the broader socioeconomic and environmental impacts resulting from its procurement decisions, USPS expressly declined to do so. Instead, USPS enshrined its decision with what amounts to a sham process designed to support USPS optically in pending litigation without seriously considering a full array of alternatives and impacts in the manner required by NEPA.

DISCUSSION

Once again, UAW has grave concerns about USPS's acquisition of NGDVs that are produced using non-union labor, as well as the agency's compliance with federal law in deciding how to manufacture and acquire this large quantity of vehicles. Moreover, in its comments on USPS's notice of intent to prepare an SEIS, UAW explained that the agency cannot view the SEIS process as an opportunity merely to shore up a severely deficient administrative record in the course of active litigation (including a case filed by UAW challenging USPS's ROD and FEIS). Rather, as UAW urged, the SEIS process must be treated as a serious effort to address all relevant concerns raised by the public with respect to the FEIS. Unfortunately, USPS has squandered this opportunity. Far from analyzing—let alone resolving in a manner favorable to UAW and its members—the concerns UAW has repeatedly raised about union labor, environmental, social, or economic impacts that USPS failed to consider before entering into a massive contract for the first order of NGDVs, USPS has instead issued a Draft SEIS that once again fails to address myriad important issues under NEPA, and thus suffers from the same fatal flaws that doom the FEIS.

As repeatedly explained in UAW's previous comments on this matter, USPS's decision to enter into—and fund—a contract that indisputably entails adverse environmental impacts prior

to the completion of any analysis of those impacts is a major violation of NEPA. *See* Attach. 1 at 8; Attach. 2 at 3-5; Attach. 3 at 2. In response, USPS acknowledges that the "SEIS does not address the environmental impacts associated with the manufacture of the vehicles proposed for acquisition, or production of the parts thereof." Draft SEIS at 1-3. To defend this decision, USPS attempts to wash its hands of any responsibility for such impacts by reiterating its tired assertion that the agency "has no control or responsibility over the location or manner of vehicle or part production, or detailed information about supplier operations." *Id.* For several reasons, this argument contravenes logic and law, and is arbitrary and capricious.

Since the issuance of the ROD and the filing of UAW's lawsuit challenging USPS's failure to examine certain alternatives and their environmental impacts, USPS has attempted to distance itself from the decision to locate the manufacturing facility in South Carolina. For example, in an April 5, 2022 hearing before the House Committee on Oversight and Reform, NGDV Executive Director Victoria K. Stephen conceded that USPS "was made aware of" the decision to manufacture NGDVs at a new facility in South Carolina "shortly before the public announcement" of the contract award—i.e., during the initial NEPA process, prior to the issuance of the ROD—but characterized the decision to locate production as within "the discretion of the supplier" *Id.* The suggestion that USPS lacks either the authority or ability to control the location of vehicles that USPS *itself* is commissioning and that would not be built but for USPS's decision to order them, through the contract that USPS itself negotiates, defies logic. As extensively explained in UAW's previous comments, USPS's conceded control over all manner of the production of new vehicles under the contract necessarily encompasses control over the location and manner of production of the new vehicles that it has ordered and is causing to be built. Accordingly, USPS has a legal obligation under NEPA to consider all of the direct, indirect, and cumulative impacts of the production of these vehicles, as well as alternatives (such as an alternative that the vehicles be produced at existing facilities) that would reduce adverse impacts. *See, e.g.*, 40 C.F.R. § 1502.16; *City of Alexandria v. Slater*, 198 F.3d 862, 868-69 (D.C. Cir. 1999) (noting that agencies are obligated to consider reasonable alternatives, including "solution[s] that lie[] outside of an agency's jurisdiction" or those that "solve only a portion of the problem"); *Ctr. for Biological Diversity v. BLM*, 937 F. Supp. 2d 1140, 1156 (N.D. Cal. 2013) (holding that an agency's categorical refusal to consider an effect as "outside the scope" of analysis is unreasonable where the effect bears a reasonably close causal relationship to the action at issue).

Yet, despite numerous comments explaining USPS's clear duty to fully consider *all* of the impacts of its action—including those stemming from the location of production of the new vehicles—the agency has to date staunchly refused to take the legally required "hard look" at the environmental effects of certain social, economic, and union versus non-union labor matters. The Draft SEIS does not cure this fatal defect. To the contrary, USPS only exacerbates a critical error made in the FEIS and ROD—namely, committing to an action that not only has "adverse environmental impact[s]," but also has "[l]imit[ed] the choice of reasonable alternatives." 40 C.F.R. § 1506.1(a). USPS has thus once again "prevent[ed] full and frank consideration of environmental concerns," in violation of NEPA, *Comm. of 100 on the Fed. City v. Foxx*, 87 F. Supp 3d 191, 205-06 (D.D.C. 2015).

USPS's remaining defenses of its refusal to fully examine the environmental, social, and socio-economic effects of its action likewise fall flat. For the first time, USPS asserts that the consideration of the impacts stemming from the location of production "would not meaningfully inform [USPS's] decision-making or aid us in distinguishing among alternatives." *Id.* However, as UAW has consistently explained, "the location of the production facilities will, in fact, have a significant effect on workers, employment, and local economies." Attach. 1 at 4. Indeed, the production of new vehicles at a non-unionized new facility in South Carolina will indisputably have far reaching environmental, economic, and social impacts on both the South Carolina community where the new facility is located and Oshkosh Defense's existing, unionized facilities in Wisconsin. For example, as explained by UAW member Ron McInroy, by "using a non-unionized facility to build USPS's NGDV fleet, the agency will create a new product line essentially from scratch without many of the important safety and environmental measures that UAW would require in a collective bargaining agreement." Attach 4 at 17. By extension, then, USPS's decision will have concrete impacts on "both the economy and the environment" of the location the agency selects for manufacturing. *Id.* These impacts are both reasonably foreseeable effects of USPS's decision, and, as explained below, are well within USPS's discretion to control.

USPS argues that the agency "is not funding the construction of any new supplier facilities under any of the Alternatives." However, as extensively explained in UAW's comments on the FEIS, this conclusion is dubious. The decision to *purchase and deploy* new vehicles necessarily must include the decision to *manufacture* those same vehicles. This conclusion is reinforced by the fact that, in the *very next sentence* in the Draft SEIS, USPS concedes that it "would pay the supplier for . . . manufacturing tooling costs." Draft SEIS at 1-3 to -4. USPS thus admits that its action includes the provision of funds for the development of a new manufacturing facility. USPS is therefore obligated to consider the full environmental impacts of this action—including the development of a facility *specifically intended, designed, and tooled* to exclusively manufacture USPS's new fleet—*before* committing resources to the project that effectively limit the agency's consideration of alternatives. *See Metcalf*, 214 F.3d at 1144.

Critically, as explained, the impacts from manufacturing a new fleet of vehicles are "sufficiently likely to occur" from a contract to purchase and deploy such a fleet that a "person of ordinary prudence would take [them] into account when reaching a decision" on the contract." *Sierra Club v. FERC*, 867 F.3d 1357, 1371 (D.C. Cir. 2017). Such impacts not only "could result from the act" of purchasing the new fleet, but, as USPS well knows, *will* result from the development of a facility that USPS *has in fact funded*. *Grand Canyon Tr. v. FAA*, 290 F.3d 339, 347 (D.C. Cir. 2002); *cf. Sw. Williamson Cnty. Cmty. Ass'n v. Slater*, 243 F.3d 270, 279 (6th Cir. 2001) (providing that "federal funding is a significant indication that a project constitutes a major federal action" within the meaning of NEPA). Accordingly, USPS cannot evade its duty to analyze the impacts of the *production* of its new fleet at a new facility funded (at least in part) by taxpayer dollars (or alternatives to locating production at such a facility) by "tak[ing] a foreshortened view of the impacts" of its action. *Grand Canyon Tr.*, 290 F.3d at 347.

Nor can USPS "fail[] to address the true scope and impact of the activities that should be under consideration" —i.e., "segment[]" its environmental review—by disingenuously parsing its decision to purchase a new fleet of vehicles into separate projects. *Del. Riverkeeper Network*

v. FERC, 753 F.3d 1304, 1313 (D.C. Cir. 2014). NEPA requires that "actions that will have cumulative or synergistic environmental impact upon a region . . . be considered together." *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976). Indeed, "[o]nly through comprehensive consideration of pending proposals can the agency evaluate different courses of action." *Id.* Actions that "[c]annot or will not proceed unless other actions are taken previously or simultaneously," or that "[a]re interdependent parts of a larger action and depend on the larger action for their justification" are considered "connected actions" and must be considered in the same EIS. *See* 40 C.F.R. §§ 1501.9(e), 1508.25(a); *Del. Riverkeeper Network*, 753 F.3d at 1314. As UAW has explained, the provision of funds to Oshkosh to develop a facility *specifically intended, designed, and tooled* to exclusively manufacture USPS's new fleet is an action that "[c]annot or will not proceed unless" USPS provides funds to actually manufacture the fleet. 40 C.F.R. § 1501.9(e). Moreover, both the funding of the new facility and the funding of the new fleet are clearly "interdependent parts of a larger action"—i.e., USPS's decision to modernize the USPS's fleet—"and depend on the larger action for their justification." *Id.* Accordingly, *at the very least*, these two actions are "connected actions" and therefore "must" be considered in the same impact statement. *Del. Riverkeeper Network*, 753 F.3d at 1314.

USPS's head-in-the-sand approach to the consideration of the significant environmental impacts that indisputably will occur as a result of its decisions—including the selected contractor and location for manufacturing NGDVs—further demonstrates the point that UAW has previously explained in its detailed comments: that USPS predetermined this outcome long before finalizing the FEIS and ROD, and once again has no intention of seriously considering new alternatives to the actions prior to completing the SEIS. Indeed, in response to comments requesting that USPS withdraw, or as the very least, suspend the ROD pending a full environmental review of *all* of USPS's actions' impacts, USPS states simply that it "do[es] not agree that there is any deficiency with the FEIS that would rise to the level warranting a withdrawal of the ROD." Draft SEIS at B-313. USPS further insists that its contract with Oshkosh—which it entered into before the issuance of the ROD—was not unlawfully pre-decisional because the award "was expressly contingent on the . . . satisfactory completion of the NEPA process." *Id.* However, as explained in UAW's previous comments, USPS's conceded ability to later modify or cancel the contract with Oshkosh does not excuse the agency's unlawful commitment of resources through a contract that entails adverse environmental impacts that have never been disclosed or analyzed.

Despite USPS's protestations to the contrary, the Draft SEIS only further demonstrates that USPS has, from the beginning of this decisionmaking process, committed itself to a course of action prior to the completion of any NEPA analysis. As explained, *see* Attach. 1 at 8, until the NEPA process has concluded, agencies are prohibited from taking any action "that would: (1) [h]ave an adverse environmental impact; or (2) [l]imit the choice of reasonable alternatives." 40 C.F.R. § 1506.1(a). Courts have construed such regulatory language "as requiring agencies to prepare NEPA documents, such as an . . . EIS, before any irreversible and irretrievable commitment of resources." *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9th Cir. 2000). In essence, courts ask whether the agency has made a decision and committed to the action. *See Sierra Club v. U.S. Dep't of Energy*, 825 F. Supp. 2d 142, 155 (D.D.C. 2011). Here, USPS has indisputably made a final decision and committed to its action prior to the conclusion of its NEPA review.

Hence, as UAW has explained, USPS's approach to NEPA has been result-oriented from the start, designed to reach a predetermined outcome—as made clear in the agency's already executed procurement order. However, the NEPA process cannot be used to rationalize or justify a decision already made by the agency. *See, e.g.*, 40 C.F.R. § 1502.2(g) (EISs "shall serve as the means of assessing the environmental impact of proposed agency actions, *rather than justifying decisions already made*."). A supplemental NEPA review of a decision already made does not cure this fatal defect. Here, it is plain from USPS's notice that its decisions—including the selected contractor and location for manufacturing NGDVs with hundreds of millions of federal dollars—are *already set in stone*, and nothing in the SEIS will reconsider or address those issues in any meaningful way. That is the textbook definition of using the SEIS process to rationalize decisions that the agency has already made, in patent violation of NEPA.

Finally, USPS's failure to examine the environmental, socioeconomic, and labor issues stemming directly from its action to procure NGDVs from a non-union contractor in a jurisdiction that is openly hostile to collective bargaining and worker rights, is particularly arbitrary and problematic under NEPA in light of the Biden Administration's own stated interest in, and prioritization of, worker rights and unionized labor in government contracting. For example, the Biden Administration has exercised its authority to promote the use of union labor in federal procurement and contracting, declaring it "the policy of [the] Administration to encourage worker organizing and collective bargaining." *See* E.O. 14025 (Apr. 26, 2021). President Biden also issued an executive order requiring agencies engaging in large-scale federal construction projects to require contractors and subcontractors to "negotiate or become a party to a project labor agreement with one or more appropriate labor organizations." *See* E.O. 14063 (Feb. 4, 2022). Accordingly, USPS's failure to analyze the impacts of its NGDV procurement contracting decision and alternatives that would better promote the government's own stated interests in union labor, collective bargaining, worker rights, and more sustainable environmental outcomes—let alone any mention of these Executive Orders and USPS's efforts to comply with those directives—violates NEPA, its implementing regulations, and the Administrative Procedure Act ("APA").

CONCLUSION

The Draft SEIS fails to satisfy USPS's obligations under NEPA. At a minimum, to comply with the statute, USPS must consider the impacts of and alternatives to procuring these new vehicles using American union labor versus other options, along with the consequent environmental, social, and economic impacts resulting from various options for production and procurement. In the absence of such an examination, USPS will commit the same legal errors with respect to these vehicles that it did for NGDVs and once again fail NEPA's hard look standard. The Draft SEIS must be significantly revised and recirculated with this expanded scope, and fully and meaningfully analyze all relevant issues that have been raised to the agency at the DEIS, FEIS, and SEIS stages.

COMMENTS OF THE ATTORNEYS GENERAL OF NEW YORK, CALIFORNIA, COLORADO, CONNECTICUT, DELAWARE, THE DISTRICT OF COLUMBIA, ILLINOIS, MAINE, MARYLAND, NEW JERSEY, OREGON, PENNSYLVANIA, RHODE ISLAND, VERMONT, WASHINGTON, THE CORPORATION COUNSEL OF THE CITY OF NEW YORK, AND THE DISTRICT COUNSEL OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

August 14, 2023

VIA ELECTRONIC MAIL

Mr. Davon Collins
Environmental Counsel
United States Postal Service
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Office 6606
Washington, DC 20260-6201
NEPA@usps.gov

Re: Draft Supplemental Environmental Impact Statement (SEIS) for Next Generation Delivery Vehicles (NGDV) Acquisitions (June 30, 2022)

Dear Mr. Collins:

The Attorneys General of New York, California, Connecticut, Colorado, Delaware, the District of Columbia, Illinois, Maine, Maryland, New Jersey, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, the Corporation Counsel of the City of New York, and the District Counsel of the Bay Area Air Quality Management District (collectively, States) submit these comments on the United States Postal Service's (USPS or Postal Service) June 30, 2023 Draft Supplemental Environmental Impact Statement for its Next Generation Delivery Vehicles Acquisitions program (Draft SEIS).[1] While the States support the Postal Service's progress towards acquiring a greater percentage of electric vehicles for its delivery fleet, we continue to object to (1) the Postal Service's commitment of resources before completing environmental review, and (2) its failure to consider a full range of reasonable alternatives as required by the National Environmental Policy Act (NEPA).

[1] 88 Fed. Reg. 42401 (June 30, 2023).

Both defects continue to mean that the Postal Service should pause its contract with Oshkosh Defense, LLC and stop any further vehicle orders until it completes the required environmental review. The review should appropriately consider higher percentages of electric vehicles than the 62 percent determination that the Postal Service announced in December 2022. The review should likewise consider and fully analyze updated legal requirements and information addressing the climate crisis.

Statutory and Regulatory Background

The Postal Service is required to explore and examine all reasonable alternatives pursuant to NEPA, regulations promulgated pursuant to NEPA, and the Postal Service's own regulations interpreting its NEPA obligations.

A. NEPA

The National Environmental Policy Act ("NEPA") "is our basic national charter for protection of the environment,"[2] with two fundamental purposes: (1) to guarantee that an agency takes a "hard look" at the consequences of its actions before the action occurs by ensuring that "the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts"; and (2) to ensure that "the relevant information will be made available to the larger audience that may also play a role in both the decision making process and the implementation of that decision."[3]

NEPA requires the preparation of an environmental impact statement (EIS) for any "major federal action significantly affecting the quality of the human environment."[4] In preparing the EIS, NEPA requires federal agencies to take a "hard look," which involves considering the direct, indirect, and cumulative impacts of their proposed actions.[5] When a proposed action has a potential adverse impact on minority or low-income populations, agencies must include an environmental justice analysis as part of this hard look.[6]

NEPA requires that federal agencies provide a "detailed statement" regarding the "alternatives to the proposed action."[7] Agencies must explore and evaluate all

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[2] 42 U.S.C. § 4321, *et seq.*; *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 734 (9th Cir. 2020).
[3] *Ctr. for Biological Diversity v. Bernhardt*, 982 F.3d 723, 734 (9th Cir. 2020). *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349-50 (1989).
[4] 42 U.S.C. § 4332(C).
[5] *Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 973 (9th Cir. 2002).
[6] *See* Exec. Order No. 12898, § 1-101 of Feb. 11, 1994; 59 Fed. Reg. 7629 (Feb. 16, 1994); *Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1330 (D.C. Cir. 2021) (reviewing challenge to agency's environmental justice analysis under NEPA).
[7] 42 U.S.C. § 4332(C)(iii). *California ex rel. Lockyer v. U.S. Dep't of Agric.,* 459 F. Supp.2d 874, 905 (N.D. Cal. 2006).

reasonable alternatives that relate to the purposes of the project and discuss the reasons for eliminating any alternatives from detailed study.[8] The existence of "a viable but unexamined alternative renders [an] environmental impact statement inadequate."[9]

NEPA requires accurate and current information, which the agency must disclose to the public. "[A]n agency may not rely on incorrect assumptions or data."[10] These "disclosure requirement[s] obligate the agency to make available to the public high quality information, including accurate scientific analysis, expert agency comments and public scrutiny, before decisions are made and actions are taken."[11]

NEPA prohibits an agency from committing resources to a particular course of action prior to completing its environmental review,[12] meaning the agency must "prepare NEPA documents … before any irreversible and irretrievable commitment of resources."[13] This "point of commitment" constituting an irreversible and irretrievable commitment of resources can occur when an agency "sign[s] the contract" with a project proponent "and then work[s] to effectuate the Agreement."[14]

B. Postal Service regulations: consideration of alternatives in an EIS "is vitally important."[15]

The Postal Service's specific NEPA procedures (39 C.F.R. Part 775) recognize its responsibilities to "[i]nterpret and administer applicable policies, regulations, and public laws of the United States in accordance with the policies set forth in [NEPA] and the NEPA Regulations."[16]

The same regulations stress that consideration of alternatives in an EIS "is vitally important"[17] and that its policy must "[e]mphasize environmental issues and alternatives in the consideration of proposed actions," to "identify and assess reasonable alternatives to proposed actions in order to avoid or minimize adverse

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[8] *See* 40 C.F.R. § 1502.14.
[9] *Muckleshoot Indian Tribe v. U.S. Forest Service,* 177 F.3d 800, 814 (9th Cir. 1999).
[10] *See* Exec. Order No. 12898, § 1-101, 59 Fed. Reg. 7629 (Feb. 16, 1994); *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005).
[11] *Ctr. for Bio. Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1167 (9th Cir. 2003).
[12] See 40 C.F.R. § 1502.2(f) ("Agencies shall not commit resources prejudicing selection of alternatives before making a final decision"). *See also id.* § 1506.1 (headed "Limitations on actions during NEPA process").
[13] *Metcalf v. Daley*, 214 F.3d 1135, 1143 (9th Cir. 2000).
[14] *Id.*
[15] 39 C.F.R. § 775.11(c)(5).
[16] *Id.* § 775.2(a).
[17] *Id.* § 775.11(c)(5).

impacts on the environment," and to "[u]se all practicable means to protect, restore, and enhance the quality of the human environment."[18]

Factual Background

The Draft SEIS analyzes the Postal Service's current plans for an evolving replacement program for its nationwide delivery vehicle fleet. Unfortunately, it continues the Postal Service's unlawful past practice of making decisions first and then analyzing only an unreasonably limited set of alternatives afterwards.

A. The Postal Service's Contract with Oshkosh and Subsequent NEPA Review

In February 2021, the Postal Service awarded a contract to Oshkosh to produce 50,000 to 165,000 Next Generation Delivery Vehicles (NGDV) and placed an order funding the production design, assembly tooling, and factory start-up costs. The Postal Service committed more than $480 million before completing environmental review. After making this commitment, the Postal Service began its environmental review, issuing a final environmental impact statement (Final EIS) in December 2021.[19] The Draft SEIS is intended to supplement this prior review.

The Final EIS received criticism from many sectors across the federal government, the States, environmental and health non-governmental organizations, and labor union stakeholders. Before the Postal Service issued its record of decision, the U.S. Environmental Protection Agency (EPA), Council on Environmental Quality, members of Congress, and citizens groups wrote letters to the Postal Service identifying serious flaws with its NEPA process.

In particular, EPA's letter identified numerous substantive flaws in the Final EIS and requested that the Postal Service address them in a supplemental EIS. EPA stated that (1) critical features of the Postal Service's contract with Oshkosh were not disclosed; (2) the Postal Service underestimated greenhouse gas emissions from internal combustion engine vehicles and overestimated those from battery electric vehicles; (3) the Postal Service did not disclose data and other essential information underlying total cost of ownership analysis that drove the Postal Service's decision-making; (4) the Postal Service failed to consider a single feasible alternative to the Proposed Action—particularly alternatives that are more environmentally protective; and (5) the Postal Service inadequately considered impacts on environmental justice communities.

The Postal Service nonetheless issued its record of decision (ROD) on February 23, 2022. The record of decision rejected EPA's call for supplemental analysis, but it did not adequately address the numerous flaws identified by EPA and others.

[18] *Id.* § 775.2(c), (e), (f).
[19] *See* 87 Fed. Reg. 994 (Jan. 7, 2022).

The Postal Service's Office of Inspector General issued a report on March 21, 2022, entitled "Electric Delivery Vehicles and the Postal Service."[20] The report found that electric vehicles are capable of meeting most of the Postal Service's needs, particularly on longer routes. The Inspector General projected that electric vehicles are likely to be more affordable to own than gasoline-powered vehicles in certain cases, even in the absence of any financial incentives. Just before issuing the report, the Inspector General received a congressional request to review the Postal Service's compliance with NEPA with respect to the vehicle acquisition program.

On April 5, 2022, the House Committee on Oversight and Reform held a hearing on the Postal Service's delivery fleet, where it heard testimony from representatives from the Postal Service, its Inspector General, and other stakeholders. The next day, the President signed the Postal Service Reform Act of 2022. This significant overhaul of the Postal Service's financial requirements for funding pension and medical benefits is projected to save the Postal Service billions of dollars over the coming decade.[21]

B. Litigation by States, Citizen Organizations and Unions

On April 28, 2022, the States and others filed suit in the United States District Court for the Northern District of California challenging the Postal Service's defective environmental review.[22] The States' complaint alleged that the Postal Service violated NEPA by (1) making "an irreversible and irretrievable commitment of resources" before completing the NEPA process by signing contracts with Oshkosh to procure vehicles six months before even releasing its draft environmental review, and a year prior to issuing the final environmental impact statement and record of decision; (2) failing to consider and evaluate reasonable alternatives to its action that would largely continue the status quo by replacing 90 percent of its fleet with fossil fuel-powered, internal combustion engine vehicles, evaluating only 10 percent electric and 100 percent electric vehicle options, while arbitrarily rejecting any consideration of vehicle fleets with a larger mix of electric vehicles; (3) failing to take a "hard look" at these alternatives, including air quality, environmental justice, and climate harms, by simply assuming that any upgrade to its vehicle fleet would have positive impacts on the environment; (4) failing to ensure the scientific integrity of its analysis by relying on unfounded assumptions regarding the costs and performance of electric

[20] *See* U.S. Postal Service, Office of Inspector General, Electric Delivery Vehicles and the Postal Service, Report No. RISC-WP-22-003 (Mar. 17, 2022) [hereinafter, IG Delivery Vehicles Report], *available at* https://www.uspsoig.gov/document/electric-delivery-vehicles-and-postal-service .

[21] *See* Congressional Budget Office, Estimated Budgetary Effects of Rules Committee Print 117-32 for H.R. 3076, the Postal Service Reform Act of 2022, as Posted on February 3, 2022, and as Amended by Amendment #1, the Manager's Amendment, as Posted on February 4, 2022 (Feb. 4, 2022) [hereinafter CBO Report], *available at* https://www.cbo.gov/system/files/2022-02/hr3076_rules.pdf .

[22] *See California v. U.S. Postal Serv.*, Civil Case No. 3:22-cv-02583-JD (N.D. Cal.).

vehicles, infrastructure, and gas prices, and refusing to identify the source of the data relied upon in the final environmental impact statement; and (5) failing to consider inconsistencies of its preferred alternative with the States' laws and policies to reduce fossil fuel consumption and to electrify the transportation sector.

This litigation was related to a similar action brought by a coalition of non-governmental organizations,[23] and these claims remain pending. Another coalition of organizations and unions filed suit in federal district court in New York.[24]

C. Legislative Developments

In early August 2022, Congress passed the Inflation Reduction Act. Section 70002 contains approximately $3 billion in funding for the Postal Service zero-emissions delivery vehicles and associated infrastructure. This legislation closed the purported gap in funding that the Postal Service identified in the Final EIS and record of decision between the cost of gas-powered replacement vehicles and an electric vehicle fleet.

D. Supplemental EIS Scoping Process

In the summer of 2022, the Postal Service announced that it would prepare a supplement to the Final EIS to examine acquiring (1) only up to 50,000 NGDV, 50 percent of which would be electric, and (2) up to 34,500 commercial vehicles, approximately 14,500 of which would be gas-powered.

The States filed scoping comments on August 15, 2022,[25] stating that (1) the Postal Service should pause its Oshkosh contract while supplemental review is completed, (2) the SEIS should assess a reasonable range of alternatives, including 80 percent and 95 percent electric alternatives, (3) the SEIS should account for significant increases in fuel costs in assessing the total cost of ownership, (4) the SEIS should include updated information on electric vehicle performance and infrastructure, (5) the SEIS must account for inconsistencies with approved state and local laws, policies and plans, (6) the SEIS should account for significant new information such as the Postal Service Reform Act of 2022 and the Inflation Reduction Act, the litigation over the final environmental impact statement and record of decision, and the Inspector General's March 2022 report and then-pending reports (subsequently issued in April 2023), and (7) the Postal Service should commit

[23] *CleanAirNow v. DeJoy*, Case No. 3:22-cv-02576-JD (N.D. Cal. filed Apr. 28, 2022).
[24] *NRDC v. DeJoy*, Case No. 1:22-cv-03442-AT (S.D.N.Y. filed Apr. 28, 2022).
[25] Comments of the Attorneys General of New York, California, Colorado, Connecticut, Delaware, the District of Columbia, Illinois, Maine, Maryland, Michigan, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, Corporation Counsel of the City of New York, and the District Counsel of the Bay Area Air Quality Management District (Aug. 15, 2022) [hereinafter AG Scoping Comments].

to 90 percent or more electric vehicles in its initial 5,000-vehicle order slated for production in 2023.

The States filed a supplemental scoping comment letter on February 2, 2023, urging the Postal Service to follow newly released guidance from the White House Council on Environmental Quality on assessing greenhouse gas emissions and climate change impacts in NEPA reviews.

E. Recent Announcements and April 2023 Inspector General Report

In December 2022, before releasing any supplemental NEPA analysis, the Postal Service announced it expected to acquire at least 66,000 electric vehicles as part of a 106,000-vehicle acquisition plan between 2022 and 2028.[26] The announcement further stated that acquisitions in 2026 and after were expected to be 100 percent electric. Two months later, the Postal Service awarded new contracts to purchase 9,250 commercial gas-powered vehicles, 9,250 commercial electric vehicles, and 14,000 electric vehicle charging stations.[27]

In April 2023, the Postal Service Office of Inspector General completed its report[28] examining compliance with NEPA in reviewing the delivery vehicles acquisition program. The report recommended that the supplement include an evaluation of more alternatives, update the total cost of ownership analysis, and update the assumptions underlying the environmental analysis to more fully reflect NGDV emissions.

F. The SEIS

The Postal Service issued the Draft SEIS in June 2023. It analyzes the environmental impacts of three scenarios for replacement of the Postal Service's delivery vehicles with approximately 106,480 vehicles over the next decade.

Under Alternative 1 (the Preferred Alternative), the Postal Service would purchase 106,480 vehicles in a mixed fleet of custom-built NGDVs from Oshkosh (75

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[26] U.S. Postal Service, Press Release, "USPS Intends To Deploy Over 66,000 Electric Vehicles by 2028, Making One of the Largest Electric Vehicle Fleets in the Nation" (Dec. 20, 2022), *available at* https://about.usps.com/newsroom/national-releases/2022/1220-usps-intends-to-deploy-over-66000-electric-vehicles-by-2028.htm .

[27] U.S. Postal Service, Press Release, "USPS Moves Forward with Awards to Modernize and Electrify the Nation's Largest Federal Fleet" (Feb. 28. 2023), *available at* https://about.usps.com/newsroom/national-releases/2023/0228-usps-moves-forward-with-awards-to-modernize-and-electrify-nations-largest-federal-fleet.htm .

[28] *See* U.S. Postal Service, Office of Inspector General, Next Generation Delivery Vehicles – Envtl. Impact Statement, Audit Report, Report No. 22-107-R23 (Apr. 6, 2023) [hereinafter Audit Report], *available at* https://www.uspsoig.gov/reports/audit-reports/next-generation-delivery-vehicles-environmental-impact-statement .

percent electric) and other commercially available vehicles, about 20,000 of which would be gas-powered. Overall, Alternative 1 would be 62 percent electric and would occur over six years.

Under Alternative 2, the Postal Service would purchase 106,480 vehicles over eight years. They would all be custom-built NGDV, and 62 percent would be electric.

The "No-Action" Alternative consists of the program selected in the Final EIS and record of decision: up to 165,000 vehicles purchased over ten years (including a subset of 106,480 purchased over eight years), with only a 10 percent electric commitment.

G. The States' Strong Interest in NEPA Review of the Postal Service's Action

The States have a strong interest in preventing the adverse environmental and public health impacts of fossil fuel development and combustion, including air quality degradation and public health harms associated with the use of fossil fuel-powered vehicles. The transportation sector accounts for a significant percentage of emissions of both criteria pollutants and greenhouse gases, and Postal Service facilities are often located within environmental justice communities who are exposed to disproportionate emissions from mail delivery vehicles.[29]

The States also have a strong interest in preventing and mitigating harms that climate change poses to human health and the environment, including increased heat-related deaths, damaged coastal areas, increased wildfire risk, disrupted ecosystems, more severe weather events, and longer and more frequent droughts.[30] The States have long been leaders in adopting laws and plans to reduce greenhouse gas emissions and slow the pace of climate change, including policies to promote electrification of the transportation sector. As a result, the States have strong interests in preventing adverse impacts to these state and local laws and policies—including adopted policies, targets, statutes, and regulations aimed at reducing greenhouse gas emissions and associated climate harms.

Finally, the States have a strong interest in the Postal Service's compliance with NEPA to provide timely and accurate information so commenters and residents can participate in public decision-making processes.

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[29] *See* First Amended Complaint, *California v. U.S. Postal Serv.*, Civil Case No. 3:22-cv-02583-JD, Doc. 79, ¶¶ 30-33 (N.D. Cal. filed Apr. 28, 2022).

[30] *See Massachusetts v. EPA*, 549 U.S. 497, 521 (2007).

Comments on the Draft SEIS

The States provide the following comments on the Draft SEIS:

1. The Postal Service should pause its unlawful contract with Oshkosh and make no further vehicle orders until it completes this supplemental NEPA review.

The Postal Service must complete its environmental review, including the SEIS and a revised record of decision, as appropriate, before committing resources to a particular course of action,[31] such as advancing work under a contract.[32] Otherwise, the Postal Service will prejudice its analysis of alternatives and commit resources before reviewing impacts of that commitment. NEPA's "disclosure requirement[s] obligate the agency to make available to the public high quality information, including accurate scientific analysis, expert agency comments and public scrutiny, before decisions are made and actions are taken."[33]

However, the Postal Service already executed an agreement with Oshkosh, and more recently, contracted for commercial electric vehicles, before completing this supplemental NEPA review. The Postal Service already committed $480 million of public resources to Oshkosh before its initial, insufficient NEPA review was finalized. Then, after issuing the Final EIS and record of decision, the Postal Service placed an order for Oshkosh to produce up to 50,000 vehicles beginning in August 2023. Even after announcing a supplemental environmental process and accepting scoping comments—and in the midst of multiple lawsuits challenging its initial NEPA review—the Postal Service announced new plans to acquire approximately 62 percent electric vehicles and 38 percent gas-powered vehicles. Two months later, the Postal Service executed contracts for vehicles and charging stations.

In short, the Postal Service continues to commit resources before completing NEPA review, despite having only a defective and insufficient initial process, and now just the draft of this SEIS. NEPA prohibits an agency from committing resources to a particular course of action prior to completing its environmental review.[34] The Postal Service should use the supplemental review process to actually comply with NEPA, not repeat its prior mistakes.

To avoid additional NEPA violations and ensure the SEIS fully informs the Postal Service's major purchasing decisions, the Postal Service should pause its Oshkosh contract, including its current 50,000-vehicle order, and its other more

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[31] *See* 40 C.F.R. § 1502.2(f) ("Agencies shall not commit resources prejudicing selection of alternatives before making a final decision"), *see also id.* § 1506.1 (headed "Limitations on actions during NEPA process").
[32] *Metcalf v. Daley*, 214 F.3d at 1143.
[33] *Ctr. for Bio. Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1167 (9th Cir. 2003).
[34] *See* 40 C.F.R. §§ 1502.2(f); 1506.1.

recent orders and contracts for commercial vehicles and charging stations, until completing the SEIS and issuing a revised record of decision. In addition, the Postal Service should make no more premature, unlawful commitments of resources and enter into no more contracts for vehicles and infrastructure until the supplemental process is completed. These pauses are critical because the Draft SEIS has identified new information but examined only an inadequate range of alternatives. The Postal Service must address numerous issues, detailed below.

2. The SEIS should be expanded to assess a reasonable range of alternatives for the entire vehicle acquisition program.

As stated above in Section F, the Draft SEIS analyzes only two action alternatives and a No-Action Alternative for the replacement of 106,480 Postal Service vehicles. Alternative 1 consists of a mixed fleet of NGDV and commercial vehicles, with a 62 percent battery electric vehicle commitment, to be delivered within six years. Alternative 2 commits to the same proportion of electric vehicles, and consists of NGDV only, with 62 percent battery electric vehicles, to be delivered within eight years. The No-Action Alternative maintains the Postal Service's decision from the 2022 NGDV Record of Decision, which consisted of the purchase of 50,000 to 165,000 NGDV over ten years, with a minimum of 10 percent battery electric vehicles.[35] The Draft SEIS does not consider any alternative with a vehicle mix containing more than 62 percent battery electric vehicles. Nor does it provide any explanation for the Postal Service's failure to consider other alternatives.

Under NEPA, the Postal Service must provide a "detailed statement" regarding the "alternatives to the proposed action."[36] The requirement to consider reasonable alternatives "lies at the heart of any NEPA analysis."[37] All reasonable alternatives "must be rigorously explored and objectively evaluated."[38] Moreover, as stated above, the failure to examine a viable alternative renders an environmental impact statement inadequate.[39]

In scoping comments for the Draft SEIS, the States requested that the Postal Service consider at least two additional alternatives—one consisting of at least 80 percent battery electric vehicles, and the other consisting of at least 95 percent

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[35] Draft SEIS, at iii.

[36] 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.14(a); 39 C.F.R. § 775.11(c)(5); *see also* 39 C.F.R. §§ 775.8(a)(4), 775.11(b)(2)(iv)-(v).

[37] *California ex rel. Lockyer v. U.S. Dept. of Agric.*, 459 F.Supp.2d 874, 905 (N.D. Cal. 2006); 40 C.F.R. § 1502.14.

[38] Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," Question 1a., 46 Fed. Reg. 18026, 18027 (1981).

[39] *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 814 (9th Cir. 1999) (agency failed to consider an adequate range of alternatives when it considered only a no action alternative along with two virtually identical action alternatives).

battery electric vehicles—for the entire vehicle acquisition program. The Draft SEIS, however, does not evaluate these proposed alternatives, and fails to explain why these alternatives are not viable. Instead, the Draft SEIS limits the alternatives considered to include a commitment only up to a maximum of 62 percent battery electric vehicles—a commitment that the Postal Service had already made months prior in its December 2022 announcement. The limited consideration of vehicle mix in the Draft SEIS represents a failure to evaluate a reasonable range of alternatives. In fact, in addition to ignoring the States' proposal to consider 80 percent and 95 percent battery electric alternatives, the Postal Service has provided no explanation why *any* percentage of battery electric vehicles greater than 62 percent is not feasible.[40] This is especially noteworthy because the Draft SEIS discloses that fewer than 10 percent of routes are longer than 70 miles, the range that the Postal Service currently uses as the limit for battery electric vehicles.[41] Based on this calculation, it should be feasible for at least 90 percent of the Postal Service's fleet to consist of battery electric vehicles.

In our scoping comments, we also urged the Postal Service to address recent legislative developments and their impact on the funding available for alternatives that would include a greater proportion of electric vehicles. In the record of decision, the Postal Service's selection of an only 10 percent battery electric vehicle alternative was based largely on the purported higher costs and alleged lack of funding for electric vehicles, identifying an approximately $2.3 billion need to achieve full electrification.[42] The SEIS should address the Postal Service's significantly changed financial situation due to the $3 billion in funding for electric vehicles and infrastructure provided by the Inflation Reduction Act of 2022 (HR 5376). The SEIS should assess the impact of this additional available funding on the Postal Service's ability to acquire more battery electric vehicles overall, and to do so more quickly.

The Draft SEIS, however, contains only a brief discussion of financial considerations without disclosing details on how available funding is to be allocated under each of the alternatives. The Draft SEIS states that its Preferred Alternative "fully leverages the recently appropriated Inflation Reduction Act funding for zero-emission vehicles and supporting infrastructure,"[43] but does not explain why "most of the electric vehicle funding would continue to come from Postal Service revenues," or why funding limitations would cap the electric vehicle commitment at 62 percent.[44] The Postal Service should disclose the available funding, and the amounts allocated

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[40] *Cf. State of California v. Block*, 690 F.2d 753, 768 (9th Cir. 1982) (nothing in the agency's decisional criteria required not considering an alternative that allocates more than 33 percent of lands to the wilderness category).

[41] Draft EIS, at 3-2. In the Final EIS, the Postal Service stated that only 5 percent of its routes would be unsuited to battery electric vehicles.

[42] *See* ROD, at 5.

[43] Draft SEIS, at ii.

[44] Draft SEIS, at 3-2.

under each alternative—including 80 percent and 95 percent battery electric vehicle alternatives—to gas-powered vehicles, battery electric vehicles, and electric vehicle infrastructure. Additionally, as discussed below, the Postal Service should disclose the total cost of ownership of battery electric and gas-powered vehicles.

In sum, the Draft SEIS is inadequate because of its failure to consider viable alternatives that would include more than 62 percent electric vehicles.

3. The SEIS comparison of alternatives should include cost comparisons for total cost of ownership, not just acquisition.

The Draft SEIS fails to consider the total cost of ownership of battery electric versus gas-powered vehicles by limiting its discussion of costs only to upfront acquisition costs. This is a departure from the Final EIS, which did consider a total cost of ownership analysis. The Draft SEIS does not clearly explain why it now declines to consider total cost of ownership: it briefly states that it changed its analysis to consider only upfront acquisition costs because of the Postal Service's improving financial condition and the provision of $3 billion from the Inflation Reduction Act. But the fact that significantly more funds are now available to the Postal Service should not change the cost comparison methodology.

Notably, the Postal Service's consideration only of acquisition costs likely has the effect of skewing the analysis in favor of gas-powered vehicles because of the higher upfront costs of battery electric vehicles.[45] In fact, electrifying the Postal Service's fleet would yield a net savings when the total cost of ownership is considered.[46] When considering the total cost of ownership, the Postal Service should take into account that, after the initial acquisition, due to lower fuel costs, electric vehicles can cost at least 13 percent less to operate as gas-powered vehicles.[47] Additionally, electric vehicles have lower maintenance costs because they have fewer moving parts, less abrasive braking options, and no need to change transmissions or other mechanical components.[48] All of these cost considerations make the ownership of electric vehicles more cost-effective than the Draft SEIS recognizes.

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[45] *See id.*

[46] See James Di Filippo, Nick Nigro, and Charles Satterfield, *Federal Fleet Electrification Assessment: A total cost of ownership analysis of federal fleet light vehicles and buses in 2025 and 2030*, Atlas Public Policy (August 2021), available at: https://atlaspolicy.com/wp-content/uploads/2021/09/Federal_Fleet_Electrification_Assessment.pdf .

[47] Lawrence Berkeley National Laboratory, *Why Regional and Long Haul Trucks Are Primed for Electrification Now*, 2022, available at: https://eta-publications.lbl.gov/sites/default/files/updated_5_final_ehdv_report_033121.pdf .

[48] North American Council for Freight Efficiency, *Electric Trucks Have Arrived: The Use Case for Vans and Step Vans*, 2022, available at: https://nacfe.org/wp-content/uploads/edd/2022/04/Vans-and-Step-Vans-Report-FINAL.pdf .

Under NEPA, the Postal Service must discuss each alternative considered "in detail, including the proposed action, so that reviewers may evaluate their comparative merits."[49] By considering and disclosing only the acquisition costs of electric versus gas-powered vehicles, the Postal Service fails to conduct a full analysis of the comparative merits of the vehicles, and thus shortcuts the required balancing of environmental values with economic and technical considerations.[50] The Postal Service's Final SEIS thus should include a total cost of ownership analysis.

4. The SEIS should include updated information on battery electric vehicle performance and infrastructure.

The Draft SEIS anticipates that changes in the Postal Service's operations and improved financial condition will support the acquisition of more battery electric vehicles.[51] NEPA requires accurate and current information, which the agency must disclose to the public. "[A]n agency may not rely on incorrect assumptions or data."[52] The Postal Service's analysis must take the "hard look" required by NEPA, by using current information on battery electric vehicles performance and infrastructure.

The Final EIS used older battery performance and cost data, but in this rapidly evolving area, current data are critical to making informed decisions. However, the Postal Service is still relying on a 70-miles-per-charge threshold to determine the suitability of different routes for electric vehicle service. The Draft SEIS bases this route length primarily on the Postal Service's vehicle testing, which appears to have been conducted sometime prior to issuance of the Final EIS more than 18 months ago. The Draft SEIS acknowledges that "[electric vehicle] range requirements will change over time as battery technology improves,"[53] but the Postal Service has not described any further testing of this range assumption.

As the States pointed out in scoping comments,[54] detailed information from the California Air Resources Board (CARB) provided cost data for comparable battery electric vehicles procured through state contracts in California at prices significantly lower than the figures the Postal Service used in its Final EIS.[55] The Draft SEIS does not appear to consider these other sources, nor update the mileage range offered by current battery technology, the costs of charging infrastructure, and the ratio and

[49] 40 C.F.R. § 1502.14(b).
[50] See 42 U.S.C. § 4332(B).
[51] Draft SEIS, at 3-2 to 3-3.
[52] *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005).
[53] Draft SEIS, at 3-2.
[54] AG Scoping Comments, at 7.
[55] *Id.* citing Cal. Air Resources Board, Letter to Jennifer Beiro-Reveille, U.S. Postal Serv., at 17-20 (Jul. 29, 2022).

number of chargers necessary to support a fleet at higher percentages of electrification.

Similarly, the Draft SEIS does not examine the ranges for battery electric vehicles used by other delivery companies such as FedEx and Amazon, which have both committed to significantly electrifying their delivery vehicle fleets. Comparisons to other delivery companies should examine both NGDVs and the commercially available vehicles proposed for purchase.

5. The Supplemental EIS must account for inconsistencies with approved state and local laws, policies, and plans.

The Postal Service's delivery fleet is the largest civilian public vehicle fleet in the country, with vehicles in every state and locality across the nation.[56] The NGDV Acquisitions program will therefore impact every state and local government's greenhouse gas requirements and initiatives, many of which have mandates or targets aimed at electrifying the transportation sector. NEPA regulations require that "[t]o better integrate environmental impact statements into State, Tribal, or local planning processes," an EIS "shall discuss any inconsistency of a proposed action with any approved State, Tribal, or local plan or law[,] and [w]here an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law."[57]

Certain locations will be particularly impacted, with the Postal Service identifying 414 "Candidate Sites" with an average of 100 vehicles. Of these, approximately 50 sites will have more than 200 vehicles.[58] However, neither the Final EIS nor the Draft SEIS addresses any state and local climate laws, regulations, policies or plans. The Draft SEIS specifically states that "[greenhouse gases] were analyzed on a national level . . . State regulations were not considered."[59] This significant omission violates NEPA and could impact States' efforts to address climate change.

In our scoping comments, the States identified adopted laws, regulations, policies, and plans that aim to reduce greenhouse gas emissions and fossil fuel consumption to mitigate the devastating consequences of global climate change. Many of these adopted measures are specifically designed to electrify the transportation sector. For example, California's laws and plans include: (1) California's statutory target of reducing greenhouse gas emissions by 40 percent below 1990 levels by 2030;[60] (2) the California Air Resources Board's plan to reduce fossil fuel consumption by 45 percent by 2030 to meet this target; (3) California's

[56] Draft SEIS, at 4-20.
[57] 40 C.F.R. § 1506.2(d).
[58] Draft SEIS, at 4-40.
[59] Draft SEIS, at 4-20.
[60] Cal. Health & Safety Code § 38566.

policies to phase out the sale of new conventional passenger cars and trucks by 2035 and achieve a 100 percent zero-emission in-use medium and heavy duty vehicle fleet by 2045;[61] (4) California's policy to achieve carbon neutrality by 2045;[62] and (5) the Advanced Clean Fleets regulation, as adopted by the California Air Resources Board, which will require that federal delivery fleets transition to 25% zero emissions vehicles by 2028, and 100% zero emissions vehicles by 2036.[63] Local plans often work with state-level ones to achieve these ambitious targets, such as the Bay Area Air Quality Management District's target that 90 percent of vehicles in the Bay Area should be zero emissions by 2050, with an interim target of 1.5 million such vehicles by 2030.

Other examples provided in our scoping comments, but which were not considered in the Draft SEIS include:

i. New York's Climate Leadership and Community Protection Act, which requires the state to reduce economy-wide greenhouse gas emissions 40 percent below 1990 levels by 2030 and at least 85 percent below 1990 levels by 2050.[64] The City of New York also has committed to reducing greenhouse gas emissions 80 percent below 2005 levels by 2050,[65] with numerous plans describing its path to achieving this goal, all of which call for increased electrification of the transportation sector.

ii. Connecticut must reduce the level of greenhouse gas emissions in the state by at least 45 percent below the 2001 level by 2030 and by at least 80 percent below the 2001 level by 2050.[66]

iii. Washington must reduce overall greenhouse gas emissions in the state by 45 percent below 1990 levels by 2030[67] and set a statewide target that all publicly and privately owned passenger and light duty vehicles of model year 2030 or later that are sold, purchased, or registered in Washington State be electric vehicles.[68]

iv. New Mexico has enacted an Energy Transition Act, which sets standards for electric utilities of 50 percent renewable energy by 2030, 80 percent by 2040, and zero-carbon resources by 2050.

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[61] Cal. Executive Order N-79-20.
[62] Cal. Executive Order B-55-18.
[63] Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/acf22/acffroa2.pdf .
[64] *See* N.Y. Envtl. Conserv. L. § 75-0107(1).
[65] *See* NYC Admin. Code § 24-803.
[66] Conn. Gen. Stat. § 22a-200a(a).
[67] Wash. Rev. Code § 70A.45.020(1)(a)(ii).
[68] S.B. 5974, 67th Leg., Reg. Sess. (Wash. 2022).

v. Pennsylvania has adopted a Climate Action Plan to comply with the governor's commitment to reach a 26 percent reduction in greenhouse gases by 2025 and an 80 percent reduction by 2050.[69]

vi. New Jersey's Global Warming Response Act requires the state to reduce greenhouse gas emissions from their 2006 levels by 80 percent by 2050.[70]

vii. Oregon has established a policy to reduce greenhouse gas emissions by 45 percent below 1990 levels by the year 2035, and 80 percent below by 2050, and has enacted a requirement that the state's electric utilities transition to 100 percent renewable energy by 2040.[71]

viii. Rhode Island's 2021 Act on Climate, *inter alia*, mandates greenhouse gas emission reductions to 45 percent below 1990 levels by 2030; 80 percent below 1990 levels by 2040, and to net-zero emissions by 2050.[72] As of 2026, there will be a statutory right to bring actions, including actions against the State and its agencies, for failure to comply with the 2021 Act on Climate.[73]

ix. Maryland's Climate Solutions Act of 2022 requires the State to reduce greenhouse gas emissions 60 percent below 2006 levels by 2031.[74]

The Draft SEIS takes no account of these approved state and local plans and laws. The SEIS should at least identify applicable state and local laws, and estimate numbers of its vehicles expected to operate in States with such laws, regulations, policies, and plans. In particular, many of these state and local plans have timing requirements—moving towards an increasingly electrified transportation sector by certain years. Although the Postal Service has sketched out a plan in Appendix C of the Draft SEIS for the years expected to complete its vehicle acquisitions, it should assess consistency of its alternatives with the timing of transportation sector electrification and overall greenhouse gas emissions reductions in affected state and local jurisdictions.

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[69] *See* Pa. Executive Order 2019-01, *available at* https://www.oa.pa.gov/Policies/eo/Documents/2019-01.pdf and https://www.dep.pa.gov/Citizens/climate/Pages/PA-Climate-Action-Plan.aspx

[70] N.J.S.A. 26:2C-37.

[71] Executive Order No. 20-04; Or. Rev. Stat. § 469A.410.

[72] *See* R.I. Gen Laws § 42-6.2-9.

[73] *See id.*

[74] Md. Code Ann., Env't § 2-1204.1.

6. The SEIS should address the consistency of its proposed alternatives with the Postal Service Inspector General's March 2022 and April 2023 reports.

In March 2022, U.S. Representatives Carolyn Maloney, Gerald Connolly, Stephen Lynch, Brenda Lawrence, and Jared Huffman requested a review of the U.S. Postal Service's Next Generation Delivery Vehicles – Environmental Impact Statement.[75] The Postal Service Office of the Inspector General reviewed the Final EIS and issued an Audit Report in April 2023 (Audit Report).[76] This Report noted areas of concerns with portions of the Postal Service's Final EIS that should be addressed in the SEIS. These included (1) an evaluation of more alternatives that are technically and economically feasible and meet the need for the proposed action; (2) updates to the total cost of ownership (TCO) analysis; and (3) updates to the emissions-related assumptions used.

A. The Postal Service did not evaluate sufficient technically and economically feasible alternatives as the Audit Report recommended because it did not evaluate alternatives with significant higher battery electric vehicle ratios.

The Audit Report identified the acquisition alternatives presented in the Final EIS as overly narrow.[77] The Audit Report recommends the SEIS include an evaluation of more alternatives that are technically and economically feasible and meet the purpose and need for the proposed action.[78] While the Draft SEIS evaluated additional technically and economically feasible alternatives, the Draft SEIS should be expanded to assess a reasonable range of alternatives. *See* Comment 2, above.

B. The Postal Service did not update the Total Cost of Ownership analysis as the Audit Report recommended.

In the Final EIS the Postal Service used a Total Cost of Ownership (TCO) model, incorporating purchase costs, maintenance costs, fuel costs and, if applicable, battery electric vehicle charging infrastructure costs, to evaluate proposals.[79] However, the TCO analysis in the Final EIS was deficient in several ways. It used a baseline nationwide gasoline price of $2.19/ gallon from October 12, 2020, and electricity price of $0.1089/kWh from July 2020 – data that was more than a year old

[75] Letter from Representatives Carolyn Maloney, Gerald Connolly, Stephen Lynch, Brenda Lawrence, and Jared Huffman to Tammy L. Whitman, Postal Service Inspector General (Mar. 14, 2022), *available at* https://huffman.house.gov/imo/media/doc/usps_ig_letter_314.2022.pdf

[76] Audit Report.

[77] *Id.* at 6.

[78] *Id.* at 7.

[79] *See* Final EIS, at 1-3.

when the FEIS was completed.[80] After issuing the Final EIS, the Postal Service conducted a sensitivity analysis using updated baseline nationwide prices, but concluded that these results did not change the overall investment cost differentials.[81] Subsequently, the Office of the Inspector General applied its own TCO model to explore how different route characteristics and other scenarios could affect the cost of electric delivery vehicle implementation.[82] As a result, the Audit Report recommends the Postal Service make efforts to include more current, long-standing baseline data in order to provide a more robust analysis.[83]

The Audit Report also recommended that the TCO in the SEIS account for regional delivery operational variances such as daily vehicle mileage, air conditioning usage, and gas and electricity fuel prices.[84] As the Audit Report points out, using more precise data for each of these elements would provide a more rigorous assessment. The TCO model in the Final EIS assumed an average daily vehicle mileage of 17.3 miles.[85] Given the significant diversity in route distances, using actual route mileage would provide more accurate analysis.[86] For example, it is reasonable to expect battery electric vehicles on longer routes to generate more fuel savings as compared to an internal combustion engine vehicle. The TCO model in the Final EIS assumed a national average air conditioning use of 60 percent on and 40 percent off in its fuel efficiency calculations for internal combustion engine vehicles.[87] However, a more geographic based weighting system that took into account regional annual average temperatures would provide a more accurate fuel efficiency considering the expected differences in air conditioning usage in colder and warmer regions.[88] Finally, the TCO model used in the Final EIS relied on national averages for gasoline and electricity fuel prices.[89]

However, instead of updating the TCO analysis as the Audit Report recommended, the Postal Service shifted the basis for its analysis to focus on the upfront acquisition costs (including both vehicle purchase and site charging infrastructure).[90] The Draft SEIS notes this shift in approach is a result of the Postal Service's improving financial condition and the provision of $3 billion from the Inflation Reduction Act to fund the purchase of zero-emission vehicles and the acquisition of necessary infrastructure at Postal Service facilities to support battery

[80] Final EIS, at Appendix B-158.
[81] Audit Report, at7.
[82] *Id.* at 8.
[83] *Id.*
[84] *Id.*
[85] Final EIS, at Appendix B-158.
[86] Audit Report, at 8.
[87] *See Id.*
[88] *Id.*
[89] Final EIS, at Appendix B-158.
[90] Draft SEIS, at 3-2.

electric vehicle adoption.[91] While these developments are encouraging, the shift between the Final EIS and the Draft SEIS in approach to analyzing relative costs of alternatives analyzed leaves a void on information. Simply evaluating the upfront acquisition costs undercounts significant differences between battery electric vehicles and internal combustion engine vehicles that should be evaluated. *See* Comment 3, above.

C. The Postal Service updated some emissions-related assumptions as the Audit Report recommended, but should update more.

The Audit Report identified various emissions-related assumptions in the Final EIS that should be updated, including:

- applying a single-county's emissions assumptions on a national scale;
- omitting starting and refueling emissions;
- using emissions profile that includes lower weight vehicles;
- failing to account for future emissions reductions and using outdated electricity generation mix;
- failing to appropriately model power sector emissions; and
- failing to include grid electrical losses.[92]

The Draft SEIS uses updated models to address some of the emissions-related assumptions highlighted by the Audit Report. For example, in order to capture emissions from starting and refueling, the Draft SEIS uses an updated Motor Vehicle Emissions Simulator (MOVES) model, which incorporates starting and refueling emissions for direct emissions.[93] Furthermore, to correct emissions-related assumptions related to upstream electricity generation, the Draft SEIS uses the Greenhouse Gases, Emissions, and Energy use in Technologies model (GREET2022).[94] By using GREET2022, the Draft SEIS better incorporates electricity generation emissions, upstream emissions of criteria pollutants, and grid electrical losses.

However, despite the Audit Report's recommendation to adjust the emissions analysis to include regional variation, it is unclear whether the Draft SEIS sufficiently addresses this recommendation. The Final EIS applied emissions assumptions for Westchester County, NY on a national scale.[95] Applying emissions assumptions of Westchester County nationwide does not account for regional variations in key emissions inputs, such as fuel formulation, drive cycles, and air

[91] *Id.*
[92] Audit Report, at 9-11.
[93] Draft SEIS, at 4-17, Appendix F-4.
[94] *Id.* at 4-16, 4-18, Appendix F-24.
[95] Final EIS, at Appendix F-6, 18, Appendix B-188.

conditioning usage.[96] Despite the insufficiency of this one value across the board approach, but seemingly seeking to respond to this recommendation, the Postal Service performed a "national-scale analysis" for the Draft SEIS.[97] However, applying a national average to all scenarios does no more to account for regional variations than applying a single county's emissions assumptions.

Finally, the Draft SEIS does not incorporate the Audit Report's recommendation regarding the classification of the NGDVs as "light commercial truck." This misclassification likely underestimates emissions from internal combustion engine NGDVs.[98] Although the regulatory class of "light duty vehicles" include vehicles weighing less than 10,000 pounds, as the NGDV are, the MOVES model further distinguishes light duty trucks by their federal emission control regulations.[99] Trucks with a gross vehicle weight rating less than 8,500 pounds are considered light duty, while trucks greater than 8,500 pounds are considered heavy duty. Even though the NGDV analyzed by the Postal Service weighed more than 8,500 pounds, the Draft SEIS classified them as "light commercial truck" in the MOVES model.[100] Given the gross vehicle weight ranges, the vehicles analyzed in the Draft SEIS should have been classified as "light-heavy duty" in the model. This more appropriate classification would have provided more accurate information to be analyzed.

7. The SEIS should address the Postal Service's announcement that it will purchase 100 percent electric vehicles after 2026.

The Postal Service's December 2022 announcement of the current 62 percent electric mix also stated an expectation that vehicle purchases in 2026 and later would be 100 percent electric. However, the SEIS does not address this announcement or examine it in the context of various alternatives.[101] The SEIS should clarify the Postal Service's commitments to its future purchasing plans.

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[96] Audit Report, at 9.
[97] Draft SEIS, at 4-16; Appendix F-4. Noting that this was recommended by EPA.
[98] *Id.* at Appendix F-4.
[99] *See* EPA, How Does MOVES Classify Light-Duty Trucks? https://www.epa.gov/moves/how-does-moves-classify-light-duty-trucks .
[100] Long-Life Vehicles and Delivery Personally Owned Vehicles were classified as passenger trucks.
[101] See inconsistencies in Draft SEIS, at Appendices C-1 and C-2. Specifically, Table C-1 in Appendix C shows a hypothetical plan for Alternative 1 that is consistent with only electric vehicle purchases beginning in 2026, but Tables C-2 for Alternative 2 shows purchases of gas-powered vehicles through 2030.

8. The SEIS's Environmental Justice Analysis should be strengthened to fully examine the impacts of each alternative and the differences between alternatives.

It is crucial for the Postal Service to strengthen it environmental justice analysis, especially considering that 349 of the 414 Candidate Sites for vehicle deployment are located in environmental justice communities.[102] First, the Environmental Justice Analysis in the Draft SEIS limits the impacts analysis to a one-mile buffer study area around "Candidate Sites."[103] The Draft SEIS summarily dismisses impacts beyond the buffer area as "negligible" because such emissions are "distributed along an entire route."[104] However, this conclusion ignores that the same impacts continue along the entire route, and many of these routes wind through the same or similar communities that are already heavily burdened by truck traffic-related impacts. Since this narrow geographic study area fails to properly examine the impacts of alternatives on environmental justice communities, the SEIS should evaluate the impacts of alternatives beyond the one-mile buffer study area.[105]

Second, the characterization of impacts on environmental justice communities as "negligible" fails to recognize the disproportionate air quality impacts that such communities already experience. It is well-established that residents of low-income neighborhoods and communities may already be more vulnerable to air pollution because of proximity to pollution sources such as factories, major roadways, and ports with diesel truck operations.[106] This can result in health effects such as asthma, reduced lung function, cardiovascular disease, and premature death. Children and the elderly are especially vulnerable to these health impacts.[107] Considering the disproportionate burden that environmental justice communities face, and the fact that any gas-powered vehicles deployed to these communities will be in use for decades, the Postal Service should evaluate the cumulative health impacts of its alternatives on these communities.

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[102] Draft SEIS, at Appendix D-4.
[103] Draft SEIS, at 4-39.
[104] Draft SEIS, at 4-41.
[105] The Draft SEIS also notes air quality effects on EJ communities nationwide beyond one mile of vehicle deployment sites are negligible. *See* Draft SEIS at 4-41.
[106] EPA, "EPA Research: Environmental Justice and Air Pollution," available at: https://www.epa.gov/ej-research/epa-research-environmental-justice-and-air-pollution ; *see also* Jbaily, et al., *Air pollution exposure disparities across U.S. population and income groups*, 601 NATURE 228 (Jan. 2022), https://doi.org/10.1038/s41586-021-04190-y ; Union of Concerned Scientists, "Inequitable Exposure to Air Pollution from Vehicles in California," (Feb. 2019), available at: https://www.ucsusa.org/sites/default/files/attach/2019/02/cv-air-pollution-CA-web.pdf .
[107] EPA, "EPA Research: Environmental Justice and Air Pollution," available at: https://www.epa.gov/ej-research/epa-research-environmental-justice-and-air-pollution .

Third, the Draft SEIS fails to disclose the communities in which the Candidate Sites[108] are located, making it all but impossible to properly evaluate the information provided in the Draft SEIS. Further, the Draft SEIS does not fully disclose the criteria for selecting Candidate Sites.[109] This contravenes a fundamental objective of NEPA, which requires that relevant information be made available to the public so that it may also play a role in the decision-making process.[110] The SEIS should provide additional information about the Candidate Sites, site selection process, and characteristics of the surrounding communities.

Finally, the Draft SEIS's analysis of environmental justice impacts combines its assessment of Alternatives 1 and 2, only noting that "emissions reductions would occur sooner under Alternative 1" as a result of an increased rate of battery electric vehicle deployment.[111] Although the alternatives analyzed are somewhat similar, the SEIS should examine the specific differences in impacts on environmental justice communities between the two alternatives.[112] This becomes particularly important when an expanded range of reasonable alternatives are assessed. *See* Comment 2, above.

Conclusion

The States appreciate the opportunity to comment on the Draft SEIS. We support more robust environmental analysis, but we have identified a number of areas to expand this NEPA review to address existing deficiencies in the Final EIS and record of decision and examine a full range of reasonable alternatives. Until the SEIS is complete and the shortcomings in the Final EIS and record of decision corrected, there should be no further actions for vehicle production under the existing NGDV contract or commercially available vehicle contracts that would lock in production of gas-powered vehicles. NEPA requires an agency to complete its analysis

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[108] Draft SEIS, at 4-38, fn 20 (stating the Candidate Sites are subject to change).
[109] Draft SEIS, at 3-4 (noting that Postal Service has not yet finalized which existing facilities would comprise the Candidate Sites, and stating only that Candidate Sites tend to be larger sites with numerous routes suitable for battery electric vehicles).
[110] *See Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349, 109 S.Ct. 1835, 104 L.Ed.2d 351 (1989).
[111] Draft SEIS, at 4-41.
[112] Environmental justice is defined by EPA as the "fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to development, implementation, and enforcement of environmental laws, regulations and policies." EPA, EPA-300-B-1-6004, EJ 2020 Action Agenda: The U.S. EPA's Environmental Justice Strategic Plan for 2016-2020, at 1 (Oct. 2016). For the purpose of this comment, the term "environmental justice community" refers to a community of color or community experiencing high rates of poverty that due to past and or current unfair and inequitable treatment is overburdened by environmental pollution, and the accompanying harms and risks from exposure to that pollution, because of past or current unfair treatment.

before taking an action, and the Postal Service must comply with this fundamental environmental protection.

Respectfully submitted,

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Re: NGO Comments on the U.S. Postal Service's Draft Supplemental Environmental Impact Statement for Next Generation Delivery Vehicle (NGDV) Acquisitions

Dear Mr. Collins:

The Natural Resources Defense Council (NRDC), Union of Concerned Scientists (UCS), Coltura, and the Zero Emission Transportation Association (ZETA) respectfully submit these comments in response to the United States Postal Service's ("Postal Service" or "USPS") Draft Supplemental Environmental Impact Statement (SEIS) for Next Generation Delivery Vehicle (NGDV) Acquisitions.

I. Introduction

A. Praise for Improvements

With more than 235,000 vehicles,[1] the Postal Service's delivery fleet is not only one of the largest in the world, but it has the potential to be among the most influential in delivering equitable progress towards cleaner air and a more stable climate. To date, the Postal Service has not lived up to its "Commitments to Environmental Excellence," but a fleet modernization plan that maximizes electrification would represent a significant step towards doing so.[2]

The Postal Service has made meaningful improvements to their overall fleet modernization plan since the publication of the Final Environmental Impact Statement (FEIS) for the NGDV in December 2021. Recognizing the value of a delivery fleet comprised mostly of battery-electric vehicles (BEVs) is a significant step towards reducing climate-warming emissions and air pollutants, as well as a more financially stable fleet. A clear commitment to maximize electrification would put our national postal fleet within reach of becoming an international leader in clean and efficient freight delivery. As countries around the world move rapidly towards an electric transportation future, leveraging the Postal Service's purchasing power to acquire

[1] USPS operates more than 235,00 vehicles in the United States. See United States Postal Service, Postal Facts. Available at: https://facts.usps.com/postal-service-has-more-than-200000-vehicles/#:~:text=The%20Postal%20Service%20has%20more,civilian%20fleets%20in%20the%20world

[2] "United States Postal Service Committment to Envionmental Excellence." United States Postal Service. January 2022. https://about.usps.com/what/corporate-social-responsibility/sustainability/report/2022/usps-annual-sustainability-report.pdf

greater numbers of BEVs than those projected in the draft SEIS would promote American economic competitiveness and help ensure the United States remains at the forefront of this global transition.

Additionally, we are pleased that the Postal Service understands that replacing its aging and polluting delivery fleet will have implications for the communities most impacted by air pollution from transportation. Where the previous analysis stated four separate times that fleet modernization would "result in no to negligible impact" on environmental justice, this draft SEIS included a more genuine attempt to understand potential outcomes.[3] This information presents the Postal Service with an opportunity to deliver equitable change and should be used in determining how fleet modernization can be a vehicle for reducing negative health burdens on our most disadvantaged neighbors.

B. Statement of Principles

Need to Maximize Emissions Reductions

Despite the above improvements, the draft SEIS still includes fundamental flaws in its assumptions, data inputs, and analytics that result in an arbitrary ceiling for fleet electrification feasibility and economics. We believe that a more holistic analysis supported by reasonable assumptions and credible economic and technological data inputs may present a stronger case for further electrification. While it is understandable that the Postal Service may require combustion-powered delivery vehicles for niche routes in the short-term, reaching the fleet's maximum feasible electrification potential of 90 percent will reduce ongoing expenditures, contributions to climate change, and negative air quality impacts. Furthermore, the ubiquitous nature of zero-emission Postal Service delivery vehicles across the country would serve as a testament to the Postal Service's innovation and leadership while visually reaffirming to consumers considering their own purchasing decisions that BEVs can meet their personal transportation needs.

We are glad to see that around 85 percent of Candidate Sites slated for focused BEV deployment were located in communities experiencing environmental injustices.[4] However, we believe the Postal Service would better meet its stated goal to fulfill the spirit of the Federal Government's commitments to equitably address air pollution by clearly committing to prioritize near-term BEV deployment at facilities responsible for highest fuel consumption in the most impacted neighborhoods in the Final SEIS. Accelerated replacement of older delivery vehicles stationed in and serving these communities would not only help to reduce exposure to harmful air pollution faster, but could be a catalyst for community co-benefits such as electricity grid improvements. We understand that some flexibility may be required to ensure the successful rollout of this momentous transition, however the significant level of influence wielded by this

[3] Final Environmental Impact Statement for Purchase of Next Generation Delivery Vehicles." United States Postal Service. December 2021. https://uspsngdveis.com/documents/USPS+NGDV+FEIS_Dec+2021.pdf
[4] USPS Draft SEIS, Table 4-11.2

action warrants close attention to ensure equitable, meaningful, and lasting benefits for disadvantaged communities.

Focusing BEV NGDV deployment at facilities and on routes responsible for the highest fleet vehicle miles traveled (VMT) and fossil fuel use will ensure both maximum reductions in air and climate-warming pollution as well as accelerated recuperation of capital expenditures for BEVs and related infrastructure. While we assume that the Postal Service's stated preference for focusing BEV NGDV deployment at "Candidate Sites" may result in maximum fossil fuel displacement, this was not made clear in SEIS. We recommend that the Postal Service rely on historic auditing data of VMT and fuel use, such as those gathered in the Automated Vehicle Utilization System, to best determine where BEV deployment can maximize fossil fuel displacement. Additionally, we request that these data be publicly available and easily accessed online.

At the highest level, fleet modernization must focus on reducing fossil fuel use as much as possible across the entire fleet –for delivery, distribution, and service vehicles. Although this draft SEIS pertains only to the delivery fleet, the Postal Service could affect long-term economic and administrative efficiencies by acting on this initial fleet modernization action as a first step towards overall fleet electrification. A number of recent studies suggest that most classes of electric heavy-duty vehicles will reach both upfront and total-cost parity with their combustion counterparts within a decade.[5] Actions taken today to prepare for zero-emission vehicles fleetwide will put the Postal Service in a better place to benefit from an accelerated transition.

Additionally, the Postal Service should strive to electrify promptly the facilities and routes using the most gasoline and prepare for electrification of all feasible routes. The market for zero-emission commercial vehicles is expanding rapidly with availability up around 30 percent in the past three model years.[6] Where certain routes may not be suitable for electrification today, they likely will be in the near future as new models of varying capabilities and ranges come to market.

Need to Ensure Successful Rollout and Long-Term Operations

Equally vital to strengthening the Postal Service's commitment to fleet electrification is ensuring the successful rollout and sustainable long-term operation of the modern postal fleet. The Postal Service must take appropriate steps now to ensure that the BEV delivery fleet remains successfully operational for its full useful life. This will maximize fleetwide emissions reduction potential. Given they emit zero tailpipe emissions, the environmental benefits from electric vehicles are compounded the longer they are in operation. Furthermore, as the electricity grid continues to decarbonize, BEV operations become even cleaner.

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[5] See "Analyzing the Impact of the Inflation Reduction ACt on Electric Vehicle Uptake in the United States," *The International Council on Clean Transportation*, January 2023, https://theicct.org/wp-content/uploads/2022/01/cost-ev-vans-pickups-us-2040-jan22.pdf

[6] Zero-Emission Technology Inventory website. CALSTART. https://globaldrivetozero.org/tools/zeti/

While the expanded electrification signaled in the draft SEIS is a positive signal, the plan includes other assumptions that not only serve to limit electrification potential, but may also hinder long-term success. For example, pursuing Nickel Manganese Cobalt (NMC) battery chemistry under the assumption that each vehicle will need to fully charge each night will lead to accelerated range and performance degradation. A Lithium Iron Phosphate (LFP) battery chemistry for the BEV NGDVs, a more strategic charging plan, and a diversified charging infrastructure would lead to reduced upfront and long-term expenditures as well as a more durable and adaptive fleet over the long term. A reconsideration of these plans and actions would also allow the Postal Service to expand BEVs within the fleet and accelerate their deployment.

We agree with the Postal Service's stated plan to concentrate the initial deployment of the BEV delivery fleet at larger postal facilities. Although the Postal Service has experimented with electric vehicles throughout its history, this is the first planned mass-deployment of this technology. Concentrating BEV deployment will provide several economic, operational, and administrative benefits to the Postal Service.

First and perhaps most obviously, concentrating BEVs at the largest facilities would allow the Postal Service to take advantage of economies of scale when purchasing and installing EVSE and upgrading maintenance bays for the new fleet. Similarly, it would require reduced planning and project management for grid interconnection requests and related permits as opposed to a wide dispersal of the initial BEV fleet. Finally, it would also enable the Postal Service to better target training for drivers and mechanics slated to work with the BEV fleet. Each of these may serve to accelerate BEV deployment.

Need to Maximize Co-Benefits

This multi-year, multi-billion-dollar modernization effort presents the Postal Service with a unique opportunity to drive positive change throughout our economy. Although the primary mission of the Postal Service is to provide our nation with reliable, affordable, and universal mail service, the impacts and legacy of the Postal Service reach even further. This endeavor is occurring at the onset of a worldwide shift towards zero-emission transportation and well-placed, strategic investments by any government agency or large enterprise could serve as a catalyst for greater good.

The Postal Service's transition to zero-emission vehicles will have implications well beyond the delivery and logistics fleets. Any significant fleet deployment of electric delivery vehicles in a concentrated area will help to jumpstart the grid and infrastructure work needed to usher in further ZEV deployment. That is to say that Postal Service electrification could be a catalyst for the larger transition for delivery and commercial fleets. During planning, construction, and deployment for the BEV delivery fleet, the Postal Service should coordinate with businesses and facilities adjacent to Candidate Sites that may also be interested in electrification. Doing so may create additional efficiencies in permitting and planning.

While preparing postal facilities for electric delivery vehicles, the Postal Service should take the opportunity wherever possible to plan and execute the installation of public-facing EV fast-chargers for postal customers. Such a service would generate additional revenue for the Postal Service while expanding access to charging nationwide given the Postal Service's locational footprint in nearly every community in the United States. This would be particularly helpful at rural Post Offices and those in urban areas with parking lots – two areas that often lack public charging opportunities.

With well over 100,000 vehicles slated to be manufactured under this plan, the Postal Service should be mindful of the direct and indirect impacts on workers and jobs associated with NGDV manufacturing and facility updates including EVSE installation. The Postal Service has a unique opportunity to ensure that the federal funding received for its electrification efforts is fully leveraged to invest in communities and create high-quality jobs.

Need to Align with the Agency's Annual Sustainability Report Commitments

Additionally, maximizing the number of BEVs in the Postal Service's fleet is not only essential but also aligns with the agency's commitment to sustainability and environmental responsibility, which was laid out in the agency's 2022 Annual Sustainability Report[7] and reiterated in a memorandum from Postmaster General Louis DeJoy.[8] Some of these principles are explored throughout this section.

Principle 1: Environmental Management and Compliance

The Postal Service states that it is committed to meeting or exceeding compliance with all applicable environmental laws and regulations but the fact still stands that the agency is moving forward with a contract that was awarded prior to the National Environmental Policy Act (NEPA) process. Additionally, the agency is still not fully transparent about certain economic assumptions and several deficiencies exist related to the assumptions disclosed, and the agency also fails to consider feasible alternatives to the proposed action that would exceed electrification levels greater than 62 percent for the next fleet purchase – a number that is seemingly arbitrarily set given that the Office of the Postal Service Inspector General asserts that greater electrification levels are not only feasible, but beneficial to the agency's long-term delivery needs.[9]

The agency's sustainability report also states that integrating "pollution prevention, waste and energy reduction, recycling, and reuse of materials" into Postal Service operations is a priority.

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[7] 2022 Annual Sustainability Report. U.S. Postal Service, 2022. https://about.usps.com/what/corporate-social-responsibility/sustainability/report/2022/usps-annual-sustainability-report.pdf

[8] "United States Postal Service Commitment to Environmental Excellence." U.S. Postal Service, January 2022. https://about.usps.com/what/corporate-social-responsibility/sustainability/pdf/usps-commitment-to-evironmental-excellence-202201.pdf

[9] Office of Inspector General, USPS. Audit Report: Delivery Vehicle Acquisition Strategy, August 2020. Available at: https://www.uspsoig.gov/sites/default/files/reports/2023-01/RISC-WP-22-003.pdf

Increasing the percentage of the fleet that is electrified is certainly one key way the agency can deliver upon this particular sustainability pledge, since BEVs are a cleaner alternative to combustion engine vehicles. Additionally, unlike gasoline or other fossil fuels which can only be used once and emit harmful pollutants upon combustion, the critical minerals used in EV batteries can be recycled and reused, extending their lifecycle and minimizing waste.

The Postal Service claims that "[s]pent lithium-ion BEV batteries would be an additional source of hazardous waste for the BEV procurement scenarios. Recycling methods in the U.S. are currently limited and vary in recovery capabilities, although the recently signed IRA includes specific funding programs for development of facilities to recycle critical materials."[10] Electric vehicle batteries are classified as hazardous waste according to EPA and DOT, but they can be safely recycled to recover 95 percent of critical minerals for reuse in new batteries today at commercial-scale hydrometallurgical recyclers, such as Redwood Materials and Li-Cycle.[11] In addition, direct cathode recycling, which can recover a cathode without breaking it down into separate materials, is under development by several startups like Princeton NuEnergy as well as the National Lab research group, ReCell.[12] More funding was made available through the Bipartisan Infrastructure Law for advanced recycling research.[13] By the time the BEVs procured by the Postal Service begin to retire, recycling methods will be even more advanced and scaled to recycle old batteries with maximum material recovery and minimum impact. Even so, the infrastructure exists today in the U.S. to ensure old batteries are handled safely and recycled efficiently so that their materials can be reused.

Additionally, as BEVs age, their emissions will decline further as they plug into an increasingly clean electric system. For example, the U.S. Energy Information Administration's short term energy outlook forecasts increasing percentages of electricity generation coming from renewable sources, mainly due to increasing solar capacity expansions.[14] In contrast, emissions from any combustion engine vehicles procured by the agency will grow as their emission control systems degrade and deteriorate over time.

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[10] Draft EIS, 4-36

[11] Redwood Materials, Recycling, Refining, and Remanufacturing Battery Materials for a Clean Energy Future, Redwood Materials, https://www.redwoodmaterials.com/solutions/
Li-Cycle, Full-Service Solution for Recycling Lithium-ion Batteries, https://li-cycle.com/services/#closed-loop-battery-resource-recovery

[12] "DOE Invests $2 Million to Advance Li-Ion Battery Recycling and Remanufacturing Technologies." Advanced Materials & Manufacturing Technologies Office, June 7, 2023. https://www.energy.gov/eere/ammto/articles/doe-invests-2-million-advance-li-ion-battery-recycling-and-remanufacturing

[13] "Biden-Harris Administration Announces $192 Million to Advance Battery Recycling Technology," Department of Energy, June 12, 2023. https://www.energy.gov/articles/biden-harris-administration-announces-192-million-advance-battery-recycling-technology

[14] "Short-Term Energy Outlook." U.S. Energy Information Administration (EIA), August 9, 2022. https://www.eia.gov/outlooks/steo/report/electricity.php

Principle 2: Leading by Example on Environmental Excellence and Stewardship

Another principle in the agency's sustainability report is to lead by example on environmental excellence and stewardship among federal entities. One key way the Postal Service can do this is to fully leverage its funds for electrification and the agency's funds for fleet replacement to maximize the percentage of the fleet that is electrified by purchasing an increased percentage of BEVs. Given the incredibly large size of the agency's fleet, the Postal Service having an increased commitment to fleet electrification can drive significant change in the national transportation landscape too. For example, larger-scale procurement of EVs can drive changes in market conditions to create a more robust market for these vehicles. Additionally, doing so further incentivizes manufacturers to invest in BEV production, research, and development – which hits on another of the agency's sustainability principles to invest in new vehicles and technology that champion sustainable and environmentally focused solutions, like BEVs.

C. Legal Requirements Under NEPA

The National Environmental Policy Act (NEPA) announced "the continuing policy of the Federal Government . . . to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans."[15] The law's "twin aims" are to require agencies to "consider every significant aspect of the environmental impact of a proposed action" and to inform the public of these environmental impacts.[16] Agencies must comply with NEPA by producing, for any "major Federal action[] significantly affecting the quality of the human environment," a "detailed statement" concerning the "environmental effects of the proposed agency action."[17]

The purpose of such an environmental impact statement "is to ensure agencies consider the environmental impacts of their actions in decision making."[18] It must include a "detailed statement" of environmental impacts of the proposed action, alternatives to the proposed action, adverse environmental impacts that cannot be avoided should the proposal be implemented, and any irretrievable commitments of resources.[19] The EIS must "present the environmental impacts of the proposed action and the alternatives."[20] The agency must "[e]valuate reasonable alternatives to the proposed action," "briefly discuss the reasons for [the] elimination" of any alternatives eliminated from detailed study, and "[d]iscuss each alternative considered in detail, including the proposed action, so that reviewers may evaluate their comparative merits."[21] The EIS must include an analysis of "environmental consequences" that "forms the scientific and

[15] 42 U.S.C. § 4331(a).
[16] *Balt. Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 97 (1983) (quotation marks omitted).
[17] 42 U.S.C. § 4332(2)(C).
[18] 40 C.F.R. § 1502.1.
[19] *See* 42 U.S.C. § 4332(2)(C).
[20] *Id*. § 1502.14.
[21] *Id.*

analytic basis for the comparisons" for the alternatives analysis.[22] In preparing this analysis, agencies must "use . . . reliable existing data and resources" and "identify any methodologies used and shall make explicit reference to the scientific and other sources relied upon for conclusions in the statement."[23]

The Postal Service has promulgated regulations implementing NEPA.[24] Those regulations declare that the alternatives analysis is "vitally important."[25] The alternatives and their impacts should be "presented in comparative form, thus sharply defining the issues and providing a clear basis for choosing alternatives."[26] To compare alternatives, the EIS "must" "[e]xplore and evaluate all reasonable alternatives, including the 'no action' alternative, and briefly discuss the reasons for eliminating any alternatives" and "[d]evote substantial treatment to each alternative considered in detail, including the proposed action, so that reviewers may evaluate their comparative merits."[27]

II. Electric Vehicles Must be Maximized in the Postal Service's Fleet

A. Electric Vehicle Market Growth Through 2026

Although the Postal Service has committed to 100 percent BEV acquisitions after 2026, the SEIS focuses on the challenges of near-term electrification. As such, in order to assess the feasibility of a more rapid Postal Service transition to an all-BEV fleet, it is critical to first review the projected growth in vehicle model availability and the domestic capacity to manufacture such vehicles. The United States is in the midst of a domestic manufacturing renaissance due in part to BEV incentives in the Inflation Reduction Act (IRA) and the Bipartisan Infrastructure Law (BIL).

Research from the Environmental Defense Fund (EDF) illustrates the rapid growth in BEV manufacturing capacity over the next three years. EDF found that because of the IRA and BIL investments and Jobs Act, electric vehicle manufacturing capacity through 2026 will expand substantially. Figure II. A-1 below demonstrates that by 2026, 4.3 million BEVs are projected to be produced before the time of the Postal Service's commitment to 100 percent BEV acquisitions. For reference, that equals about one-third of all new vehicles sold in the U.S. in 2022.[28]

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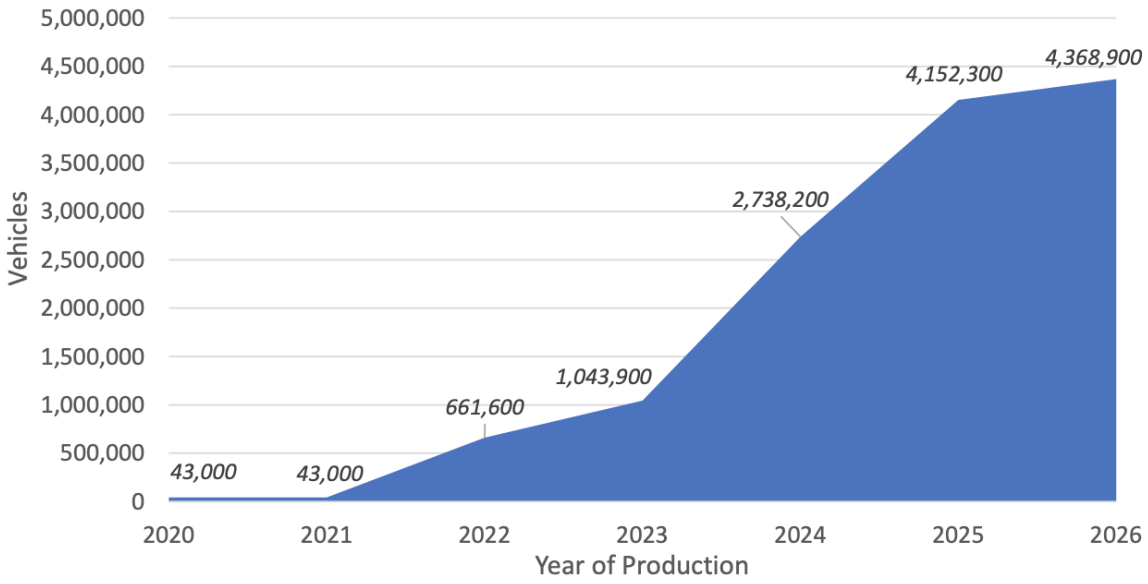
[22] *Id*. § 1502.16(a).
[23] *Id*. § 1502.23.
[24] *See* 39 C.F.R. pt. 775.
[25] *Id*. § 775.11(c)(5).
[26] *Id*.
[27] *Id*. § 775.11(c)(5)(i)-(ii).
[28] "Report Finds Investments in U.S. Electric Vehicle Manufacturing Reach $120 Billion, Create 143,000 New Jobs," Environmental Defense Fund, (March 14, 2023) https://www.edf.org/media/report-finds-investments-us-electric-vehicle-manufacturing-reach-120-billion-create-143000

Figure II. A-1. Estimated BEV Manufacturing Capacity Following Passage of the IRA and BIL 2020-2026.[29]



With ambitious electrification goals, OEMs are investing heavily in domestic BEV manufacturing. BEVs are already being produced domestically. In the first quarter of 2023, American factories produced 39 percent more BEVs than the same period the year before.[30] The Postal Service's argument that near-term electrification is infeasible does not reflect the impending market reality of BEV production through 2026.

As referenced previously, the market for zero-emission commercial vehicles is expanding rapidly with availability up around 30 percent in the past three model years.[31] Globally, the most robust model-availability growth comes from zero-emission cargo vans and heavy-duty trucks, growing 56 percent and 87 percent year-over-year respectively between 2021 and 2022.[32] Today there are at least fourteen heavy-duty Class 7 and Class 8 electric trucks and an additional eight electric heavy-duty yard tractors on the market in the U.S. Complimentary state and federal policies that drive emissions reductions, incentives from the BIL and IRA, and acceleration of corporate sustainability commitments can be expected to drive rapid, continued growth in new model availability over the 2024-2026 time frame including models that meet the diverse needs of the Postal Service fleet.

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[29]"Report Finds Investments in U.S. Electric Vehicle Manufacturing Reach $120 Billion, Create 143,000 New Jobs," Environmental Defense Fund, (March 14, 2023) https://www.edf.org/media/report-finds-investments-us-electric-vehicle-manufacturing-reach-120-billion-create-143000

[30] "Five New EV Models Drive Up North American Factory Production," Bloomberg, (May 10, 2023) https://www.bloomberg.com/news/articles/2023-05-10/five-new-ev-models-drive-up-north-american-factory-production#xj4y7vzkg

[31] *Id.* at footnote 5

[32] CALSTART. *"Zeroing in on Electric School Buses."* (October 2022) Retrieved from: https://globaldrivetozero.org/site/wp-content/uploads/2022/10/ZE_TruckBus_update.pdf

B. The Postal Service's Minimum Electrification Commitment Must be Greater

The Postal Service manages one of the largest civilian fleets in the world and the agency's fleet has a use case that is well suited to electrification, since these vehicles drive predictable distances and regularly return to central depots for long period of time where they can recharge. Accordingly, maximizing the number of BEVs in the Postal Service's fleet can provide significant benefits for public health and the environment, in addition to delivering significant cost savings for the agency's budget. Failure to do this will lock in decades of fossil fuel vehicles operating in communities across the nation, resulting in higher maintenance and fuel costs, worse air quality, and increased climate impacts.

The Postal Service Must Consider Alternatives Greater than It Proposed

While it is a positive start that the agency is considering electrification commitments of 62 percent – after only a 10 percent minimum BEV commitment in the original Record of Decision and then a 50 percent minimum BEV commitment in last year's SEIS Notice of Intent – the Postal Service Inspector General's report estimates that BEVs have sufficient range for over 90 percent of Postal Service delivery routes. Additionally, the Postal Service noted in the draft SEIS that around 90 percent of all routes could be serviced by electric vehicles. The agency's procurement plans should better reflect these levels of electrification.

In the draft SEIS, the Postal Services suggests several reasons for not choosing a 100 percent electrification alternative, however, they do not make a reasonable case for not analyzing a 90 percent zero-emitting fleet or an alternative that more accurately reflects a scenario that maximizes electric delivery vehicle deployment. Given the Postal Service's claim of route feasibility, the significant lifetime savings afforded by BEV delivery vehicles, and the nearly five-fold increase in North American electric vehicle battery manufacturing currently planned by 2025, we believe that such an alternative is decidedly appropriate for analysis.[33]

A comprehensive environmental analysis by the agency would have analyzed this alternative, and the agency's failure to do this more comprehensive review is disappointing and allows for a final procurement scenario that leaves additional cost savings and environmental benefits on the table. As such, it is important that the Postal Service include such an analysis in their final SEIS.

The agency also evaluates a "no action" alternative, which would involve proceeding with the existing procurement plan under the agency's Record of Decision. This "no action" alternative should not even be considered, as the agency has demonstrated in the draft SEIS that going with this alternative would be insufficient.

[33] "Assessment of Light-duty Plug-in Electric Vehicles in the United States, 2010-2021," *Argonne National Laboratory*, November 2022, https://publications.anl.gov/anlpubs/2022/11/178584.pdf

The Draft SEIS Shows the Postal Service Can Afford a Minimum Commitment of 82% BEVs

The draft SEIS includes a vehicle purchasing schedule for two alternatives that involves a reduction in the total number of vehicles proposed for purchase to a mix of 106,480 NGDV and commercial off the shelf (COTS) vehicles and results in a minimum commitment of 62 percent of these vehicles being BEVs over a period of six to eight years.

One additional alternative the agency should consider would be to combine the purchasing schedules from the two alternatives in such a way that the overall BEV percentage is increased without exceeding the number of EVs available from any one source and maintaining a faster replacement schedule than Alternative 2. Doing so would not require the production of any additional BEVs beyond what is already projected to be possible in the agency's draft SEIS.

This combined alternative (Table II. B-1) would be comprised of the left hand drive (LHD) COTS BEV purchase schedule from Alternative 1[34] and the BEV NGDV purchase schedule from Alternative 2[35] and would result in 21,230 more vehicles being electrified, raising the minimum BEV commitment from 62 percent to 82 percent.

Table II. B-1. Combined Alternative Hypothetical Purchase Plan (82% EVs)

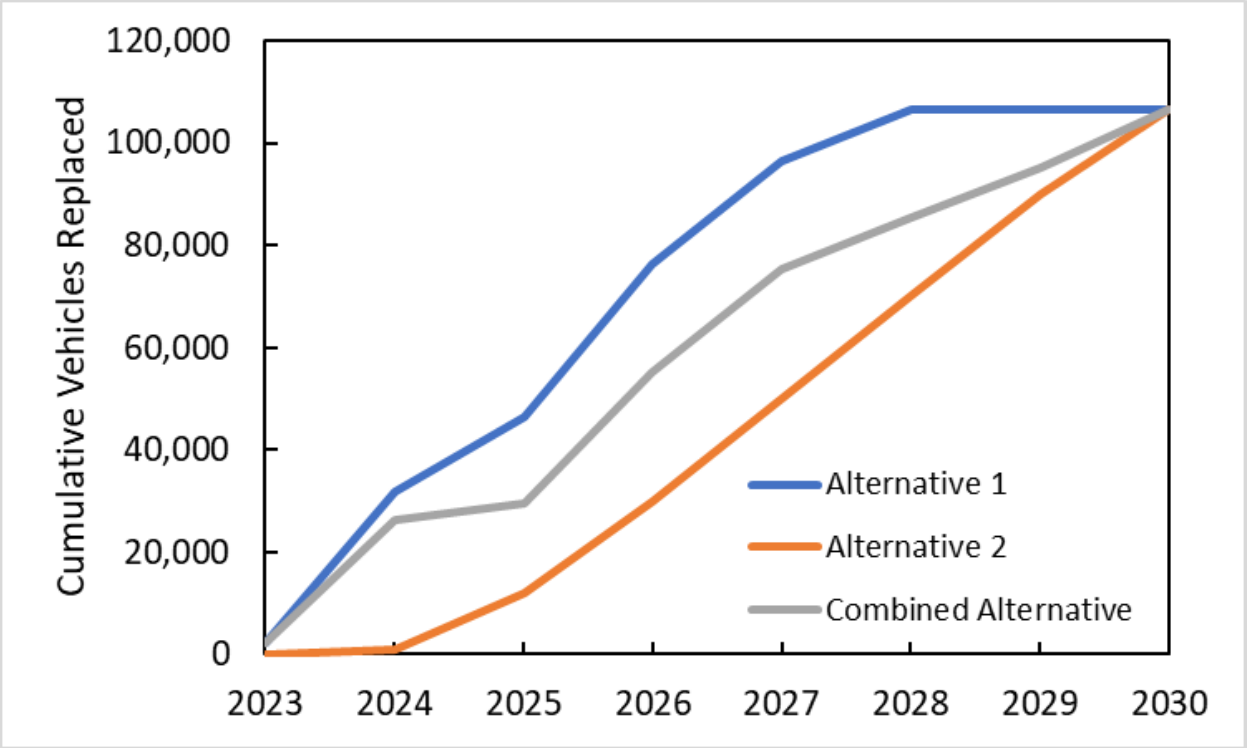
		BEV NGDV	ICEV NGDV	RHD COTS ICEV	LHD COTS ICEV	LHD COTS BEV	Total Vehicles Replaced	Cumulative Replaced
Year 1	2023	0	0	2,433	0	0	2,433	2,433
Year 2	2024	76	1,011	12,067	3,509	7,200	23,863	26,296
Year 3	2025	1,247	0	0	0	2,050	3,297	29,593
Year 4	2026	13,504	0	0	0	11,980	25,484	55,077
Year 5	2027	20,173	0	0	0	0	20,173	75,250
Year 6	2028	10,000	0	0	0	0	10,000	85,250
Year 7	2029	10,000	0	0	0	0	10,000	95,250
Year 8	2030	11,230	0	0	0	0	11,230	106,480
SUM		66,230	1,011	14,500	3,509	21,230	106,480	106,480

The cells in blue represent the proposed procurement levels from Alternative 1 and the cells in orange represent the proposed procurement levels from Alternative 2 as seen in the SEIS.

[34] Draft SEIS at C-2. Table C-1. Hypothetical Vehicle Purchase and Replacement Plan– Alternative 1.
[35] Draft SEIS at C-2. Table C-2. Hypothetical Vehicle Purchase and Replacement Plan– Alternative 2.

The combined alternative would also involve a slower replacement rate for vehicles than would occur in the agency's preferred approach (Alternative 1), but this is faster than the Alternative 2 proposal and allows for a reduction in the number of ICEVs purchased without increasing the number of BEVs from any source beyond what the agency has already indicated is possible in the draft SEIS. This is depicted in the figure below.

Figure II. B-1. Comparison of Vehicle Purchase Schedules



III. The Postal Service Must Reevaluate Key Assumptions

A. Total Cost of Ownership

Previously, the Postal Service sought to demonstrate the cost differential between combustion engine NGDVs and BEV NGDVs through a faulty and opaque Total Cost of Ownership (TCO) analysis. This analysis used inflated and obsolete data to conclude that its original "preferred alternative" of procuring 90 percent gas guzzling vehicles was the more favorable option. Instead of correcting that TCO analysis by including more accurate inputs (such as more accurate data for estimated gasoline costs, battery costs, maintenance costs etc.) and by using more appropriate charger-to-vehicle ratios (as suggested by the OIG and U.S. Government Accountability Office reports), the agency instead opts to use upfront acquisition costs to inform the percentage of BEV and combustion engine vehicles in the procurement strategy for the

alternative proposals. The Postal Service should reverse course and make these decisions using TCO to compare BEVs and combustion engine vehicles.

A Total Cost of Ownership Analysis is More Comprehensive

Using upfront acquisition costs, rather than TCO, significantly underestimates the monetary benefits of BEVs[36, 37] compared to combustion engine vehicles, and greatly misrepresents the long-term implications of this agency action – especially the climate and public health damages associated with the continued use of fossil fuel-powered vehicles.

A TCO analysis would offer a more comprehensive view of the financial implications of choosing between BEVs and combustion engine vehicles and will allow the Postal Service to fully examine metrics related to vehicle performance, fuel consumption, and maintenance costs, especially since BEV cost savings are strongly influenced by the number of operational years.

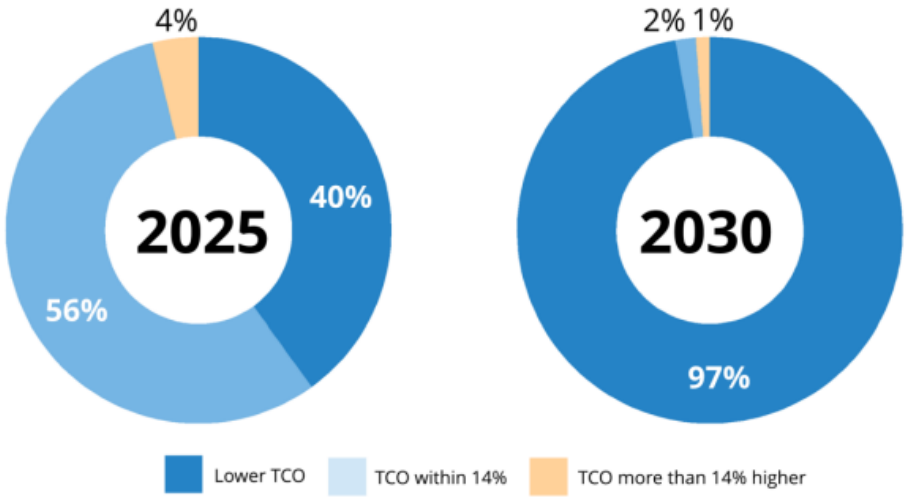
While in some cases the upfront costs associated with BEVs may be higher than combustion engine vehicles, the savings in BEV operating costs over the lifetime of the vehicle make these vehicles a more cost-effective and sustainable choice for the Postal Service's operations in the long run. This is due to BEVs having more efficient powertrains, lower costs for refueling and increased fuel price stability, as well as increased uptime due to fewer maintenance and repair needs for the overall fleet. Since electric powertrains are both more fuel efficient and less complex than combustion engine powertrains, this increased efficiency means that EVs cost less to fuel and the decrease in complexity means they cost less to maintain. This is a factor that is not appropriately considered when only upfront acquisition costs are evaluated, rather than TCO. In fact, research from Atlas Public Policy has shown that electrifying approximately 97 percent of the Postal Service fleet could yield some $4.3 billion in savings and that by 2030, the vast majority of all federal fleet vehicles – for Postal Service and non-Postal Service vehicles – will be cost competitive to combustion engine vehicles on TCO basis.[38] This is depicted in the figure below.

[36] "Next Generation Delivery Vehicles - Environmental Impact Statement Audit Report."United States Postal Service Office of Inspector General (OIG). April 6, 2023. https://www.uspsoig.gov/reports/audit-reports/next-generation-delivery-vehicles-environmental-impact-statemen

[37] "Report to Congressional Requestors, U.S. Postal Service, Action Needed to Improve Credibility of Cost Assumptions for Next Generation Delivery Vehicles." United States Government Accountability Office. April 2023. https://www.gao.gov/products/gao-23-106677

[38] Di Filippo, James, Nick Nigro, and Charles Satterfield. Rep. Federal Fleet Electrification Assessment. Washington, D.C.: Atlas Public Policy, 2021. https://atlaspolicy.com/federal-fleet-electrification-assessment/

Figure III. A-1: Comparison of TCO for Non-Postal Service Federal Fleet Vehicles



Atlas analysis of Dashboard for Rapid Vehicle Electrification (DRVE) tool outputs for non-USPS Federal fleet electric vehicle TCO performance compared to conventional vehicles in 2025 and 2030.

Additionally, a report by the International Council on Clean Transportation shows that electric drive systems – including the transmission, motor, and inverter – are forecasted to see cost reductions of over 60 percent by 2030, reaching $23/kW. This report also found that upfront cost parity between electric trucks and their diesel counterparts is expected to be achieved in the late 2020s or early 2030s for most truck segments.[39]

The agency's assumptions for charging or EV Supply Equipment (EVSE) costs are also unnecessarily high by requiring that each vehicle have its own charger, rather than allowing two or more vehicles to share a charger. Given that the ranges of the Ford E-Transit COTS vehicle and other existing delivery vans are over 100 miles per charge and that the Postal Service's average route length is around 24 miles, charging every vehicle every day is unnecessary. Using a higher ratio of vehicles to chargers will reduce the total cost of ownership of BEVs compared to their combustion engine counterparts. We provide recommendations to improve charging assumptions later in these comments.

Further, the vehicle specifications listed in the SEIS for the NGDVs and COTS vehicles the agency seeks to procure assume the use of nickel-manganese-cobalt (NMC) batteries, which are more expensive than lithium-ferro-phosphate (LFP) and are much less suited to Postal Service's presented use case and priorities. Switching to procuring vehicles with LFP batteries would not only reduce upfront costs, but would also provide the agency with a battery chemistry that is better suited to Postal Service's needs. Many of the points raised in this section are also explored in more detail throughout these comments.

[39] Xie, Yihao, Hussein Basma, and Felipe Rodriguez. *"Purchase costs of zero-emission trucks in the United States to meet future Phase 3 GHG standards."* International Council on Clean Transportation, 2023. https://theicct.org/wp-content/uploads/2023/03/cost-zero-emission-trucks-us-phase-3-mar23.pdf

Utility Rates Designed for EV Charging Can Increase Savings

Gasoline, diesel, and electricity prices vary across the country, and electricity prices vary depending upon the particular characteristics of the utility rate on which a customer takes service. And many existing commercial and industrial utility rates have "demand charges" that can reduce fuel cost savings for some EV charging use-cases. Thankfully, the challenge such demand charges can pose for EV charging has long been recognized and across the nation, many utilities and regulators have already implemented solutions or are in the process of doing so. These are solutions that will increasingly benefit the Postal Service's operations, especially if the agency maximizes the amount of electric vehicles in its procurement plan.

In fact, the Bipartisan Infrastructure Law (BIL) amended the Public Utility Regulatory Policies Act (PURPA) Section 111(d) to require regulators and non-regulated utilities to consider new rates that:

> *…promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure; improve the customer experience associated with electric vehicle charging; accelerate third-party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles; and appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure*.[40]

While this law has spurred new regulatory proceedings across the country, many utilities, regulators, and state legislatures were already acting to address this issue before the BIL became law.

As detailed in a publication of the National Association of Regulatory Utility Commissioners (NARUC) entitled "Best Practices for Sustainable Commercial EV Rates and PURPA 111(d) Implementation," rates designed for EV charging can deliver significant fuel cost savings without relying upon cross-subsidies from other utility customers.[41] For example, on a new Pacific Gas & Electric rate designed for commercial EV charging that still recovers all associated marginal costs, the San Joaquin Regional Transit District reduced its overall fuel cost per mile from $2.31 to $0.68 (in a utility service territory that has some of the higher underlying marginal costs in the nation).[42] The paper also details rates that take a similar approach that were approved for Southern California Edison, San Diego Gas & Electric, and Alabama Power. Since the publication of that NARUC paper, many other utilities and regulators have either proposed or secured approval of new rates designed for EV charging and many more are expected to follow suit over the coming decade.

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[40] H.R.3684. Infrastructure Investment and Jobs Act. 117th Congress. (2021-2022). Section 40431 www.congress.gov/bill/117th-congress/house-bill/3684/text

[41] Nancy Ryan, Alissa Burger, Jenifer Bosco, John Howat, and Miles Muller. Best Practices for Sustainable Commercial EV Rates and PURPA 111(d) Implementation. (2022). https://pubs.naruc.org/pub/55C47758-1866-DAAC-99FB-FFA9E6574C2B

[42] *Id.*

Appropriate Methodology and Data Inputs for BEV NGDV/COTS TCO Analysis

When planning a TCO analysis for the Final SEIS, the Postal Service should undertake a comprehensive literature review of similar studies in order to ascertain the best methodologies and data inputs. The analysis should be structured based on rigorous methods in existing literature and conducted in a manner that leads to logical, repeatable, and independent conclusions.To date, many reliable studies on lifetime costs of electric commercial vehicles have been published by government agencies, think tanks, businesses, and academics alike.[43,44,45]

Where the original EIS for the NGDV estimated fuel costs between $2.19 and $2.55 per gallon of gasoline through 2040, the TCO analysis for the final SEIS should include reliable data inputs related to fuel. The California Air Resources Board published a draft study in 2021 that used both California Energy Commission and U.S. Energy Information Administration fuel price forecasts beyond 2030 and found 2040 gasoline prices to around $4.50 per gallon.[46] While we recognize that California is likely to remain a most costly market for gasoline, using more conservative estimates for gasoline prices is in keeping with the Postal Service's other conservative estimates in the draft SEIS and likely more representative of fuel prices in urban areas. Additionally, it is likely that the Postal Service may focus initial deployment of BEV delivery vehicles in California in order to satisfy fleet electrification requirements under California's Advanced Clean Fleets rule.[47]

In addition to more realistic fuel costs, we recommend that the TCO analysis include potential revenue generated under Low Carbon Fuel Standards by fleets located in states with such programs.

The Postal Service Should Collaborate with Dept. of Treasury on IRA Incentives

The Postal Service has frequently cited additional funding through the Inflation Reduction Act (IRA) as one of several primary reasons for expanded BEV deployment.[48] Although the IRA clearly directs around $3 billion in funding to the Postal Service for fleet electrification, it may also be possible for the Postal Service to take advantage of other IRA incentives including those for the purchase of clean commercial vehicles and installation of EVSE under tax code section

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[43] "Total Cost of Ownership of Alternative Powertrain Technologies for Class 8 Long-Haul Trucks in the United States." The International Council on Clean Transportation. April 27, 2023. https://theicct.org/wp-content/uploads/2023/04/tco-alt-powertrain-long-haul-trucks-us-apr23.pdf

[44] "Electrifying Last-Mile Delivery: A total cost of ownership comparison of battery-electric and diesel trucks in Europe." The International Council on Clean Transportation. June 2022. https://theicct.org/wp-content/uploads/2022/06/tco-battery-diesel-delivery-trucks-jun2022.pdf

[45] "Spatial and Temporal Analysis of the Total Cost of Ownership for Class 8 Tractors and Class 4 Parcel Delivery Trucks," National Renewable Energy Laboratory, 2021, https://www.nrel.gov/docs/fy21osti/71796.pdf

[46] "Draft Advanced Clean Fleets Total Cost of Ownership Discussion Document." California Air Resources Board. September 9, 2021. https://ww2.arb.ca.gov/sites/default/files/2021-08/210909costdoc_ADA.pdf

[47] Title 13 California Code of Regulation, Section 2015. "Advanced Clean Fleets Regulation." Adopted April 28, 2023. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets

[48] "USPS Intends to Deploy Over 66,000 Electric Vehicles by 2026, Making One of the Largest Electric Vehicle Fleets in the Nation," USPS News, https://about.usps.com/newsroom/national-releases/2022/1220-usps-intends-to-deploy-over-66000-electric-vehicles-by-2028.htm

45W and 30C, respectively. If entities like the Postal Service are ultimately deemed eligible to access these incentives, they could help to further the Postal Service's commitment to electrification by reducing upfront expenditures for vehicle purchases and EVSE installation.

Final guidance around these tax credits for non-profit and government fleets is forthcoming. However, in January 2023, the U.S. Government Services Administration (GSA) emailed a memo, titled "EV TAX CREDIT MEMO," to GSA Fleet suppliers of electric vehicles that stated IRA incentives were available to both "commercial customers and government fleets."[49] This memo assumed that federal fleets would be eligible for the IRA incentives mentioned above, signaling that the Postal Service may also be eligible.

The U.S. Department of the Treasury (Treasury) and the Internal Revenue Service (IRS) are currently engaged in rulemaking to finalize the guidance on IRA incentives for non-profit and government fleets.[50] We strongly encourage the Postal Service to engage proactively with the Treasury and the IRS to ensure that every opportunity to reduce upfront costs for BEVs is understood and taken advantage of.

B. Battery Range and Chemistry

The Postal Service assumed a range of 70 miles for vehicles that travel less than 35 miles daily and that these vehicles will be charged every day to 100 percent. Yet, the agency also assumed that their vehicles would use nickel-manganese-cobalt (NMC) batteries, but this chemistry is much less suited to the presented use case and priorities than lithium-ferro-phosphate (LFP) batteries. Lithium-ion batteries with an NMC cathode are good at delivering higher ranges with less weight (energy density), but they are more expensive and lose capacity faster than LFP (see the graph below).

Since the Postal Service only wants 70 miles of range – much less than the range of similar BEVs on the market currently – and plan to use and charge their vehicles daily, LFP is a much more suited option for multiple reasons. First, the relatively low range necessary (70 miles) means the lower energy density of LFP batteries is not an issue. Second, the low cost is a priority for these vehicles and the LFP battery is less expensive than NMC because it does not include nickel and cobalt. Third, LFP batteries have a much higher cycle life than NMC batteries meaning they can be discharged and recharged much more before their range meaningfully degrades.[51]

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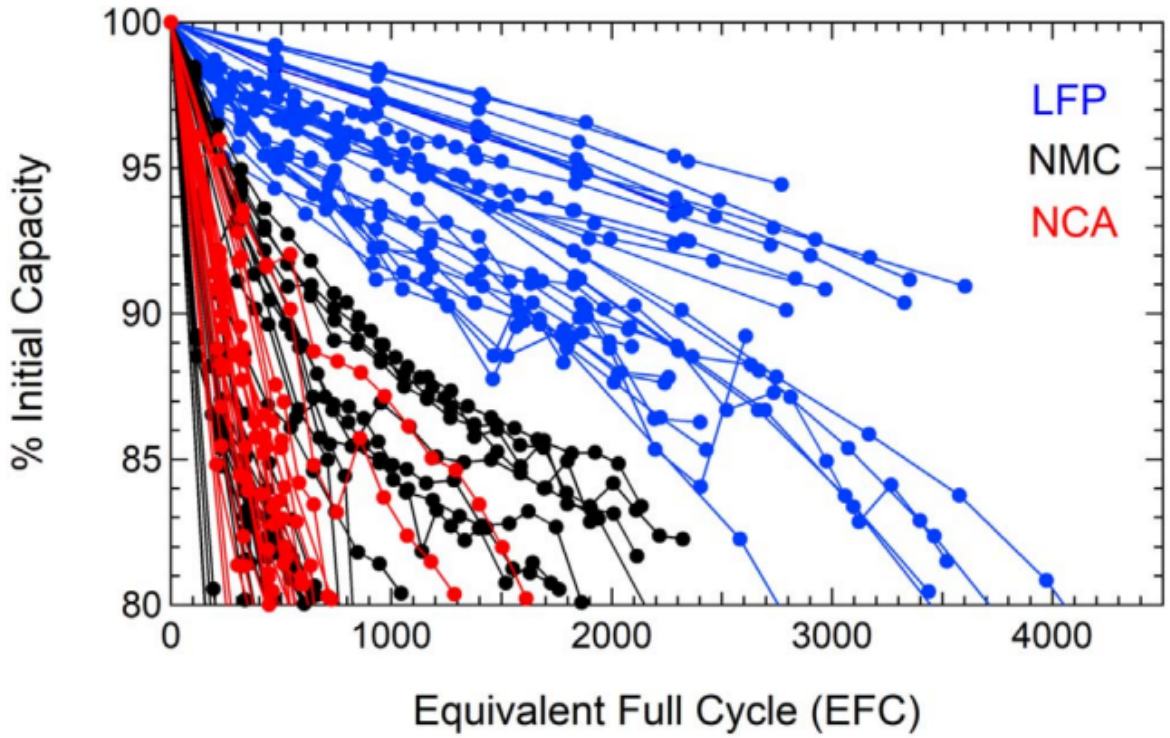
[49] Email from Leonard Fedoruk, Purchase Director, GSA Fleet, titled "EV TAX CREDIT MEMO." January 3, 2023.
[50] Section 6417 Elective Payment of Applicable Credits, 88 Fed. Reg. at 40528,to be codified at 26 CFR 1 and 26 CFR 301, https://www.federalregister.gov/documents/2023/06/21/2023-12798/section-6417-elective-payment-of-applicable-credits
[51] Vladimir Karimov, "New Tests Prove: LFP Lithium Batteries Live Longer than NMC," One Charge, March 30, 2021. https://www.onecharge.biz/blog/lfp-lithium-batteries-live-longer-than-nmc/

III. B-1: Degradation of Battery Capacity as a Function of Full Cycle Life[52]



Note: The variation in degradation within each individual battery chemistry are a response to different controlled variables in testing (temperature, depth of discharge, and discharge current)

As an example, Rivian announced earlier this year that they are switching to LFP batteries in their commercial vehicles in order to take advantage of the enhanced durability cycles and cost savings for their customers.[53] Amazon vans manufactured by Rivian with LFP batteries are on the streets today using the 150 miles of range – although more is available – to carry packages and make frequent stops to deliver them.[54] Although the driving patterns of Amazon delivery vans differ from those of the Postal Service, this illustrates that vehicles with LFP batteries are the best choice for the general use case of mail and package delivery.

Further, using LFP instead of NMC batteries in cost calculations will reduce the upfront costs of BEVs, thus allowing the Postal Service to achieve a higher penetration rate of BEVs in their fleet, as was noted earlier in these comments.

Lastly on range assumptions, the Postal Service assumed a range of 77 miles for the Ford E-Transit COTS BEV based on an assumed 70 percent of original capacity guaranteed by the

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[52] Yuliya Preger et al, *Degradation of Commercial Lithium-Ion Cells as a Function of Chemistry and Cycling Conditions*, 2020 J. Electrochem. Soc. 167 120532

[53] Rivian, "Q1 2023 Rivian Shareholder Letter," 2023 https://www.sec.gov/Archives/edgar/data/1874178/000187417823000027/ex-9921q23shareholderletter.htm

[54] Joel Feder, "Rivian EDV: All about electric vans for Amazon and beyond," January 3, 2023 https://www.greencarreports.com/news/1138310_rivian-edv-specs

manufacturer warranty.[55] This is a flawed assumption as the manufacturer warranty is 8 years meaning that it would take at least 8 years, likely more, for the battery to degrade to 70 percent of its original capacity.[56] In the meantime, the range would be closer to the original 110-mile range thus allowing for longer routes to be served by BEVs as well as less frequent charging thus reducing the number of chargers required per vehicle as is discussed in more detail in the following section.

C. Fleet Charging

The total amount of chargers or electric vehicle supply equipment (EVSE) needed to support this fleet is likely lower than the Postal Service anticipates.[57] That is because vehicles can share charging stations where the timing and frequency of vehicles' charging needs allow. We are disappointed with the agency's decision to keep to a one-to-one vehicle to EVSE ratio in its procurement plans, especially since this will unnecessarily increase the upfront costs for each of the BEVs procured by several thousand dollars, as the U.S. Government Accountability Office (GAO) notes.[58]

Rather than first waiting for the agency to "gain greater experience with the use, management and deployment of BEVs" before evaluating the use of "charging stations of varying capacities," the Postal Service should instead look to case studies for how large fleets with similar operating patterns are already adopting this technology (such as those explored in these comments) and evaluate this as a part of their route optimization efforts. While there may be federal entities that are leveraging one-to-one EV to EVSE ratios, this is not a one size fits all approach for federal fleets. For example, even the Inspector General's report makes note that the General Services Administration (GSA), the federal agency that leases out the vehicles used most in federal program fleets – although not the Postal Service – has determined that agencies do not need a one-to-one EV to EVSE ratio for vehicles that do not require a full charge every night.

The Postal Service anticipates the daily battery discharge of between 17 and 29 percent for the BEV NGDV and 27 to 45 percent for BEV COTS.[59] Furthermore, we understand these estimates to be based on degraded vehicle range after 10 years of service.[60] With typical urban routes of around 21 miles and typical rural routes around 38 miles (and nearly all of these routes are less than 70 miles), the Postal Service would only need to plug a portion of the fleet in each night to ensure its fleet has vehicles charged and capable of supporting the mission. [61,62]

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[55] Draft SEIS at 3-6. Table 3-3.2. COTS Vehicle Specifications
[56] FordPro, "Cargo Van," "Vehicle Highlights," https://www.fordpro.com/en-us/fleet-vehicles/e-transit/cargo-van?intcmp=fpro-etrans-gbc-2023CargoVan-ViewDetails
[57] Technically speaking, the "charger" when charging on AC power is actually on-board the vehicle. The equipment used to feed AC electricity to the vehicle is technically an electric vehicle or supply equipment, or EVSE for short.
[58] USPS Draft SEIS at B-307
[59] USPS Draft SEIS at 4-34
[60] USPS Draft SEIS at 4-36
[61] USPS Draft SEIS at F-6
[62] "Electric Delivery Vehicles and the Postal Service." United States Postal Service Office of Inspector General. March 17, 2022. P. 11

While we agree with the Postal Service's requirement for the NGDV to possess the capability to fully recharge within eight hours, such a requirement in practice may not be necessary for all routes and vehicles. Delivery vehicles servicing shorter routes may be able to charge using slower, but more affordable Level 1 chargers.[63] For example, a NGDV with a 94 kWh battery servicing a 10 mile route could charge from 65 percent to well over 80 percent overnight using a 1.65 kW Level 1 charger. A 2022 OIG report also suggested that Level 1 chargers be considered as they may be suitable for some routes and could significantly reduce BEV TCO.[64] Additionally, planning for the deployment of Level 1 chargers for shorter routes may allow for accelerated deployment of BEVs at Candidate Sites located in dense urban neighborhoods – particularly those in communities experiencing environmental injustices. The final SEIS should include assumptions around charging frequency and duration that more accurately reflect the Postal Service's battery longevity goals (70 miles after 10 years of service) for the BEV fleet and account for additional charging options.

In niche situations where nightly charging may be necessary, charging infrastructure can be designed with different configurations to accommodate this. For example, charging stations are readily available where one station can charge two vehicles simultaneously on one circuit and there are smart charging systems that can dynamically allocate charging capacity based on the vehicles' needs. Even during holiday delivery seasons or for unexpected events, a lower charger-to-vehicle ratio could flexibly support day-to-day operational adjustments.

As noted earlier, procuring a charger for each vehicle unnecessarily drives up the upfront cost assumptions. The agency points to the upfront cost of EVs as a reason for acquiring a larger portion of internal combustion engine vehicles than would be necessary under a more realistic charger scenario. Even the Inspector General's report states that a one-to-one charger-vehicle ratio may be excessive and contrary to how real-world BEV charging would occur for an electrified Postal Service Fleet.[65]

D. Manufacturing Impacts

The Postal Service has a unique opportunity and a social responsibility to ensure that the $3 billion in federal funding received from the IRA for its electrification efforts is fully leveraged to invest in communities, to create high-quality jobs, and to maximize equity.

Refusing to review the environmental and economic impacts related to the production of the NGDVs – impacts which only exist due to the agency's decision to move forward with the Oshkosh Defense ("Oshkosh") contract – the agency fails to ensure maximum benefit for the federal dollars invested in this effort. Additionally, doing so ignores key factors that are vital for understanding the true environmental and economic impacts of this procurement related action and unduly limits the alternatives available to the Postal Service under this SEIS.

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[63] USPS Draft SEIS, Table 3-3.1
[64] "Electric Delivery Vehicles and the Postal Service." United States Postal Service Office of Inspector General. March 17, 2022.
[65] *Id.*

This is especially true in the case of the contract awarded to Oshkosh defense for the manufacturing of the NGDVs, which was based on an unlawfully deficient environmental analysis issued after the Postal Service had already decided on a course of action.

The Postal Service asserts in the draft SEIS that the agency "has no control or responsibility over the location or manner of vehicle or part production, or detailed information about supplier operations."[66] This is not true. The agency has admitted that it did not require Oshkosh to identify where the NGDVs would be built, but had the agency required the contract bids to include this information, it would have been able to make a fully informed decision that more comprehensively characterized the socioeconomic and environmental impacts related to awarding this contract to Oshkosh. Additionally, the Postal Service has a social responsibility to understand to the best of its ability the broader consequences of the agency's actions and make decisions that account for that in order to minimize adverse effects on impacted communities and workers – such as the union workers in Oshkosh, Wisconsin.

IV. Emissions Analysis

A. Benefits of Tracking Fleetwide Fossil Fuel Use

The Postal Service should optimize its operations for maximum reduction of fleetwide fossil fuel use.

The SEIS states that the Postal Service delivery fleet consumed 189 million gallons of gasoline in FY 2022 for delivery operations. It projects that the delivery vehicles proposed for replacement consume between 83-89 million gallons of gasoline per year, or roughly 45 percent of all of the Postal Service's gasoline. Given that the Postal Service proposes replacing 62 percent of its vehicles with BEVs under Alternative 1, and projects gasoline reduction around 45 percent, there is significant opportunity to further reduce fossil fuel use by optimizing its vehicle assignments for gasoline reduction.

Fleet optimization to reduce fossil fuel use will require the Postal Service to set specific targets for reducing gasoline consumption, track the fuel use of every route, and prioritize the prompt replacement with BEVs on those routes that use the most fuel. These fleet optimization plans should require its major facilities to develop a detailed and comprehensive fuel use plan with specific fuel quotas and reduction requirements. The agency should publish, track, and optimize for a set of fuel use metrics, including total gallons used, gallons per mile of Postal Service route and gallons per letter and parcel delivered.

[66] USPS Draft SEIS at 1-3.

V. Conclusion

The agency can and must go further than it has proposed. Adopting the recommendations set forth in this comment letter would result in a feasible, cost-beneficial procurement plan that would better serve the needs of the agency and the communities served.

Respectfully submitted,

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Jordan Brinn, *Clean Vehicles & Infrastructure Advocate*
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Zero Emission Transportation Association

August 14, 2023

Mr. Davon Collins
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Re: Notice of Availability of Draft Supplemental Environmental Impact Statement for Next Generation Delivery Vehicles Acquisitions, 88 Fed. Reg. 42401

Dear Mr. Collins:

Please accept these comments on behalf of the undersigned organizations on the United States Postal Service's ("USPS") Draft Supplemental Environmental Impact Statement ("Draft SEIS") for Next Generation Delivery Vehicles ("NGDV"). The environmental review continues to suffer from serious flaws that infect it, and it should not be used as the basis for the significant decision USPS is making. While we recognize USPS's commitment to significantly higher battery electric vehicle ("BEV") purchases than set forth in the Final EIS and Record of Decision, USPS must still conduct a proper environmental review that considers purchasing as many BEVs as is feasible based on accurate science and up-to-date market information. In particular, even with more than 60% of the vehicle mix being BEVs, tens of thousands of internal combustion engine ("ICE") vehicles will be on the road. Accordingly, USPS must consider a range of alternatives including a 95% BEVs alternative, broaden its project description, and amend the analysis of the direct and cumulative impacts of ICE vehicles. Finally, USPS should refrain from making further changes to its purchasing plan before the environmental review is complete.

In addition, attached to this comment letter as "Attachment A" is a technical report commissioned on the Draft SEIS. This letter will refer to that report as the "Dr. Patterson Report." The Dr. Patterson Report identifies serious flaws in the analysis, and we request that USPS include it as a comment on the Draft SEIS.

The Postal Service has a responsibility, particularly after receiving $3 billion in earmarked federal funds for fleet electrification, to transition to a higher percentage of zero-emissions vehicles.[1] Transportation remains the largest source of climate pollution in the United

[1] *See* Comment Letters from Congressmember Emanuel Cleaver, II; Congressmember Sharice L. Davids; and CleanAirNow (June 8, 2023) [hereinafter "Congressional Representatives and CleanAirNow Comments"] (attached to this comment letter as "Attachment B").

States, with air pollution from fossil fuel vehicles disproportionately harming low-income communities and communities of color. USPS's decision to purchase over 100,000 vehicles for the fleet is a decision that will have significant consequences on the environment and communities around the country. USPS should conduct a compliant environmental review and adopt an SEIS that takes full account of the fleet's impact on the public and the planet.

I. THE POSTAL SERVICE SHOULD STOP MAKING UNILATERAL CHANGES TO ITS PURCHASING PLANS WITHOUT ADEQUATE PUBLIC COMMENT AND REVIEW.

The Postal Service currently sits in a continuous cycle of NEPA violations by not finishing environmental review before making substantial decisions related to its vehicle procurement contracts. USPS must avoid making further substantial changes to the NGDV contract or amending its fleet electrification plan without submitting the proposed changes to the public for review. Since releasing the Final EIS in January 2022,[2] USPS has twice amended its NGDV contract without review or released inconsistent messages about its fleet electrification plans.[3] These unilateral changes violate NEPA.[4]

Most recently, in March of 2023 USPS issued a contract modification to increase its initial NGDV purchase from 10,019 BEVs to 35,000 BEVs.[5] While this increase in BEVs is certainly better for the climate and public health,[6] the contract modification occurred before USPS completed or published the Draft SEIS.[7] Therefore, the contract modification violates NEPA requirements that agencies avoid committing resources and "prejudicing selection of alternatives before making a final decision."[8] The Draft SEIS does not provide key details about the contract modification, including whether the new slate of initial BEVs are right-hand or left-

[2] 87 Fed. Reg. 964 (Jan. 7, 2022).
[3] *See* UNITED STATES POSTAL SERV., DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT: UNITED STATES POSTAL SERVICE: NEXT GENERATION DELIVERY VEHICLE ACQUISITIONS (June 2023) at 1-2 [hereinafter Draft SEIS]; Press Release, United States Postal Service, *USPS Intends To Deploy Over 66,000 Electric Vehicles by 2028, Making One of the Largest Electric Vehicle Fleets in the Nation* (Dec. 20, 2022) [hereinafter "USPS Press Release"], https://about.usps.com/newsroom/national-releases/2022/1220-usps-intends-to-deploy-over-66000-electric-vehicles-by-2028.htm.
[4] *See* 42 U.S.C. § 4321, *et seq*; *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349-50 (1989); *Ctr. For Biological Diversity v. Bernhardt*, 982 F.3d 723, 734 (9th Cir. 2020).
[5] Draft SEIS, at 1-2.
[6] *See id.* at 4-45 (finding an increase in BEVs "would result in beneficial effects on transportation safety, traffic noise, air pollution, air pollutant and GHG emissions (with the exception of SO2), community services, fuel (gasoline) consumption, hazardous waste generation, and EJ communities").
[7] *See id.* at 1-2.
[8] 40 C.F.R. § 1502.2(f) ("Agencies shall not commit resources prejudicing selection of alternatives before making a final decision"); *see also* 40 C.F.R. § 1506.1(c); *Metcalf v. Daley* 214 F.3d 1135, 1143 (9th Cir. 2000) (holding that NEPA requires preparing environmental documents before pursuing contractual work).

hand drive.[9] The contract modification also included the purchase of 15,000 ICE NGDV without providing many details about this significant purchase.[10]

Even earlier, in December 2022 USPS issued a press release stating that it expected NGDV "delivered" from 2026 to 2028 to be "100% electric," but the Draft SEIS does not reflect this commitment.[11] The Draft SEIS stated that USPS ordered 50,000 NGDV (70% BEVs) to be "deployed" between 2024 and 2028, but USPS provided no schedule for when the BEVs would be delivered or if any ICE vehicles would be delivered between 2026 and 2028.[12] The Draft SEIS's "Hypothetical Vehicle Purchase and Replacement Plan" suggests that, under the Preferred Alternative, USPS would purchase 100% BEVs after 2026.[13] However, this Purchase Plan is only hypothetical and includes no commitment from USPS to limit vehicle deliveries to BEVs from 2026 to 2028.[14] Additionally, the Purchase Plan did not include a timeline for vehicle *delivery*—only timelines for vehicle *purchases* and *replacements*.[15] Thus, even the hypothetical Purchase Plan likely would not meet USPS's December 2022 commitment to 100% BEV delivery between 2026 and 2028 because the Purchase Plan for the Preferred Alternate 1 includes purchasing 4,311 ICE NGDV in 2026, which would likely be delivered after 2026.[16] Moreover, since the hypothetical purchase schedule was used to analyze the impacts (e.g. air quality, greenhouse gas, etc.), the failure to make this a commitment renders the analysis inadequate. Ultimately, the Draft SEIS must reflect USPS's prior commitment to 100% BEV delivery after 2026, including making it a specific project element.

These unilateral changes and inconsistent messages are incompatible with NEPA.[17] NEPA instructs agencies to make "high quality information" available to the public "*before* decisions are made and actions are taken."[18] By acting to change the terms of its NGDV contract and delivery schedule before publishing the Final SEIS or Record of Decision, USPS is both failing to adequately consider the consequences of its actions before it acts and failing to involve the public in the process.

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[9] Draft SEIS, at 1-2. The Draft SEIS states that, under the NGDV Record of Decision published in February 2022, all of the NGDV will be "purpose-built, right-hand drive" vehicles, but the Draft SEIS does not explicitly state if these conditions remain true after the contract modification in March 2023. *Id*.
[10] *Id.*
[11] USPS Press Release; *see also* Draft SEIS.
[12] Draft SEIS, at 3-4.
[13] *Id*. at C-2.
[14] *Id.*
[15] *Id.*
[16] *See id.*
[17] *See* 42 U.S.C. § 4321, *et seq*.
[18] *Bernhardt*, 982 F.3d at 734.

II. THE POSTAL SERVICE RELIES ON THE PROJECT DESCRIPTION TO UNREASONABLY NARROW ITS ALTERNATIVES.

The Postal Service uses its stated project purpose and need to unreasonably limit the alternatives that the agency considers in the Draft SEIS. While agencies have discretion to define the purpose and need of a project, "[a]n agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality."[19]

For example, the Postal Service uses its stated purpose and need to justify its improper award of the NGDV contract to Oshkosh Defense before environmental review. Comments on the Draft and Final EIS noted from the outset that the Postal Service violated NEPA by awarding its contract to Oshkosh before environmental review. Among other things, this slanted the environmental review by centering Oshkosh's capabilities and interests. Now, USPS states that certain alternatives were eliminated because "engag[ing] in a new solicitation . . . would undercut the purpose of the project to expeditiously replace our end-of-life and high-maintenance LLVs and FFVs to meet our Universal Service Mission."[20] If USPS conducted a proper environmental review at the outset, before awarding contracts, it would not be in this position of eliminating reasonable alternatives on timeliness concerns. An agency's reliance on private interests such as Oshkosh's to narrow its purpose and eliminate reasonable alternatives constitutes a violation of NEPA.[21] Moreover, neither the project's purpose nor need statements include an explicit mention of an "expeditious replacement." These post-hoc rationalizations cannot be added to the project description to eliminate reasonable alternatives. Nor should USPS be able to eliminate alternatives based on its own failures to conduct a proper environmental review in a timely manner.

III. THE DRAFT SEIS MUST HAVE A MORE ROBUST ALTERNATIVES ANALYSIS.

The Postal Service should consider a range of alternatives that demonstrates the benefits of procuring a higher percentage of BEVs. Under NEPA, the existence of "a viable but unexamined alternative renders [an] environmental impact statement inadequate."[22] If an agency wishes to eliminate an alternative from detailed study, the agency must discuss the reasons for doing so.[23] However, the Draft SEIS only evaluates two alternatives—both of which consist of

[19] *National Parks & Conservation Ass'n v. Bureau of Land Management*, 606 F.3d 1058, 1070 (9th Cir. 2010) (internal citations and quotation marks omitted).
[20] Draft SEIS, at 3-8.
[21] *National Parks & Conservation Ass'n*, 606 F.3d at 1072 (holding that purpose and need statement were unreasonably narrow because BLM "adopt[ed] private interests to draft a narrow purpose and need statement that exclude[d] alternatives that fail[ed] to meet specific private objectives, yet that was the result of the process").
[22] 40 C.F.R. § 1502.14.
[23] *Id.*

62% BEVs and provide no meaningful contrast to each other. The Draft SEIS also does not discuss why USPS eliminated a high-percentage BEV alternative from study.[24] Moving forward, each alternative that USPS considers should incorporate its prior stated commitment to not receive deliveries of combustion vehicles from 2026 onward.[25]

A. The Postal Service Should Analyze a 95% BEV Alternative.

The Postal Service should analyze a 95% BEV alternative, as USPS statements and our earlier comments demonstrate that a 95% BEV alternative is economically and technologically feasible and would provide increased environmental benefits.[26] In the Draft SEIS, USPS stated that "fewer than 10 percent of routes" fall outside a BEV's conservative 70-mile range.[27] And earlier, the Final EIS found that approximately 5% of current routes are longer than 70 miles, while the USPS Office of the Inspector General ("OIG") found only 2% of routes were 70 miles or longer.[28] The OIG also found the average route length is around 24 miles.[29] However, the Draft SEIS did not analyze the possibility of servicing all BEV-compatible routes with BEVs.[30]

Additionally, USPS should analyze a 95% BEV alternative because the agency recently received $3 billion in federal funding, making fleet electrification financially feasible.[31] USPS had previously stated that it would cost $2.3 billion to switch to a 100% BEV fleet, but the Draft SEIS did not acknowledge that the IRA had closed this funding gap.[32] Given the new federal funding for fleet electrification, USPS should have analyzed a 95% BEV alternative, which would have revealed that 95% BEVs would cause better environmental outcomes than the 62% BEV alternatives.

B. The Postal Service Should Analyze Alternatives That Provide a Meaningful Contrast to Each Other.

The alternatives in the Draft SEIS do not provide a meaningful contrast to each other, and so cannot capture the full range of the program's environmental impacts. Alternative 1 calls for

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[24] *See* Draft SEIS, at 3-8, 3-9.
[25] USPS Press Release.
[26] *See* Comments of CleanAirNow, Sierra Club, Center for Biological Diversity, and Earthjustice, Draft EIS, at Appendix B3.
[27] Draft SEIS, at 3-2.
[28] UNITED STATES POSTAL SERV., FINAL ENVIRONMENTAL IMPACT STATEMENT: UNITED STATES POSTAL SERVICE: NEXT GENERATION DELIVERY VEHICLE ACQUISITIONS (Dec. 2021) at 3-2 [hereinafter Final EIS]; USPS Office of Inspector General, *Electric Delivery Vehicles and the Postal Service*, Report Number RISC-WP-22-003 (March 17, 2022) ("*Electric Delivery Vehicles and the Postal Service*"), at 5, https://www.uspsoig.gov/sites/default/files/reports/2023-01/RISC-WP-22-003.pdf.
[29] *Electric Delivery Vehicles and the Postal Service*, at 5.
[30] *See* Draft SEIS, at 3-2.
[31] *Id.*
[32] *See* UNITED STATES POSTAL SERV., RECORD OF DECISION AND RECORD OF ENVIRONMENTAL CONSIDERATION NEXT: GENERATION DELIVERY VEHICLE ACQUISITIONS (Feb. 23, 2022), at 3-1-3; Draft SEIS, at 3-2; Inflation Reduction Act of 2022, HR 5376, Section 70002.

purchasing a mix of NGDV and commercial-off-the-shelf ("COTS") vehicles, deployed over six years, while Alternative 2 calls for purchasing only NGDV, deployed over eight years.[33] Both alternatives involve purchasing the same percentage of BEVs.[34] The alternatives are so similar that USPS combined its analysis of their environmental impacts in nearly every major category.[35] The evaluation of only two nearly identical alternatives can render a NEPA analysis inadequate.[36] USPS should analyze more alternatives that demonstrate the true environmental impacts of different NGDV mixes.

In April 2023, the OIG Final EIS Audit Report also recommended that USPS should "include an evaluation of more alternatives."[37] Specifically, the OIG Final EIS Audit Report criticized the alternatives in the Final EIS as "narrow" because USPS "did not include other alternatives that were also technically and economically feasible, and realistically [would meet] the purpose and need for the proposed action."[38] OIG noted that the "infusion of federal funding" provided USPS with the "opportunity to strengthen its evaluation of reasonable alternatives."[39] OIG also noted that USPS decision makers should evaluate all reasonable alternatives "even if those decision makers might have initial doubts or preferences regarding the alternatives under consideration."[40] This OIG recommendation suggests that these "initial doubts or preferences" referred to USPS's *ex ante* skepticism about BEVs that unduly influenced the lack of high-percentage BEV alternatives in the Final EIS.[41]

C. The Postal Service Should Analyze an Alternative That Aligns With its Analysis of the Maximum Feasible Amount of BEVs.

USPS should analyze an alternative that contains the maximum percentage of BEVs the agency deems possible, after analyzing all relevant factors such as air quality, climate impacts, and fuel savings. The Draft SEIS lists several reasons USPS believes it needs at least some ICE vehicles, but it does not describe why it needs as many as 40,462 ICE vehicles—or 38% of its overall mix.[42] For example, the Draft SEIS does not explain why it does not select BEVs for

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[33] Draft SEIS, at 3-3, 3-7.
[34] *Id.* at 3-1.
[35] *Id.* at 4-6, 4-9, 4-12, 4-31, 4-32, 4-33, 4-36, 4-40.
[36] *California ex rel. Lockyer v. U.S. Dept. of Agric.*, 459 F. Supp. 2d 874, 905 (N.D. Cal. 2006); *see also Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 812-14 (9th Cir. 1999) (holding an EIS failed to meet the requirements of NEPA because it considered "only a no-action alternative along with two virtually identical alternatives")
[37] USPS Office of Inspector General, *Next Generation Delivery Vehicles – Environmental Impact Statement*, Report Number 22-107-R23 (April 6, 2023) ("OIG Final EIS Audit Report"), at 7, https://www.uspsoig.gov/sites/default/files/reports/2023-04/22-107-r23.pdf.
[38] *Id.* at 6.
[39] *Id.* at 7.
[40] *Id.* at 6-7.
[41] *Id.* at 7.
[42] Draft SEIS, at 3-1, 3-2.

every BEV-compatible route.[43] The Draft SEIS also notes that the COTS BEV market is "currently limited" but does not describe how or why the perceived limitation would impact its procurement plans.[44] Moreover, the Draft SEIS states that USPS must procure some ICE vehicles while it waits for the installation of charging infrastructure, but it does not analyze the current availability of charging infrastructure or calculate how many ICE vehicles are necessary for this reason.[45] Finally, the Draft SEIS states that BEVs' higher cost justifies some ICE vehicles, but it does not quantify the maximum number of BEVs USPS could feasibly purchase.[46] As our previous comments have stated, failing to analyze an alternative because of resource constraints is not a legitimate reason for failing to analyze an alternative that would meet the agency's purpose and need.[47] To correct this analysis in the Final SEIS, USPS should calculate the maximum number of BEVs it can feasibly purchase, reflecting its consideration of all relevant environmental factors and current market conditions.

IV. THE POSTAL SERVICE FAILED TO TAKE A HARD LOOK AT DIRECT, INDIRECT, AND CUMULATIVE IMPACTS.

In connection with a major action affecting the quality of the human environment such as this one, USPS is required to prepare a "detailed statement" discussing and disclosing the environmental impacts of that action.[48] To perform this task, USPS must "take a 'hard look' at the environmental consequences of its actions, including alternatives to its proposed course."[49] When undertaking its analysis, USPS must also "insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements."[50]

A. The Postal Service Should Analyze the Direct and Cumulative Air Quality Impacts of the Project.

The Draft SEIS's air quality impact analysis fails to incorporate USPS's commitment to 100% electric NGDV and COTS acquisitions beginning in 2026. USPS published a press release

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[43] *See id.* at 3-2.
[44] *Id.* at 3-1.
[45] *Id.* at 3-2.
[46] *Id.* at 3-2, 3-3.
[47] *Pub. Employees for Env't Resp. v. U.S. Fish and Wildlife Serv.*, 177 F. Supp. 3d 146, 154-55 (D.D.C. 2016) ("It is not lost on the Court that agencies must work within limited budgets and, in the real world of resource constraint, cannot pursue all their policy goals at once. Rather, they must prioritize based on what they can afford to do. In this case, it seems that FWS chose only to consider options that 'would not result in changes to current management strategies" because considering changes to that scheme would require the expenditure of resources that the agency did not have. . . . . But NEPA's requirement to consider appropriate alternatives takes that option off the table. . . ."); *see also* Comments of CleanAirNow, Sierra Club, Center for Biological Diversity, and Earthjustice, Draft EIS, at Appendix B3.
[48] 42 U.S.C. § 4332(2)(C).
[49] *Sierra Club v. FERC*, 867 F.3d 1357, 1367 (D.C. Cir. 2017) (quoting *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 97 (1983)); *Robertson*, 490 U.S. at 350.
[50] 40 C.F.R. § 1502.24.

in December 2022 announcing that "NGDV acquisitions delivered in 2026 and thereafter expected to be 100% electric" and COTS "[a]cquisitions delivered in 2026 through 2028 expected to be 100% electric."[51] Instead of acknowledging this commitment, the vehicle distribution for the air quality impact analysis in Alternative 1 incorporates significant ICE NGDV acquisitions in 2026 and, in Alternative 2, does not limit ICE NGDV acquisitions at all.[52] As discussed above, USPS's own commitment to zero ICE acquisitions in 2026 and beyond shows that this is a reasonable goal to incorporate into each alternative and that it should be included in the assumptions for the air quality impact analysis. Without incorporating such a significant commitment, the air quality impact analysis for each alternative fails to adequately inform the public or decision makers of the true air quality impact of this project.

Additionally, USPS continues to hedge by treating the vehicle distributions in its air quality analysis as mere "hypotheticals." The notes under each vehicle distribution table indicate that they represent a "hypothetical spread of vehicles to be replaced per year, used only for the purpose of this SEIS evaluation."[53] Not only is the Alternative 1 vehicle distribution the only place where USPS attempts to recognize its 2026 ICE-phase out commitment, but the "hypothetical" nature of the vehicle distributions also makes them empty promises without further commitment. USPS must reiterate its commitment to zero ICE acquisitions in 2026 and beyond to create a concrete portrayal of the project's impact on air quality. Failure to do so gives USPS another opportunity to move the goal posts on environmental impacts and leaves the public to rely on hypotheticals and wishful thinking.

Finally, the Draft SEIS undercounts air emissions by assuming more lighter vehicles than the ones proposed in this mix. The Dr. Patterson Report identifies this underestimation of emissions from ICE vehicles: "[b]y not designating a regulatory class [in its emissions modeling], this Draft SEIS analysis includes lower weight vehicles in the emissions modeling of ICE vehicles. Lighter vehicles have lower emission factors."[54] This must be remedied to ensure a full and accurate consideration of the impacts of this decision.

B. The Postal Service Should Analyze the Direct and Cumulative Environmental Justice Impacts of the Project.

A decision this important requires a more rigorous environmental justice analysis, particularly given that 84% of the 414 candidate sites for vehicle deployment are environmental justice communities.[55] The Draft SEIS focuses on the beneficial effects of the project and fails to discuss the negative impacts that the ICE vehicle purchases will have on environmental justice communities. The Final SEIS should include a more rigorous analysis of the air quality impacts and health risks that environmental justice communities will face. The analysis should also

[51] USPS Press Release.
[52] Draft SEIS, at F-7 (Tables F-4.a, F-4.b).
[53] *Id.*
[54] Dr. Patterson Report, at 7-8 (citations omitted).
[55] Draft SEIS at 4-38, 4-40.

demonstrate compliance with President Biden's Justice40 Initiative by showing that at least 40% of the project's benefits will flow to environmental justice communities.[56]

Additionally, the environmental justice analysis does not account for state and local regulations, such as California's Advanced Clean Trucks and Advanced Clean Fleets rules. The Advanced Clean Trucks rule imposes ZEV sales requirements on truck manufacturers and establishes reporting requirements for fleet owners. The Advanced Clean Fleets rule requires fleets to add an increasing percentage of zero-emission trucks. Because the Postal Service's new vehicles will be subject to these regulations' requirements, California may experience an influx of the Postal Service's BEVs. The Draft SEIS's environmental justice analysis should account for this, and the agency should plan accordingly to ensure that environmental justice communities across the country receive the benefits of these BEVs.[57]

Lastly, the Draft SEIS fails to include any mitigation measures, which is a core part of NEPA. The Draft SEIS should have analyzed mitigation measures or project features that would articulate a schedule for purchasing and deploying BEV in environmental justice communities. For example, the agency should publicly disclose when and where it will be building charging infrastructure, how many vehicles will be deployed and where, and a general analysis of the demographics of each chosen candidate site. USPS should develop a tracking tool like those tools developed by other federal agencies to track investments under the Biden Administration's Justice40 Initiative, such as the U.S. Department of Energy's Energy Justice Dashboard.[58] This will allow communities to keep track of deployment and how it will affect them. This will also be particularly important in the early years of deployment to make sure overburdened communities are receiving the benefits early in the program.[59] The Draft SEIS also lacked the necessary diligence and "hard look" at the cumulative impacts in environmental justice communities. The Draft SEIS does not acknowledge the disproportionate cumulative impact that ICE vehicles will have on environmental justice communities, particularly those located in nonattainment areas. Instead, the analysis focuses on the relative benefits compared to the existing fleet.[60] The Draft SEIS notes that the new fleet will have the greatest reductions of VOCs, NOx, and CO, and it then goes on to explain that "VOCs and NOx are the precursors to ozone; all three of these pollutants are associated with aggravation and development of respiratory health conditions, such as asthma. Ozone is itself an important component of smog,

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[56] *See* Congressional Representatives and CleanAirNow Comments.
[57] *See id.*
[58] United States Department of Energy, Office of Economic Impact and Diversity, *Energy Justice Dashboard (BETA)*, https://www.energy.gov/diversity/energy-justice-dashboard-beta (last visited Aug. 14, 2023).
[59] *See* Congressional Representatives and CleanAirNow Comments.
[60] Draft SEIS, at 4-40 ("Table 4-11.4 depicts annual direct emissions reductions for each vehicle type on a city curb-line route compared to existing LLVs. BEVs would completely eliminate VOC, NOx, CO, SO2, and CO2e emissions, and reduce particulate matter emissions by 9 to 41 percent per year. ICE vehicles would reduce VOC, NOx, and CO emissions by at least 97 percent; PM2.5, SO2, and CO2e emissions by 26 to 36 percent; and PM10 emissions by about 8 percent."); 4-41 ("Table 4-11.3 shows the annual direct emissions reductions anticipated for each listed pollutant under each Alternative per 100 vehicles stationed at a Candidate Site, relative to existing conditions.").

as well. Elevated levels of outdoor CO can exacerbate the effects of heart disease, potentially causing chest pain."[61] Given the existing health disparities that environmental justice communities face—particularly with regards to respiratory illnesses like asthma—the agency should address the health risks that new ICE vehicles will have on these communities. This is particularly important given that USPS vehicles stay on the road for decades, and any new ICE vehicles will continue to operate for decades.

V. THE DRAFT SEIS DOES NOT CORRECT THE DEFICIENCIES THE INSPECTOR GENERAL IDENTIFIED IN THE FINAL EIS'S TOTAL COST OF OWNERSHIP ANALYSIS.

OIG identified several deficiencies in USPS's total cost of ownership ("TCO") analysis that the agency failed to address. Specifically, OIG recommended that the TCO analysis should include more "current, long-standing baseline data" for gasoline and electricity prices and apply more regionally specific assumptions for daily vehicle mileage, air conditioning usage, and electricity fuel prices.[62] Instead of incorporating these suggestions, USPS adopted a new acquisition strategy based on upfront costs alone that allowed the agency to ignore OIG's recommendations.[63] USPS then used the upfront costs as a financial constraint to establish a distribution of BEV to ICE acquisitions that failed to incorporate any of the of the long-term cost savings of BEVs such as reduced fuel use. While the Final EIS contained detailed descriptions of its financial calculus to arrive at its vehicle distributions,[64] USPS dismissed requests to justify its decision in the Draft SEIS by claiming the data it based its distributions on was "not publicly available."[65]

USPS's justification for basing its vehicle acquisitions on upfront costs instead of a TCO analysis is insufficient. The agency cites its "improving financial condition" and receiving "$3 billion from the IRA" as vague reasons to adjust its acquisition strategy to upfront costs and select a ratio of BEV to ICE NGDV that fully expended IRA funds immediately.[66] However, the IRA making funds available for the acquisition of electric vehicles does not necessitate the use of upfront costs to be the only factor in determining vehicle acquisition. While the IRA allocates money specifically for vehicle acquisition, it specifically stipulates that the funds "remain available through September 30, 2031,"[67] allowing for flexibility in the financial strategy to acquire the most electric vehicles possible. The purpose of the IRA funding was to accelerate USPS's electrification and should not be used as a justification to continue reliance on ICE vehicles.

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[61] *Id.* at 4-40.
[62] OIG Final EIS Audit Report, at 7-8.
[63] Draft SEIS, at B-302-09 (Response No. 1, 16-22).
[64] Final EIS, at B-158-59 (Response to comment 13).
[65] Draft SEIS, at B-320 (Response to comment 74).
[66] *Id.* at 3-2.
[67] IRA Section 70002.

Instead of artificially constraining itself to upfront costs, USPS should use the funds from the IRA in conjunction with a TCO analysis that incorporates the long-term benefits of BEVs. According to the 20-year total estimated cost in the Final EIS, the difference in cost between the 10% BEV and 100% BEV alternative was $2.3 billion as of December 2021.[68] Applied to the potential purchase of 91,980 NGDV in Alternative 1, the difference between an acquisition of 10% versus 100% BEV would be $2.82 billion. Conveniently, the $3 billion supplied to USPS by Congress would cover this difference and was specifically meant for investment in BEVs and charging infrastructure,[69] which was priced into the original TCO analysis.[70] Using USPS's own TCO analysis, Alternative 1 could incorporate a 100% BEV NGDV acquisition, and at a minimum a 95% acquisition, and secure an 86% BEV to ICE ratio instead of the 62% adopted in the Draft SEIS. USPS should return to using a TCO analysis that incorporates the long-term benefits of BEV NGDV, accurately informs the public, and utilizes IRA funds to maximize their commitment to BEV acquisitions.

VI. THE POSTAL SERVICE'S REASONING FOR ACQUIRING 14.5K RIGHT-HAND DRIVE COTS VEHICLES IS FLAWED.

The Postal Service does not sufficiently justify its decision to acquire 14,500 right-hand drive ("RHD") COTS ICE vehicles. The Draft SEIS states that the "14,500 total was chosen because the Postal Service's outreach to potential suppliers indicated that this would likely be the last remaining quantity of RHD COTS vehicles for sale in the U.S. for the foreseeable future."[71] But the agency does not identify who its competitors are and why it must race to purchase this last remaining quantity. The Draft SEIS then notes that "RHD vehicles are generally superior to LHD vehicles in terms of efficiency, performance, and safety for Postal Service routes" and "COTS vehicles can be obtained at a faster pace than the purpose-built NGDV, which would enable the Postal Service to more rapidly replace LLVs currently in service and better meet our Universal Service Mission."[72] But this reasoning cannot be reconciled with the Postal Service's stated goal of electrifying its fleet. Although the Draft SEIS states that "[t]here are currently no RHD BEVs available in the market," the agency again should explain its reasoning for rushing to acquire these additional vehicles instead of setting a path for further electrifying its fleet.

VII. CONCLUSION

We appreciate your consideration of these comments. We look forward to working with USPS to cure the serious deficiencies in this document to ensure all decision makers and the

[68] Final EIS, at 3-2 (Table 3-1.1); iii ("[T]he 100 percent BEV NGDV Preferred Alternative is $2.3 billion more expensive than the 90 percent ICE NGDV Preferred Alternative for an order of 75,000 vehicles (see Table 3-1.1). Furthermore, acquiring 100 percent BEV NGDV for the full 165,000 amount of the Proposed Action would require more than $1 billion in additional investment.").
[69] IRA Section 70002.
[70] Final EIS, at B-158-59 (Response to comment 13).
[71] Draft SEIS, at 3-5.
[72] *Id.*

public are appropriately informed of the environmental consequences of this massive expansion project.

Sincerely,

Beto-Lugo Martinez
Atenas Mena
CleanAirNow

Katherine Garcia
Sierra Club

Scott Hochberg
Center for Biological Diversity

Adrian Martinez
Yasmine Agelidis
Candice Youngblood
Earthjustice

ATTACHMENT A

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Comments on the United States Postal Service (USPS) Draft Supplemental Environmental Impact Statement (SEIS) for its Next Generation Delivery Vehicle (NGDV) Acquisitions, June 2023

by

Dr. Regan Patterson, Consultant[1]
August 14, 2023

A. Introduction

This Draft SEIS analyzes the environmental impacts associated with USPS modifying its decision from the NGDV Record of Decision (ROD), which committed to purchasing between 50,000 to 165,000 NGDVs—with up to 90% internal combustion engine (ICE) vehicles and a minimum of 10% battery electric vehicles (BEV)—to replace an equal number of existing, aging Long-Life Vehicles (LLV) and Flexible Fuel Vehicles (FFV) over a period of ten years. The Draft SEIS analyzes impacts from purchasing 106,480 vehicles over a period of six or eight years, including purpose-built NGDV or commercial-off-the-shelf (COTS) vehicles comprising an overall mix of 38% ICE vehicles and 62% BEVs. The COTS vehicles will have either right-hand drive (RHD) or left-hand drive (LHD) configurations. This report provides a general critique of the Draft SEIS itself, with a specific focus on the BEV procurement analysis.

A general criticism of the Draft SEIS pertains to the commitment to acquire 62% BEVs. The USPS's Final EIS omitted feasible alternatives with greater than 10% BEVs, so this Draft SEIS demonstrates a step by USPS toward accelerating its transition to an electric delivery fleet. However, the Draft SEIS only considers two alternatives, each proposing 62% BEVs for the entire vehicle acquisition. The USPS's Preferred Alternative in the Draft SEIS is to acquire a mixed fleet of NGDVs and COTS vehicles, with 62% BEVs overall, over a six-year period. The Draft SEIS does not justify a ceiling of 62% for BEVs, and in fact, evidence shows it should have considered alternatives between 62% and 100% BEVs. Not only is the choice of 62% arbitrary and unsupported, it is inadequate. I provide evidence for opportunities to increase BEVs deployment below.

B. Analysis on the Lack of Consideration of Higher Percentage BEV Alternatives

The Draft SEIS analyzes two action alternatives along with the No-Action Alternative. The Preferred Alternative is to purchase and deploy a mixed fleet of NGDVs and COTS vehicles over six years, with 62% BEVs overall. Alternative 2 is to purchase and deploy NGDVs only over eight years, with 62% BEV NGDV. The factors behind these options are urgent need, route suitability

[1] Curriculum vitae provided in Appendix A.

for BEVs, upfront acquisition costs, and the USPS's revised vehicle procurement strategy.[2] I will examine the first three criteria below.

B.1 Criteria: Urgent Need

With the USPS's urgent need to replace its aging delivery fleet, USPS argues that it cannot acquire 100% BEVs because

> Given the time needed to install necessary infrastructure, the fact that over the near-term COTS vehicles can be obtained at a faster pace than the purpose-built NGDV, and that the COTS BEV market is currently limited, the Postal Service has determined it necessary to consider only Alternatives that include the procurement of some ICE vehicles.[3]

USPS is using urgency to justify the procurement of ICE vehicles, which would lock in higher greenhouse gas (GHG) and air pollution emissions for at least 20 years.[4] As indicated by the USPS's existing delivery vehicles, which "are on average eight years beyond their 24-year service life,"[3] newly purchased ICE vehicles will likely be operated beyond their intended service life. However, the Draft SEIS does not provide any supportive analysis on the claims about infrastructure installation time. The Draft SEIS states that, "Charging stations would be needed at Postal Service facilities to accommodate BEVs, and public charging stations would not be used."[5] There are no details on underlying assumptions about installment nor policies designed to accelerate the deployment of electric fleets, such as charging infrastructure incentives and utility charging infrastructure assistance programs. Private delivery companies, such as FedEx, are committing to fully electrifying their fleets and installing the necessary charging infrastructure to support their fleet.[6] USPS should maximize its procurement of BEV NGDVs and COTS BEVs.

Further, USPS's argument that the COTS BEV market is limited is simply inaccurate. As I discuss below, RHD COTS BEVs and LHD COTS BEVs are currently available on the market. USPS should consider a COTS acquisition with 100% BEVs.

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[2] SEIS. Section 3.2

[3] SEIS. Section 3-2.1

[4] SEIS. Section 4-1.1.2, "The NGDV is designed to provide an effective minimum service life of 20 years."

[5] SEIS. Section 6-4.7

[6] FedEx. (2022). FedEx Continues Advancing Fleet Electrification Goals with Latest 150 Electric Vehicle Delivery from BrightDrop. Retrieved from https://newsroom.fedex.com/newsroom/global/fedex-continues-advancing-fleet-electrification-goals-with-latest-150-electric-vehicle-delivery-from-brightdrop.

B.2 Criteria: Routes Incompatible with BEVs

USPS uses supposed BEV route length and operational constraints to justify the acquisition of ICE vehicles. With respect to route length, the Draft SEIS states,

> While the Postal Service expects that our BEV range requirements will change over time as battery technology improves and we gain experience using and maintaining BEVs, at this time, new BEVs will generally not be deployed to routes that exceed 70 miles (the minimum BEV driving range) to avoid the risk of BEVs running out of power mid-route. For the quantity of vehicles that would be acquired under Alternatives 1 and 2, fewer than 10 percent of routes fall outside this 70-mile BEV-compatible range.[7]

In the Final EIS, USPS conceded that only 5% of current routes are not suitable for BEVs due to route length.[8] Further, the USPS Office of Inspector General released a report that asserts only 1.5% of total routes are longer than 70 miles.[9] Therefore, BEVs are extremely capable of meeting the USPS's needs. The Draft SEIS has a wide and unsupported discrepancy between the percentage of BEV-compatible routes and the current commitment to 62% BEVs overall.

USPS also argues that there are operational constraints. The Draft SEIS states, "while no BEVs would automatically be excluded from any deployment site on account of climate, routes with significant snowfall, cold weather, or challenging terrain will be prioritized for deployment of all-wheel drive vehicles, which are likely to have ICE powertrains."[7] However, this inaccurately represents the current all-wheel drive BEV market. There are market-available COTS BEVs with all-wheel drive and a driving range longer than 70 miles, such as the BrightDrop Zevo.[10] The Draft SEIS fails to thoroughly look at how COTS BEV options can serve these routes, especially as BEV technology rapidly improves.

B.3 Criteria: Cost

In addition to urgent need and route compatibility, USPS also argues for the purchase of ICE vehicles based on the supposedly higher acquisition cost for BEVs: "the Postal Service is considering only Alternatives that include the procurement of some ICE vehicles," because "[t]he upfront acquisition cost differential between BEV and ICE vehicles remains significant for both COTS vehicles and NGDV."[11] According to USPS, BEVs cost 86% more than ICE vehicles when

[7] SEIS. Section 3-2.2

[8] Final EIS. Section 3-1.1, "The current number of delivery routes that are not suitable for BEV NGDV based on route length equate to approximately 5 percent of current routes" (p. 3-2).

[9] USPS Office of the Inspector General. (2022). Electric Delivery Vehicles and the Postal Service. Report No. RISC-WP-22-003. Retrieved from https://www.uspsoig.gov/sites/default/files/reports/2023-01/RISC-WP-22-003.pdf.

[10] BrightDrop. (n.d.). BrightDrop Zevo. Retrieved from https://www.gobrightdrop.com/products/brightdrop-zevo.

[11] SEIS. Section 3-2.3

including infrastructure. However, this figure is unsupported. USPS's analysis does not disclose the upfront costs, nor does it provide details on whether the analysis accounts for declining upfront costs as BEV technology improves and federal and state tax credits and incentives lower production costs. The analysis also fails to discuss charging infrastructure incentives and assistance programs.

Further, with funding from the Inflation Reduction Act, the Draft SEIS no longer takes into account the Total Cost of Ownership (TCO). Instead, the only financial consideration in determining the mix of BEV and ICE vehicles is the upfront acquisition costs.[11] With the significant omission of any TCO analysis, the supposed cost differential between BEV and ICE vehicles is inadequately analyzed. The Draft SEIS needs to include an updated TCO analysis.

C. Need to Consider RHD COTS BEVs

As stated in Section 3-3.2, USPS's Preferred Alternative includes the purchase of 14,500 RHD COTS ICE delivery vehicles because, "suppliers indicated that this would likely be the last remaining quantity of RHD COTS vehicles for sale in the U.S. for the foreseeable future."[12] Given that the expected life expectancy for COTS ICE vehicles is 12 years,[13] the proposed acquisition would lock in future GHG and air pollution emissions that could be substantially reduced by greater BEV deployment.

The Draft SEIS attempts to make the case on the grounds that

> COTS vehicles can be obtained at a faster pace than the purpose-built NGDV, which would enable the Postal Service to more rapidly replace LLVs currently in service and better meet our Universal Service Mission. Thus, the Postal Service determined it necessary to include this limited quantity of RHD ICE vehicles in our Preferred Alternative. There are currently no RHD BEVs available in the market.[12]

That no such vehicles are available is simply incorrect. As an example, Envirotech Vehicles, Inc. manufactures a RHD BEV delivery vehicle.[14] The Draft SEIS analysis of the BEV market would result in a squandered opportunity to deploy BEVs while addressing the USPS's urgent need.[15] USPS should analyze alternatives for the 14,500 RHD COTS vehicles acquisition that include BEVs and work with BEV companies to supply RHD COTS BEVs.

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[12] SEIS. Section 3-3.2

[13] SEIS. Section 4-1.1.2, "A COTS ICE delivery vehicle such as a well-maintained Ford Transit is expected to last about 12 years."

[14] Envirotech Logistics, Inc. (n.d.). Right-Hand Drive Van. Retrieved from https://evtvusa.com/vehicles/right-hand-drive-van/; U.S. Department of Energy. (n.d.). Alternative Fuels Data Center. Retrieved from https://afdc.energy.gov/vehicles/search/results/?vehicle_type=light&category_id=9&fuel_id=41,57,45.

[15] SEIS. Section 3-2.1

Commitment to this purchase also fails to anticipate rapid changes in the BEV market. For instance, the Rivian Electric Delivery Van is available in RHD[16] and can be purchased once Rivian's exclusive contract with Amazon ends. Rivian and Amazon are in on-going discussions to remove the exclusivity terms early.[17]

D. Need to Consider a LHD COTS BEV Acquisition with 100% BEVs

Per discussion in the Draft SEIS as summarized in Section 3-3.3, "the Preferred Alternative also includes acquisition of an additional 31,980 vehicles that can be COTS vehicles or NGDV, of which 66 percent will be BEV. The Postal Service anticipates that at least a portion of these vehicles will likely be LHD COTS vehicles."[18]

The Draft SEIS arbitrarily evaluates a 66% BEV option for these additional vehicles, while failing to consider a larger mix of BEVs. The proposed mix of 66% BEVs is baseless. The emissions modeling was conducted under the assumption that all of these vehicles will be LHD COTS vehicles, consisting of 34% ICE vehicles and 66% BEVs.[19] Due to market availability of LHD COTS BEVs, all purchased LHD COTS vehicles should be BEV. There are many available LHD COTS BEV options, such as the Ford E-Transit, Envirotech LHD Logistics Van, Bollinger Deliver-E, Ram ProMaster EV, BrightDrop Zevo, and Canoo Lifestyle Delivery Vehicle. USPS should consider 100% BEVs for its LHD COTS vehicle acquisition.

Private delivery companies are acquiring LHD COTS BEV as part of their commitments to fully electrifying their fleets. For example, FedEx plans to have an all-electric parcel pickup and delivery vehicle fleet by 2030[20] and will phase in 2,500 BrightDrop Zevo 600s over the next few years.[6] Also, Walmart is targeting a zero-emissions fleet by 2040[21] and has purchased 4,500 Canoo Lifestyle Delivery Vehicles.[22] As the operator of the world's largest civilian vehicle fleet, USPS has an opportunity and responsibility to lead the nation's transition to 100% vehicle electrification.

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[16] Mihalascu, D. (2021). VIN Decoder Reveals Rivian Electric Delivery Van Names, Trims. Inside EVs. Retrieved from https://insideevs.com/news/542648/rivian-electric-van-vin-decoder/.

[17] McLain, S.; Mattioli, D.; Eckert, N. (2023). Amazon, Rivian in Talks to End Exclusivity Part of Delivery-Van Pact. The Wall Street Journal. Retrieved from https://www.wsj.com/articles/amazon-rivian-in-talks-to-end-exclusivity-part-of-delivery-van-pact-5cea809d.

[18] SEIS. Section 3-3.3

[19] SEIS. Table F-4.a

[20] FedEx. (n.d.). Charged up about electric vehicles. Retrieved from https://www.fedex.com/en-us/sustainability/electric-vehicles.html.

[21] Walmart. (2020). Walmart's Regenerative Approach: Going Beyond Sustainability. Retrieved from https://corporate.walmart.com/newsroom/2020/09/21/walmarts-regenerative-approach-going-beyond-sustainability.

[22] Walmart. (2022). Walmart to Purchase 4,500 Canoo Electric Delivery Vehicles to Be Used for Last Mile Deliveries in Support of Its Growing eCommerce Business. Retrieved from https://corporate.walmart.com/newsroom/2022/07/12/walmart-to-purchase-4-500-canoo-electric-delivery-vehicles-to-be-used-for-last-mile-deliveries-in-support-of-its-growing-ecommerce-business.

E. Logical Alternative – Analyze a Minimum 95% BEV Option

The Draft SEIS should consider a minimum 95% BEV alternative. As 95% of current USPS routes can be serviced by BEVs, this percentage of BEVs should be analyzed. This alternative is consistent with the Biden Administration's policies aimed at electrifying the federal vehicle fleet Both Executive Order 14057 on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability and the Federal Sustainability Plan target 100% zero-emission vehicle acquisitions by 2035.[23] A minimum 95% electric fleet would provide significant environmental and climate benefits and advance environmental justice.

F. Logical Alternative – Between 62% and 95% BEV Option

The Draft SEIS should also consider an alternative that explores the feasibility of acquiring greater than 62% BEVs. The proposed fleet mix is premised on unsubstantiated data. Based on route compatibility, the rapidly evolving BEV market, fuel and operating savings, and environmental and climate benefits, USPS should determine and sufficiently analyze a higher percentage of BEVs. The analysis should be transparent about how the fraction of BEVs is determined.

G. Concerning Assumptions and Omissions

I have identified concerns of some of the assumptions used in the Draft SEIS analysis.

(i) The Draft SEIS provides an assumed procurement schedule by year. As an example, Table F-4.a, reproduced below, shows the vehicle acquisition numbers for the Preferred Alternative. As noted below the table, the current quantities are deemed "hypothetical": "This table represents a hypothetical spread of vehicles to be replaced per year, used only for the purpose of this SEIS evaluation." The Draft SEIS should give detailed information about how the assumed numbers were determined in order to ensure that the projected procurement schedule is reasonable. This is crucial to demonstrating that the conclusions reached within the Draft SEIS are valid given that the entire environmental analysis hinges upon these acquisition numbers.

Relatedly, while the Draft SEIS makes no mention of only acquiring BEVs post-2026, Table F-4.a indicates that for the Preferred Alternative, no ICE vehicles will be purchased after 2026. In December 2022, USPS announced that it would only purchase BEVs starting in 2026.[24] Since the procurement numbers are "hypothetical," USPS must pledge to acquire 100% BEVs post-2026.

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[23] The White House. Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability. Retrieved from https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/; Office of the Federal Chief Sustainability Officer. (n.d.). Federal Sustainability Plan. Council on Environmental Quality. Retrieved from https://www.sustainability.gov/federalsustainabilityplan/index.html.

[24] United States Postal Service. (2022). USPS Intends to Deploy Over 66,000 Electric Vehicles by 2028, Making One of the Largest Electric Vehicle Fleets in the Nation. Retrieved from https://about.usps.com/newsroom/national-releases/2022/1220-usps-intends-to-deploy-over-66000-electric-vehicles-by-2028.htm.

Also, this commitment should apply to all alternatives considered, not just the Preferred Alternative.

Table F-4.a
Alternative 1 – Vehicle Distribution (Number of Vehicles)

Year	BEV NGDV		ICE NGDV		RHD COTS ICE		LHD COTS ICE		LHD COTS BEV		LLV Replaced		Delivery POV Replaced	
	Rural	City	Rural	City	Rural	City	Rural	City	Rural	City	Rural	City	Rural	City
2023	0	0	0	0	858	1,575	0	0	0	0	250	1,575	608	0
2024	23	53	257	754	4,258	7,809	153	8,997	931	6,269	2,431	23,882	3,191	0
2025	374	873	2,460	7,218	0	0	27	1,573	265	1,785	2,671	11,449	455	0
2026	4,047	9,457	1,096	3,215	0	0	0	0	1,549	10,431	5,902	23,103	790	0
2027	6,046	14,127	0	0	0	0	0	0	0	0	5,261	14,127	785	0
2028	2,997	7,003	0	0	0	0	0	0	0	0	2,608	7,003	389	0
2029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**13,487**	**31,513**	**3,813**	**11,187**	**5,116**	**9,384**	**180**	**10,570**	**2,745**	**18,485**	**19,123**	**81,139**	**6,218**	**0**

Note:
(1) This table represents a hypothetical spread of vehicles to be replaced per year, used only for the purpose of this SEIS evaluation.

(ii) The USPS's approach to modeling direct emissions from ICE vehicles underestimates ICE emissions. USPS classifies ICE NGDVs and COTS ICE vehicles as the MOVES source type, "light commercial truck."[25] This source type includes trucks weighing less than 10,000 lbs.[26] However, source types can be further divided between regulatory classes based on gross vehicle weight rating (GVWR).[27] Light commercial trucks less than 8,500 lbs. GVWR are considered light-duty in regulatory class 30, while those of 8,500-10,000 lbs. GVWR are considered light heavy-duty vehicles in regulatory class 41. As shown in Table F-3.a, reproduced below, ICE NGDVs and LHD COTS ICE vehicles should therefore be classified as light-heavy duty vehicles.

Table F-3.a
Summary of Vehicle Type and Model Year for MOVES Model

Vehicle	ICE NGDV	BEV NGDV	RHD COTS ICE	LHD COTS ICE	LHD COTS BEV	LLV	Delivery POV
Gross Vehicle Weight Rating (GVWR) (lbs)	8,501	8,877	6,834	9,350	9,500	4,450	various
MOVES Vehicle Type	Light Commercial Truck (32)	Light Commercial Truck (32)	Light Commercial Truck (32)	Light Commercial Truck (32)	Light Commercial Truck (32)	Passenger Truck (31)	Passenger Truck (31)
Vehicle Make Year	2023-2030	2023-2030	2023-2030	2023-2030	2023-2030	1987-1994	1960-2023

USPS did not specify a regulatory class. Below Table F-4.d, which shows unit emissions for ICE vehicles, the Draft SEIS states, "Since ICE NGDV, RHD COTS ICE, and LHD COTS ICE vehicles are categorized as the same 'light commercial truck' vehicle type in the MOVES model, emission

[25] SEIS. Appendix F, p. F-4.

[26] US Environmental Protection Agency. (2023). How does MOVES Classify Light-Duty Trucks. Retrieved from https://www.epa.gov/moves/how-does-moves-classify-light-duty-trucks.

[27] US Environmental Protection Agency. (2021). Population and Activity of Onroad Vehicles in MOVES3. Retrieved from https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1011TF8.pdf.

factors shown in Table F-5.a were used for the emissions analyses for these vehicle types."[28] By not designating a regulatory class, this Draft SEIS analysis includes lower weight vehicles in the emissions modeling of ICE vehicles. Lighter vehicles have lower emission factors.[29] Therefore, the modeling approach results in underestimated ICE emissions.

H. Prioritize BEV Deployment in Environmental Justice Communities

The Draft SEIS states that USPS plans to deploy a large portion of proposed vehicles to "Candidate Sites."[30] USPS has identified 414 Candidate Sites, which "would average about 100 vehicles, with approximately 50 sites having more than 200 vehicles."[30] Therefore, potential impacts of the vehicle acquisition will be heavily concentrated in communities that host these sites. Based on the USPS's analysis, 84% of the Candidate Sites are located in environmental justice communities.[31]

USPS must commit to targeting BEV deployment to these Candidate Sites. The Draft SEIS states, "At this time, the Postal Service anticipates these Candidate Sites to host predominantly BEVs."[32] However, the Draft SEIS environmental justice analysis is based on a fleet mix of 62% BEVs. To ensure that environmental justice communities do not bear disproportionate impacts from ICE vehicle pollutant emissions, BEVs should be deployed to these communities. Additionally, USPS should target routes within or upwind of environmental justice communities for BEVs to mitigate adverse impacts. BEV NGDV and COTS BEV deployment should be tracked in order to be transparent about how these deployments are distributed to environmental justice communities and adhere to targeting benefits to these communities. USPS should develop a tool similar to those being developed by federal agencies to track investments under the Biden Administration's Justice40 Initiative, such as the U.S. Department of Energy's Energy Justice Dashboard.[33]

I. Conclusion

In conclusion, while the Draft SEIS does increase the percentage of BEVs in the proposed vehicle acquisition, its current proposed BEV percentage is unsupported by adequate analysis. I have identified several opportunities to increase BEV deployment and improve the analysis, which would better meet urgent environmental, climate, and environmental justice goals. USPS must incorporate the issues raised in order to support its decisions on the fleet procurement strategy.

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[28] SEIS. Table F-4.d

[29] Burnham, A. (2021). MOVES3 Vehicle Operation Emission Factors. Argonne National Laboratory. Retrieved from https://greet.es.anl.gov/files/update_moves3.

[30] SEIS. Section 4-11.3.1

[31] SEIS. Section 4-11.2

[32] SEIS. Section 3-3

[33] Office of Economic Impact and Diversity. (n.d.) Energy Justice Dashboard (BETA). US Department of Energy. Retrieved from https://www.energy.gov/diversity/energy-justice-dashboard-beta.

APPENDIX A

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EDUCATION

2019	Ph.D.	Environmental Engineering, University of California, Berkeley *Dissertation: "Effects of Diesel Emission Control Measures and Truck Routing on Air Quality, Environmental Equity and Justice"*
2014	M.S.	Environmental Engineering, University of California, Berkeley
2013	B.S.	Chemical Engineering, University of California, Los Angeles

PROFESSIONAL EXPERIENCE

Academic Appointments

2022-present	Assistant Professor, Department of Civil and Environmental Engineering University of California, Los Angeles
2019-2020	Postdoctoral Research Fellow, Institute for Social Research University of Michigan

Other Professional Experience

2020-2022	Transportation Equity Research Fellow, Congressional Black Caucus Foundation, Inc.
2017-2019	Research Intern, California Office of Environmental Health Hazard Assessment
2016-2018	Community Engagement Intern, Bay Area Air Quality Management District
2015-2017	Intern, Greenaction for Health and Environmental Justice
2015	Intern, Communities for a Better Environment

PUBLICATIONS

Journal Articles

1. **Patterson, R.F.** Engineering solutions for justice: Transformative approaches to address transportation-related disparities. *The Bridge*. 2022, 52, 19-24.
2. Wang, Y.; Apte, J.S.; Hill, J.D.; Ivey, C.E.; **Patterson, R.F.**; Robinson, A.L.; et al. Location-specific strategies for eliminating US national racial-ethnic PM2.5 exposure inequality. *Proc. Natl. Acad. Sci. USA*. 2022, 119, e2205548119.
3. **Patterson, R.F.**; Harley, R.A. Effects of diesel engine emission controls on environmental equity and justice. *Environ. Justice*. 2021, 14, 360-371.
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1. Shingledecker, S.; **Patterson, R.**; Haley, C.; Mills, A. Recommendation Report: Understanding Needs to Broaden Outside Use of NASA Data for the Environmental Justice Community (UNBOUND-EJ). Earth Science Information Partners. 2022.
2. **Patterson, R.F.** Driverless Jobs: Autonomous Vehicle & A Just Transition for Black Drivers. Policy Brief. Congressional Black Caucus Foundation, Inc. 2021.
3. **Patterson, R.F.** Gender, Climate and Transport in the United States. Policy Brief. Women's Environment & Development Organization. 2021.

4. **Patterson, R.F.** New Routes to Equity: The Future of Transportation in the Black Community. Policy Brief. Congressional Black Caucus Foundation, Inc. 2020.
5. Corburn, J. et al. Situational Analysis of Mukuru Kwa Njenga, Kwa Reuben & Viwandani. Technical Paper. UC Berkeley, University of Nairobi, Muungano Alliance, Strathmore University, and Katiba Institute, Nairobi. 2017.

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1. **Patterson, R.** Black communities must lead the charge to repair harm from freeways. Environmental Health News. 2021.
2. Hicken, M.; **Patterson, R.**; Miles, L.; Sylvers, D. American Landscapes of Racial Dispossession and Control. Interdisciplinary Associates for Population Health Science Blog. 2019.
3. **Patterson, R.** Enough: Refusal to conform to narrow conventions of STEM through presence, research, and citation. Cite Black Women Collective Blog. 2019.

AWARDS AND FELLOWSHIPS

2022	Young, Gifted & Green 40 Under 40 Award, Black Millennials for Flint
2022	US Frontiers of Engineering Symposium Speaker, National Academy of Engineering
2020-2021	Agents of Change in Environmental Health Fellow, Environmental Health News
2018-2019	Switzer Environmental Fellowship, Robert & Patricia Switzer Foundation
2017	Impact Award, Kapor Center for Social Impact
2016-2019	Science to Achieve Results (STAR) Fellowship, US Environmental Protection Agency
2015	Roselyn Lindheim Award, UC Berkeley School of Public Health
2013-2015	Chancellor's Fellowship, UC Berkeley
2013	Student Commencement Speaker, UCLA School of Engineering
2013	Harry M. Showman Research Prize, UCLA School of Engineering
2013	Achievement Award for Student Welfare, UCLA School of Engineering
2013	Science Poster Day Dean's Prize, UCLA
2013	Elma Gonzalez Award for Outstanding MARC Senior, UCLA MARC
2012	Certificate of Achievement for poster presentation, ABRCMS
2011	Outstanding Poster Presentation Award, SACNAS
2008-2012	Dean's Scholarship, UCLA

FUNDED PROJECTS

UCLA Instructional Improvement Program # 22-17: Developing an Engineering Engaged Scholarship Course in Environmental Justice. Role: PI. $13,272.75. 01/2023 – 06/2023.

RESEARCH EXPERIENCE

2019-2020	Postdoctoral Research Fellow, Institute for Social Research, University of Michigan
2017-2019	Research Intern, Office of Environmental Health Hazard Assessment, Oakland, CA
2016	Institute of Urban and Regional Development, University of California, Berkeley
2013-2019	Graduate Researcher, Harley Lab, University of California, Berkeley
2012	Joint Research Institute in Science and Engineering, Peking University, Beijing, China
2011-2013	NIH Minority Access to Research Careers (MARC), University California, Los Angeles

TEACHING

University of California, Los Angeles

2023 CEE 188 – Engineering and Environmental Justice
2023 CEE 188 – Transportation Sustainability

University of California, Berkeley

2019 ESPM 72 – Introduction to Geographic Information Systems
2019 ESPM 163AC – Environmental Justice: Race, Class, Equity, and the Environment

2016 E157AC – Engineering, the Environment, and Society

Other Teaching Experiences

2016 College Success Instructor, Summer Math and Science Honors Academy (SMASH)
2015 Engineering and Design I Instructor, Summer Math and Science Honors Academy (SMASH)
2014 Math Instructor, Upward Bound/Upward Bound Math-Science
2010 Teaching Assistant, Science Mathematics Achievement and Research Technology for Students (SMARTS) Program

PROFESSIONAL SERVICE

Peer Reviewer for Journals: Atmosphere; The Annals of the American Academy of Political and Social Science; Development Engineering; Environmental Research Letters; Environmental Science & Technology; Journal of Transport Geography

Committees

2023 National Academies of Sciences, Engineering, and Medicine Committee to Review the Draft Fifth National Climate Assessment
2023 Congress for the New Urbanism Committee to Select the 2023 Freeways Without Futures

Organizing Meetings

2021 Regional Vision Zero Summit, Washington Area Bicyclist Association
2021-2023 #BlackInEnvironWeek, Black in Environment
2020 RacismLab MLK Symposium, University of Michigan
2015 Inaugural Bay Area Graduate Pathways Symposium, University of California, Berkeley

Organizing Outreach Events

2016 Black Engineering Workshop Series, University of California, Berkeley
2009-2013 Women in Science and Engineering (WISE) Day, University of California, Los Angeles
2009-2013 Youth Motivation Day (YMD), University of California, Los Angeles
2009-2013 Engineers in Training (EIT) Day, University of California, Los Angeles

Professional Organizations

2022-Present Air Quality & GHG Mitigation Committee, Transportation Research Board
2021-Present Co-Founder, Black in Environment
2020 Volunteer, Postdoctoral Association Antiracism Subcommittee, University of Michigan
2020 Twitter Team, Interdisciplinary Associates for Population Health Science
2019-2020 Founder/Chair, Black Postdocs Circle, University of Michigan
2014-2019 Board Member, Black Graduate Student Association, University of California, Berkeley
2014-2018 Board Member, Black Graduate Engineering and Science Students, University of California, Berkeley
2008-2012 National Society of Black Engineers – President, Pre-College Initiative Chair, Public Relations Chair, Senator, University of California, Los Angeles

COMMUNITY OUTREACH

2021 Guest Presenter, The Freedom Community School, Washington, DC
2020 Guest Presenter, Sister Mentors, Washington, DC
2018 Guest Presenter, Girls Inc. of Alameda County
2017-2018 Guest Lecturer, NSBE Jr. East Bay Chapter, Pittsburg High School
2017 Volunteer, MLK Public Service Day, Brookfield Elementary School
2016-Present Creator, Black Engineering Workshop Listserv, San Francisco Bay Area
2015 Volunteer, A Stand for Education (ASFE), UC Berkeley
2015 Volunteer, Leadership, Technology, and Innovation Conference, Oakland High School
2014-2015 Mentor, Oakland Science and Math Outreach, Boys and Girls Club of Oakland
2013-2019 Math Tutor, Project Touchdown, St. Paul's AME Church
2009-2013 Volunteer, Mathematics, Engineering, Science Achievement (MESA) Day, UCLA

2008-2013 Tutor, National Society of Black Engineers (NSBE), UCLA

PRESENTATIONS

Conferences

2023 Health Effects Institute Annual Conference. *Environmental Justice and other Implications of New Transportation on TRAP and Health*. Boston, MA (April 30-May 2, 2023).

2023 AYA Research Institute, Inc. Future of Technology in a Just Transition Symposium. *Modeling Tools Inform Environmental Justice Efforts to Reduce Transportation-Related Air Pollution*. Virtual (April 27-28, 2023).

2023 Transportation Research Board Annual Meeting. *Fleet Electrification, EJ Communities, and Avoiding Unintended Consequences*. Washington, DC (January 8-12, 2023).

2022 CBCF Annual Legislative Conference. *Where the Rubber Meets the Road: Operationalizing the Justice40 Initiative to Actualize Transportation Equity.* Washington, DC (September 28-October 2, 2022).

2022 US Frontiers of Engineering Symposium. *Engineering Solutions for Justice: A Case Study of Electric Vehicles*. Seattle, WA (September 21-23, 2022).

2022 Second National Conference: Justice in Geoscience. *Advancing Environmental Justice through Research*. Washington, DC (August 14-17, 2022).

2022 YIMBYtown Conference. *From Highways to Homes: The opportunity to reconnect communities divided by freeways*. Portland, OR (April 11-13, 2022).

2022 New Horizons in Conservation Conference. *Environmental Justice – Trends in Research and Advocacy*. Virtual (March 29-31, 2022).

2021 CBCF Annual Legislative Conference. *Autonomous Vehicles and Transportation Equity.* Virtual (September 12-17, 2021).

2021 Transportation Research Board Conference on Advancing Transportation Equity. *The Misplaced Burden of Rectifying Inequity.* Virtual (September 9-14, 2021).

2020 CBCF Annual Legislative Conference. *Moving to Racial Equity in Transportation.* Virtual (August 31-October 2, 2020).

2018 American Geophysical Union (AGU) Fall Meeting. *Quantifying the Impacts of Diesel Truck Regulations on Environmental Equity and Justice in an Urban Freight Corridor*. Washington, DC (December 10-14, 2018).

2018 HBCU Climate Change Conference. *The Climate and Environmental Justice Implications of Reducing Diesel Truck Emissions.* New Orleans, LA (September 19-23, 2018).

2018 International Aerosol Conference. *Effects of Diesel Truck Regulation on Environmental Justice in a Major Freight Corridor in California.* St. Louis, MO (September 2-7, 2018).

2018 Youth for the Environment and Sustainability (YES) Conference. *Green Careers: Environmental Justice.* Oakland, CA (February 24, 2018).

2016 Empowering Women of Color Conference. *Women of Color in STEM: Demystifying Science While Broadening the Scientific Community.* Berkeley, CA (April 9, 2016).

2012 Annual Biomedical Research Conference for Minority Students (ABRCMS). *Particle Deposition in Respiratory Tracts of School-Aged Children using Multiple-Path Particle Dosimetry Model (MPPD).* San Jose, CA (November 7-11, 2012).

2011 Society for the Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) National Conference. *Particle Deposition in Respiratory Tracts of School-Aged Children using Multiple-Path Particle Dosimetry Model (MPPD).* San Jose, CA (October 27-30, 2011).

Invited Keynotes/Talks

2023 UC Davis Institute of Transportation Studies. *Freeway Removal: Lessons from the Past to Inform an Equitable Transport Future*. Davis, CA (March 3, 2023).

2022 NSBE Region VI Fall Regional Conference Panel. *Maximizing Your PhD: Preparing for Academia or Industry*. Los Angeles, CA (November 19, 2022).

2022 Health Effects Institute New Science to Inform Environmental Justice Workshop Panel. *What are barriers to and opportunities for conducting effective EJ research?* Atlanta, GA (October 20-21, 2022).

2022 Transportation Research Board Annual Workshop on Transportation Law Panel. *Infrastructure Investment and Jobs Act (IIJA): Seizing the Moment to Transform Transportation*. Portland, OR (July 26, 2022).

2022 Washington State Joint Transportation Committee. *Reconnecting Communities: An Opportunity to Repair Harm.* Virtual (June 21, 2022).

2022 New Jersey Planning and Redevelopment Conference Panel. *Beyond Getting from A to B: Ensuring Safer and Fairer Ways to Move Around*. Virtual (June 15, 2022).

2022 Young Professionals in Transportation – Greater NYC Chapter. *Transportation Equity*. Virtual (May 5, 2022).

2022 Smithsonian Arts + Industries Building. *We Interrupt Your Regularly Scheduled Panel: Future of Transportation*. Washington, DC (April 24, 2022).

2022 Washington State Transportation Commission. *Reconnecting Communities: An Opportunity to Repair Harm*. Virtual (March 16, 2022).

2022 WE ACT for Environmental Justice Panel Moderator. *Driving Down Pollution from the Transportation Sector*. Virtual (February 22, 2022).

2022 Washington State Senate Transportation Committee. *Reconnecting Communities: An Opportunity to Repair Harm.* Virtual (January 27, 2022).

2022 United Methodist Women Just Energy for All Webinar. *Women on the Move: Equity and Climate Justice in Public Transit*. Virtual (January 19, 2022).

2022 Smart Growth America Equity Summit Moderator. *Transportation Equity and Technology*. Virtual (January 12, 2022).

2022 The American Public Transportation Association Kaleidoscope Webinar Series Panel. *Infrastructure Funding is on the Way: What Does it Mean for Diversity, Equity, Inclusion, and Belonging?* Virtual (January 6, 2022).

2021 Association for Commuter Transportation TDM Forum Keynote. *Reimagining Transportation to Repair Harm*. Virtual (December 14, 2021).

2021 New Jersey Climate Change Alliance Vision Forum. *Healthy, Just, Resilient and Carbon-Neutral Mobility for All*. Virtual (December 13, 2021).

2021 UCLA Lake Arrowhead Symposium Panel Moderator. *Transit Before and During COVID-19.* Virtual (September 30, 2021).

2021 Women's Environment & Development Organization Panel. *Building an Inclusive Transportation System.* Virtual (July 29, 2021).

2021 Shared Use Mobility Center National Shared Mobility Summit Panel Moderator. *What is required in a participatory decision-making process to advance mobility justice?* Virtual (July 27, 2021).

2021 Cambridge Systematics Equity in Transit Symposium. *New Routes to Equity: The Future of Transportation in the Black Community.* Virtual (July 26, 2021).

2021 Washington Area Bicyclist Association Regional Vision Zero Summit Panel. *Law Enforcement out of Traffic.* Virtual (June 24, 2021).

2021 Unurbanist Assembly. *Naming Harm in Transportation: Tools of Control and Oppression.* Virtual (June 18, 2021).

2021 Metcalf Institute Annual Science Immersion Workshop for Journalists. *Climate Change & Public Health.* Virtual (June 10, 2021).

2021 American Association of Blacks in Energy National Summit Panel Moderator. *The Future of Transportation – Vehicle Choice, Infrastructure Access, and Economic Development – Connecting Communities to Economic Opportunities.* Virtual (May 25, 2021).

2021 UCLA Engineering in Action Series Panel. *Transportation Equity.* Virtual (May 20, 2021).

2021 Council of University Transportation Centers Webinar Panel. *Advancing equity in transportation research.* Virtual (May 20, 2021).
2021 Move Minneapolis Summit. *Health and Urban Freeways.* Virtual (May 18, 2021).
2021 US Climate Action Week Panel. *Preparing Our Communities to Address the Climate Crisis: Science Leads the Way.* Virtual (April 20, 2021).
2021 MIT Research to Policy Engagement Initiative. *Environmental Justice Research: Centering Community and Informing Policy.* Virtual (April 9, 2021).
2021 University of Michigan Law School's Law and Mobility Conference Panel. *Transportation Equity and Emerging Technologies.* Virtual (April 1, 2021).
2021 Shared Use Mobility Center Shared Mobility Rocks Panel. *Decarbonizing Transportation.* Virtual (March 3, 2021).
2021 American Association of Blacks in Energy Legislative Issues Public Policy Committee Webinar Series Panel. *Transportation Policy, Climate Change, and Equity – The Future of Transportation – A Review of Low-Emissions Vehicle Policy and Equitable Access.* Virtual (February 17, 2021).
2021 UCLA Urban Planning & Institute of Transportation Studies Perloff Lecture Series on Race in Transportation. *New Routes to Equity: The Future of Transportation in the Black Community.* Virtual (February 11, 2021).
2019 Cite Black Women Panel. *#citeblackwomen: A Candid Dialogue about Citational Politics and Black Women's Knowledge Production.* Berkeley, CA (February 22, 2019).
2016 Stockholm Environment Institute. *Mukuru – Nairobi Community Upgrading Partnership.* Nairobi, Kenya (July 29, 2016).

Guest Lectures

2022 Technology and Society, UCLA (May 11, 2022).
2021 Exploration of Social Equity and Justice in Civil and Environmental Justice, UC Berkeley (October 29, 2021).
2021 Environmental Justice, George Washington University (June 16, 2021).
2021 Technology and Society, UCLA (May 5, 2021).
2021 Equity and Ecology, Harvard University (April 1, 2021).

ATTACHMENT B

Congress of the United States
Washington, DC 20515

June 08, 2023

The Honorable Louis DeJoy
Postmaster General and Chief Executive Officer
U.S. Postal Service
475 L'Enfant Plaza SW
Washington, D.C. 20260

Dear Postmaster General DeJoy,

As the Representatives for Missouri's Fifth Congressional District and Kansas' Third Congressional District, we write to you today concerning the U.S. Postal Service's (USPS) plans to electrify their delivery vehicle fleet as announced in December 2022.

In August 2022, we – along with many of our House and Senate colleagues – voted to pass the *Inflation Reduction Act*, which included a $3-billion authorization for USPS fleet electrification. As such, we are pleased at the USPS' announcement to invest nearly $10 billion in battery electric vehicles (BEVs) with plans to purchase over 66,000 of them over the next five years.

Additionally, we welcome the USPS' contract with the Ford Kansas City Assembly Plant to build 9,250 of these BEVs that will begin deployment later this year. These BEVs will help improve mail delivery efficiency, drastically reduce the USPS' carbon emissions and air pollution, and capitalize on the manufacturing capabilities of communities like the greater Kansas City area.

As the USPS develops plans to deploy these BEVs, please see the attached concerns from CleanAirNow – a climate action organization serving our communities – about ensuring equitable deployment in underserved communities. We ask that you give their concerns your full and fair consideration.

Thank you for your attention to this matter. Should you have any questions or concerns, please contact Harden Spencer (Harden.Spencer@mail.house.gov), Eric Dunay (Eric.Dunay@mail.house.gov), or Rani Williams (Rani.Williams@mail.house.gov) in our offices.

Sincerely,

Emanuel Cleaver, II
Member of Congress

Sharice L. Davids
Member of Congress

Congressman Emanuel Cleaver
Congresswoman Sharice Davids

RE: USPS to deploy these electric vehicles in underserved communities in KC and similar environmental justice neighborhoods.

In August 2022, you helped pass the Inflation Reduction Act which authorized $3 billion for electrifying the United States Postal Service (USPS) fleet. In February 2023, the USPS awarded a new contract to purchase 9,250 Battery Electric Vehicles (BEV) as the first step in this overall plan. The USPS will ultimately invest $9.6 billion in BEVs - fully switching to them by 2026.

CleanAirNow, a climate and environmental justice organization focused on building community power through environmental health education, equitable community-based research projects, and community led solutions in public policy, welcomes this step to bring electric vehicles to our neighborhoods across the nation.

The first order of vehicles will be produced by Ford in Kansas City, Missouri. Environmental justice communities, in the Greater Kansas City area and nationwide, have long suffered the cumulative impacts of legacy pollution. Therefore, the USPS should prioritize deploying this clean fleet in our neighborhoods, meeting the Biden administration's Justice40 goals to invest 40 percent of overall benefits in disadvantaged communities.

Please urge the USPS to do its due diligence and ensure these underserved communities are prioritized in seeing the social, economic, and health benefits of a zero-emission fleet. We stand ready to work with both of your offices, local officials, and the USPS to ensure a just and effective rollout of this BEV fleet.

Sincerely

Beto Lugo Martinez
Executive Director
betomtz.lugo@cleanairnowkc.org
323-313-2253

COLTURA
Moving Beyond Gasoline

VIA Email to NEPA@usps.gov

Mr. Davon Collins
Environmental Counsel
United States Postal Service
475 L'Enfant Plaza SW, Office 6606
Washington, DC 20260-6201

Re: Coltura Comments on USPS SEIS re Next Generation Delivery Vehicle (NGDV) Acquisitions

Dear Mr. Collins:

Coltura hereby submits the following comments regarding USPS's SEIS re Next Generation Delivery Vehicle (NGDV) Acquisitions in response to an invitation from Jennifer Beiro-Réveillé, USPS Sr. Director, Environmental Affairs and Corporate Sustainability. This comment supplements the joint comment that Coltura submitted with the National Resources Defense Council, the Union of Concerned Scientists, and the Zero Emission Transportation Association. This comment focuses narrowly on maximizing emission reductions and cost savings impacts by prioritizing electrification of those USPS vehicles ***which use the most gasoline***.

Background

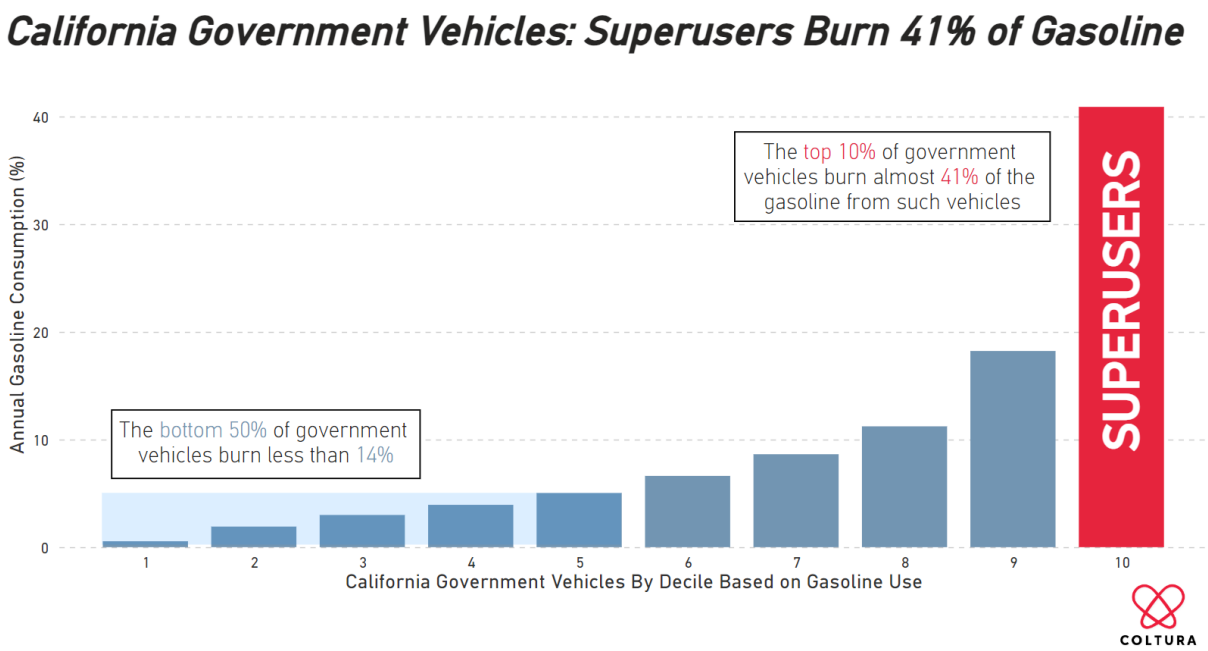
Coltura is a 501(c)(3) nonprofit moving America beyond gasoline. In 2021, Coltura developed the "Gasoline Superusers" approach, a data-driven method of prioritizing the biggest users of gasoline ("Superusers") for the switch to EVs to reduce gasoline use faster. Coltura's research on Superusers has been published in the Environmental Law Reporter, presented to the National Academy of Sciences, and featured in many publications.

Prioritize Vehicles Using the Most Gasoline for Electrification

The principal purpose of the electrified NGDV program is to avoid GHG and criteria pollutant emissions caused by gasoline combustion. The implementation of the NGDV program should therefore be designed to minimize gasoline consumption. To do this, the USPS should prioritize the replacement of those vehicles using the most gasoline with battery electric vehicles (BEVs). Generally, this will mean that BEVs should be prioritized for longer routes and for facilities with a preponderance of longer routes. This approach will result in substantially more gasoline, carbon, and criteria emissions reduction as compared to replacing existing delivery vehicles with BEVs without regard to gasoline reduction.

110 Prefontaine Pl.S., Ste. 304, Seattle, WA 98104 tel. 206-445-7628 info@coltura.org www.coltura.org

While individualized data on the gasoline use of USPS vehicles is not presently available, the following graph illustrating gasoline consumption of governmental vehicles in California by decile is instructive. It shows that the top 10% of government vehicles in terms of gasoline consumption burn 41% of all the gasoline used by government vehicles in California.



It is likely that an analysis of gasoline consumption of USPS vehicles by decile based on gasoline use would show a similar pattern.

The USPS Should Prioritize BEV Solutions for Its Longest Distance Routes

The SEIS indicates that the USPS intends to avoid deploying BEVs on routes longer than 70 miles. While routes longer than 70 miles constitute fewer than 10% of USPS routes, they constitute a much larger share of USPS gasoline use because distance traveled is the primary driver of gasoline use. Rather than purchase new ICE vehicles for these routes, the USPS should purchase BEVs that offer a range sufficient to complete these routes. In cases where a BEV of sufficient range is not available, arranging for charging en route could be a viable option.

The USPS Should Set More Aggressive Targets for Fleet-Wide Gasoline Reduction

The SEIS notes that the USPS delivery fleet consumed 189 million gallons of gasoline in FY 2022 for delivery operations. It projects that the delivery vehicles proposed for replacement consume between 83-89 million gallons of gasoline per year, or roughly 45% of all USPS gasoline. Given that the USPS proposes replacing 62% of its vehicles with BEVs under Alternative 1 and projects gasoline reduction of around 45%, the USPS could substantially increase its gasoline reduction potential by optimizing its vehicle assignments for gasoline reduction.

The USPS should aim to achieve reductions in gasoline use significantly higher than the percentage of BEVs in its fleet. While a lack of data on USPS operations does not allow for the recommendation of a precise target, the USPS should aim to reduce its gasoline consumption by at least 80% over the eight-year replacement period, provided that it prioritizes BEVs for its longer routes. Such an approach will not only lead to a decrease in GHG emissions but will also result in decreased operating costs.

Coltura favors the maximum feasible electrification of the entire Postal Service vehicle fleet. Its suggestion that longer routes that consume more gasoline should be prioritized for BEVs should in no way be construed as a recommendation that fewer vehicles be electrified.

Conclusion

We appreciate the opportunity to provide feedback on the SEIS. Significant public health and climate benefits, as well as cost savings, will be realized from the deployment of BEVs in a manner that maximizes gasoline reduction.

Sincerely,

COLTURA

Matthew N. Metz
Co-Executive Director

USPS SEIS Comment

The Center for Transportation and the Environment (CTE) applauds the United States Postal Services (USPS) Preferred Alternative Mixed Fleet with increased BEV commitment. The 62% Battery Electric Vehicle (BEV) procurement is a significant improvement from the 10% BEV procurement plan currently established. **However, CTE adamantly encourages the USPS to perform fleet electrification planning in tandem with executing the procurement of any vehicles.**

CTE is a 501 (c)(3) non-profit and the national leader in developing fleet electrification plans for public transit and municipal fleet operators. Fleet electrification plans are recognized by the Federal Transit Administration (FTA) as effective planning tools and are required by FTA in order to receive federal funds through their LowNo program. The LowNo program has received widespread support and acclaim as an effective tool to aid transit fleet operators to transition their fleets to zero emissions. The California Air Resources Board (CARB) and the Environmental Protection Agency (EPA) also require fleet electrification planning for their Innovative Clean Transit (ICT) and Clean School Bus Program respectively.

The proposed actions, in the absence of Fleet electrification planning, will fail to properly assess zero-emission vehicle operational capacities, accurate upfront capital costs, and life cycle costs, which will cost the agency valuable funds. Fleet electrification planning will enable the USPS to maintain its current procurement and deployment timeline while ensuring that the appropriate number of electric vehicles are deployed in the most cost-effective and operationally efficient manner. This type of analysis can help optimize the benefits of both conventional and electric vehicle technology to ensure maximum benefit for the USPS and its customers.

Fleet Electrification Planning v. Fleet Electrification Procurement Targets

The Fleet Electrification Planning process would evaluate (a) the operational feasibility and technology requirements of the USPS's existing operations; (b) the cost-benefit ratio of various operational strategies, including all candidate powertrain technologies; and (c) the infrastructure requirements for fleet electrification to develop a plan that optimizes costs, efficiency, and environmental benefits.

CTE developed the industry standard Zero-Emission Vehicle Planning Methodology for fleets. This methodology considers vehicle and service requirements, fleet procurement timelines, infrastructure assessments, vehicle and facilities capital costs, operating and maintenance cost impacts, and emission benefits as fleets move to become 100% zero emission.

Alternative 1, Alternative 2, and No-Action options all establish fleet electrification procurement targets as opposed to fleet electrification planning. Currently, in Appendix C, the Hypothetical Purchase Plan displays procurement and replacement plans for the USPS fleet. These assumptions were based solely on supplier estimates and recognize that a proper transition requires factoring in operational needs, available appropriations, and facility capabilities.

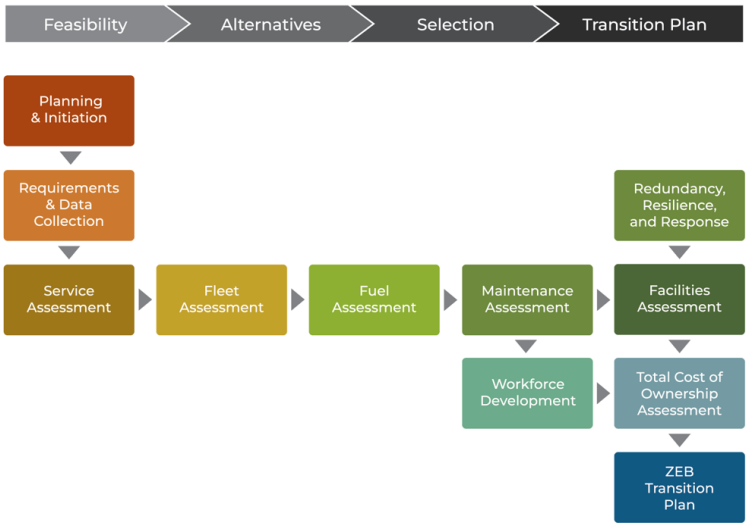
Needed Changes to the Supplemental SEIS

The Postal Service established a Purpose and Need for its fleet transition and the best way to address this purpose and need is to do Fleet Electrification Planning now and then conduct periodic plan updates in tandem with future procurements to avoid ineffective decision-making. Sections 3-3 and 3-4 of the Supplemental Environmental Impact Statement fail to incorporate a proper fleet electrification process and therefore will not fully address the SEIS' purpose and need.

The Fleet Electrification Process maximizes the vehicle replacement schedule and expected benefits (e.g., reduced air emissions, quieter vehicles, reduced gasoline usage) while at the same time meeting performance, safety, and ergonomic requirements of the entire nationwide system. The process will give USPS the ability to fully leverage Inflation Reduction Act funding by making informed choices from the start.

CTE's standard Zero-Emission Bus Transition Planning Methodology, as highlighted below, encompasses ten key phases: Planning & Initiation; Requirements & Data Collection; Service Assessment; Fleet Assessment; Fuel Assessment; Maintenance Assessment; Facilities Assessment; Redundancy, Resilience, and Response; Total Cost of Ownership Assessment; and finally, the creation of the ZEB Transition Plan itself. The current USPS

strategy only incorporates a single piece of one of the phases which may lead to designs that may cost more in the long run from design challenges, suboptimal performance, and fleet inefficiencies.



Concluding Statement

The Center for Transportation and the Environment enthusiastically submits these comments in the hope that the USPS incorporates Fleet Electrification Planning as an integral part of the procurement and deployment of incoming USPS' incoming mixed Fleet. Setting fleet composition targets without a fleet electrification study will significantly impact the USPS's ability to realize the full benefits of electric-drive technology, as well as greatly increase the risk of the electric NGDVs failing to meet their service and cost-savings requirements. With proper planning, the USPS can leverage the capabilities of experienced zero-emission fleet planners and engineers to modernize the USPS fleet in the most environmentally conscious and cost-effective manner.

B6 Public and Agency Draft SEIS Comments and Responses

Table B6-1
Responses to EPA, Other Agency, and Public Comments Timely Received in Response to the NOA of the Draft SEIS (including Comments Received during the Draft SEIS Public Hearing), and Postal Service Responses

Unless updated in the below Table or in the Final SEIS, the Postal Service's responses to identical and similar comments submitted during the SEIS scoping period or during the FEIS process are incorporated by reference.

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
1	**EPA has identified the following technical concerns that should be addressed in the Final SEIS.** ***Cost Modeling*** **The 2021 Final EIS used a TCO model to help determine the share of BEVs and choose alternatives, based on the lifetime costs of vehicles, consistent with best practices. The TCO model is not used to conduct the analysis in the Draft SEIS. Instead, the analysis relies only on the up-front acquisition cost of vehicles, which would result in inappropriately skewing the results toward ICE vehicles over BEVs. The TCO includes the acquisition and operating and maintenance costs to compare the costs among alternatives. Please also see our comments below on *Investment and Acquisition Considerations.***
	Per Section 3-2.3 of the Draft SEIS, Total Cost of Ownership (TCO) was used in the FEIS to compare and contrast relative costs among the Alternatives as that was the metric in determining the "best value" among the offerors for the NGDV procurement. This was considered a sufficient basis for relative cost comparison in the FEIS because the Alternatives in the FEIS were designed to provide maximum flexibility in terms of whether ICE or BEV powertrains would be procured over a ten-year period. In contrast, in this SEIS, the Postal Service is proposing a very different approach – i.e., acquiring a smaller quantity of vehicles over a shorter time period with fixed percentages of ICE and BEV powertrains and fixed quantities of COTS and NGDV vehicles. The Postal Service would not make such large capital commitments primarily on the basis of vehicles' total cost. Such commitments are complex financially and operationally. This is because the Postal Service does not have the resources to purchase vehicles irrespective of acquisition cost (i.e. the cost which would be paid in the present from available funds) and because the precise scheduling of each element of the transition to electric vehicles (e.g., acquisition and installation of chargers and training of employees must take place before BEVs arrive) is critical to ensure the Postal Service can achieve our Universal Service Mission. Therefore, comparing Alternatives with fixed percentages using upfront acquisition costs was determined to be more reasonable, prudent and transparent regarding the factors affecting the Postal Service's decision-making process. Furthermore, using upfront acquisition costs rather than TCO would not "skew" the Postal Service's choice of ICE versus BEV vehicles. In fact, if the Postal Service were to make such specific purchasing decisions based on TCO the Postal Service would be forced to acquire far fewer than 66,000 (62%) BEVs at this time. Furthermore, as stated in our NGDV Record of Decision (ROD), sensitivity analyses incorporating higher gasoline prices did not bridge the TCO gap for a quantity of 75,000 vehicles, let alone for the size of the entire Postal Service fleet. Since the ROD, the Postal Service has continued in the ordinary course of business to conduct sensitivity analyses, including models involving gasoline prices well

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
	above $4.50 per gallon. Our sensitivity analyses show that higher gasoline prices did not result in BEVs having a lower TCO than ICE vehicles for most routes over the 20-year horizon we anticipate using these new vehicles.
2	***Cost Modeling (Cont.)*** **The current analysis does not account for the lower fuel costs of BEVs, the lower maintenance costs of BEVs, and the risks posed by oil price shocks over time. Additionally, the cost of gasoline and electricity varies across the country. Applying a TCO framework for separate regions of the country will likely show that BEVs are much cheaper over the life of the vehicles for most, if not all, parts of the country. EPA recommends that the Final SEIS incorporates these components in the analysis as appropriate.** **When using the TCO model, the constraints should be clearly documented. For instance, the Draft SEIS states that Postal Service will not use BEVs for routes that exceed 70 miles. However, in the GAO's April 2023 analysis[2] of all routes, the purchasing model selected gas vehicles for 2 percent of routes greater than 70 miles. EPA recommends that any constraints or criteria which fundamentally affect the modeling of the alternatives be identified and included in the analysis and discussed in the Final SEIS.** **[2] GAO 2020, GAO-20-195G Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs https://www.gao.gov/products/gao-20-195g**
	See Response No. 1 above for why TCO was decided not to be included in the SEIS. While the Postal Service appreciates the GAO's analysis of its routes and EPA's interpretation on how it could be applied, the Postal Service must make vehicle investment decisions based on its financial position and operational needs, including our determinations as to appropriate route lengths. As stated in the SEIS and in Response No. 1, the acquisition cost and ability to bring infrastructure online on a timeline that supports the urgent need to replace mission-critical vehicles are the basis for the decision to acquire 62 percent BEVs in this SEIS. Additionally, as stated in the SEIS, this purchase is less in total quantity than the FEIS to provide the flexibility to increase that overall percentage, should the market and infrastructure timelines prove favorable for the Postal Service to pursue more BEVs. Also it is noteworthy that in Appendix II to the GAO's final report cited by EPA above, the GAO acknowledged that they needed to provide updates to their preliminary analysis after gaining a better understanding of the Postal Service's data – in particular, the impact of the Postal Service's expected twenty-year use on the relative maintenance cost differences between ICE and BEV vehicles (emphasis added): "*We testified in April 2022 that our preliminary analysis of the model's methodology raised questions about the ways the model estimates the costs and benefits of the gas and electric next generation delivery vehicle. USPS provided additional documentation to respond to these questions. Specifically, we testified that USPS's assumption for fuel efficiency used a gas mileage assumption that did not reflect the use of air conditioning. USPS provided documentation that demonstrated the updated model also uses a revised fuel efficiency assumption that reflects contractor data from fuel efficiency performance tests. We also testified that USPS's assumption for maintenance costs appeared to show electric vehicles as having a higher maintenance cost per mile than gas vehicles. USPS provided additional documentation that showed USPS determines maintenance costs over the expected service life of the vehicle.* ***While USPS estimates electric vehicle maintenance will cost less than gas vehicles on an annual basis, the model's average process for electric vehicles with a longer service life results in similar maintenance cost per mile for gas and electric vehicles***."

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
3	***Cost Modeling (Cont.)*** **If the analysis includes the subsidies provided by the IRA, the optimal, cost-effective strategy (using a TCO framework) would result in a higher percentage of BEVs purchased than the approximately 60 percent proposed by the Postal Service. As noted above, the GAO analysis suggests the Postal Service should purchase 90 percent BEV if using the prevailing cost of gasoline and the reduced cost of charging infrastructure resulting from the IRA subsidies. The GAO report noted that if the average price of charger installation dropped from $18,000 to $12,000, the model recommends mostly BEV if all other costs remain constant. The IRA included $1.71 billion in subsidies for BEV-related infrastructure, or roughly $26,000 per charger installation (based on roughly 66,000 BEVs in alternatives 1 and 2). The IRA subsidy would provide four times more than needed to have the TCO model recommend mostly BEVs. EPA had previously pointed out that the assumption of one charging station for each vehicle was too strict, as some vehicles could be charged while others were out. Additionally, BEVs with low mileage demands will not need a daily charge. Correctly accounting for these costs in the TCO model will increase the optimal purchase of BEVs in all alternatives, including the No Action Alternative. Using the results from the GAO analysis, combined with the $1.29 billion for the purchase of zero-emission vehicles and $1.71 billion for BEV-related infrastructure provided by the IRA, the optimal, cost-effective strategy would be to purchase a much higher percentage of BEVs than the approximately 60 percent proposed by the Postal Service.**
	The Postal Service disagrees that EPA's description of the GAO analysis is accurate. The GAO analysis referenced in this question did not predict costs, but rather was a simple analysis that showed if infrastructure costs decreased, or if gasoline costs increased, either would result in a higher proportion of BEVs. This was simply an illustration of how the model works and did not include research to support these data points. The Postal Service also disagrees with EPA's opinion that our use of 1:1 charger ratios is too strict. That decision is based on the multiple consideration factors, as detailed in the Draft SEIS's Response No. 18 (see Table B3-1), and those factors (e.g., operational costs to manage vehicle movement across multiple chargers, need for additional parking space, and battery conditioning) remain relevant. Another consideration factor for the 1:1 ratio is the need for battery conditioning in order to maximize range. The Department of Energy's National Renewable Energy Labs are now publishing case studies for other government agency fleet implementations, and incorporating a 1:1 charger ratio with other federal entities noting *"an ideal EV to EVSE ratio of 1:1 to ensure each vehicle has its own dedicated EVSE. This will ensure vehicles are always charged and capable of supporting their mission."* See Grand Teton National Park Federal Fleet Tiger Team EVSE Site Assessment, National Renewable Energy Laboratory (2022), p. 6, available at: https://www.nrel.gov/docs/fy22osti/83250.pdf. See also Camp Lejeune Federal Fleet Tiger Team EVSE Site Assessment, National Renewable Energy Laboratory (2022), available at: https://www.nrel.gov/docs/fy22osti/83250.pdf. These studies therefore further corroborate the installed cost of EVSE used within the Postal Service's analysis. Indeed, the Postal Service would emphasize that a 1:1 vehicle-to-BEV-charger ratio is a mission-critical element of our electrification strategy. The Postal Service cannot risk situations where BEVs cannot operate because there is no available charger. For instance,

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
	BEVs often may be required to operate for longer than expected on account of weather, accident, or increased utilization during peak season or due to increased same-day delivery. The SEIS's Preferred Alternative contains fixed ICE/BEV percentages based on current costs because vehicles and infrastructure need to be purchased immediately to ensure delivery of the nation's mail. For that reason, debate about how to properly account for costs in a TCO model is not relevant to the Postal Service's analysis. See Response No. 1 above. Furthermore, acquisition of a new delivery fleet is but one of multiple mission-critical objectives the Postal Service must achieve. For example, as stated in our Delivering for America Plan, the Postal Service is currently investing $40 billion to remedy years of deferred maintenance and to modernize our infrastructure to enable innovation in our products and services. Given these multiple priorities and a limited source of funds to make capital investments, the Postal Service has determined that basing capital decisions on upfront acquisition cost is a more reasonable approach than basing them on future price decreases for delivery vehicles that might or might not occur. Additionally, as stated in Section 3.2.4 of the SEIS, Vehicle Procurement Strategy, the Postal Service's proposed approach to acquire smaller quantities of vehicles over time, after additional supplemental NEPA analyses, will allow us to be more responsive to such factors as technology improvements and changed market conditions, such as lower prices. In short, the Postal Service believes that EPA should not consider the quantity of vehicles in this SEIS's Preferred Alternative in isolation, but in a broader context that considers the Postal Service's multiple, competing priorities (as discussed above), the immediacy of the Postal Service's need to fulfill our current mission requirements, that the Postal Service can avail itself of any positive trends in BEV-related costs and availabilities when procuring vehicles in the future, and that the speed with which LLVs are taken out of operation has a direct and significant effect on the total emissions for most of the criteria pollutants which impact local air quality (see Table 4-6.1, Net Changes in Annual Direct Air Emissions Under Alternative 1).
4	***Cost Modeling (Cont.)*** **Battery costs are the single largest component of the cost of BEVs. Improvements in battery technology over time promise lower acquisition costs over time. EPA recommends the analysis in the Final SEIS account for the lower costs of BEVs over time.**
	See Response No. 3 above regarding consideration of potential future cost reductions. In addition, the vehicles and batteries are being procured in the present, with today's costs, not in the future. While improvements can be expected to lower costs over time, notwithstanding battery pricing increases as currently occurring (See Charts referenced in Response No. 87 showing price increases in 2022 and 2023), the acquisitions made today are being made as part of an execution plan that is operationally critical and that is designed to ensure that fleet electrification occurs without negative impacts to the Postal Service's Universal Service Mission. As such, the vehicle quantity and mix in the SEIS's Alternatives must reflect today's acquisition prices. Future purchases will reflect and capture any lower acquisition costs at those future points in time.
5	***Vehicle Purchase and Replacement Plan*** **The Draft SEIS acknowledges in several sections the Postal Service commitment to no longer purchase gasoline powered vehicles by 2026. However, some portions of the Draft SEIS appear to have conflicting statements. For example, Section 6-2, Geographic Extent and Time Frame states, "The deployment of up to 106,480 replacement delivery vehicles over a six- to ten-year period …". EPA recommends**

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
	that Postal Service remove inconsistent statements to this commitment in the Final SEIS. For clarity, EPA recommends Postal Service clarify in the executive summary that it intends to replace the remaining 100,000 ICE vehicles with BEV at a future date.
	In its December 20, 2022, Press Release "USPS Intends to Deploy Over 66,000 Electric Vehicles by 2028, Making One of the Largest Electric Vehicle Fleets in the Nation," the Postal Service stated: "NGDV acquisitions delivered in 2026 and thereafter expected to be 100% electric." Commitments regarding specific ICE and BEV percentages can be made only with respect to quantities considered in the Alternatives under consideration in this SEIS. "Committing to replace the remaining 100,000 ICE vehicles with BEV at a future date" in this SEIS would pre-decide the Postal Service's decision prior to any future supplements for those vehicles and therefore would not be in accordance with NEPA. To be clear, while adjustments to the provided deployment schedule may occur due to any number of factors, including supplier disruptions and any attempts by the Postal Service to accelerate the receipt of BEVs (which might resultingly push back any ICE quantities), the BEV procurements proposed in this SEIS's Preferred Alternative are in accordance with the expectations provided in the December Press Release regarding future vehicle procurements. Both EPA and members of the public will have a full opportunity to comment on the NEPA analysis for those future procurements. If there is any perceived deviation from the Postal Service's expectation regarding future vehicle procurements, that can more appropriately be pointed out during the relevant public comment period.
6	***Vehicle Purchase and Replacement Plan (Cont.)*** **The No Action Alternative is presented as 106,480 (out of a total of 165,000) NGDV with at least 10 percent BEV. However, the initial order of NGDV does not appear to factor into the No Action Alternative. As noted in Section 1-2.1 of the introduction, "in accordance with our ROD, the Postal Service issued a contract modification that changed the initial delivery order mix to 70 percent BEV NGDV (35,000 vehicles), 20 percent ICE two-wheel drive NGDV (10,000 vehicles), and 10 percent ICE all-wheel drive NGDV (5,000 vehicles)." While this initial order was consistent with the 2022 ROD, it does not appear to be accounted for in the No Action Alternative in the Draft SEIS. EPA recommends that the Final SEIS explain why and/or how this order has been excluded. This explanation may include a discussion about any contract variations with the NGDV supplier that would allow this order to be removed.**
	If the SEIS's No-Action Alternative were selected, the Postal Service would retain the ability to change ICE and BEV percentages, subject to the 10 percent minimum, including for orders already made (for example, by reducing the BEV percentages). Therefore, it was determined that using the minimum percentage was appropriate in the FEIS and ROD, rather than assuming that the current vehicle order is locked-in and unchangeable, which it is not as a contractual matter.
7	***Vehicle Purchase and Replacement Plan (Cont.)*** **According to the 2022 ROD, the current plan is to purchase up to 165,000 NGDV (at least 10 percent BEV) over 10 years. However, Table 3-1.1 (Summary of Alternatives) of the Draft SEIS states that a subset of the full order, or 106,480 NGDV (with 10 percent BEV) over eight years, are analyzed "to ensure a fair comparison against the vehicle quantities proposed under Alternatives 1 and 2." If the plan is to purchase the full 165,000 vehicles over 10 years, EPA believes that the impacts of that plan should be represented in the Final SEIS. EPA recommends that the No Action Alternative in**

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
	Final SEIS include an analysis of the entire 165,000 NGDV as indicated in the 2022 ROD.
	The Postal Service disagrees with the approach suggested by EPA for the reasons that are set forth herein. The assessment of environmental impacts for the full range of ICE-BEV percentages for the FEIS's Preferred Alternative (incorporated by reference) remains valid and available for inspection if any person desires to compare the SEIS's Action Alternatives against the larger quantity permitted in the Record of Decision. For the purposes of this SEIS, the Postal Service maintains that using comparable quantities provided a fairer and more transparent basis of comparison of environmental impacts among the Alternatives.
8	***Selection of Specific Commercial-off-the-shelf (COTS) and Right-Hand Drive/Left-Hand Drive (RHD/LHD) Vehicles*** **Section 3-3.2 (RHD COTS ICE Vehicle Acquisition) of the Draft SEIS notes that "the 14,500 total was chosen because the Postal Service's outreach to potential suppliers indicated that this would likely be the last remaining quantity of RHD COTS vehicles for sale in the U.S. for the foreseeable future." EPA recommends that the Final SEIS provide a more detailed explanation concerning costs, emissions, and other factors that supported these decisions. EPA also recommends that Postal Service consider the possibility of manufacturers expanding the production of RHD COTS, as appropriate.**
	The Postal Service does not believe that information "concerning costs, emissions" and other unspecified factors is relevant information with respect to the issue of a specific, existing supply of RHD vehicles currently available on the COTS market to preserve our immediate ability to fulfill our Universal Service Mission. To be clear, when the Postal Service stated in SEIS Section 3-3.2, RHD COTS ICE Vehicle Acquisition, that "the Postal Service's outreach to potential suppliers indicated that this would likely be the last remaining quantity of RHD COTS vehicles for sale in the U.S.," such "outreach to potential suppliers" included a consideration as to whether manufacturers could timely "expand the production of RHD COTS, as appropriate."
9	***Selection of Specific Commercial-off-the-shelf (COTS) and Right-Hand Drive/Left-Hand Drive (RHD/LHD) Vehicles (Cont.)*** **It is not clear why specific COTS LHD ICE vehicles and COTS LHD BEVs were chosen. Since these vehicles are coming from the commercial market, there is an expectation that there should be more choices of LHD vehicles. For example, in Table 3-3.2 in the Draft SEIS, the gross weight of the LHD COTS ICE vehicle selected weighs notably more than the RHD COTS ICE vehicle and because it has a larger engine size, gets fewer miles per gallon (MPG). EPA also anticipates there would be multiple vendors with LHD BEVs available for purchase. With the size of the fleet the Postal Service is replacing, EPA expects the commercial market would adjust to the increased demand from the Postal Service. If acquisition of COTS LHD BEVs is done in phases, this would allow potential vendors to adjust to the increase in demand from the Postal Service.**
	The vehicle quantities and models included for consideration in this SEIS are based on the Postal Service's understanding of our mission-critical vehicle requirements, extensive market research, confidential solicitations to potential suppliers, availability of large quantities in the next few years, and vehicle testing, as not all vehicles are equally suitable for Postal Service operations. In addition, in our experience the quantity of delivery vehicles that we are purchasing is not likely to move electric vehicle manufacturers, who compete in a market with over 12 million annual light truck sales in the U.S. alone, to retool their production lines

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
	or to increase their manufacturing capacity to produce more vehicles that meet our unique operational needs.
10	***Route Optimization Efforts*** **The Draft SEIS appears to not have fully addressed route optimization and consideration of the redistribution of existing ICE vehicles and the allocation of new ICE vehicles. One central limiting factor for BEV adoption is the 70-mile route limit. For example, under Alternative 1, the Postal Service is planning to retain over 100,000 ICE vehicles and based on the footnotes under Tables G-1 and G-2, the plans are to purchase an additional 40,250 new ICE vehicles for use on routes where BEVs are currently not suitable. The Draft SEIS does not disclose how many ICE vehicles the Postal Service needs. If the purchase of an additional 40,250 ICE vehicles will result in a surplus of ICE vehicles beyond what is actually needed, some of the ICE vehicles could perhaps be substituted with the purchase of more BEVs, which would provide additional environmental benefits. As the longer-term solution to the Postal Service's vehicle needs are developed, EPA recommends that if a surplus of ICE vehicles results, for the Postal Service to consider replacing more of the ICE vehicles with BEVs.**
	It is not the case that new ICE vehicles are being procured to be "used on routes where BEVs are currently not suitable." As stated in Section 3-2 of the SEIS, Consideration Factors for Alternatives, route suitability is only one of multiple factors why some ICE vehicles were included in the Alternatives. With respect to how many ICE vehicles the Postal Service "needs," as stated in SEIS Section 2, the "need" of the Postal Service is not to acquire vehicles of any type of powertrain, ICE or BEV, but rather to replace its existing outdated vehicles with new vehicles "with more energy-efficient powertrains, updated technology, reduced emissions, increased cargo capacity and improved loading characteristics, improved ergonomics and carrier safety, and reduced maintenance costs." Of the quantity proposed to be procured, the Postal Service has determined, after balancing multiple factors as discussed in Section 3-2, that 62 percent BEV is reasonable, readily achievable, and would not add undue risk to the fulfillment of our Universal Service Mission. Finally, given the scale of existing outdated vehicles and the fact that all new vehicles would immediately be allocated to satisfy a specific mission-critical need, there would not be a surplus of vehicles for any type of powertrain.
11	***Replacement of Personally Owned Vehicles (POVs)*** **According to Sections 3-3, 3-4 and 4-3.3.2, and Tables C-1, C-2, G-1, and G-2, under Alternatives 1 and 2 the number of delivery POVs to be replaced are 6,218 and 4,400, respectively. The total number of existing delivery POVs is not specified in the Draft SEIS; therefore, the percentage of delivery POVs being replaced overall is not clear. Because of the age and fuel efficiencies of these delivery POVs (which are determined to be primarily ICE), their replacement with government owned BEVs provides environmental benefits. It is possible that additional environmental benefits could be achieved by replacing more of these POVs with BEVs or ICE NDGVs. The EPA recommends that the Final SEIS specify the total number of existing delivery POVs.**
	The Postal Service currently has over 26,000 routes that are serviced by employees using delivery POVs to deliver mail. While there may be additional environmental benefits to replacing more of these POVs, which is therefore worthy of further study, at this time the Postal Service's focus with respect to our delivery fleet is on replacing the existing outdated,

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
	costly, fuel and emissions inefficient delivery fleet. Additionally, within the context of the Preferred Alternative, there are greater environmental benefits, particularly for air emissions, associated with replacement of LLVs as compared with delivery POVs.
12	***Importing Commercial off the Shelf (COTS) and Battery Electric Vehicles (BEVs)*** **The Draft SEIS indicates that COTS BEV purchases are limited because of the small availability of supply. Section 3-6.2 of the Draft SEIS states that "Vehicles manufactured for foreign markets are not designed or tested to meet EPA emission standards and U.S. Federal Motor Vehicle Safety Standards. Furthermore, it is the Postal Service's determination that obtaining such approvals would be lengthy and costly, with no guarantee that it would ultimately succeed and therefore is neither technically nor economically feasible. These regulatory obstacles aside, the Postal Service would still need to solicit and obtain vehicles that could meet our demand in terms of price (including any applicable tariffs and shipping costs), quantity, size and operational capabilities, rate of production, and delivery schedule on a competitive basis as those vehicles manufactured for the U.S. market." EPA notes that BEV vehicles are made by numerous manufacturers both in the U.S. and abroad. Therefore, EPA recommends that the Postal Service not limit this option without additional support and data and should consider cost-effective contracts with current manufacturers as appropriate. Additionally, the Draft SEIS is confusing as written because it also acknowledges that BEVs do not produce any emissions. EPA recommends clarifying the Postal Service's concerns with emissions standards.**
	While emission standards may not be relevant to the importation of BEVs, they are relevant to the importation of ICE vehicles – for example, if the Postal Service were to consider importing more RHD ICE COTS vehicles. However, for the multiple reasons provided in Section 3-6.2, importing either ICE or BEV powertrain vehicles is not practical or feasible. The U.S. Federal Motor Vehicle Safety Standards (FMVSS) however, are relevant to both ICE and BEVs that could be potentially imported from other countries. Furthermore, the determination of the cost and timeline for this approval process has not been "estimated" by the Postal Service, but rather provided directly to the Postal Service by potential suppliers of imports (including one current supplier). These cost estimates and timelines came directly from the manufacturers. The Postal Service disagrees that the SEIS's analysis would benefit from the inclusion of additional "support and data" for the proposition that different countries have different vehicle emission and safety standards, or for the proposition that foreign manufacturers not already producing vehicles for the U.S. market would be able to easily, cost-competitively or on a timely basis produce vehicles for a Postal Service procurement. It bears emphasis that the Alternatives in this SEIS were developed not as part of an academic study, but rather as potential procurement strategies capable of immediate execution, and full achievement within a relatively short six- to eight-year window and without negative impacts to mission performance. As it is the Postal Service's current practice, the Postal Service will continue to "consider cost-effective contracts with current manufacturers as appropriate." As clarified in Section 3-3.3, Additional COTS Vehicle or NGDV Acquisition, to better take advantage of rapid changes in the COTS vehicle market and to better ensure access to either RHD or LHD COTS delivery vehicles capable of meeting the Postal Service's demanding operational requirements, the Preferred Alternative allows for the ICE and BEV COTS vehicles specified in Table 3-3.2 to be replaced with equivalent or superior COTS delivery vehicles should they become available.

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
13	***Investment and Acquisition Considerations*** **Section 3-6.1 (Acquisition of a New Purpose-Built Vehicle) of the Draft SEIS states "The Postal Service believes that initiating another purpose-built vehicle solicitation would neither be an efficient use of the Postal Service's limited time and resources, nor would it guarantee a new purpose-built vehicle that is superior to the NGDV in cost or performance. In addition, in the Postal Service's judgment, a new solicitation so soon after the conclusion of the NGDV solicitation would expose the Postal Service to potential legal risk and reputational harm with our suppliers. Finally, if the Postal Service were to engage in a new solicitation, it would undercut the purpose of the project to expeditiously replace our end-of-life and high-maintenance LLVs and FFVs to meet our Universal Service Mission." It is EPA's understanding that the existing contract, while determined to be the most competitive for development and acquisition of a mix of ICE and BEVs, was not the most competitive for BEVs. Furthermore, according to court records there were three other contract bids that had higher rated BEVs. EPA believes that consideration of these potential cost savings may allow the Postal Service to acquire higher quality BEVs at a more competitive price than those associated with the initial purchase from 2022 ROD. For these reasons, EPA recommends that the Postal Service also consider options available under the existing contract that will allow for the purchase of additional BEVs under a new acquisition strategy. This may allow for an increase in the percentage of BEVs from the assumption currently presented in the preferred alternative.**
	The NGDV contract was awarded after a competitive, open market procurement, involving over 450,000 work hours rigorously testing purpose-built prototypes. This also does not include the over 25,000 work hours invested testing various COTS models as to their suitability for Postal Service operations. To the extent EPA's beliefs about which vehicles were "most competitive" for BEV or any other powertrain are based on "court records" – presumably self-serving allegations in failed litigation by a disappointed offeror – the Postal Service reiterates that our conclusions about the vehicle that represented the best value to meet our operational needs is reflected in the contract award. To the extent EPA recommends that the Postal Service consider options that will "allow for the purchase of additional BEVs under a new acquisition strategy," as stated in SEIS Section 3-2.4, Vehicle Procurement Strategy, the Postal Service is considering additional procurement strategies, which include the purchase of additional BEVs. As stated in Response No. 3 above, the Postal Service believes that EPA should not look at the vehicle quantities in this one SEIS in isolation but as part of a broader, evolving vehicle procurement strategy. Finally, the Postal Service believes that EPA's focus on the total percentage of BEVs fails to properly weigh other factors with an even greater influence on potential environmental effects. As discussed in SEIS Section 4-12.2, Selection of Preferred Alternative, the Preferred Alternative was found to have greater cumulative reductions of most criteria pollutants as compared to Alternative 2 because the incorporation of a proportion of ICE vehicles permits the Postal Service to replace its LLVs two years earlier. In short, because of the significant differences in air emissions between the aged LLVs and modern ICE vehicles (see Table 4-6.1, Net Changes in Annual Direct Air Emissions Under Alternative 1), the speed with which LLVs are taken out of operation has a direct and significant effect on the total emissions for most of the criteria pollutants which impact local air quality. Because of the multiple factors affecting BEV deployment, including charging infrastructure procurement and installation, employee training, utility upgrades, and network modernization, BEVs take longer to deploy as compared to ICE vehicles. Thus, the longer the Postal

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
	Service takes to replace its aging fleet, the longer it must operate vehicles that emit significantly more air contaminants (including at major deployment sites near Environmental Justice communities), that are increasingly costly and unreliable to operate, and that lack modern safety features. In summary, total BEV percentages should not be looked at in isolation. The environmental, operational, financial, and public safety costs of slower LLV replacement must also be weighed.
14	***Social Cost of Greenhouse Gases (SC-GHG)*** **The monetized climate change damages associated with the expected greenhouse gas (GHG) emissions from the proposed action are not calculated correctly in Appendix F of the Draft SEIS. First, it is incorrect to multiply cumulative emissions by the social cost of GHG (SC-GHG) for the corresponding year. That is, the cumulative emissions for 2025, which is the summation of emissions in years 2023, 2024 and 2025, is not the value of emissions that should be multiplied by the 2025 SC-GHG values for carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O). As explained in the 2021 Interagency Working Group on SC-GHG (IWG) report[3], multiplying the SC-GHG in year t (e.g., 2023) by the change in emissions in year t yields the monetized value of future emission changes from a year t perspective. That value represents the present value of damages from GHG emitted for that year. Continuing the example, the estimated emissions for year 2025 is the correct value to multiply by the 2025 SC-GHG value. Second, it is incorrect to sum the SC-GHG values from 2023-2050 and represent that sum as the lifespan total of GHG emitted by the project. Before including in an analysis, that value must be discounted to the present. For the Final SEIS, the Postal Service should calculate the present value of the stream of SC-GHG using the present value year of 2023 (the current year). Furthermore, the monetized value of future GHG emission changes should be discounted at the same rate used to calculate the initial SC-GHG to ensure internal consistency—i.e., future damages from climate change using the SC-GHG at 2.5 percent should be discounted to the base year of the analysis using the same 2.5 percent rate. EPA also recommends including the tables for SC-GHG from 2023-2050 for each alternative using the 2021 IWG numbers in Appendix F. EPA is available to assist with these calculations if requested.** **[3] https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf**
	Tables F-9.b through F-9.d were clarified and expanded to indicate the total net emissions occurring in each year from 2023-2050. These values represent the net emissions from vehicles anticipated to be in operation for each year. For example, the 2023 value represents the net emissions from the vehicles to be deployed in 2023. The 2024 value represents the net emissions from the vehicles deployed in 2023, which would also operate in 2024, and the net emissions from the vehicles deployed in 2024. The 2025 value represents the net emissions from vehicles deployed in 2023, 2024, and 2025, as all of those vehicles would be operating in 2025. Beginning in 2028 for Alternative 1, and 2030 for Alternative 2 and the No-Action Alternative, the annual emissions values represent the net emissions from all 106,480 new vehicles operating in that year. Prior references in these tables to “Emissions for Individual Year” and “Cumulative Emissions” were removed for clarity. Additionally, Tables F-9.f through F-9.h and F-9.j through F-9l were expanded to also show the present value of the SC-GHG. Present value was determined using 2023 as the current year and discounting the SC-GHG per metric ton as provided in the IWG Technical Support Document (2021) (and EPA Supplementary Material [2022]) under each discount scenario

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
	according to the respective discount rate on an annual basis into the future (e.g., costs per metric ton under a 3% discount scenario were discounted at 3% annually). Tables F-9.j through F-9.l of the Draft SEIS provided the SC-GHG from 2023-2050 for each alternative using the 2021 IWG cost values and were also expanded to include the present value.
15	***Social Cost of Greenhouse Gases (SC-GHG) (Cont.)*** **In addition, direct and indirect air emissions, including GHGs, for each alternative should be calculated over the lifetime of the vehicles, not just the eight-year implementation period, i.e., 2023-2030. In the calculation of SC-GHG, the analysis should not assume GHG emissions in 2030 remain unchanged each year through 2050. EPA recommends that the Postal Service model emissions beyond 2030 and use the Energy Information Administration's (EIA) Annual Energy Outlook (AEO) as a source of modeled emission estimates from the electricity sector (see https://www.eia.gov/outlooks/aeo/). EIA forecasts a 63 percent decrease in the emissions intensity of electric power production between 2022 and 2050 (see Tables 8 and 18 at https://www.eia.gov/outlooks/aeo/tables_ref.php).**
	Once the proposed 106,480 new vehicles have been deployed, replacing an equivalent number of existing delivery vehicles, the Postal Service considers the annual emissions to have reached "steady state." The Postal Service considers these estimates to be sufficient to demonstrate the relative differences between the alternatives with respect to potential air emission (including GHG) effects. The results of an intensive inventory of lifespan emissions would not affect the Postal Service's decision-making for the alternatives considered in this analysis. Upon full implementation, in either 2028 or 2030 depending on the alternative, while the annual emissions of the proposed new vehicles would likely not change substantially from year to year, the Postal Service acknowledges that the emissions would not remain constant. In reality, they would be affected by numerous factors. For example, any degradation of the emission control systems in ICE vehicles would result in increased direct emissions. This factor is not accounted for in this SEIS, as explained in the scoping Comment Response No. 112 (see Table B3-1). Additionally, operational emissions would be affected by potential future changes in the Postal Service's delivery operations over the lifespan of the vehicles. Extending the assumptions made for this air quality analysis (e.g., drive cycle data) many years into the future would therefore be very speculative. Further, as noted in the comment, the Postal Service recognizes that the electric grid is projected to decarbonize over time, resulting in decreased indirect emissions. As explained in the scoping Comment Response No. 88 (see Table B3-1), the GREET model accounts for decarbonization of the electric grid over time and is consistent with the latest national net-zero emission goal. While the Postal Service declines to model emissions beyond 2030 for this analysis, we did review the decarbonization rate incorporated into the GREET model between 2030 and 2050. For ICE vehicles, the indirect emissions would be expected to decrease by 0.09% by 2040, and by 0.98% by 2050, compared to a 2030 baseline. For BEVs, the indirect emissions would be expected to decrease by 12.18% by 2040, and by 16.32% by 2050, compared to a 2030 baseline. Thus, this particular influence on indirect emissions could account for decreases in total (aggregate) emissions for each alternative by 2040 and by 2050 as shown in the below table.

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments

	Total Annual Emissions of CO_2e in 2030 (MT)	**Total Annual Emissions of CO_2e (2040) (MT)**	**Total Annual Emissions of CO_2e (2050) (MT)**
Alternative 1	-773,871	-795,422 (2.8% lower emissions)	-801,429 (3.6% lower emissions)
Alternative 2	-805, 751	-826,437 (2.6% lower emissions)	-832,060 (3.3% lower emissions)
No-Action Alternative	-518,800	-522,116 (0.6% lower emissions)	-522,506 (0.7% lower emissions)

Incorporating grid decarbonization between 2030 and 2050 into the SC-GHG benefit calculations results in the following effects on cumulative present value totals, using the IWG's 5% and 2.5% discount scenarios as representative examples.

	SC-GHG (IWG 5% Scenario)		**SC-GHG (IWG 2.5% Scenario)**	
	Assume Constant Emissions After 2030	**Decreasing Emissions After 2030**	**Assume Constant Emissions After 2030**	**Decreasing Emissions After 2030**
Alternative 1	-242,231,532	-245,750,740 (1.5% more benefits)	-1,383,605,928	-1,405,324,300 (1.6% more benefits)
Alternative 2	-230,112,943	-233,491,995 (1.5% more benefits)	-1,329,708,042	-1,350,555,183 (1.6% more benefits)
No-Action Alternative	-156,162,109	-156,704,885 (0.4% more benefits)	-885,556,556	-888,898,688 0.4% more benefits)

16 ***Environmental Justice***

EPA notes that the Draft SEIS identifies 349 out of 414 tentative Candidate Sites that fulfilled at least three environmental justice criteria from a variety of screening tools. For analytical purposes the Postal Service assumes 62 percent of the new vehicles would be BEVs, but all new vehicles would generate significant air quality benefits, with the greatest benefits generated from the BEVs. BEVs nearly eliminate volatile organic compounds (VOC), nitrogen oxides (NOX), and carbon monoxide (CO) emissions, and reduce particulates from sulfur dioxide (SO2) and CO2 equivalents (CO2e) by 30-73 percent compared to the existing vehicle fleet. The Postal Service commits to replacing an equal number of existing end-of-life vehicles with new vehicles and acknowledges that the preferred alternative will accelerate environmental benefits by working toward a six-year deployment timeframe instead of Alternative 2's eight-year timeframe. EPA understands that the Postal Service has not finalized which existing facilities would comprise the list of Candidate Sites. However Postal Service does not specifically commit to deploying new vehicles first to the Candidate Sites that were identified to have environmental justice concerns. EPA continues to recommend the Postal Service commit in the Final SEIS and ROD to deploying new

No.	Section 1: U.S. Environmental Protection Agency (EPA) Comments
	BEVs in the Candidate Sites identified to have environmental justice concerns first, in the opening years of deployment, making a visible difference for communities that have experienced environmental and other burdens longest.
	Because the Candidate Sites are the sites where charging infrastructure can be most quickly and efficiently achieved, it is the Postal Service's expectation that new vehicles will primarily be deployed to the Candidate Sites first. Furthermore, as the majority of the Candidate Sites are in communities with Environmental Justice concerns, the Postal Service expects that those communities will accordingly receive new vehicles before other areas. That said, there are numerous, dynamic factors that will affect where and when new vehicles will be deployed, importantly including the operational needs of the Postal Service to fulfill our Universal Service Mission. As just one example, one facility might experience delays in the installation of its charging infrastructure while another facility might achieve its installation ahead of schedule. This would necessitate that vehicles planned for deployment at the former facility be shifted to the latter. As another example, there might be regulatory requirements that affect where new vehicles need to be deployed, or certain areas might be in more dire need of new vehicles in order to achieve reliable service. For these many reasons, the Postal Service declines to pre-commit to deploy new vehicles to specific locations.

No.	Section 2: Summaries of Other Substantive Comments
17	**Commenter is heartened by the Postal Service's shift towards zero emission trucks over the last two years.**
	This comment was considered.
18	**Postal Service should commit in Final SEIS to only buy electric trucks after 2026 in line with his public statements. The proposed deployment schedule for the Preferred Alternative is only hypothetical and/or not binding enough and/or is not supported with sufficient data.**
	See Response No. 5 above regarding future vehicle commitments. The Postal Service's deployment schedule is based on its best, good faith estimates as to the likely deployment pace of vehicles depending on multiple factors including vehicle production capacity, postalization of COTS vehicles, facility charging infrastructure readiness, and employee training. While we have every expectation of meeting this goal, we don't believe it appropriate to include it as a part of our current analysis as required by NEPA.
19	**Postal Service should increase the proportion of electric mail trucks.**
	See SEIS Section 3-2, Consideration Factors for Alternatives, for a summary of multiple factors affecting why the Postal Service has proposed the BEV percentage it has for the particular quantity of vehicles in this procurement. Per SEIS Section 3-2.4, Vehicle Procurement Strategy, additional quantities of vehicles will be procured, after additional supplemental NEPA analyses, which the Postal Service expects will result in an increased proportion of BEVs.
20	**Electric trucks can reliably serve the majority of mail routes.**

No.	Section 2: Summaries of Other Substantive Comments
	The Postal Service agrees. That said, as stated in SEIS Section 3-2.2, Route Suitability, the ability of BEVs to reliably service Postal Service delivery routes is only one of multiple factors affecting the proposed vehicle mix.
21	**Electric mail trucks are a more prudent long-term choice.**
	The Postal Service believes that its proposal to invest over $9 billion in BEVs, as well as its expectation to procure more BEVs in the future, is in accord with this opinion.
22	**The Postal Service should take action to keep air clean and mitigate the climate crisis.**
	The Preferred Alternative will provide substantial environmental benefits including significant reductions in fossil fuel consumption and greenhouse gas emissions. The Postal Service believes that these benefits are particularly notable as the Postal Service's Purpose and Need are to replace its aging vehicles to ensure timely and reliable delivery of the nation's mail, and our goal to reduce air emissions must be considered in light of our primary mission to provide universal delivery of mail and packages to the nation.
23	**Purchasing ICE vehicles is foolish and near-sighted.**
	This comment has been considered. See SEIS Section 3-2, Consideration Factors for Alternatives, for why the Postal Service is not proposing to acquire all BEVs at this time.
24	**The Postal Service should consider lives that would be saved nationwide and health improvements that would result from maximizing the transition to ZEVs, including the significant financial benefits.**
	See, for example, SEIS Section 4-11.3, Environmental Justice Environmental Consequences, for discussion of air and health benefits expected to be obtained from the Preferred Alternative, including from the significantly reduced emissions of the new ICE vehicles as compared to the LLVs. With respect to "maximizing the transition to ZEVs," the Postal Service must balance multiple factors, including capital and human resource needs unrelated to its vehicle fleet, in order to effectuate its Universal Service Mission. In short, vehicle fleet composition is not a decision that can be made in isolation and without consideration of the broader operational context.
25	**The Postal Service should consider a plan to purchase 90 or 95 percent BEVs.**
	The Postal Service considered alternatives with higher percentages of BEVs in the FEIS. That similarly high BEV percentages were not included in the SEIS Alternatives should not be assumed to mean the Postal Service has not already considered them as options. For Alternatives considered in detail in the SEIS, which used fixed percentages of ICE vehicles and BEVs, the provided BEV percentages were considered reasonable and operationally feasible given the factors provided in SEIS Section 3-2, Consideration Factors for Alternatives.
26	**The Postal Service has not offered a reason for why it did not include Alternatives with possibility of purchasing the maximum number of electric vehicles feasible.**
	The Purpose and Need of the Postal Service for this SEIS is not to obtain the maximum number of electric vehicles feasible, but to replace its aging fleet with modern vehicles. See

No.	Section 2: Summaries of Other Substantive Comments
	Section 2, Purpose of the Proposed Action, and Section 3-2, Consideration Factors for Alternatives. The Alternatives considered in both the FEIS and SEIS have been to satisfy that Purpose and Need.
27	**The SEIS is a sham process designed to paper over unaddressed deficiencies in the FEIS to help the Postal Service in active litigation.**
	The Postal Service disagrees and believes that the Alternatives considered in the SEIS are demonstrably different from the Alternative selected in the Record of Decision in terms of vehicle mix and significantly higher BEV commitment.
28	**Postal Service previously estimated that it would need $2.3 billion in order to achieve a fully electric fleet. Therefore, the Inflation Reduction Acts should have funded full electrification.**
	This is not correct. $2.3 billion was the TCO differential in the FEIS between a 10% BEV Alternative and 100% BEV Alternative for a quantity of 75,000 NGDV, not the cost differential to fully electrify the Postal Service fleet. As stated in the ROD, the cost differential increases with the quantity of BEVs increasing as BEV deployments spread to facilities with higher charging infrastructure costs (for example, facilities that are space-constrained, leased, aged, or without the necessary power supply).
29	**Postal Service's cost assessment of NGDV and COTS is arbitrary in its assumptions and inputs, resulting in inflated costs and deflated benefits for BEVs.**
	The Postal Service disagrees with this opinion. The Postal Service's cost assumptions and inputs are based on market solicitations and Postal Service expertise managing one of the nation's largest civilian work forces, vehicle fleets, and portfolio of properties.
30	**Postal Service should account for BEVs typically being less expensive than ICE vehicles over the lifetime of the vehicle due to their lower operating costs for refueling, maintenance and repairs.**
	The Postal Service has not found that BEVs capable of delivering the mail are less expensive over their lifetime than equivalent ICE vehicles for most routes. See Response No. 1 above. Those cost differentials notwithstanding, the Postal Service remains committed to the fiscally responsible and mission-capable roll-out of electric powered vehicles for America's largest and oldest federal fleet.
31	**Final SEIS should include a comprehensive and credible cost assessment.**
	See Response No. 1 for discussion of cost factors affecting vehicle mix proposed in SEIS Alternatives.
32	**Final SEIS should include a Total Cost of Ownership assessment to capture the long-term economic benefits that BEVs have over ICE models.**
	See Response No. 1 above for discussion regarding the inclusion of TCO analysis.
33	**Cost assessments and Total Cost of Ownership should be updated to include credible fuel cost projections for gas and electricity.**
	See Response No. 1 above for discussion regarding the inclusion of TCO analysis.

No.	Section 2: Summaries of Other Substantive Comments
34	**Postal Service should use different charger-to-vehicle ratio and vehicle-charging schedules, as suggested by GAO's April 2023 report. Postal Service should reconsider its decision to use 1:1 ratio as it gains more experience using BEVs.**
	The multiple consideration factors for why the Postal Service has determined to use 1:1 ratios for the time being, as stated in the Draft SEIS's Response No. 18, remain relevant. As better data becomes available and more experience is gained in the management and use of BEVs, the Postal Service will continue to assess optimal charger ratios and adjust as appropriate. See also Response No. 3 above for discussion regarding current federal guidance as to 1:1 being the recommended vehicle-charger ratio.
35	**Postal Service should more rigorously consider impacts that ICE vehicles would have on EJ communities, including mitigation methods and additional public discourse.**
	The Postal Service believes that its assessment of potential environmental impacts and benefits on the Environmental Justice communities in the vicinity of its likely major deployment sites presented in Section 4-11, Environmental Justice, was rigorous, thorough, and a reasonable level of analysis for the Alternatives under consideration in this SEIS. Given the substantial environmental benefits that would result from the Preferred Alternative, as well as the multiple challenges relating to prioritizing deployment to certain areas (see Response No. 16 above), the Postal Service has determined that mitigation is not needed. Additionally, as discussed in both the FEIS and SEIS, including Section 4-11.3.1, Environmental Consequences, Alternatives 1 and 2, the replacement of an LLV with either a BEV or ICE vehicle provides significant emissions reduction on a per vehicle basis. The Postal Service believes that the public comment periods, including public hearings, have provided sufficient opportunities for members of the public to provide input for the Postal Service's consideration. In addition, members of the public will continue to have opportunities during future public comment periods as the Postal Service delivery fleet continues to be replaced.
36	**Postal Service should commit to ensuring that Environmental Justice communities will receive first batches of BEVs.**
	See Response No. 16 above for the reasons why the Postal Service has determined that it cannot make such a categorical commitment.
37	**Postal Service should account for federal, state and local regulatory environments and greenhouse gas reduction goals the new vehicles will face, including California's Advanced Clean Fleets Rule. Multiple states and localities have enacted targets and goals for the reduction in greenhouse gas emissions.**
	The Postal Service regularly evaluates proposed and forthcoming regulations that potentially might affect the Postal Service fleet, including California's Advanced Clean Fleets Rule, for which the Postal Service submitted a comment on October 17, 2022. If any forthcoming federal or State vehicle regulations are determined to be applicable to the Postal Service's fleet, the Postal Service will strive to comply to the extent possible given its statutory mandate to be self-supporting and to deliver to over 165 million addresses at least six days per week. The Postal Service has considered State and local greenhouse gas reduction targets and plans accordingly. While most of such plans, to date, have referred to the relevant State or

No.	Section 2: Summaries of Other Substantive Comments
	locality's own greenhouse gas emissions, the Postal Service will strive to comply with any regulations applicable to the Postal Service fleet as it does for all applicable laws. To the extent States and localities have non-enforceable goals and ambitions for reductions in greenhouse gas emissions, the Postal Service considers its Preferred Alternative, with its significant greenhouse gas emission reductions, to be in accordance with those goals and ambitions. Furthermore, the Postal Service expects that the near-term, concrete steps it is proposing to take in this SEIS will compare favorably, in terms of actual progress achieved, to the progress made by others in the private and governmental sectors.
38	**Postal Service should identify applicable state and local laws, policies and plans that might affect its vehicle decision and estimate the number of vehicles that would be deployed in compliance with such laws, policies and plans.**
	The Postal Service disagrees that this SEIS requires or would benefit from the development and inclusion of a list of state and local laws, policies and plans that might be applicable to its vehicle decision. As stated above, as the Postal Service finds regulations applicable to its operations in the ordinary course, it develops plans to achieve compliance. Any specific regulations previously unknown, but brought to the Postal Service's attention during this EIS process have been considered. The Postal Service does not believe that its Preferred Alternative would violate any applicable law of which we are aware.
39	**To achieve faster reductions in carbon and gasoline consumption, Postal Service should prioritize for replacement the vehicles that use the most gasoline and deploy BEVs to the longest distance routes, including by obtaining BEVs capable of servicing routes longer than 70 miles or arranging for charging en route. Research indicates that a small percentage of vehicles can consume a disproportionately high percentage of fuel.**
	The Postal Service has considered this information, that a small percentage of vehicles consume a disproportionate percentage of fuel. That said, the Postal Service anticipates that vehicle replacements will be completed primarily on the basis of available infrastructure and need to effectuate its Universal Service Mission. It is possible, however, that the vehicles most in need of replacement for operational reasons might also be the vehicles consuming a disproportionate quantity of fuel. See SEIS Section 3-2.2, Route Suitability, for a discussion of why the Postal Service determined that 70 miles was an appropriate required range capability for BEVs on the Postal Service drive cycle. See SEIS Section 3-2.4, Vehicle Procurement Strategy, for discussion of how the Postal Service's new procurement strategy would permit it to take advantage of technological improvements, such as "obtaining BEVs capable of servicing routes longer than 70 miles." See Response No. 12 above for discussion of how the Preferred Alternative will allow for the ICE and BEV COTS vehicles specified in Table 3-3.2 to be replaced with equivalent or superior COTS delivery vehicles should they become available. The Postal Service does not consider enroute charging to be compatible with the mail delivery cycle at this time.
40	**The Postal Service should consider environmental and economic impacts of the manufacturing of its vehicles.**
	See SEIS Section 1-4 for discussion regarding actions not included in this SEIS.

No.	Section 2: Summaries of Other Substantive Comments
41	**The new postal fleet should be built by 100 percent union labor.**
	The Postal Service has considered this comment; however, the supplier determines whether or not it will use union labor to perform under its contract with the Postal Service.
42	**The Postal Service should comment on the issue of Oshkosh's management of its UAW members in Wisconsin with respect to the NGDV contract.**
	The Postal Service has no comment on the internal management or labor relations practices of its suppliers.
43	**Postal delivery trucks are the ideal use for electric vehicles given that they do not travel long distances.**
	The Postal Service agrees with this opinion. That said, whether an electric vehicle can service a route is only one of multiple factors that must be considered when determining vehicle mix.
44	**The Postal Service should consider smaller delivery options, such as cargo bikes, small BEVs, and other low-speed options.**
	The Postal Service is currently testing and evaluating cargo bike options. If such bikes or other delivery options should be found feasible, they will be considered for inclusion in future procurements.
45	**The Postal Service should have centralized data on how much gasoline all of its vehicles are using.**
	The Postal Service currently maintains centralized data on gasoline usage for all vehicles and publishes annual gasoline consumption in its annual Federal Automotive Statistical Tool (FAST) report.
46	**The Postal Service's explanation for acquiring the 14,500 RHD ICE COTS vehicles is arbitrary as it neither explains who its competitors are nor its need for securing the alleged last remaining quantity.**
	The Postal Service disagrees as it has repeatedly explained the multiple benefits RHD vehicles have over LHD vehicles for delivering the mail. See, for example, FEIS Section 4-1.1.1, Delivery Vehicle Performance. The Postal Service disagrees that the disclosure of commercially sensitive information about competitors is required for a determination to not be considered arbitrary.
47	**The Postal Service is supposed to be working toward an electrified fleet.**
	The Postal Service believes that the substantial investment in BEVs under the Preferred Alternative demonstrates considerable progress towards full delivery fleet electrification.
48	**BEV fuel efficiencies given in miles-per-kilowatt-hour should be expressed in miles-per-gallon equivalents to make the more comparable to the gas mileage of ICE vehicles.**
	The Postal Service has incorporated the recommended changes. See SEIS, Tables 3-3.1 and 3-3.2.
49	**The Postal Service should consider particulate emissions from brake wear and tear, including any impact from BEV's regenerative braking.**
	The Postal Service has considered potential air emissions from brake wear and tear, including the impacts of regenerative braking. See FEIS Comment Response No. 117.
50	**The Postal Service should add air conditioning for driver safety.**

No.	Section 2: Summaries of Other Substantive Comments
	All vehicle models included in the SEIS Alternatives have air conditioning as well as multiple other modern features and amenities lacking in the current fleet.
51	**EV charging infrastructure should be paired with onsite generation such as solar or battery storage.**
	While an exploration of on-site power generation is beyond the scope of this SEIS, the Postal Service will continue to explore opportunities for solar power, battery storage, and other energy solutions.
52	**It is not clear whether Preferred Alternative's BEV reserve COTS or NGDV category could potentially reduce overall BEV percentage.**
	The BEV percentage in the Preferred Alternative is fixed at 62 percent. The only variability in the Preferred Alternative is whether certain BEVs will be NGDV or COTS. See SEIS Section 3-3.3, Additional COTS Vehicle or NGDV Acquisition ("… retaining this flexibility will ensure that the Postal Service can increase our purpose-built vehicle quantity to achieve operational goals and meet our 62-percent BEV commitment in the event that the COTS BEV market proves insufficient.").
53	**Postal Service has placed vehicle orders for COTS and made NGDV contract modifications prior to completion of NEPA process, which violates NEPA.**
	The Postal Service disagrees. See Draft SEIS Comment Response No. 32 in Table B3-1.
54	**The Draft SEIS Alternatives are nearly identical and therefore did not represent consideration of an appropriate range of reasonable alternatives.**
	The Postal Service disagrees that the Alternatives are nearly identical. While the BEV percentage is the same, the Alternatives differ significantly in fleet mix and deployment schedules. Furthermore, that the Preferred Alternative achieves significantly greater cumulative reductions of criteria pollutants by 2030 than Alternative 2 demonstrates that the Alternatives represent different approaches to replacing the delivery fleet and would result in different environmental impacts. See also Comment Response No. 12 above for discussion of how the Preferred Alternative, unlike Alternative 2, would allow for the ICE and BEV COTS vehicles specified in Table 3-3.2 to be replaced with equivalent or superior COTS delivery vehicles should they become available.
55	**Postal Service should not dismiss or limit alternatives based on time constraints.**
	The Postal Service's urgent need is one of multiple factors considered in the development of the Alternatives under consideration in this SEIS, but it should be beyond dispute that the fulfillment of our primary mission to deliver the nation's mail and packages at least six days per week is one such factor, and that the immediate replacement of some of our vehicles is a critical requirement.
56	**Postal Service should increase BEV percentage by reallocating existing ICE vehicles not being replaced in near future to routes that are not currently suitable for BEV deployment.**
	Per SEIS Section 3-2.2, Route Suitability, route suitability is only one of multiple factors considered when determining the BEV percentages for consideration in this SEIS. Therefore, the Postal Service does not agree with the underlying assumption that even if ICE vehicles could practically, reliably and cost-effectively be redeployed to longer routes that such an effort would result in an increased BEV percentage. As just one example, if an ICE vehicle currently based at a small facility that would not receive charging infrastructure in the near term were to be redeployed to a longer route elsewhere, it does not stand that a BEV could

No.	Section 2: Summaries of Other Substantive Comments
	be deployed to the newly vacated route. There would still be a lack of charging infrastructure. Furthermore, because of the significant differences in air emissions between the aged LLVs and modern ICE vehicles (see Table 4-6.1, Net Changes in Annual Direct Air Emissions Under Alternative 1), the speed with which LLVs are taken out of operation has a direct and significant effect on the total emissions for most of the criteria pollutants which impact local air quality. Thus, it cannot be assumed that redeploying higher-emitting LLVs to other routes, rather than seeking to replace them with significantly lower-emitting modern ICE vehicles, would have superior environmental benefits.
57	**It is unclear why all-wheel drive models cannot be purchased with BEV or ZEV powertrains, such as the BrightDrop Zevo 600. FedEx and Walmart are implementing plans for BEV all-wheel drive.**
	While all-wheel drive vehicles can be obtained in BEV or ZEV powertrains – for example, the Postal Service has access to an all-wheel drive option for the BEV NGDV – powertrain availability is only one of multiple factors that must be considered when deciding vehicle deployments. For example, the vast majority of all-wheel drive vehicles will be required to be deployed at smaller locations that are unlikely to have the necessary charging infrastructure at this time for multiple reasons, including a lack of sufficient power supply, the Postal Service's prioritization of EVSE installation at larger sites to expedite BEV deployments, and the need to evaluate smaller facilities for installation costs. See also SEIS Section 3-2.4, Vehicle Procurement Strategy, for discussion of how the Postal Service's vehicle procurement strategy will be more responsive to technology improvements and changing market conditions, such as for all-wheel drive BEVs. See also FEIS Comment Response Nos. 7 and 20 for discussion regarding difficulty of comparison of the Postal Service's unique operating requirements to unexamined public relations announcements of private competitors. See also Comment Response No. 12 above for discussion of how the Preferred Alternative will allow for the ICE and BEV COTS vehicles specified in Table 3-3.2 to be replaced with equivalent or superior COTS delivery vehicles should they become available.
58	**Because Ford produces RHD BEV COTS for United Kingdom market, Postal Service could leverage its purchasing power to have more RHD BEV COTS produced domestically. Tropos also can domestically product RHD COTS BEVs.**
	The vehicles that Ford produces for the UK market are built to UK requirements – which are different than the requirements for the U.S. market. Positioning the driver on the right-hand side of the vehicle is, of course, a crucial design element for the Postal Service; but meeting each country's respective safety and emission standards demands completely different rigors. If it were easy to do, more manufacturers would already have both versions in place. In the Postal Service's experience, manufacturers of RHD vehicles for the UK market find the Postal Service's market potential far too small to consider making the investment required for them to meet both sets of standards. Auto manufacturers typically produce and optimize for quantities in the millions. The entire Postal Service delivery fleet represents only a fraction of auto manufacturing annual production levels, so the Postal Service's purchasing decisions have very little influence over market trends.
59	**The social cost of carbon benefits of the Draft SEIS's Action Alternatives demonstrates the additional benefits that would be achieved if electrification were further increased.**

No.	Section 2: Summaries of Other Substantive Comments
	The Postal Service agrees that the social cost of greenhouse gas analysis demonstrates the environmental benefits from electrification and expects that its efforts to further increase electrification will continue.
60	**Postal Service fails to account for worsening emissions rates due to deterioration experienced by ICE vehicles over their operational life as compared to the BEVs. This failure is exacerbated by the Postal Service's history of keeping vehicles beyond their useful life, as well as by the fact that BEVs will draw power over time from an increasingly green energy grip.**
	Refer to the SEIS Scoping Comment Responses Nos. 88 and 112 in Table B3-1.
61	**The GREET model may still underestimate benefits of BEV fleet as marginally-available electricity for Postal Service vehicles may be substantially cleaner than the grid-wide average.**
	The Postal Service cannot reasonably estimate the carbon intensity of marginally available electricity for its facilities on a nationwide level. Further, the Postal Service has not determined the ultimate destination of the over 100,000 vehicles included in this Proposed Action. The Postal Service considers it most credible to complete the air quality analysis for this SEIS on a national scale. See also Comment Response No. 101 below.
62	**Increased demand for electricity will spur further investments in clean energy, thereby further reducing BEV's emission rates.**
	The Postal Service acknowledges that the electric grid is anticipated to decarbonize over time. This is accounted for in the GREET model used for this analysis (see SEIS Scoping Comment Response No. 88 in Table B3-1). As noted in Section 4-9.3.1 of the SEIS, Alternatives 1 and 2 would each consume about 0.009 percent of total U.S. electricity once fully implemented, not accounting for likely growth in U.S. electricity generation over the next six to eight years. Thus, the increased demand for electricity associated with this Proposed Action would be negligible on a nationwide basis and therefore cannot be reasonably assumed to influence the rate of investments in clean energy.
63	**For modern gasoline vehicles, startup emissions can typically be the dominant duty cycle source of tailpipe criteria emissions for the entire day.**
	The Postal Service accounted for startup emissions in the MOVES model (see Section 4-6.3.1 of the SEIS and the "Direct Emissions from Vehicle Operation: Modeling Methodology using MOVES" section of Appendix F).
64	**Purchase of ICE vehicles early in the procurement could delay urgently needed deployment of BEVs/ZEVs to disadvantaged and Environmental Justice communities.**
	The Postal Service disagrees that the faster replacement of significantly more polluting LLVs represents a greater potential harm to communities than leaving LLVs in place for a longer period of time. See also Response No. 13 above for discussion of the importance of LLV replacement speed on potential environmental impacts to local air quality, including Environmental Justice communities.
65	**Postal Service should reveal data used to model costs and conclusions so they can be verified or replicated by third parties.**
	The Postal Service calculated vehicle replacement costs based in part on commercially sensitive information. The Postal Service is not publicly disclosing that sensitive information. The information in the SEIS provides a meaningful opportunity for commenters to provide substantive feedback on potential environmental impacts of the Proposed Action.

No.	Section 2: Summaries of Other Substantive Comments
66	**Postal Service has not fully assessed the effects of network consolidation, including increases to vehicle miles traveled.**
	See SEIS Section 1-4, Actions Not Included in the Proposed Action, for discussion regarding future consideration of potential network consolidation actions. See also SEIS Section 4-6.3.2, Air Quality Environmental Consequences – Alternative 1, for a sensitivity analysis performed to identify the potential effects of increased route length on air emissions.
67	**Postal Service has not fully accounted for available programs to further reduce BEV operational and acquisition costs, such as low carbon and clean fuel standards.**
	Certainly, the allocation of $3 billion in IRA funding is being applied directly to support BEV operational and acquisition costs. In addition, the Postal Service has completed an assessment of programs available to defray operational and acquisition costs for BEVs, including determination of eligibility. Though there are many programs at the federal, state, local, utility and manufacturer level, there are also many restrictions tied to accessing these incentive funds. For example, as a federal entity, the Postal Service is not eligible to apply for some incentive programs. In other cases, specific suppliers are required for the purchase of equipment or to complete charging infrastructure installation work. In other cases, ownership of infrastructure components conveys to the incentive provider, not to the applicant. These restrictions may not be aligned with the acquisition, implementation, or deployment strategy that the Postal Service is using to acquire and deploy needed equipment. The Postal Service will continue to monitor the incentives available and consider appropriate solutions to help defray BEV costs.
68	**Postal Service could purchase luxury BEV Hummers for less than the price of its BEV NGDVs.**
	While the Postal Service cannot disclose commercially sensitive information such as vehicle prices, the Postal Service has extensive experience using and testing vehicle models of all types for delivering the mail. As with ICE powertrains, not all BEVs, or even most BEVs, will be suitable for mail delivery due to issues with cargo capacity and the fact that many BEVs are not constructed purpose-built to withstand the rigors of the mail delivery cycle for multiple years (for example, the opening and closing of doors and windows repeatedly throughout the operational day as well as the powering of electronic accessories for extended periods of time, in all climates).
69	**Postal Service should leverage its property leasing relationships to achieve greater electrification.**
	The Postal Service has considered this comment. To the extent the comment assumes the Postal Service could appreciably lower EV infrastructure costs through negotiations with its thousands of individual landlords, the Postal Service considers such potential benefits to be too speculative to be a factor in making vehicle procurement decisions at this time.
70	**Postal Service should develop electrification plans that extend beyond just large consolidated facilities.**
	The Postal Service agrees. That said, the Postal Service has determined that BEVs can be most quickly and cost-effectively deployed at larger facilities, while also moderating the risks to the fulfillment of our mission, due to the availability of sufficient power for vehicle charging mitigating the need for electrical upgrades.
71	**Postal Service should consider innovative charging infrastructure, such as aboveground and free-span overhead products.**

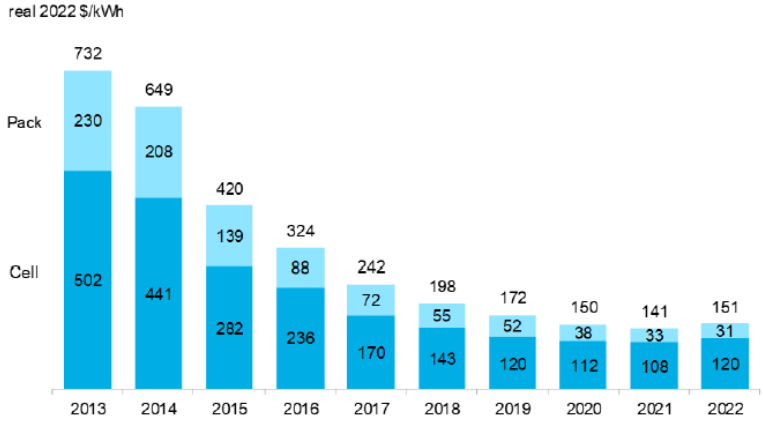
No.	Section 2: Summaries of Other Substantive Comments
	The Postal Service completed a broad competitive solicitation for commercially available EV charging stations, seeking Level 2 charging equipment, without restricting the form factor for the solutions. None of the proposals received included aboveground or free-span overhead products. As changes occur in the marketplace and new technologies become more broadly and commercially available, the Postal Service will determine whether to expand the range of charging equipment for future EVSE buys.
72	**Postal Service should develop a fleet electrification plan that evaluates such factors as operational feasibility, technology requirements, and cost-benefit ratios of different operational strategies.**
	The Postal Service agrees and the SEIS contains an electrification plan utilizing vehicle technology as it exists today. Purchasing smaller quantities of vehicles will allow the Postal Service to strengthen this strategy as technology or operational changes occur.
73	**Postal Service should set gasoline reduction targets greater than can be achieved by just replacing vehicles, by, for example, optimizing which vehicles are being replaced. These targets should be planned, published, and tracked.**
	See Response No. 39 above for discussion of factors relating to which vehicles will first be replaced. The Postal Service's sustainability goals are planned and published in its Annual Sustainability Reports.
74	**Postal Service should clarify its BEV deployment schedule by year and whether any ICE vehicles will be delivered after 2026.**
	See SEIS Appendix C for the Postal Service's current best estimates regarding annual vehicle deployments, by vehicle type and powertrain.
75	**Postal Service's elimination of Alternatives involving new solicitations is improper and/or the result of Postal Service's having failed to do environmental review prior to issuing award to Oshkosh.**
	The Postal Service disagrees that its contingent award to Oshkosh impacted its consideration of Alternatives in the SEIS. The Postal Service disagrees that the considered reasons it provided for not including new solicitations at this time was improper.
76	**Office of Inspector General (OIG) report found that only 2% of postal routes were 70 miles or longer, and that the average route length is around 24 miles.**
	This comment considers only partial information provided by the Office of Inspector General (e.g., the report did not include delivery POV routes). As stated in Section 3-2 of the SEIS, Consideration Factors for Alternatives, route suitability is only one of multiple factors why some ICE vehicles were included in the Alternatives.
77	**Draft SEIS should explain in more detail why Postal Service believes it needs the proportion of ICE vehicles set in the Preferred Alternative.**
	The Postal Service believes it provided a sufficient number of reasons to explain why it determined the BEV percentage for the specific quantities in this SEIS, as well as its intent to conduct additional supplements for future procurements.
78	**Draft SEIS does not specify the current status of available charging infrastructure, the lack of which is a reason why the Postal Service is procuring some ICE vehicles.**
	Per SEIS Section 3-2, Consideration Factors for Alternatives, the availability of charging infrastructure is only one of multiple factors considered in determining the vehicle mix.

No.	Section 2: Summaries of Other Substantive Comments
	The Postal Service has only a couple dozen charging stations in operation today, typically 1 or 2 chargers per site, primarily in early test sites and in the new EVSE First Article Test locations. BEV charging infrastructure installation is actively underway in a limited set of sorting and distribution centers and ramping up significantly over the coming months. In these early deployment locations, the infrastructure is primarily leveraging existing building power. This means that the timeline associated with utility upgrades, typically quoted anywhere between one to three years in duration, can be avoided by leveraging available power in these former processing sites. However, we expect challenging utility upgrade timelines as we expand into smaller sites, so this challenge will persist throughout program execution.
79	**Postal Service should quantify the maximum quantity of BEVs it could feasibly purchase.**
	The Postal Service must balance multiple factors, including capital and human resource needs unrelated to its vehicle fleet, in order to effectuate its Universal Service Mission. Therefore, a determination of "maximum feasibility" must include operational feasibility, and would necessarily also entail a judgment about other operational priorities that should or should not be funded. The Postal Service does not consider NEPA to require such an analysis.
80	**The "hypothetical" nature of the Postal Service's vehicle spreads make them empty promises without further commitment. Postal Service should also provide more detail regarding how numbers were reached.**
	The Postal Service's deployment schedule is based on its best, good faith estimates as to the likely deployment pace of vehicles depending on multiple factors including vehicle production capacity, postalization of COTS vehicles, infrastructure deployment rates, network modernization, and employee training.
81	**Postal Service should comply with President Biden's Justice40 Initiative showing that at least 40 percent of the project's benefits will flow to Environmental Justice communities.**
	While the Postal Service is not subject to the Justice40 Initiative, see SEIS Section 4-11.3.1, Environmental Justice – Environmental Consequences, for discussion of the considerable air benefits that would accrue to communities in the vicinity of the Candidate Sites, many of which presently have environmental justice concerns.
82	**Draft SEIS should include a more rigorous analysis of air impacts and health risks Environmental Justice communities will face, including from the deployment of new ICE vehicles.**
	The Postal Service believes that its assessment of potential environmental impacts and benefits on the Environmental Justice communities in the vicinity of its likely major deployment sites was rigorous, thorough, and a reasonable level of analysis for the Alternatives under consideration in this SEIS. This analysis included the air emissions that would result from the deployment of new ICE vehicles.
83	**Postal Service should develop a tracking tool that will allow the public to follow the deployment of BEVs.**
	While the Postal Service cannot commit to the development of such a tool at this time, it will consider this recommendation and deploy such a tool if it determines it appropriate.
84	**The use of Inflation Reduction Act funds does not necessitate that the Postal Service make its decision based on upfront acquisition costs rather than Total Cost of Ownership.**

No.	Section 2: Summaries of Other Substantive Comments
	See Response No. 1 above for discussion as to why upfront acquisition costs were used to determine fixed BEV percentages in the SEIS's Alternatives rather than TCO.
85	**The procurement of the RHD ICE COTS cannot be reconciled with the Postal Service's stated goal of electrifying the fleet or with its stated "Commitments to Environmental Excellence."**
	The Postal Service disagrees and believes that its substantial investment in BEVs places it at the forefront of the nation's green initiatives.
86	**Draft SEIS does not provide enough detail about the timing to install charging infrastructure and how such timing relates to the Postal Service's urgent need.**
	The timeline for the installation of charging infrastructure is dependent upon multiple factors. For example, site designs must consider operational workflows, vehicle parameters (dimensions, turning radius, port locations, etc.), vehicle loading space, EVSE placement and protection (bollards and wheel stops), and available space (NGDV and COTS vehicles are larger than the existing fleet). Designs also consider cost implications to reduce wiring runs, to eliminate trenching where possible, step-down transformer locations/space, and electrical design in panelboards. All of these variables must be considered when developing/approving site designs, as well as coordination of scheduling with other network modernization activities at these sites. Field installations timelines are dependent upon the number of chargers at a site, and the complexity of conditions addressed within the design. There are more than 100 sites already actively in progress currently, some in design phases, some with installation underway, with many more slated over the next four to five years to support the deployment of over 66,000 BEVs. See also Response No. 78.
87	**The Postal Service's statement that BEVs' upfront acquisition costs are higher than ICE vehicles' is unsupported.**
	While the Postal Service declines to publish commercially sensitive cost and market research data, the upfront acquisition cost differentials provided in SEIS Section 3-2.3, Financial Considerations, is well supported by actual market data and solicitations to manufacturers, rather than by academic studies. BEVs and ICE vehicles are not expected to reach price parity until after 2028, or once the cost for EV batteries drops below $100/kWh. According to BloombergNEF, the cost per kWh has been steadily declining each year since 2010, until 2022, when market disruptions caused the first ever *increase* in the cost of battery cells.

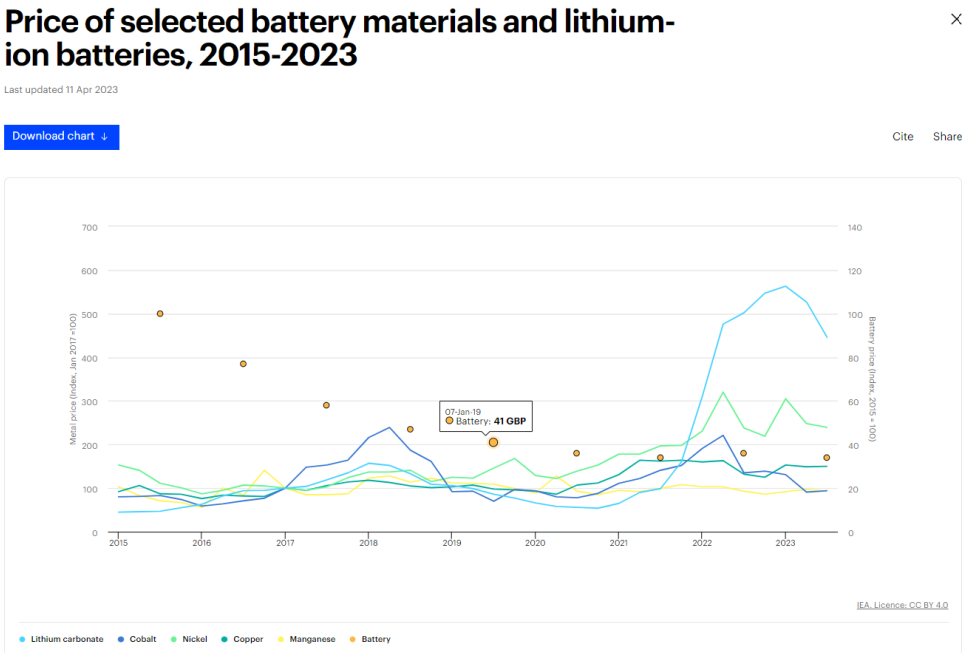
No.	Section 2: Summaries of Other Substantive Comments

Figure 1: Volume-weighted average lithium-ion battery pack and cell price split, 2013-2022



Source: BloombergNEF. All values in real 2022 dollars. Weighted average survey value includes 178 data points from passenger cars, buses, commercial vehicles and stationary storage.

The U.S. Energy Information Administration (EIA) shows a similar trend, with the impact of the market challenges in 2023:



In a May 31, 2023, interview with Reuters, Ford CEO Jim Farley stated, "EVs may not achieve cost parity with gasoline cars until *after* 2030."

88	**The Postal Service's analysis and conclusions regarding the limitations of the COTS BEV market are inadequate and flawed, and do not include such manufacturers and vehicle models as Envirotech Vehicles, Canoo, Ram, BrightDrop Zevo 400 & 600, Ford E-Transit, Bollinger Deliver-E. and Rivian, nor the expected increase in BEV production over the next decade.**
	The Postal Service disagrees that its analysis of the COTS vehicle market is inadequate or flawed. The Postal Service considered multiple suppliers of COTS BEVs, but only one met our operational requirements and had sufficient available quantities during the necessary

No.	Section 2: Summaries of Other Substantive Comments
	deployment window. The Preferred Alternative includes three separate COTS manufacturers whose vehicles have been found through the Postal Service's extensive testing to be capable of servicing certain Postal Service routes. In addition, the Postal Service's vehicle procurement strategy leaves the potential that other COTS vehicle manufacturers may be included in future procurements. See also Comment Response No. 12 above for discussion of how the Preferred Alternative will allow for the ICE and BEV COTS vehicles specified in Table 3-3.2 to be replaced with equivalent or superior COTS delivery vehicles should they become available.
89	**Postal Service should increase BEV percentage to be consistent with Executive Order 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability.**
	While the Postal Service is not subject to this Executive Order, it believes that its substantial commitment to BEVs under the Preferred Alternative is in accord with the goals of the Executive Order. As stated in the Biden-Harris Administration's December 20, 2022, press release in response to the announcement of our Preferred Alternative, "USPS demonstrates how it is leading by example for the Federal Government in achieving President Biden's charge to electrify the U.S. Government's 650,000 vehicles."
90	**The Draft SEIS's modeling of direct emissions underestimates ICE emissions by classifying ICE NGDVs and ICE COTS as "light commercial trucks." Light commercial trucks less than 8,500 pounds gross vehicle weight rate are considered light duty in regulatory class 30, while those of 8,500 to 10,000 pounds GVWR are considered light heavy-duty vehicles in class 41. ICE NGDVs and LHD ICE COTS should therefore be classified as light-heavy duty vehicles.**
	The Postal Service used the correct vehicle category in MOVES. The Postal Service used the light commercial truck category based on both the sizes of the engines and the GVWRs of the vehicles. The RHD COTS ICE vehicle and NGDV both have 2 liter, 4 cylinder engines, comparable to passenger car engines, while the LHD COTS ICE vehicle – the largest proposed COTS ICE vehicle – has a 3.6 liter, 6 cylinder engine. The ICE vehicles under consideration in the SEIS Alternatives range in weight from 6,834 to 8,900 pounds. The light commercial truck classification (MOVES3 Model Class 32, which is a combination of Regulatory Classes 30 and 41) encompasses vehicles with a weight range between 6,000 and 14,000 pounds and various engine sizes, and thus sufficiently covers all three proposed ICE vehicle models. In contrast, the light heavy-duty truck (Regulatory Class 41) recommended in the comment would largely encompass vehicles with much larger engines that use more fuel (e.g., 6 liter, 8 cylinders) and a higher weight distribution (8,500 to 14,000 pounds), which would be less representative of the proposed ICE vehicles. Therefore, it was more accurate to model the three proposed ICE vehicles as light commercial trucks (Model Class 32 which encompasses both Regulatory Classes 30 and 41) rather than solely representing them as Regulatory Class 41.
91	**The Postal Service should classify the NGDV as a "light heavy duty truck" for its emissions modeling, as recommended by the Office of the Inspector General.**
	The NGDV was classified as a "light commercial truck" in MOVES (see Section 4-6.3.1 of the SEIS and the "Direct Emissions from Vehicle Operation: Modeling Methodology using MOVES" section of Appendix F). See also Response No. 90 above.
92	**Commenter believes that the BEVs manufactured at Ford's Kansas City assembly plant will help improve mail delivery efficiency, dramatically reduce the Postal Service's carbon emissions and air pollution, and capitalize on the manufacturing capabilities of communities like the greater Kansas City area.**

No.	Section 2: Summaries of Other Substantive Comments
	The Postal Service has considered this comment.
93	**Commenter is pleased that Postal Service will invest nearly $10 billion to procure over 66,000 BEVs within next five years.**
	The Postal Service has considered this comment.
94	**Postal Service should pause its contract with Oshkosh pending completion of NEPA review.**
	The Postal Service disagrees as it has identified no flaws in its EIS that would warrant such a step.
95	**Postal Service should follow Office of Inspector General's findings including updating EIS with more alternatives, an updated Total Cost of Ownership analysis, and updates to the assumptions used in the environmental analyses.**
	See Draft SEIS Comment Response No. 38 in Table B3-1 for examples of OIG recommendations incorporated into this SEIS. See Response No. 1 above for discussion regarding the inclusion of a TCO analysis into this SEIS.
96	**Postal Service's commitment of funds to Oshkosh to date prior to completion of NEPA process violates NEPA.**
	The Postal Service disagrees. See NGDV Record of Decision, pages 8-9, which explains in detail why the contingent Oshkosh award did not violate NEPA.
97	**Draft SEIS does not explain why any Alternative with percentage greater than 62 percent is not feasible. Failure to consider such Alternatives violates NEPA.**
	The Postal Service does not claim that BEV percentages higher than 62 percent are not feasible. Rather, in deciding on fixed BEV percentages for the vehicle quantities under consideration in this SEIS, the Postal Service considered and weighed multiple factors to conclude that 62 percent is reasonable and readily achievable. Furthermore, given that the fleet will continue to be replaced subject to future supplements, the overall BEV percentage will change. It is also the Postal Service's expectation that the overall BEV percentage will continue to increase. The Postal Service also notes that it considered higher BEV percentages in the original NGDV FEIS (published in January 2022).
98	**SEIS should address the Postal Service's significantly changed financial situation due to such factors as the Inflation Reduction Act funding and the passage of postal reform legislation.**
	The SEIS does consider such factors. See SEIS Section 1-2.2, Rationale for Preparing This SEIS, and 3-2.3, Financial Considerations.
99	**Electrifying the postal fleet would result in net savings to the Postal Service when the Total Cost of Ownership is considered, including such factors as lower electricity costs and BEVs' lower maintenance costs.**
	See Response No. 1 above for discussion regarding TCO.
100	**The data the Postal Service used to base its BEV route length criteria is more than 18 months old and therefore dated and does not account for improvements in battery technology.**
	The Postal Service disagrees that its data is dated. Rather, it is based on multiple manufacturers' current data at various temperatures in which the Postal Service will be required to deliver. The smaller quantity of vehicles under the Preferred Alternative will allow

No.	Section 2: Summaries of Other Substantive Comments
	the Postal Service to account for improvements in battery technology over the next several years in subsequent acquisition activity.
101	**SEIS should adjust emissions analysis to account for regional variations in such key emission inputs as fuel formulation, drive cycles, and air conditioning usage.**
	Regional air emissions (including GHG) analyses would require extensive analyses with several parameters, including the Postal Service's deployment schedule of the new vehicles and type of new vehicles to be deployed at each location, which has not yet been determined. The Postal Service requires the ability to be flexible with its delivery and vehicle structure in order to support its Universal Service Mission (39 USC 101) and any such assignments at this time would be speculative. The SEIS thus provided a programmatic nationwide evaluation to preserve this flexibility and appropriately represent the Postal Service's national coverage.
102	**SEIS should analyze Environmental Justice impacts beyond the one-mile radius as mail trucks can be expected to wind through such communities and contribute to environmental impacts.**
	Potential effects on communities with Environmental Justice concerns, nationwide, resulting from daily travel of a delivery vehicle along each route (i.e., beyond the one-mile radius) are analyzed and presented in Section 4-11.3.1. For example, Table 4-11.4 estimates the reductions in annual direct emissions, in pounds per year, per delivery vehicle on a city curb-line route.
103	**SEIS should disclose the communities in which the Candidate Sites are located as well as the criteria used for selecting Candidate Sites.**
	As stated in SEIS Section 4-11.2, Environmental Justice – Affected Environment, the Candidate Sites are not finalized and are subject to change (if, for example, a site-specific analysis should find a particular site uneconomical or unavailable for lease renewal) and have not been announced publicly or within the Postal Service itself. Therefore, their specific locations are not disclosed in this SEIS.
104	**SEIS should clarify whether BEV deployment at Candidate Sites would result in maximum fossil fuel displacement.**
	See Response No. 39 above for discussion of factors affecting vehicle replacements and potential impacts on fuel consumption.
105	**Research suggests that most classes of heavy-duty BEVs will achieve both upfront and Total Cost of Ownership parity with their ICE counterparts within a decade.**
	The Postal Service's TCO analyses do not accord with this claimed research. See Response No. 1 above for discussion regarding TCO.
106	**Using Nickel Manganese Cobalt battery chemistry under the assumption that each vehicle will be fully charged each night will lead to accelerated range and performance degradation. Other battery chemistry, such as Lithium Iron Phosphate, should be considered instead.**
	This statement is not accurate. There are several factors that can impact range and performance degradation over time. One of the greatest single potential contributors to battery degradation is how the charging process occurs. The faster the charge, the hotter the battery gets, and the more likely the battery is to experience long-term degradation over time. Regardless of the state of charge when the battery is placed on the charger, the slowest possible charging process results in the best long-term preservation of battery functionality. The Postal Service has on average, at least a 12-hour window to charge vehicles, from the time the carriers return from the street at the end of the day, until they

No.	Section 2: Summaries of Other Substantive Comments
	leave the office the following day. As a result, the Postal Service specified Level 2 charging for NGDVs, and will use the same equipment and process for COTS vehicles. This enables the Postal Service to avoid peak/demand rates (where they exist), and still have more than 8 hours available to achieve a full charge. This "low and slow" charging approach allows the most operational flexibility, lowest cost equipment and charging solutions, and the best long-term approach for preserving battery life over time. Other battery chemistries were not offered by the potential suppliers in the competitive, unrestricted solicitations for either NGDV or COTS vehicles, and are not in the consideration set.
107	**Postal Service should switch to procuring BEVs with lithium-ferro-phosphate batteries, which are cheaper and have a better battery chemistry than nickel-manganese cobalt batteries. For example, it is reported that Rivian is switching to Lithium Ferro Phosphate batteries.**
	Other battery chemistries were not offered by the potential suppliers in the competitive, unrestricted solicitations for either NGDV or COTS vehicles, and are therefore not in the consideration set.
108	**The size of the NGDV battery is needlessly large and drives up the cost for BEVs.**
	The Postal Service disagrees. The NGDV battery is sized to support the Postal Service's daily drive cycle, with up to 70 miles of driving distance, and to support HVAC and Accessory loads throughout the up to 12 hours/day of operational time while the carrier is on the street delivering mail. The battery is sized at 94 kWh, but is constrained to enable 72 kWh of available capacity. Every battery degrades over time, and lithium-ion batteries are no different. However, by sizing the battery to account for this expected degradation over its ten-year life and constraining it to protect the battery health so that over- or under-charging cannot occur, this ensures full functionality throughout this time (and likely beyond). This ensures that the battery will continue to meet the full requirements at the end of its required ten-year life, not just at the beginning. The COTS vehicle batteries are similarly sized, within approximately 5% of this battery size.
109	**Commenter agrees with Postal Service's plan to concentrate initial BEV deployments at larger postal facilities to provide multiple economic, operational and administrative benefits to the Postal Service.**
	The Postal Service has considered this comment.
110	**Postal Service should coordinate with local businesses and facilities near Candidate Sites as it rolls out its BEV infrastructure to jumpstart and create additional efficiencies for broader BEV adoption.**
	The Postal Service has considered this comment. While jumpstarting or facilitating broader BEV adoption is outside the scope of the Proposed Action, it is possible that the Postal Service sometime in the future, when we are well along the way with our electrification initiative in support of our primary mission, can revisit this public mission in collaboration with Congress and the Administration's environmental officials.
111	**Postal Service should take opportunity to install public chargers when installing infrastructure for its BEVs. This would generate additional revenue for the Postal Service.**
	The Postal Service has stated, in response to Congressional and GAO inquiries about public charging: "We have limited resources, and a primary statutory mission to deliver mail and packages to 165 million delivery addresses, six and sometimes seven days per week, in a financially self-sufficient manner. As such, our focus has to be on making investments that advance our ability to fulfill our primary mission in a financially self-sufficient manner. For that

No.	Section 2: Summaries of Other Substantive Comments
	reason, we need to be careful not to undertake initiatives that distract from our mission, or that divert our limited resources to initiatives that are not a part of our purview, even if laudable. In addition, we likewise need to be mindful not to take on projects which are not a part of our mission, and which could potentially interfere with our normal operations. In that regard, providing public charging is not aligned with our legislated mission, would provide significant operating issues (e.g., ensuring availability of parking for customers and managing charger usage and repairs), could jeopardize user safety, and increase our cost potentially without any statutory authority to generate revenue from the effort. That said, we acknowledge that sometime in the future, when we are well along the way with our electrification initiative in support of our primary mission, we can revisit this public mission in collaboration with the Congress and the administration's White House environmental officials."
112	**Postal Service should consider that BEV components will become increasingly recyclable over time and thus will be available by the time the postal BEVs begin to retire.**
	Section 4-10.3.1 of the SEIS was revised to acknowledge that the Postal Service expects BEV batteries to become more recyclable over time, particularly considering the COTS vehicle and NGDV batteries would have lifespans of eight and ten years, respectively. Recycling of other BEV components would be conducted largely in accordance with procedures for ICE vehicle recycling. The Postal Service has already initiated work to establish sound requirements and a clear process for recycling BEV batteries as well as consideration of other sound uses for batteries that have exceeded their required functional use life. Requirements development is already underway, and the Postal Service is gaining experience by recycling prototype BEV equipment batteries, and working with suppliers in this space.
113	**Postal Service should consider how a procurement of its size will further spur wider electrification, including, by example, incentivizing manufacturers to invest in BEV production.**
	While the size of the Postal Service's fleet is not large enough to influence manufacturing decisions for automobile manufacturers that produce vehicle quantities in the millions – see Response No. 58 above – the Postal Service believes the size and speed of the BEV procurement proposed in the Preferred Alternative will compare favorably to other efforts and may spur others to action.
114	**Postal Service should consider combining Alternatives 1 and 2 to increase the BEV percentage to 82 percent, though at a slower replacement rate.**
	While the Postal Service declines to add an additional Alternative at this time, under the new vehicle procurement strategy, future procurements will consider varying vehicle mixes to be analyzed in future supplements. See also Response No. 13 above for discussion of potential environmental effects resulting from slower replacement rate.
115	**Postal Service should consider current and potential legislative and regulatory reforms which would result in lower electricity rates for EV charging usage. For example, a new Pacific Gas & Electric rate designed for commercial EV charging reduced fuel cost per mile from $2.31 to $0.68.**
	Given its size and scale, the Postal Service actively manages energy and utility usage at tens of thousands of facilities across the nation, and has engaged two firms to support these energy management activities, including differences in regulated vs non-regulated markets.

No.	Section 2: Summaries of Other Substantive Comments
	In order to access EV charging rates, utilities generally require sub-metering – which also has associated costs. In early estimates, the cost with installing/connecting new sub-meters was approximately $25,000, so there is some complexity, cost, and additional timeline associated with enabling access to these EV charging rates. As for the Postal Service's current efforts, EVSE systems will be configured to avoid peak/demand rate charges, and to leverage load management capabilities – all aimed at optimizing both the vehicle charging process, as well as the electricity rates paid.
116	**Postal Service should consider gas forecasts finding gasoline prices around $4.50 per gallon beyond 2030.**
	The Postal Service updates analyses related to fuel costs in conjunction with any major market events, or while any fleet investment decisions are in development. This includes developing a range of sensitivity analyses that leverage the most current EIA data and projections, and account for changing conditions in the market. Most recent evaluations have considered ranges of gasoline prices appreciably above the suggested price per gallon, as well as those that trend directly with EIA projections as part of the evaluation process.
117	**Postal Service should take advantage of other potential BEV incentives in Inflation Reduction Act beyond the $3 billion vehicle and infrastructure funding – for example, IRA incentives for the purchase of ZEV commercial vehicles and charging infrastructure and tax credits which might be available for government fleets. Postal Service should engage proactively with Internal Revenue Service and Treasury to ensure it is taking advantage of every opportunity.**
	See Response No. 67 above
118	**The Draft SEIS erred by assuming a range of 77 miles for the Ford E-Transit based on an assumed 70 percent of original capacity guaranteed by the manufacturer warranty. This is flawed because the manufacturer warranty is 8 years, meaning that it would take at least 8 years for the battery to degrade to 70 percent of its original capacity. In the meantime, the range would be closer the original 110-mile range thus allowing for longer routes to be served by BEVs as well as less frequent charging (thereby reducing need for 1:1 vehicle-charger ratios).**
	The Postal Service disagrees. A warranty of eight years does not mean that a commercial vehicle – especially one subject to the rigors of the Postal Service delivery cycle – will maintain the full 100 percent charge for the entire eight years. Rather, it is reasonable to expect, based on manufacturer battery warranties, that the battery will have some degradation (resulting in between 100% and 70% of the maximum capacity available) over those eight years. Furthermore, the Postal Service considers it impractical to deploy vehicles to routes of a long length only to then redeploy them to routes of shorter length at unpredictable intervals as the battery capacity degrades. In the Postal Service's determination, a conservative range of 70 miles is the best guarantee to use BEVs to reliably deliver the mail across a wide variety of delivery characteristics, including route length, climate, topography, and stop frequency. Using a range of 77 miles for the COTS BEVs results in a conservatively low fuel efficiency (mi/kWh) value for this vehicle type, which affects indirect emission estimates. Thus, the actual benefits of COTS BEVs in the Preferred Alternative, with respect to air emissions, may be greater than estimated in this SEIS. However, as noted under Table 3-3.2, the Postal Service has not fully tested COTS BEVs on Postal Service delivery route drive cycles to date and has limited real-world performance data. The fuel efficiency value is a calculated estimate based on manufacturer-provided information (i.e., the expected range on a single charge divided by the total battery size).

No.	Section 2: Summaries of Other Substantive Comments
119	**Postal Service should purchase vehicles using union labor and/or has a social responsibility to consider adverse effects to union labor from Oshkosh's decision not to build NGDV in Wisconsin. This would also accord with the Biden Administration's goals to promote the use of union labor, such as Executive Order 14025 on Worker Organizing and Empowerment (April 26, 2021).**
	See Response No. 41 above. The Postal Service does not comment on the internal management or labor relations of its suppliers.
120	**The Draft SEIS's failure to consider environmental, social and economic impacts relating to the production of NGDV in South Carolina violates NEPA.**
	The Postal Service disagrees. See FEIS Comment Response No. 96.
121	**The Postal Service has tested only Ford E-Transits and therefore has not tested a sufficient variety of COTS BEV options.**
	It is incorrect that the Postal Service has tested only Ford E-Transits, which were selected as part of competitive solicitation process with multiple offerors. The Postal Service has tested multiple other COTS BEVs, though comparable delivery vehicle BEV options are limited.
122	**SEIS needs to account for ICE vehicles being 3 to 5 times more expensive to drive than BEVs due to higher fuel and maintenance costs.**
	The Postal Service has not found this opinion to be accurate with respect to ICE and BEV vehicles suitable for mail delivery.
123	**Postal Service's assertions that it lacks resources to manage vehicles to share chargers is not credible and the Office of Inspector General found that a lower charger-to-vehicle ratio would be better for battery conditioning as each charging cycle puts stress on the battery.**
	The multiple consideration factors for why the Postal Service has determined to use 1:1 ratios for the time being, as stated in the Draft SEIS's Response No. 18 (see Table B3-1), remain relevant. The Postal Service also believes it has significant expertise in estimating and balancing the trade-offs that would be required in labor hours to track and maneuver vehicles among shared charging stations, while ensuring sufficient spare capacity to reliably deliver the mail across multiple possible scenarios, from inclement weather to peak season to employee absenteeism to space-constrained parking lots. Further, the Department of Energy's National Renewable Energy Labs are now publishing case studies for other government agency fleet implementations and incorporating a 1:1 charger ratio with other federal entities noting "an ideal EV to EVSE ratio of 1:1 to ensure each vehicle has its own dedicated EVSE."
124	**Rocky Mountain Institute authored a 2019 report on charging infrastructure cost for level 2 chargers to be between $2,500 and $4,900, far below the Postal Service's estimate of $18,000 per charger. The General Services Administration should also be capable of bulk purchasing chargers at a fraction of the Postal Service's costs.**
	See Response No. 3 above. The Department of Energy's National Renewable Energy Labs are now publishing case studies for other government agency fleet implementations, and incorporating a 1:1 charger ratio with other federal entities noting "an ideal EV to EVSE ratio of 1:1 to ensure each vehicle has its own dedicated EVSE. This will ensure vehicles are always charged and capable of supporting their mission." These studies also further corroborate the installed cost of EVSE used within the Postal Service's analysis, coming in at $17,900 per charger, reflecting the fully-loaded cost of both the EVSE hardware/software,

No.	Section 2: Summaries of Other Substantive Comments
	and all associated site prep costs for design, permitting, labor for trenching, conduit/wiring runs, concrete work/paving/patching, and physical installation of the EVSE itself. At the volumes that the Postal Service is acquiring EVSE, we can command much more favorable volume-based pricing than other agencies can achieve at lower volumes. While we can achieve economies on charging station hardware and software when purchasing in volume, there is little economy to be captured with the actual installation costs. Finally, the Postal Service's cost estimates are based on competitive nationwide solicitations in the open market using postal-specific design criteria. As such, they are superior to academic cost estimates or predictions.

B7 Notice of Availability of Final SEIS

Table B7-1
NOA Stakeholder Distribution List

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To whom it may concern	The Center for Transportation and the Environment 730 Peachtree Street NE, Suite 450 Atlanta, GA 30308-1209
To whom it may concern, Policy Committee	Elders Climate Action https://www.eldersclimateaction.org/contact-us/
To whom it may concern	EOP Foundation, Inc. 1616 H Street, NW, 5th Floor Washington DC 20006-4903

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B7 Notice of Availability of Final SEIS

Example NOA Letter

September 29, 2023

SUBJECT: Notice of Availability of Final Supplemental Environmental Impact Statement for Next Generation Delivery Vehicle Acquisitions

Dear Sir or Madam:

The Postal Service has prepared a Final Supplemental Environmental Impact Statement (SEIS) for Next Generation Delivery Vehicle Acquisitions. This SEIS is a supplement to the Postal Service's recent Next Generation Delivery Vehicles Acquisitions Final EIS, for which we published our Record of Decision on February 23, 2022. The SEIS was prepared pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality's regulations implementing NEPA (40 CFR Parts 1500-1508), and the Postal Service's regulations for NEPA compliance set forth at 39 CFR Part 775.

A copy of the Notice of Availability of the Final SEIS is enclosed.

Interested parties may view the Final SEIS at http://uspsngdveis.com/.

Sincerely,

Jennifer Beiro-Réveillé

Enclosure

B7 Notice of Availability of Final SEIS

Federal Register Publication Content

U.S. POSTAL SERVICE

Notice of Availability of Final Supplemental Environmental Impact Statement for Next Generation Delivery Vehicles Acquisitions

Pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969, its implementing regulations at 39 CFR Part 775, and the Council on Environmental Quality's regulations (40 CFR Parts 1500-1508), the U.S. Postal Service announces availability of the Final Supplemental Environmental Impact Statement (SEIS) which analyzes the environmental impacts of a range of alternatives for a modification to the Postal Service's February 23, 2022, Record of Decision (ROD) to purchase, over ten years, 50,000 to 165,000 purpose-built, right-hand drive vehicles – the Next Generation Delivery Vehicle (NGDV) – to replace existing delivery vehicles nationwide that are beyond the end of their service life. A minimum of 10 percent of those vehicles would be battery electric vehicles (BEVs).

The Postal Service has identified Alternative 1 as its Preferred Alternative, which is the purchase and deployment of a mixed fleet of Commercial Off-the-Shelf and NGDV vehicles. Of the total quantity of 106,480 vehicles to be procured under this SEIS, 62 percent would be BEV.

Interested parties may view the Final SEIS and all prior NEPA documents related to this procurement at http://uspsngdveis.com/.

REFERENCES:

1. U.S. Postal Service, Notice of Availability of Record of Decision, Next Generation Delivery Vehicles Acquisitions (87 FR 14588; Mar. 15, 2022).
2. U.S. Postal Service, Notice of Intent to Prepare a Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement (87 FR 35581; June 10, 2022).
3. U.S. Postal Service, Notice to Postpone Public Hearing and Extend Public Comment Period for Supplement to the Next Generation Delivery Vehicles Acquisitions Final Environmental Impact Statement (87 FR 43561; July 21, 2022).
4. U.S. Postal Service, Notice of Availability of Draft Supplemental Environmental Impact Statement for Next Generation Delivery Vehicles Acquisitions (88 FR 42401; June 30, 2023).

Sarah Sullivan,

Attorney, Ethics & Legal Compliance

APPENDIX C

HYPOTHETICAL VEHICLE PURCHASE PLAN

The following tables present the hypothetical plan of new delivery vehicles to be purchased and deployed, as well as the existing delivery vehicles to be replaced, in each year of the project implementation period for each Alternative that was used in modeling. These hypothetical scenarios were developed for the purpose of this SEIS analysis and represent reasonable assumptions based on supplier estimates in early 2023; the actual timing of vehicle acquisition and delivery, along with the actual vehicle deployment to sites, would be based on operational needs and supplier production capabilities.

Table C-1
Hypothetical Vehicle Purchase and Replacement Plan – Alternative 1

	Proposed Vehicle Purchases					Vehicles to be Replaced		
Year	**BEV NGDV**	**ICE NGDV**	**RHD COTS ICE**	**LHD COTS ICE**	**LHD COTS BEV**	**LLV**	**Delivery POV**	**Total Vehicle Replacements**
Year 1: 2023	0	0	2,433	0	0	1,825	608	2,433
Year 2: 2024	76	1,011	12,067	9,150	7,200	26,313	3,191	29,504
Year 3: 2025	1,247	9,678	0	1,600	2,050	14,120	455	14,575
Year 4: 2026	13,504	4,311	0	0	11,980	29,005	790	29,795
Year 5: 2027	20,173	0	0	0	0	19,388	785	20,173
Year 6: 2028	10,000	0	0	0	0	9,611	389	10,000
Year 7: 2029	0	0	0	0	0	0	0	0
Year 8: 2030	0	0	0	0	0	0	0	0
Total	**45,000**	**15,000**	**14,500**	**10,750**	**21,230**	**100,262**	**6,218**	**106,480**

Table C-2
Hypothetical Vehicle Purchase and Replacement Plan – Alternative 2

	Proposed Vehicle Purchases					Vehicles to be Replaced		
Year	**BEV NGDV**	**ICE NGDV**	**RHD COTS ICE**	**LHD COTS ICE**	**LHD COTS BEV**	**LLV**	**Delivery POV**	**Total Vehicle Replacements**
Year 1: 2023	0	0	0	0	0	0	0	0
Year 2: 2024	76	1,011	0	0	0	1,045	42	1,087
Year 3: 2025	1,247	9,678	0	0	0	10,500	425	10,925
Year 4: 2026	13,504	4,311	0	0	0	16,990	825	17,815
Year 5: 2027	20,173	0	0	0	0	19,359	814	20,173
Year 6: 2028	10,000	10,000	0	0	0	19,125	875	20,000
Year 7: 2029	10,000	10,000	0	0	0	19,222	778	20,000
Year 8: 2030	11,230	5,250	0	0	0	15,839	641	16,480
Total	**66,230**	**40,250**	**0**	**0**	**0**	**102,080**	**4,400**	**106,480**

Table C-3
Hypothetical Vehicle Purchase and Replacement Plan – No-Action Alternative

	Proposed Vehicle Purchases					**Vehicles to be Replaced**		
Year	**BEV NGDV**	**ICE NGDV**	**RHD COTS ICE**	**LHD COTS ICE**	**LHD COTS BEV**	**LLV**	**Delivery POV**	**Total Vehicle Replacements**
Year 1: 2023	0	0	0	0	0	0	0	0
Year 2: 2024	76	1,011	0	0	0	1,087	0	1,087
Year 3: 2025	1,247	9,678	0	0	0	10,925	0	10,925
Year 4: 2026	9,325	10,675	0	0	0	20,000	0	20,000
Year 5: 2027	0	20,000	0	0	0	20,000	0	20,000
Year 6: 2028	0	20,000	0	0	0	20,000	0	20,000
Year 7: 2029	0	20,000	0	0	0	20,000	0	20,000
Year 8: 2030	0	14,468	0	0	0	14,468	0	14,468
Total	**10,648**	**95,832**	**0**	**0**	**0**	**106,480**	**0**	**106,480**

APPENDIX D

ENVIRONMENTAL JUSTICE – CANDIDATE SITE SCREENING ANALYSIS

Screening Analysis Methodology

Due to the nationwide nature of the Proposed Action, the Postal Service undertook a high-level, programmatic screening analysis of communities that have the potential to be most affected by the Proposed Action. The Postal Service determined that potential effects may be most concentrated (and thus have greater potential to be disproportionate) in communities surrounding large Postal Service facilities where many delivery vehicles would be replaced. As such, the Postal Service tentatively identified 414 of these 'Candidate Sites' for which to undertake a detailed, site-specific screening review of nearby communities with EJ concerns.

For each Candidate Site, the Postal Service established a "study area," which consists of all census block groups within a 1-mile buffer. A 1-mile buffer is standard with the Centers for Disease Control and Prevention (CDC) Environmental Justice Index (EJI) and consistent with other literature reviewed. Census block groups are generally the most granular areas for which community data is available and were recommended for use by the U.S. Environmental Protection Agency (EPA). Census block groups were excluded from the study area if less than 5 percent of the block group (by geographic size) overlapped the 1-mile buffer.

The Postal Service then identified data sources containing indicators of environmental burden and other disadvantages that individual communities may be facing under existing conditions. These sources, based on early feedback from the EPA, included EPA's EJScreen, the Council on Environmental Quality's (CEQ) Climate and Economic Justice Screening Tool (CEJST), CDC's EJI, the Federal Emergency Management Agency's National Risk Index (NRI), and U.S. Department of Transportation's (DOT) Equitable Transportation Community Explorer (ETCE). EJScreen, CEJST, EJI, and NRI provide detailed community data in the form of percentiles on a national basis, which is the industry-standard approach for EJ assessments. The ETCE data was presented as binary variables out of necessity to designate whether sites are in an Area of Persistent Poverty and/or Historically Disadvantaged Community.

Based on a review of these sources, the Postal Service identified 22 indicators that provide a comprehensive representation of environmental burdens and other disadvantages facing each community, and collected these data points for each block group within the Candidate Site study areas (see Table D-1). As shown in the table, some of the indicators are provided by various data sources; in these circumstances, EJScreen was generally chosen as the primary source because it presents data at the block group level (as opposed to less granular census tracts). Where an indicator was used from CEJST, NRI, or ETCE at the census tract level, the census tract percentile was applied to each block group within the census tract. The Postal Service then grouped the 22 indicators into four general categories of disadvantage based on similar themes: air pollution burden, socioeconomic risk, climate and weather hazard, and health risk. Table D-1 depicts the data sources, specific indicators, and general disadvantage categories that the Postal Service used in this analysis.

Using the indicator data for each block group, the Postal Service calculated two overall disadvantage scores (a Population-Weighted Disadvantage Score and a Worst-Case Disadvantage Score) for each of the four general disadvantage categories for each Candidate Site. Thus, each Candidate Site has two sets of four disadvantage scores, as illustrated in Table D-9.

The Population-Weighted Disadvantage Score for each disadvantage category was calculated by multiplying the indicator values (i.e., percentiles) of each block group by the percentage of the study area population that is located within that block and then summing the values of all block groups for each indicator. The weighted indicators within each disadvantage category were then averaged to produce an overall Population-Weighted Disadvantage Score for each of the four categories. This score reflects widespread burdens or disadvantages affecting an overall study area because it gives higher weight to burdens affecting larger populations. However, this approach might fail to recognize highly

vulnerable block groups within the study area if they have a smaller population or the study area also includes block groups with very low disadvantage scores.

Table D-1
EJ Data Sources and Indicators Reviewed for Candidate Sites

Disadvantage Category	Indicator	Data Source	Other Data Sources Containing Indicator (For Reference)
Air Pollution Burden	1. PM 2.5	EJScreen	CEJST / EJI / ETCE
	2. Ozone	EJScreen	EJI / ETCE
	3. Diesel particulate matter	EJScreen	CEJST / EJI / ETCE
	4. Air toxics cancer risk	EJScreen	EJI / ETCE
	5. Air Toxics Respiratory Health Index	EJScreen	
	6. Traffic Proximity	EJScreen	CEJST / ETCE
Socioeconomic Risk	7. People of color	EJScreen	EJI
	8. Low income	EJScreen	CEJST / EJI / ETCE
	9. Unemployment rate	EJScreen	CEJST / EJI / ETCE
	10. Limited English speaking	EJScreen	EJI / ETCE
	11. Less than high school education	EJScreen	CEJST / EJI / ETCE
	12. Over age 64	EJScreen	EJI / ETCE
	13. Under age 5	EJScreen	
	14. Linguistic isolation	CEJST	ETCE
Climate and Weather Hazard	15. Drought	NRI	EJScreen
	16. Coastal Flood Hazard	NRI	EJScreen
	17. Wildfire Risk	NRI	EJScreen / CEJST
	18. Flood Risk	NRI	EJScreen / CEJST
Health Risk	19. Asthma	CEJST	EJScreen / EJI / ETCE
	20. Diabetes	CEJST	EJI / ETCE
	21. Heart disease	CEJST	EJScreen
	22. Low life expectancy	CEJST	EJScreen

Notes:
(1) EJI has similar but different indicators for People of Color (Racial Minority Status), Low Income (Poverty), Limited English Speaking (Speaks English Less than Well), Less than High School Education (No High School Diploma), and Over Age 64 (Age 65 and Older).
(2) In addition to the indicators shown in this table, the Postal Service recorded the Area of Persistent Poverty and Historically Disadvantaged Community designations sourced from ETCE.

The Postal Service also calculated a Worst-Case Disadvantage Score by selecting the highest indicator score among the block groups within a study area and averaging those highest indicator scores within each general category. This scoring approach highlights the presence of the most vulnerable communities near each Candidate Site, ensuring they are not diluted by the larger study area, but may not provide a holistic depiction of the study area. As Population-Weighted and Worst-Case Disadvantage Scores provide distinct information about each study area, the Postal Service calculated both scores to provide a comprehensive assessment at a screening level of burdens/disadvantages proximate to each Candidate Site.

Finally, the Postal Service assigned a disadvantage rating for each disadvantage score according to the thresholds shown in Table D-2. These ratings are consistent with the EJScreen classification framework.

Table D-2
Disadvantage Ratings Based on Scores

Disadvantage Rating	Threshold
Limited	Category score is below the 80th percentile.
Minor	Category score is between the 80th and 90th percentile.
Moderate	Category score is between the 90th and 95th percentile.
High	Category score is above 95th percentile.

For this SEIS, Candidate Sites were considered to be in an EJ community if they (1) have a Worst-Case Disadvantage Score in the 80th percentile or higher (i.e., at least minor disadvantage) for at least one of the four categories,[26] (2) are in an area of persistent poverty, or (3) are in a historically disadvantaged community. The Postal Service chose these designation criteria to account for both the cumulative burdens that might exist within Candidate Site study areas currently, as well as historical marginalization.

Screening Analysis Results

In total, 349 (84 percent) of the 414 Candidate Sites are considered to be in EJ communities according to the three EJ community criteria used in this SEIS. The breakdown of these sites by criteria is provided in Table D-3.

Table D-3
Summary of Candidate Sites in Communities with EJ Concerns

EJ Community Criteria	Number of Sites
Population-Weighted Disadvantage Score >80	92 (22%)
Worst-Case Disadvantage Score >80	318 (77%)
Area of Persistent Poverty	253 (61%)
Historically Disadvantaged Community	265 (64%)
EJ Community (By Any Criterion)	349 (84%)
Not EJ Community	65 (16%)

Note:
(1) Every community with a Population-Weighted Disadvantage Score >80 also has a Worst-Case Disadvantage Score >80.

The detailed results of this site-specific EJ review of all 414 Candidate Sites, including both disadvantage scores for each of the four categories, are included in Table D-9 located at the end of Appendix D.

As shown in Table D-4, 92 of the 414 Candidate Sites (22 percent) are located in areas with a widespread EJ concern, which is indicated by a high, moderate, or minor Population-Weighted Disadvantage Score. In addition to these 92 sites, 226 sites (55 percent) have a Worst-Case

[26] Because every community with a Population-Weighted Disadvantage Score >80 also has a Worst Case Disadvantage Score >80, only the Worst Case Disadvantage Score was needed as a factor for determining EJ community status.

Disadvantage Score in the 80th percentile or higher in at least one category (see Table D-5). Ninety-six sites (23 percent) are located in areas not considered disadvantaged in at least one category.

Table D-4
Population-Weighted Disadvantage Ratings, Areas of Persistent Poverty, and Historically Disadvantaged Communities Among Candidate Sites

Disadvantage Rating	Total	Area of Persistent Poverty (APP)	Historically Disadvantaged Community (HDC)	Neither APP nor HDC
High	1 (<1%)	1 (<1%)	1 (<1%)	0 (0%)
Moderate	17 (4%)	16 (4%)	14 (3%)	0 (0%)
Minor	74 (18%)	64 (15%)	67 (16%)	1 (<1%)
Disadvantage Score <80	322 (78%)	172 (42%)	183 (44%)	97 (23%)
Total	414 (100%)	253 (61%)	265 (64%)	98 (24%)

Table D-5
Worst-Case Disadvantage Ratings, Areas of Persistent Poverty, and Historically Disadvantaged Communities Among Candidate Sites

Disadvantage Rating	Total	Area of Persistent Poverty (APP)	Historically Disadvantaged Community (HDC)	Neither APP nor HDC
High	78 (19%)	78 (19%)	71 (17%)	0 (0%)
Moderate	87 (21%)	75 (18%)	79 (19%)	0 (0%)
Minor	153 (37%)	81 (20%)	96 (23%)	33 (8%)
Disadvantage Score <80	96 (23%)	19 (5%)	19 (5%)	65 (16%)
Total	414 (100%)	253 (61%)	265 (64%)	98 (24%)

Note:
(1) Every community with a Population-Weighted Disadvantage also has at least one Worst-Case Disadvantage.

Further, 253 sites are identified as areas of persistent poverty, and 265 sites are identified as historically disadvantaged communities, which both mostly overlap with high, moderate, or minor disadvantage scores: about 93 percent of areas of persistent poverty and historically disadvantaged communities correlate with at least a minor worst-case rating. Of the 414 Candidate Sites, 65 (16 percent) are not considered communities with EJ concerns based on the three criteria used in this review.

Table D-6 depicts the number of Candidate Sites that have a high, moderate, or minor disadvantage score for each of the four categories. Based on the Population-Weighted Disadvantage Scores, air pollution burden and health risk are the most common widespread burdens. Since the Worst-Case Disadvantage Scores are more sensitive than the Population-Weighted Disadvantage Scores, a larger number of sites have at least a minor disadvantage score for each category. Notably, the Worst-Case Disadvantage Scores show that socioeconomic risk is a common concern; two-thirds of Candidate Sites are in at least the 80th percentile for socioeconomic risk. Climate and weather hazards are a concern for a relatively small number of sites under both scoring approaches.

Table D-6
Candidate Site Study Areas Disadvantaged in Each Category

Disadvantage Category and Rating	Population-Weighted Approach	Worst-Case Approach
Air Pollution Burden	**56 (14%)**	**104 (25%)**
High	0	4
Moderate	6	18
Minor	50	82
Socioeconomic Risk	**2 (<1%)**	**276 (67%)**
High	0	33
Moderate	0	80
Minor	2	163
Climate and Weather Hazards	**2 (<1%)**	**18 (4%)**
High	0	0
Moderate	0	0
Minor	2	18
Health Risk	**36 (9%)**	**139 (34%)**
High	1	48
Moderate	11	26
Minor	24	65

While the number of Candidate Sites that exceed the 80th percentile threshold for the Worst-Case Disadvantage Scores is notably higher than the Population-Weighted Disadvantage Scores for all four categories, the disparity is smallest for air pollution burden and climate and weather hazards, indicating that these concerns have less variability between nearby communities. Conversely, the indicators for socioeconomic risk and health risk show larger variability within a particular study area, indicating that these concerns can be highly variable even for proximate geographic areas. For example, whereas 67 percent of Candidate Sites have a Worst-Case socioeconomic disadvantage in the 80th percentile, less than 1 percent of sites are within a study area with a Population-Weighted socioeconomic disadvantage.

Among disadvantaged study areas, some face disadvantages in multiple categories. It is uncommon for multiple disadvantages to be widespread across entire study areas. Only four Candidate Site study areas face multiple Population-Weighted Disadvantages (see Table D-7): three of these have minor disadvantages in air pollution burden and health risk, while one has minor disadvantages in air pollution burden and climate and weather hazard (see Table D-9).

Table D-7
Number of Candidate Site Study Areas with Multiple Disadvantages

Number of Disadvantages	Population-Weighted Approach	Worst-Case Approach
4	0	1
3	0	41
2	4	134
1	88	142

However, of the 318 sites with at least a minor disadvantage score under the Worst-Case approach, 176 (more than half) face multiple disadvantages (see Table D-7). One Candidate Site's study area is disadvantaged in all four categories. Forty-one Candidate Sites' study areas face three disadvantages, all of which are disadvantaged in air pollution burden and socioeconomic risk, 37 of which are disadvantaged in health risk, and 4 of which are disadvantaged in climate and weather hazard (see Table D-9).

Table D-8 denotes the correlation between multiple disadvantage categories. Of the 104 Candidate Site study areas with an air pollution burden disadvantage (see Table D-6), 87 are also at a socioeconomic disadvantage. Similarly, 115 of the 139 sites with a health risk disadvantage, and 12 of the 18 sites with a climate and weather hazard disadvantage, are also at a socioeconomic disadvantage. Air pollution burden and health risk overlap to a lesser degree.

Table D-8
Number of Candidate Site Study Areas with Overlapping Disadvantages (Worst-Case Approach)

	Air Pollution Burden	Socioeconomic Risk	Climate and Weather Hazard
Socioeconomic Risk	87		
Climate and Weather Hazard	6	12	
Health Risk	41	115	2

Table D-9
Worst-Case and Population-Weighted Disadvantage Scores for Each Major Deployment Site

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 1	**Yes**	**Yes**	No	48	**89**	52	**87**	45	56	44	71
Site 2	**Yes**	No	**Yes**	75	80	48	55	71	48	45	35
Site 3	No	No	No	48	68	49	45	42	40	19	39
Site 4	**Yes**	No	**Yes**	77	**81**	34	**83**	74	56	22	50
Site 5	**Yes**	**Yes**	**Yes**	62	**88**	28	**96**	57	53	27	**87**
Site 6	No	**Yes**	No	64	70	19	46	61	38	11	24
Site 7	No	No	No	73	68	73	57	68	38	72	40
Site 8	**Yes**	**Yes**	No	50	**82**	16	67	47	47	7	44
Site 9	**Yes**	No	No	**84**	75	42	41	78	44	18	18
Site 10	No	No	No	56	66	55	39	50	35	53	28
Site 11	**Yes**	**Yes**	**Yes**	70	**84**	43	**93**	65	59	39	78
Site 12	**Yes**	**Yes**	**Yes**	**85**	**85**	51	**97**	**81**	53	50	58
Site 13	**Yes**	**Yes**	**Yes**	**87**	**91**	48	51	**82**	53	45	17
Site 14	**Yes**	**Yes**	**Yes**	**85**	**88**	53	**91**	**81**	65	50	68
Site 15	**Yes**	No	**Yes**	69	**84**	37	47	65	56	11	31
Site 16	**Yes**	**Yes**	**Yes**	**83**	**93**	33	72	76	70	23	42
Site 17	**Yes**	No	No	65	**86**	61	44	60	61	50	22
Site 18	**Yes**	**Yes**	**Yes**	69	**92**	64	54	59	61	60	18
Site 19	No	**Yes**	No	70	71	54	29	66	36	49	14
Site 20	No	No	No	78	70	68	38	72	52	55	29
Site 21	**Yes**	**Yes**	**Yes**	**90**	**84**	46	76	**80**	52	45	47
Site 22	**Yes**	No	**Yes**	74	65	35	42	71	44	33	35
Site 23	**Yes**	**Yes**	**Yes**	**82**	**93**	57	**98**	**81**	49	38	53
Site 24	**Yes**	**Yes**	**Yes**	**82**	**93**	51	**98**	**81**	48	39	51
Site 25	**Yes**	**Yes**	**Yes**	**83**	**88**	20	37	78	60	17	25
Site 26	**Yes**	**Yes**	No	56	**83**	12	**96**	48	58	10	**91**

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 27	**Yes**	**Yes**	**Yes**	73	**92**	**82**	74	64	65	79	52
Site 28	No	No	No	72	75	17	33	62	49	15	21
Site 29	**Yes**	No	No	80	**83**	68	29	72	50	61	20
Site 30	No	No	No	54	70	61	40	50	46	61	28
Site 31	**Yes**	**Yes**	**Yes**	48	**91**	31	**96**	41	60	25	**81**
Site 32	**Yes**	**Yes**	**Yes**	**90**	**91**	48	**97**	**87**	48	30	80
Site 33	No	No	No	60	53	31	52	58	31	31	52
Site 34	No	No	No	65	69	26	48	62	40	23	31
Site 35	No	No	No	49	62	60	41	47	39	56	30
Site 36	**Yes**	**Yes**	**Yes**	71	**94**	62	71	68	67	45	52
Site 37	No	No	No	64	66	43	70	61	55	43	70
Site 38	No	No	No	70	53	41	39	63	38	39	28
Site 39	**Yes**	**Yes**	**Yes**	69	**97**	54	**86**	66	78	32	68
Site 40	**Yes**	**Yes**	**Yes**	46	**96**	52	**97**	45	73	33	73
Site 41	**Yes**	**Yes**	**Yes**	**81**	**96**	63	**92**	74	64	36	63
Site 42	**Yes**	**Yes**	**Yes**	57	**96**	75	**81**	48	77	69	55
Site 43	**Yes**	**Yes**	**Yes**	62	**92**	54	77	57	58	44	50
Site 44	**Yes**	**Yes**	No	52	**93**	25	**98**	49	68	5	**93**
Site 45	**Yes**	**Yes**	**Yes**	**92**	**85**	80	39	**86**	58	54	18
Site 46	**Yes**	**Yes**	**Yes**	79	**96**	72	25	76	65	66	21
Site 47	**Yes**	No	**Yes**	64	**85**	49	61	60	70	49	60
Site 48	**Yes**	**Yes**	**Yes**	74	**84**	21	**85**	71	50	16	69
Site 49	No	No	No	36	65	62	62	33	32	62	62
Site 50	**Yes**	No	**Yes**	71	32	43	61	71	32	43	61
Site 51	**Yes**	**Yes**	**Yes**	70	72	46	**88**	63	48	44	64
Site 52	**Yes**	No	No	**83**	78	35	31	77	59	28	20
Site 53	**Yes**	No	**Yes**	68	74	50	51	63	49	46	28
Site 54	**Yes**	**Yes**	**Yes**	68	**92**	60	**91**	62	64	49	74

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 55	**Yes**	No	No	57	**82**	39	49	51	52	37	33
Site 56	No	**Yes**	No	63	79	26	73	59	61	16	53
Site 57	**Yes**	**Yes**	No	72	**87**	44	**97**	65	45	28	**82**
Site 58	**Yes**	**Yes**	No	52	75	**82**	65	49	58	**81**	53
Site 59	No	No	No	73	68	52	28	66	40	50	13
Site 60	**Yes**	**Yes**	No	**82**	**88**	51	69	76	55	50	43
Site 61	**Yes**	No	**Yes**	**82**	**86**	52	**90**	**81**	69	52	69
Site 62	**Yes**	No	No	56	**84**	45	56	50	46	34	42
Site 63	**Yes**	**Yes**	**Yes**	78	**84**	51	**87**	72	51	50	69
Site 64	No	No	No	76	75	75	8	74	48	69	3
Site 65	**Yes**	No	**Yes**	**94**	**85**	36	24	**93**	39	32	6
Site 66	**Yes**	**Yes**	**Yes**	**93**	**86**	36	38	**93**	42	31	8
Site 67	**Yes**	**Yes**	**Yes**	77	**94**	**86**	57	65	67	65	36
Site 68	**Yes**	No	No	35	14	30	**80**	35	14	30	**80**
Site 69	**Yes**	**Yes**	**Yes**	**91**	**93**	34	**99**	**87**	62	9	**86**
Site 70	**Yes**	**Yes**	**Yes**	**81**	**88**	19	**99**	76	68	7	68
Site 71	**Yes**	**Yes**	No	70	**92**	57	73	61	62	49	59
Site 72	No	**Yes**	No	77	71	62	32	71	50	62	26
Site 73	**Yes**	**Yes**	No	70	74	50	**80**	66	42	38	35
Site 74	**Yes**	**Yes**	**Yes**	73	**83**	45	74	68	59	41	50
Site 75	**Yes**	**Yes**	**Yes**	73	**92**	29	**92**	68	69	14	**86**
Site 76	**Yes**	**Yes**	No	**83**	**93**	28	**81**	66	65	27	63
Site 77	**Yes**	**Yes**	**Yes**	75	**95**	28	**95**	67	69	23	74
Site 78	**Yes**	**Yes**	**Yes**	75	**89**	76	58	70	58	62	27
Site 79	**Yes**	**Yes**	**Yes**	78	**95**	49	80	72	63	42	59
Site 80	**Yes**	**Yes**	**Yes**	70	75	44	**86**	67	48	44	**84**
Site 81	No	No	No	66	77	75	16	61	36	75	15
Site 82	**Yes**	**Yes**	**Yes**	**82**	**85**	57	69	76	52	54	43

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 83	No	No	No	47	65	63	16	41	41	63	16
Site 84	No	No	No	74	61	27	52	72	40	22	48
Site 85	**Yes**	**Yes**	**Yes**	**81**	**83**	60	60	77	53	50	26
Site 86	**Yes**	**Yes**	**Yes**	**88**	**91**	36	63	**82**	68	36	63
Site 87	**Yes**	**Yes**	**Yes**	**88**	**91**	44	70	77	41	42	14
Site 88	**Yes**	**Yes**	**Yes**	63	**92**	40	**93**	60	70	39	70
Site 89	**Yes**	No	**Yes**	**91**	**89**	42	53	**84**	54	24	36
Site 90	**Yes**	**Yes**	**Yes**	79	79	22	75	77	41	12	43
Site 91	**Yes**	No	**Yes**	69	**81**	44	66	62	52	43	55
Site 92	No	No	No	58	25	44	10	58	25	44	10
Site 93	No	**Yes**	No	48	72	32	78	43	45	30	65
Site 94	No	No	No	33	54	62	70	25	35	59	53
Site 95	No	No	No	47	79	63	75	44	54	59	64
Site 96	**Yes**	No	**Yes**	42	**89**	72	19	39	75	62	17
Site 97	**Yes**	**Yes**	**Yes**	**96**	**95**	39	69	**89**	77	24	37
Site 98	**Yes**	**Yes**	**Yes**	68	**91**	56	54	66	61	39	42
Site 99	**Yes**	**Yes**	**Yes**	**82**	**97**	66	22	79	73	42	14
Site 100	**Yes**	**Yes**	No	35	67	21	**90**	31	46	21	**85**
Site 101	**Yes**	**Yes**	No	55	**83**	40	**85**	52	42	6	65
Site 102	**Yes**	**Yes**	No	**83**	**92**	39	76	79	53	28	25
Site 103	**Yes**	**Yes**	**Yes**	**83**	75	44	**96**	77	53	43	**86**
Site 104	**Yes**	**Yes**	**Yes**	**84**	**85**	43	**98**	79	56	21	**89**
Site 105	**Yes**	**Yes**	**Yes**	66	**90**	30	61	62	63	8	48
Site 106	**Yes**	No	No	76	**83**	18	63	68	47	16	35
Site 107	**Yes**	**Yes**	No	57	76	15	**98**	55	53	13	**89**
Site 108	**Yes**	No	**Yes**	**83**	78	31	71	77	49	30	58
Site 109	No	No	No	72	79	30	29	66	43	23	18
Site 110	**Yes**	**Yes**	**Yes**	73	**89**	25	**96**	65	60	13	**83**

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 111	**Yes**	**Yes**	**Yes**	80	**93**	55	**95**	78	54	51	38
Site 112	**Yes**	No	No	**80**	**82**	60	57	75	58	58	22
Site 113	**Yes**	**Yes**	**Yes**	79	**82**	60	57	78	**82**	60	57
Site 114	**Yes**	No	No	56	**89**	59	51	55	56	59	35
Site 115	No	No	No	74	73	45	27	69	42	41	19
Site 116	**Yes**	**Yes**	**Yes**	73	**81**	46	78	68	43	29	39
Site 117	**Yes**	**Yes**	**Yes**	65	**88**	64	73	61	42	49	42
Site 118	**Yes**	**Yes**	**Yes**	**89**	**91**	56	**82**	**86**	77	49	72
Site 119	**Yes**	**Yes**	**Yes**	**97**	**96**	63	**93**	**94**	75	41	73
Site 120	**Yes**	No	**Yes**	78	**86**	55	25	74	50	46	15
Site 121	**Yes**	**Yes**	**Yes**	65	**93**	67	**96**	61	62	63	58
Site 122	**Yes**	No	**Yes**	46	**90**	48	72	42	61	45	50
Site 123	**Yes**	**Yes**	**Yes**	62	**90**	67	**84**	54	57	58	66
Site 124	**Yes**	**Yes**	No	61	**82**	53	**86**	56	54	50	37
Site 125	**Yes**	**Yes**	**Yes**	**86**	**92**	73	44	77	68	49	28
Site 126	**Yes**	**Yes**	**Yes**	77	**82**	42	**85**	71	55	41	62
Site 127	**Yes**	No	**Yes**	62	**87**	67	50	58	55	65	38
Site 128	**Yes**	No	No	**80**	68	60	35	75	39	47	26
Site 129	**Yes**	No	No	**81**	79	44	40	78	46	24	14
Site 130	**Yes**	**Yes**	**Yes**	67	60	49	42	44	38	47	32
Site 131	No	No	No	60	40	54	18	60	40	54	18
Site 132	**Yes**	**Yes**	**Yes**	69	**95**	52	**96**	60	45	47	70
Site 133	**Yes**	No	**Yes**	67	69	56	61	62	53	55	52
Site 134	**Yes**	No	**Yes**	73	79	37	77	69	40	33	60
Site 135	**Yes**	**Yes**	**Yes**	**82**	**93**	34	**97**	72	66	14	80
Site 136	**Yes**	**Yes**	No	55	68	50	**90**	47	46	47	77
Site 137	**Yes**	**Yes**	**Yes**	69	**84**	24	**83**	67	55	23	58
Site 138	**Yes**	No	No	51	**89**	57	53	48	60	54	43

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 139	**Yes**	**Yes**	No	54	**92**	66	**83**	50	73	43	70
Site 140	**Yes**	**Yes**	**Yes**	66	**90**	57	72	61	46	47	43
Site 141	**Yes**	No	**Yes**	73	**89**	63	44	68	63	46	28
Site 142	No	No	No	71	76	63	69	55	41	50	22
Site 143	**Yes**	No	No	73	**84**	10	36	68	49	9	24
Site 144	**Yes**	**Yes**	**Yes**	76	**96**	48	**97**	68	71	45	**93**
Site 145	**Yes**	**Yes**	**Yes**	54	**93**	68	76	48	63	58	56
Site 146	**Yes**	**Yes**	**Yes**	66	**91**	72	78	62	75	68	61
Site 147	**Yes**	**Yes**	**Yes**	75	**98**	66	55	72	66	29	22
Site 148	**Yes**	No	**Yes**	**80**	**83**	63	41	72	37	59	17
Site 149	**Yes**	**Yes**	**Yes**	76	**84**	74	52	68	64	74	47
Site 150	**Yes**	**Yes**	**Yes**	67	72	46	**96**	61	46	35	**92**
Site 151	**Yes**	**Yes**	**Yes**	64	**90**	**80**	43	60	52	68	22
Site 152	**Yes**	No	No	55	**80**	18	43	50	39	15	27
Site 153	**Yes**	**Yes**	**Yes**	77	**85**	35	**92**	73	45	28	68
Site 154	**Yes**	**Yes**	**Yes**	**85**	**84**	32	**90**	**84**	39	18	28
Site 155	**Yes**	**Yes**	**Yes**	**88**	**92**	36	56	**82**	75	29	39
Site 156	**Yes**	No	**Yes**	**85**	79	**83**	6	**80**	53	**81**	3
Site 157	**Yes**	**Yes**	No	56	63	16	**87**	53	46	12	78
Site 158	**Yes**	**Yes**	No	47	74	64	**82**	47	53	64	**82**
Site 159	**Yes**	**Yes**	**Yes**	70	**89**	67	**99**	64	61	46	**92**
Site 160	**Yes**	No	**Yes**	**83**	**89**	36	**87**	**81**	69	30	**80**
Site 161	**Yes**	**Yes**	**Yes**	65	49	42	60	64	33	42	58
Site 162	No	No	No	46	79	11	57	43	56	11	57
Site 163	**Yes**	**Yes**	**Yes**	**81**	**95**	18	**98**	75	70	14	**91**
Site 164	No	No	No	59	67	74	8	55	31	71	7
Site 165	**Yes**	No	**Yes**	71	**90**	73	37	63	60	70	27
Site 166	**Yes**	No	**Yes**	79	61	68	5	79	61	68	5

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 167	**Yes**	**Yes**	**Yes**	67	**83**	65	51	65	67	48	44
Site 168	**Yes**	**Yes**	No	**81**	71	50	66	74	46	49	42
Site 169	**Yes**	**Yes**	No	70	77	24	**85**	52	38	23	68
Site 170	No	**Yes**	No	50	75	37	62	47	40	34	33
Site 171	**Yes**	**Yes**	**Yes**	**94**	**92**	53	39	**85**	69	33	28
Site 172	**Yes**	**Yes**	**Yes**	62	**84**	12	**84**	60	55	11	74
Site 173	**Yes**	**Yes**	**Yes**	77	78	**81**	**97**	68	35	70	62
Site 174	**Yes**	**Yes**	**Yes**	45	**94**	43	78	43	68	32	57
Site 175	**Yes**	**Yes**	**Yes**	63	**91**	49	**97**	60	69	47	**92**
Site 176	**Yes**	**Yes**	**Yes**	80	**85**	40	77	75	53	21	54
Site 177	**Yes**	**Yes**	**Yes**	55	**91**	78	**89**	45	72	61	70
Site 178	No	No	No	60	78	53	29	54	46	27	22
Site 179	**Yes**	No	No	67	**81**	60	56	58	55	51	23
Site 180	**Yes**	No	**Yes**	76	**90**	65	56	73	62	54	31
Site 181	**Yes**	**Yes**	No	51	**99**	57	**85**	44	79	47	60
Site 182	No	No	No	62	61	51	32	56	36	48	25
Site 183	No	No	No	74	60	38	45	69	44	36	34
Site 184	**Yes**	**Yes**	**Yes**	76	80	39	71	70	51	31	44
Site 185	**Yes**	**Yes**	**Yes**	78	**90**	37	**96**	73	57	29	68
Site 186	**Yes**	No	No	**82**	49	68	38	78	38	68	38
Site 187	**Yes**	No	**Yes**	78	**82**	78	28	69	51	51	20
Site 188	**Yes**	No	**Yes**	78	62	5	65	76	33	3	36
Site 189	**Yes**	**Yes**	No	61	48	51	**80**	58	32	50	71
Site 190	**Yes**	**Yes**	**Yes**	78	**83**	39	29	71	51	29	22
Site 191	**Yes**	**Yes**	**Yes**	**90**	**92**	**89**	**87**	80	40	48	10
Site 192	**Yes**	**Yes**	**Yes**	**92**	**84**	78	39	**82**	49	37	10
Site 193	**Yes**	**Yes**	**Yes**	**95**	**94**	53	76	**90**	70	44	38
Site 194	**Yes**	**Yes**	**Yes**	**89**	**92**	34	**99**	**85**	56	18	**88**

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 195	**Yes**	**Yes**	No	58	63	39	**83**	57	42	35	35
Site 196	**Yes**	**Yes**	**Yes**	74	**90**	45	**96**	66	51	40	**88**
Site 197	No	**Yes**	No	58	70	32	63	56	43	22	42
Site 198	No	**Yes**	No	58	72	32	63	55	41	21	42
Site 199	**Yes**	**Yes**	No	54	**82**	16	60	49	50	12	26
Site 200	No	**Yes**	No	55	79	36	58	48	46	34	44
Site 201	**Yes**	**Yes**	No	57	**83**	14	**97**	51	54	14	**95**
Site 202	**Yes**	**Yes**	**Yes**	64	74	45	**95**	56	50	44	78
Site 203	**Yes**	**Yes**	**Yes**	62	**95**	38	67	60	68	31	44
Site 204	**Yes**	**Yes**	**Yes**	62	**95**	38	67	60	68	31	44
Site 205	**Yes**	No	**Yes**	80	**87**	53	62	75	56	50	32
Site 206	**Yes**	**Yes**	**Yes**	**85**	**84**	46	**99**	**81**	34	34	38
Site 207	**Yes**	**Yes**	**Yes**	**85**	**84**	46	**99**	**80**	36	33	42
Site 208	**Yes**	No	No	75	**81**	69	27	73	39	34	3
Site 209	**Yes**	**Yes**	**Yes**	66	**98**	68	**98**	52	64	53	45
Site 210	**Yes**	No	**Yes**	66	**91**	74	47	64	73	64	41
Site 211	**Yes**	No	**Yes**	68	**84**	71	35	67	74	65	33
Site 212	**Yes**	**Yes**	**Yes**	48	**95**	67	**94**	44	72	60	59
Site 213	**Yes**	No	**Yes**	65	**91**	72	58	60	54	69	30
Site 214	**Yes**	**Yes**	**Yes**	55	65	69	34	51	43	63	20
Site 215	No	No	No	46	43	63	40	36	29	60	32
Site 216	No	No	No	62	51	18	21	60	41	18	21
Site 217	No	No	No	48	57	62	28	46	39	62	28
Site 218	No	No	No	21	0	68	0	0	0	0	0
Site 219	**Yes**	**Yes**	**Yes**	72	**90**	24	**83**	62	36	20	16
Site 220	**Yes**	**Yes**	**Yes**	69	**93**	25	70	59	63	11	50
Site 221	**Yes**	**Yes**	**Yes**	71	**87**	26	46	68	30	19	13
Site 222	**Yes**	**Yes**	**Yes**	60	**98**	55	79	56	**81**	51	55

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 223	**Yes**	**Yes**	**Yes**	68	**85**	49	76	64	65	47	70
Site 224	**Yes**	**Yes**	No	66	**97**	62	**84**	58	67	48	63
Site 225	**Yes**	**Yes**	**Yes**	**81**	**90**	72	**81**	77	75	54	53
Site 226	**Yes**	**Yes**	**Yes**	44	76	47	**84**	44	65	47	**84**
Site 227	No	No	No	71	66	21	71	64	39	19	44
Site 228	**Yes**	**Yes**	**Yes**	75	**85**	20	**97**	72	37	13	77
Site 229	No	No	No	64	73	46	56	61	41	41	34
Site 230	**Yes**	No	**Yes**	**86**	**80**	72	40	76	47	46	17
Site 231	**Yes**	No	**Yes**	77	**88**	44	75	72	61	40	67
Site 232	**Yes**	No	**Yes**	71	**87**	66	60	65	59	51	41
Site 233	**Yes**	No	No	**84**	73	32	35	79	35	31	12
Site 234	**Yes**	**Yes**	**Yes**	59	**89**	63	**88**	57	49	57	44
Site 235	**Yes**	No	**Yes**	**82**	77	44	54	76	51	43	42
Site 236	**Yes**	**Yes**	**Yes**	66	**91**	15	**91**	63	71	10	**82**
Site 237	**Yes**	No	**Yes**	65	**84**	63	63	59	49	59	47
Site 238	**Yes**	No	No	71	**83**	71	5	66	56	63	3
Site 239	**Yes**	**Yes**	**Yes**	62	79	24	**94**	49	56	10	**82**
Site 240	**Yes**	**Yes**	**Yes**	78	**89**	66	**98**	73	51	55	69
Site 241	**Yes**	**Yes**	**Yes**	**84**	**99**	48	**87**	**82**	43	44	18
Site 242	**Yes**	**Yes**	**Yes**	**85**	**96**	55	47	**84**	39	20	14
Site 243	**Yes**	**Yes**	**Yes**	**85**	**98**	53	**97**	**83**	38	23	17
Site 244	**Yes**	**Yes**	**Yes**	**85**	**96**	53	**81**	**83**	46	31	20
Site 245	**Yes**	**Yes**	**Yes**	**83**	**98**	63	23	79	70	32	15
Site 246	**Yes**	**Yes**	**Yes**	66	79	**81**	25	58	41	78	13
Site 247	**Yes**	**Yes**	**Yes**	65	**92**	53	**99**	63	52	46	65
Site 248	**Yes**	**Yes**	**Yes**	77	**84**	69	**89**	76	68	68	71
Site 249	**Yes**	No	No	75	**87**	45	50	69	62	36	39
Site 250	**Yes**	**Yes**	**Yes**	**84**	**82**	43	51	75	57	41	22

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 251	**Yes**	No	No	**85**	53	59	16	73	35	55	14
Site 252	**Yes**	No	**Yes**	**85**	71	38	54	77	38	35	37
Site 253	**Yes**	**Yes**	**Yes**	75	**98**	63	**89**	73	63	42	40
Site 254	**Yes**	**Yes**	**Yes**	78	**90**	62	**81**	75	60	38	48
Site 255	**Yes**	**Yes**	**Yes**	**92**	**88**	40	64	**87**	65	35	54
Site 256	No	No	No	47	68	68	53	41	41	68	53
Site 257	No	No	No	53	50	35	37	53	50	35	37
Site 258	**Yes**	**Yes**	**Yes**	**94**	**90**	69	63	**90**	71	54	45
Site 259	**Yes**	**Yes**	**Yes**	**91**	**90**	70	46	**85**	52	36	30
Site 260	No	No	No	52	22	63	14	52	22	63	14
Site 261	**Yes**	**Yes**	**Yes**	69	63	43	**94**	61	35	42	66
Site 262	**Yes**	**Yes**	**Yes**	73	**87**	**85**	45	61	65	50	31
Site 263	No	**Yes**	No	53	74	63	61	48	39	59	38
Site 264	**Yes**	No	**Yes**	69	**93**	71	53	67	54	64	26
Site 265	**Yes**	**Yes**	**Yes**	56	**87**	70	**96**	51	54	68	**82**
Site 266	**Yes**	**Yes**	**Yes**	**94**	**96**	43	70	**92**	67	31	36
Site 267	**Yes**	**Yes**	**Yes**	**86**	**93**	28	68	**82**	55	26	44
Site 268	**Yes**	**Yes**	**Yes**	77	**98**	62	25	73	77	33	16
Site 269	**Yes**	**Yes**	**Yes**	61	**91**	31	**98**	55	61	30	**90**
Site 270	**Yes**	No	No	**83**	75	59	**81**	77	40	36	34
Site 271	**Yes**	**Yes**	**Yes**	78	**90**	45	78	75	66	25	57
Site 272	**Yes**	**Yes**	**Yes**	79	**89**	75	**88**	76	60	66	73
Site 273	No	No	No	74	77	70	55	71	56	69	47
Site 274	**Yes**	**Yes**	**Yes**	**90**	**84**	58	**89**	**89**	69	40	71
Site 275	**Yes**	**Yes**	**Yes**	**88**	**86**	29	**91**	**82**	47	12	73
Site 276	**Yes**	**Yes**	**Yes**	**88**	**86**	29	**91**	**83**	47	13	71
Site 277	**Yes**	**Yes**	**Yes**	44	**87**	69	80	40	57	55	56
Site 278	**Yes**	**Yes**	No	49	**89**	52	61	44	50	43	37

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 279	No	No	No	37	56	58	31	33	38	56	25
Site 280	**Yes**	**Yes**	**Yes**	65	**96**	50	**86**	63	60	40	63
Site 281	**Yes**	**Yes**	**Yes**	65	**96**	49	**86**	63	62	40	66
Site 282	**Yes**	**Yes**	**Yes**	69	**80**	49	40	62	58	28	27
Site 283	No	No	No	69	79	64	32	60	34	61	23
Site 284	No	No	No	66	55	51	22	64	36	49	10
Site 285	**Yes**	No	**Yes**	**86**	**84**	64	22	79	53	64	19
Site 286	**Yes**	**Yes**	**Yes**	78	**89**	43	74	68	64	27	60
Site 287	**Yes**	No	No	77	**84**	**80**	21	75	41	61	7
Site 288	**Yes**	**Yes**	**Yes**	69	**90**	67	48	49	63	49	34
Site 289	**Yes**	**Yes**	**Yes**	**80**	**90**	49	**88**	74	69	29	72
Site 290	**Yes**	**Yes**	**Yes**	56	**85**	53	59	51	56	43	42
Site 291	**Yes**	**Yes**	**Yes**	75	**85**	47	**99**	72	48	39	59
Site 292	**Yes**	**Yes**	**Yes**	**97**	**89**	71	66	**92**	68	61	41
Site 293	**Yes**	**Yes**	**Yes**	64	**90**	42	**98**	61	51	31	76
Site 294	**Yes**	**Yes**	No	46	**85**	35	62	40	46	31	39
Site 295	**Yes**	**Yes**	No	61	**88**	37	**81**	58	49	36	60
Site 296	**Yes**	No	No	76	**86**	66	28	72	57	41	19
Site 297	**Yes**	No	**Yes**	**91**	**81**	47	57	**88**	46	41	42
Site 298	**Yes**	**Yes**	**Yes**	**91**	**93**	70	**87**	**89**	67	66	77
Site 299	**Yes**	**Yes**	**Yes**	54	**86**	19	**98**	48	65	14	**89**
Site 300	**Yes**	**Yes**	No	63	**85**	45	**90**	57	40	36	58
Site 301	**Yes**	**Yes**	**Yes**	79	**82**	14	76	76	53	14	63
Site 302	**Yes**	**Yes**	**Yes**	**87**	**87**	58	63	**84**	72	57	58
Site 303	No	No	No	63	78	68	26	57	48	65	13
Site 304	**Yes**	**Yes**	No	63	**82**	65	41	56	58	64	20
Site 305	**Yes**	No	**Yes**	67	**83**	69	66	61	60	65	42
Site 306	**Yes**	No	**Yes**	**90**	78	71	39	**83**	50	71	25

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 307	**Yes**	No	**Yes**	58	**85**	71	44	52	57	54	29
Site 308	**Yes**	**Yes**	**Yes**	**85**	**96**	**89**	63	79	50	64	25
Site 309	**Yes**	No	**Yes**	69	69	**81**	37	66	45	60	22
Site 310	**Yes**	**Yes**	**Yes**	**84**	**91**	71	78	78	68	43	33
Site 311	**Yes**	**Yes**	**Yes**	78	**94**	38	49	74	53	21	20
Site 312	**Yes**	**Yes**	**Yes**	75	**95**	50	79	72	70	26	65
Site 313	**Yes**	**Yes**	**Yes**	75	**95**	50	79	72	71	29	67
Site 314	**Yes**	No	No	**80**	**89**	70	21	70	63	55	7
Site 315	**Yes**	**Yes**	**Yes**	**85**	**95**	59	64	**81**	57	38	21
Site 316	**Yes**	No	No	**81**	79	41	34	71	47	25	19
Site 317	**Yes**	No	**Yes**	77	**87**	**84**	28	73	55	80	19
Site 318	**Yes**	No	**Yes**	61	**87**	69	44	56	56	36	21
Site 319	**Yes**	**Yes**	**Yes**	67	**96**	76	57	54	70	68	36
Site 320	No	No	No	69	69	74	23	60	39	61	12
Site 321	**Yes**	**Yes**	**Yes**	**89**	**91**	75	56	**87**	58	44	30
Site 322	**Yes**	No	**Yes**	**83**	**81**	72	43	79	54	56	15
Site 323	**Yes**	**Yes**	**Yes**	58	**87**	**84**	52	44	52	73	19
Site 324	**Yes**	No	**Yes**	62	71	**87**	26	58	46	71	10
Site 325	**Yes**	No	**Yes**	**86**	**91**	**80**	38	**82**	54	47	13
Site 326	**Yes**	**Yes**	**Yes**	71	**92**	76	58	68	60	31	48
Site 327	**Yes**	**Yes**	**Yes**	71	**91**	77	66	67	52	39	45
Site 328	**Yes**	**Yes**	No	55	**88**	59	74	52	52	54	47
Site 329	No	No	No	68	73	25	25	66	31	24	16
Site 330	**Yes**	**Yes**	**Yes**	71	**90**	36	69	67	65	33	42
Site 331	No	No	No	72	53	73	34	67	23	69	26
Site 332	No	No	No	76	74	39	46	73	33	33	35
Site 333	**Yes**	**Yes**	**Yes**	**82**	**91**	53	**99**	79	62	41	**92**
Site 334	No	No	No	43	70	42	64	41	51	40	37

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 335	**Yes**	No	**Yes**	77	**88**	65	67	71	63	39	50
Site 336	**Yes**	**Yes**	**Yes**	46	**89**	49	**86**	40	71	38	62
Site 337	**Yes**	**Yes**	**Yes**	58	**84**	52	67	53	51	38	45
Site 338	No	No	No	43	46	46	39	43	46	46	39
Site 339	**Yes**	**Yes**	**Yes**	78	**83**	74	21	76	57	73	19
Site 340	**Yes**	No	**Yes**	**91**	**84**	13	60	**90**	62	11	51
Site 341	No	No	No	72	56	70	22	67	35	56	13
Site 342	No	No	No	49	65	63	43	45	47	58	35
Site 343	**Yes**	**Yes**	**Yes**	75	**86**	67	39	72	55	63	25
Site 344	**Yes**	No	**Yes**	79	**92**	17	**87**	75	48	12	71
Site 345	**Yes**	**Yes**	**Yes**	69	**84**	54	**99**	62	53	50	77
Site 346	**Yes**	No	**Yes**	69	**88**	71	38	65	53	66	24
Site 347	**Yes**	No	**Yes**	70	**81**	45	61	67	40	38	31
Site 348	**Yes**	**Yes**	No	76	77	50	**85**	72	42	38	50
Site 349	No	**Yes**	No	70	67	34	75	63	39	16	61
Site 350	**Yes**	**Yes**	**Yes**	67	**87**	25	**98**	63	50	17	70
Site 351	**Yes**	**Yes**	**Yes**	75	**87**	44	**87**	69	44	30	58
Site 352	**Yes**	**Yes**	No	74	**84**	31	68	62	44	23	47
Site 353	**Yes**	**Yes**	**Yes**	**92**	**92**	22	**92**	**89**	45	12	39
Site 354	No	No	No	63	78	22	35	57	59	14	23
Site 355	**Yes**	No	No	62	**86**	61	25	58	56	53	18
Site 356	**Yes**	No	**Yes**	**89**	**80**	50	**85**	**86**	65	47	55
Site 357	**Yes**	**Yes**	**Yes**	**86**	**95**	50	**87**	77	72	42	69
Site 358	**Yes**	No	**Yes**	78	**82**	66	26	74	56	50	12
Site 359	**Yes**	No	No	71	**87**	71	34	70	54	55	14
Site 360	No	No	No	44	68	16	71	39	35	15	55
Site 361	**Yes**	**Yes**	**Yes**	69	76	32	70	64	53	18	54
Site 362	**Yes**	**Yes**	**Yes**	66	**83**	73	**88**	60	53	67	70

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 363	No	No	No	70	69	69	39	65	42	69	24
Site 364	**Yes**	No	No	74	**81**	27	80	69	46	26	65
Site 365	**Yes**	**Yes**	**Yes**	78	79	43	**91**	68	53	39	77
Site 366	**Yes**	No	**Yes**	**85**	**89**	68	18	79	52	57	7
Site 367	**Yes**	**Yes**	**Yes**	77	**84**	43	**93**	73	57	39	**86**
Site 368	**Yes**	**Yes**	**Yes**	76	**93**	20	**96**	70	65	10	**81**
Site 369	**Yes**	No	**Yes**	57	79	74	24	50	43	71	11
Site 370	No	No	No	73	56	51	69	70	45	48	66
Site 371	**Yes**	No	No	78	**89**	75	28	74	56	55	13
Site 372	No	No	No	63	58	76	13	61	34	74	9
Site 373	**Yes**	**Yes**	**Yes**	74	**91**	63	**83**	69	66	54	63
Site 374	No	No	No	36	61	67	33	31	35	48	22
Site 375	**Yes**	**Yes**	**Yes**	**87**	73	61	**87**	**86**	36	44	39
Site 376	**Yes**	**Yes**	**Yes**	**89**	**86**	56	**87**	**84**	71	51	76
Site 377	**Yes**	No	No	80	**81**	61	8	75	50	59	4
Site 378	**Yes**	**Yes**	No	38	75	26	**87**	24	59	24	**81**
Site 379	**Yes**	**Yes**	**Yes**	78	**83**	19	76	76	56	15	62
Site 380	**Yes**	**Yes**	**Yes**	**89**	**97**	**83**	55	**82**	70	42	30
Site 381	**Yes**	No	**Yes**	70	**83**	4	61	61	51	3	51
Site 382	**Yes**	**Yes**	**Yes**	71	**86**	32	**80**	66	65	24	63
Site 383	**Yes**	**Yes**	No	42	**91**	70	18	40	67	54	15
Site 384	**Yes**	**Yes**	**Yes**	68	**81**	55	**81**	60	53	53	59
Site 385	No	No	No	59	73	59	61	56	57	55	56
Site 386	**Yes**	No	**Yes**	72	79	71	34	68	46	61	10
Site 387	**Yes**	**Yes**	**Yes**	79	**88**	20	**92**	77	55	5	69
Site 388	No	No	No	46	76	44	65	43	38	37	56
Site 389	**Yes**	**Yes**	**Yes**	**82**	**88**	22	**84**	**81**	55	12	61
Site 390	**Yes**	**Yes**	No	**82**	**88**	68	33	77	35	44	14

Site Number	EJ Community?	Area of Persistent Poverty	Historically Disadvantaged Community	Worst-Case Disadvantage Score				Population-Weighted Disadvantage Score			
				Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk	Air Pollution Burden	Socio-economic Risk	Climate and Weather Hazard	Health Risk
Site 391	**Yes**	**Yes**	**Yes**	69	**82**	25	**93**	65	47	16	73
Site 392	No	No	No	29	44	6	49	28	33	6	49
Site 393	No	No	No	23	51	24	34	20	33	23	26
Site 394	No	No	No	68	56	70	42	66	32	58	21
Site 395	**Yes**	No	No	55	**85**	64	53	47	63	41	41
Site 396	**Yes**	**Yes**	**Yes**	**91**	**88**	55	**87**	**88**	79	21	67
Site 397	No	No	No	74	76	60	47	65	37	57	21
Site 398	**Yes**	No	**Yes**	72	**81**	43	31	70	43	36	20
Site 399	**Yes**	**Yes**	No	74	**89**	28	**90**	71	58	6	65
Site 400	**Yes**	**Yes**	**Yes**	**93**	**89**	**82**	34	**89**	53	43	20
Site 401	No	No	No	68	50	57	67	67	45	57	67
Site 402	**Yes**	**Yes**	**Yes**	48	**93**	28	**94**	44	60	22	74
Site 403	**Yes**	**Yes**	**Yes**	49	50	26	55	47	42	23	47
Site 404	No	**Yes**	No	66	75	77	65	62	48	70	47
Site 405	**Yes**	**Yes**	**Yes**	78	**92**	40	**99**	70	68	32	**90**
Site 406	No	No	No	57	50	59	42	56	29	58	23
Site 407	**Yes**	**Yes**	**Yes**	66	**91**	58	54	59	61	48	35
Site 408	**Yes**	**Yes**	**Yes**	**84**	**92**	66	32	77	55	37	9
Site 409	**Yes**	**Yes**	**Yes**	76	**93**	49	**84**	72	70	24	79
Site 410	**Yes**	**Yes**	**Yes**	**83**	**99**	58	**92**	77	73	36	62
Site 411	**Yes**	No	**Yes**	68	79	42	58	60	62	42	55
Site 412	**Yes**	No	**Yes**	67	69	40	73	60	43	39	50
Site 413	**Yes**	**Yes**	**Yes**	67	**92**	15	**98**	56	55	14	**96**
Site 414	**Yes**	**Yes**	**Yes**	55	**81**	74	78	50	54	52	66

APPENDIX E

NOISE BACKGROUND INFORMATION

Sound and Human Perception of Noise - Background Information

Table E-1
Noise Levels of Common Sources

Appendix E References

Sound and Human Perception of Noise - Background Information

Sound is a physical phenomenon consisting of vibrations that travel through a medium, such as air, and are sensed by the human ear. The perception and evaluation of sound involves three basic physical characteristics:

- Intensity – the acoustic energy, which is expressed in terms of sound pressure, in decibels (dB),
- Frequency – the number of cycles per second the air vibrates, in Hertz (Hz), and
- Duration – the length of time the sound presents.

The dB is a logarithmic unit that represents the intensity of a sound, also referred to as the sound level. All sounds have a spectral content, which means their magnitude or level changes with frequency. Environmental noise measurements are usually expressed on an "A-weighted" scale that filters out very low and very high frequencies in order to replicate human sensitivity. Table E-1 provides ambient noise levels in common environments.

Table E-1
Noise Levels of Common Sources

Sound Source	Sound Level (dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0

Source: (Cowan, 2004; Egan, 1998)

According to the EPA (1974), changes in hearing level of less than 5 dBA generally are not considered noticeable or significant to the human ear. There is no known evidence that a noise change of 5 dBA has any practical significance for the individual affected. A 9-10 dB increase in sound level is typically judged to be twice as loud as the original sound, while a 9-10 dB reduction is half as loud. Doubling the number of sources (e.g., vehicles) increases the hourly sound level by approximately 3 dB, which is usually the smallest change that people can detect outdoors without specifically listening for the change (FHWA, 2018).

The NGDV FEIS, Appendix E (Noise Background Information) presents additional background information related to noise.

Appendix E References

Cowan, James P. 1994. Handbook of Environmental Acoustics.

Egan, M. David. 1998. Architectural Acoustics.

EPA (United States Environmental Protection Agency). 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. March 1974.

FHWA. 2018. Techniques for Reviewing Noise Analyses and Associated Noise Reports.

APPENDIX F

AIR QUALITY BACKGROUND INFORMATION AND CALCULATIONS

National Ambient Air Quality Standards

The CAA amendments of 1970 allowed EPA to specify two sets of NAAQS – primary and secondary – for each of the "criteria" pollutants as applicable, as shown in Table F-1. Primary standards define levels of air quality necessary to protect public health, including the health of sensitive populations such as people with asthma, children, and the elderly. Secondary standards define levels of air quality necessary to protect public welfare (including protection against decreased visibility and damage to animals, crops, vegetation, and buildings). Standards have been established using average exposure times, based on the health and welfare effects of each pollutant.

Table F-1
National Ambient Air Quality Standards

Pollutant	Average Time	Federal Primary NAAQS	Federal Secondary NAAQS	Violation Criteria
Carbon monoxide (CO)	8-hour average	9 ppm	None	If exceeded more than once per year
Carbon monoxide (CO)	1-hour average	35 ppm	None	If exceeded more than once per year
Lead (Pb)	Rolling 3 month	0.15 µg/m^3	Same as Primary Standard	If exceeded
Nitrogen dioxide (NO_2)	Annual average	0.053 ppm	Same as Primary Standard	If exceeded 98th percentile, averaged over 3 years
Nitrogen dioxide (NO_2)	1-hour average	0.10 ppm	None	If exceeded Annual Mean
Ozone (O_3)[1]	8-hour average	0.070 ppm	Same as Primary Standard	If exceeded Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particulate matter (PM_{10})	24-hour average	150 µg/m^3	Same as Primary Standard	If exceeded more than once per year on average over 3 years
Particulate matter ($PM_{2.5}$)	Annual arithmetic mean	12 µg/m^3	15 µg/m^3	If exceeded based on 3-year average on annual mean concentration
Particulate matter ($PM_{2.5}$)	24-hour	35 µg/m^3	Same as Primary Standard	If exceeded based on 3-year average of the 98th percentile of 24-hour concentrations
Sulfur dioxide (SO_2) (2)	3-hour average	No standard	0.5 ppm	If exceeded on 3-year average of 99th percentile of 1-hour daily maximum concentrations
Sulfur dioxide (SO_2) (2)	1-hour average	0.075 ppm	No standard	If exceeded more than once per year

µg/m^3 = micrograms per cubic meter
NAAQS = National Ambient Air Quality Standards
PM_{10} = particulate matter less than 10 micrometers
$PM_{2.5}$ = particulate matter less than 2.5 micrometers
ppm = parts per million
Notes:

(1) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O3 standards additionally remain in effect in some areas. Also, some areas may have certain continuing implementation obligations under the prior, revoked 1-hour (1979) and 8-hour (1997) O_3 standards.

(2) The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet one year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or is not meeting the requirements of a SIP call under the previous SO_2 standards (40 CFR 50.4(3)).

Source: (EPA 2023a)

Table F-2 includes the *de minimis* emission level for each criteria pollutant, as established by the EPA. When the total direct and indirect emissions from a proposed project are below the *de minimis* levels, the project is considered to not exacerbate local concentrations and a detailed General Conformity analysis is not required.

Table F-2
General Conformity *De Minimis* Thresholds

Criteria Pollutant	Designation Classification	*De Minimis* Threshold (tpy)
Ozone (VOC or NO_x)	Serious nonattainment	50
Ozone (VOC or NO_x)	Severe nonattainment	25
Ozone (VOC or NO_x)	Extreme nonattainment	10
Ozone (VOC or NO_x)	Other areas outside an ozone transport region	100
Ozone (NO_x)	Marginal and moderate nonattainment inside an ozone transport region	100
Ozone (NO_x)	Maintenance	100
Ozone (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
Ozone (VOC)	Maintenance within an ozone transport region	50
Ozone (VOC)	Maintenance outside an ozone transport region	100
CO, SO_2 and NO_2	All nonattainment & maintenance	100
PM_{10}	Serious nonattainment	70
PM_{10}	Moderate nonattainment and maintenance	100
$PM_{2.5}$	Direct Emissions, SO2, NOx, VOC, and Ammonia for Serious nonattainment	70
$PM_{2.5}$	Direct Emissions, SO2, NOx, VOC, and Ammonia for Moderate nonattainment and maintenance	100
Lead	All nonattainment and maintenance area	25

tpy: tons per year
CO: Carbon monoxide
SO_2: Sulfur dioxide
NO_2: Nitrogen dioxide
NO_x: Nitrogen oxide
VOC: Volatile organic compound
PM: Particulate Matter
Source: (EPA 2023b)

Direct Emissions from Vehicle Operation: Modeling Methodology using MOVES

The Postal Service estimated direct emissions for this SEIS using the EPA-recommended MOVES model, version 3.1, which is a state-of-the-science emission modeling system that estimates mobile source emissions for criteria pollutants and GHGs. The MOVES model produced vehicular emission factors for all vehicles associated with the Alternatives considered in this SEIS. MOVES predicts tailpipe, evaporative loss, fueling operations, vehicle cold start, brake wear, and tire wear emissions from vehicles and provides emission factors in grams per mile. The Postal Service used vehicle miles traveled (VMT) for average Postal Service delivery vehicle routes to calculate the emissions, rather than the information associated with gallons of fuel or miles per gallon that cannot be used for estimating emissions of all pollutants, including GHGs, from vehicles. MOVES also produced emission factors in grams per start for vehicle hot starts[27] that occur during certain delivery routes.

The average emission factors calculated from the MOVES model encompassed the following pollutants: VOC, NO_x, CO, $PM_{2.5}$, PM_{10}, SO_2, and GHGs (CO_2e, CO_2, CH_4, N_2O). Temperature, humidity, and air conditioning adjustment factors were considered, and seasonal emissions (January and July) were averaged for estimated yearly average emission factors for all pollutants. Off-road fugitive refueling emissions (VOC) were also considered by selecting the refueling option in the MOVES model so that the output emission factors captured the refueling emissions.[28] The MOVES model assumes fully electric vehicles have no tailpipe or evaporative emissions and that brake and tire wear emissions are identical to conventional vehicles. Therefore, only particulate matter ($PM_{2.5}$ and PM_{10}) emissions, from brake and tire wear, are associated with BEV operation, while all six criteria pollutants and GHG emissions are associated with ICE vehicle operation.

The delivery vehicles considered in this SEIS were each classified in MOVES according to their characteristics. LLVs were classified as "passenger truck" with make year set to 1994 (the last year of LLV production). Delivery POVs, based on the Postal Service's best available data, are most commonly SUVs, pickup trucks, and vans, and so were also classified as "passenger truck," with make years between 1960 and 2023.[29] All proposed new vehicles (ICE NGDV, BEV NGDV, RHD COTS ICE, LHD COTS ICE, and LHD COTS BEV) were classified as "light commercial truck" with make year set to the year in which the vehicles would be initially deployed (see Table F-3.a).

As recommended by the EPA, the Postal Service performed a national-scale analysis[30] for this SEIS, for each vehicle classification, by selecting the national default parameters for modeling characteristics. Speed profiles and roadway types were specified for various different Postal Service delivery route types (i.e., rural curb-line, city curb-line, city non-curb-line, rural transit, and city transit). For each daily delivery route, daily travel of the Postal Service vehicles can be categorized into two segments: (1) Transit (i.e., driving from the vehicle deployment site to the first delivery point on its route, and from the last delivery point back

[27] Cf. OIG Report, Environmental Emissions Assumption 2 regarding starting emissions (USPS OIG, 2023).
[28] Cf. OIG Report, Environmental Emissions Assumption 2 regarding refueling emissions (USPS OIG, 2023).
[29] To determine the emission factors for each model year from 2023 to 2030, the emission factors for all make years from 1960 to 2023 were weighted and averaged based on the vehicle distribution percentage by make year. However, since the vehicle distribution percentages for future make years are unknown, the Postal Service assumed that some employees with older vehicles would replace them with newer make years in the coming years. Therefore, the analysis assumed that the vehicle percentages for the oldest make years would be replaced by newer vehicles in the following years. For example, for simulation year 2024, the vehicle distribution would be the same as simulation year 2023, except that the make year of 1960 (the oldest vehicles) would be replaced by the make year of 2024. This method was applied to all future project years (2024-2030).
[30] Cf. OIG Report, Environmental Emissions Assumption 1 regarding applying a single-county approach on a national scale (USPS OIG, 2023).

to the vehicle deployment site), and (2) Delivery (driving from the first to last delivery points on its route). Speed profile distributions were determined for each segment and for each route type.

For the transit segment, the speed cycle had an average speed of 23.5 miles per hour (mph), which could be represented using the MOVES default EPA drive cycle. However, due to the distinctive, stop-and-go nature of Postal Service delivery vehicles, the delivery segment could not be represented with a default EPA drive cycle in MOVES. As such, USPS-specific drive cycles, based on our internal field data, were developed and incorporated into the MOVES model to calculate the emission factors for both rural curb-line and city curb-line delivery segments. The drive cycle on non-curb-line delivery routes (such as dismount, park and loop, and other routes) is similar to transit driving patterns, except that several hot starts occur when the vehicles are parked and re-started at various delivery points throughout the route. Therefore, the emission factors for non-curb-line routes were assumed to be equal to the transit driving pattern (average speed of 23.5 mph), with a weighted average estimate of 36.9 hot starts per route per day (based on USPS data) included in the emission considerations.

Once emission factors were derived for each of the above scenarios, emission factors for the city delivery segment were consolidated based on a weighted average of curb-line and non-curb-line routes (23 percent curb-line, 77 percent non-curb-line), while rural delivery segments were entirely curb-line.

Table F-3.a
Summary of Vehicle Type and Model Year for MOVES Model

Vehicle	ICE NGDV	BEV NGDV	RHD COTS ICE	LHD COTS ICE	LHD COTS BEV	LLV	Delivery POV
Gross Vehicle Weight Rating (GVWR) (lbs)	8,700	8,700	6,834	8,900	9,500	4,450	various
MOVES Vehicle Type	Light Commercial Truck (32)	Light Commercial Truck (32)	Light Commercial Truck (32)	Light Commercial Truck (32)	Light Commercial Truck (32)	Passenger Truck (31)	Passenger Truck (31)
Vehicle Make Year	2023-2030	2023-2030	2023-2030	2023-2030	2023-2030	1987-1994	1960-2023

Total direct emissions were calculated by multiplying transit and delivery segment emission factors (for the year each vehicle would be initially deployed[31]) by the estimated VMT, as shown in Table F-3.b, for each

[31] The methodology does not account for potential increases in direct emissions from ICE vehicles over time resulting from degradation or deterioration of their emission control systems. This variable would increase estimated emissions over time from both the proposed new ICE vehicles and the aged ICE vehicles to be replaced. Since the Action Alternatives include 62 percent BEVs with substantially lower emissions than ICE vehicles, increasing the aged ICE vehicles' emissions over time (to account for further deterioration) would likely demonstrate greater emissions reductions relative to existing conditions since over half of them would be replaced with BEVs, making the Postal Service's analysis directionally conservative.
Additionally, while LLVs were made between 1987-1994, the MOVES model only produces emission rates for specific vehicle make years up to 30 years preceding the simulation year. If emission rates for simulation years 2025-2030 were used to calculate LLV emissions (i.e., to theoretically capture deterioration over time), those emission rates would actually start encompassing newer vehicles unrepresentative of the existing LLVs (e.g., vehicles with make years 1995-2000) with lower emission rates for most pollutants than the LLVs (make years 1987-1994). Thus, the

vehicle and route type. The breakdown of anticipated vehicle deployments across city and rural routes in each year of this Proposed Action, which was estimated for the purpose of this air quality analysis, is provided for each considered Alternative in Tables F-4.a, F-4.b, and F-4.c. The unit emissions of each vehicle on each route type/segment, based on annual VMT, in each year is provided in Tables F-4.d through F-4.g. A summary of the changes in direct emissions under each Alternative is shown in Tables F-4.h through F-4.j. Finally, the emission factors produced by MOVES are shown in Tables F-5.a through F-5.d. The total air emissions for all criteria pollutants are reported in short tons per year (tpy), consistent with regulatory air permitting and air emission inventory guidance for criteria pollutants. Greenhouse gas emissions are reported in metric tons (MT) per year, per industry standard.

Table F-3.b
Summary of Daily VMT and Drive Cycle for City and Rural Routes

Vehicle Driving Segment	Drive Cycle	Daily VMT per City Route	Daily VMT per Rural Route
Transit	EPA Cycle (23.5 mph)	5.2	9
Delivery	USPS Drive Cycle	15.4	25.9
Total	**N/A**	**20.6**	**34.9**

Postal Service calculated emissions for the 2024-2030 simulation years all using the 2024 emission rate for 1994 vehicles.
Finally, the Postal Service conducted a conservative sensitivity analysis of emissions resulting from degradation and deterioration of emission control systems during the project implementation period. The Postal Service ran the calculations using 2030 direct emission factors for all proposed new vehicles regardless of make year, and the 2024 direct emission factors for LLVs. Despite not accounting for further degradation of LLVs (as noted above), the change in aggregated annual emissions reductions was negligible.

Summary of Vehicle Acquisitions and Replacement of Aged Vehicles, and Annual Mileage and Emission Calculation per Vehicle

Table F-4.a
Alternative 1 – Vehicle Distribution (Number of Vehicles)

	BEV NGDV		ICE NGDV		RHD COTS ICE		LHD COTS ICE		LHD COTS BEV		LLV Replaced		Delivery POV Replaced	
Year	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**
2023	0	0	0	0	858	1,575	0	0	0	0	250	1,575	608	0
2024	23	53	257	754	4,258	7,809	153	8,997	931	6,269	2,431	23,882	3,191	0
2025	374	873	2,460	7,218	0	0	27	1,573	265	1,785	2,671	11,449	455	0
2026	4,047	9,457	1,096	3,215	0	0	0	0	1,549	10,431	5,902	23,103	790	0
2027	6,046	14,127	0	0	0	0	0	0	0	0	5,261	14,127	785	0
2028	2,997	7,003	0	0	0	0	0	0	0	0	2,608	7,003	389	0
2029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**13,487**	**31,513**	**3,813**	**11,187**	**5,116**	**9,384**	**180**	**10,570**	**2,745**	**18,485**	**19,123**	**81,139**	**6,218**	**0**

Note:
(1) This table represents a hypothetical spread of vehicles to be replaced per year, used only for the purpose of this SEIS evaluation.

Table F-4.b
Alternative 2 – Vehicle Distribution (Number of Vehicles)

	BEV NGDV		ICE NGDV		RHD COTS ICE		LHD COTS ICE		LHD COTS BEV		LLV Replaced		Delivery POV Replaced	
Year	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	23	53	257	754	0	0	0	0	0	0	238	807	42	0
2025	374	873	2,460	7,218	0	0	0	0	0	0	2,409	8,091	425	0
2026	4,047	9,457	1,096	3,215	0	0	0	0	0	0	4,318	12,672	825	0
2027	6,046	14,127	0	0	0	0	0	0	0	0	5,232	14,127	814	0
2028	2,997	7,003	2,541	7,459	0	0	0	0	0	0	4,663	14,462	875	0
2029	2,997	7,003	2,541	7,459	0	0	0	0	0	0	4,760	14,462	778	0
2030	3,366	7,864	1,334	3,916	0	0	0	0	0	0	4,059	11,780	641	0
Total	**19,850**	**46,380**	**10,229**	**30,021**	**0**	**0**	**0**	**0**	**0**	**0**	**25,679**	**76,401**	**4,400**	**0**

Note:
(1) This table represents a hypothetical spread of vehicles to be replaced per year, used only for the purpose of this SEIS evaluation.

Table F-4.c
No-Action Alternative – Vehicle Distribution (Number of Vehicles)

	BEV NGDV		ICE NGDV		RHD COTS ICE		LHD COTS ICE		LHD COTS BEV		LLV Replaced		Delivery POV Replaced	
Year	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**	**Rural**	**City**
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	23	53	257	754	0	0	0	0	0	0	280	807	0	0
2025	374	873	2,460	7,218	0	0	0	0	0	0	2,834	8,091	0	0
2026	2,795	6,530	2,713	7,962	0	0	0	0	0	0	5,508	14,492	0	0
2027	0	0	5,083	14,917	0	0	0	0	0	0	5,083	14,917	0	0
2028	0	0	5,083	14,917	0	0	0	0	0	0	5,083	14,917	0	0
2029	0	0	5,083	14,917	0	0	0	0	0	0	5,083	14,917	0	0
2030	0	0	3,677	10,791	0	0	0	0	0	0	3,677	10,791	0	0
Total	**3,192**	**7,456**	**24,356**	**71,476**	**0**	**0**	**0**	**0**	**0**	**0**	**27,548**	**78,932**	**0**	**0**

Note:
(1) This table represents a hypothetical spread of vehicles to be replaced per year, used only for the purpose of this SEIS evaluation.

Table F-4.d
New ICE NGDV, RHD COTS ICE, and LHD COTS ICE – Unit Emissions from MOVES Model (tpy per Vehicle)

Simulation Year	Road Type	Driving Mode / Driving Speed	Daily VMT per Vehicle (mi/day)	Annual VMT per Vehicle (mi/year)	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e (MT)
2023	City	Transit (23.5 mph)	5.2	1,570	4.07E-05	1.28E-05	1.18E-03	1.29E-05	8.83E-05	3.84E-06	0.63
2024				1,570	3.93E-05	9.02E-06	1.06E-03	1.29E-05	8.83E-05	3.78E-06	0.62
2025				1,570	3.80E-05	5.57E-06	9.51E-04	1.29E-05	8.83E-05	3.70E-06	0.61
2026				1,570	3.77E-05	5.57E-06	9.51E-04	1.29E-05	8.83E-05	3.63E-06	0.60
2027				1,570	3.76E-05	5.56E-06	9.51E-04	1.29E-05	8.83E-05	3.62E-06	0.60
2028				1,570	3.75E-05	5.54E-06	9.51E-04	1.29E-05	8.83E-05	3.62E-06	0.59
2029				1,570	3.75E-05	5.52E-06	9.51E-04	1.29E-05	8.83E-05	3.61E-06	0.59
2030				1,570	3.75E-05	5.49E-06	9.51E-04	1.28E-05	8.82E-05	3.61E-06	0.59
2023	City	Delivery (USPS Drive Cycle) – 23% City Curb-line and 77% Non-Curb-line	15.4	4,651	1.89E-04	4.16E-05	4.42E-03	6.41E-05	4.58E-04	1.60E-05	2.64
2024				4,651	1.83E-04	2.99E-05	3.98E-03	6.41E-05	4.58E-04	1.57E-05	2.59
2025				4,651	1.78E-04	1.91E-05	3.58E-03	6.41E-05	4.58E-04	1.54E-05	2.54
2026				4,651	1.77E-04	1.91E-05	3.58E-03	6.40E-05	4.58E-04	1.52E-05	2.49
2027				4,651	1.77E-04	1.91E-05	3.58E-03	6.40E-05	4.58E-04	1.51E-05	2.48
2028				4,651	1.76E-04	1.90E-05	3.58E-03	6.40E-05	4.58E-04	1.51E-05	2.48
2029				4,651	1.76E-04	1.89E-05	3.58E-03	6.40E-05	4.58E-04	1.51E-05	2.48
2030				4,651	1.76E-04	1.88E-05	3.58E-03	6.39E-05	4.58E-04	1.51E-05	2.48
2023	Rural	Transit (23.5 mph)	9	2,718	5.13E-05	2.11E-05	1.73E-03	1.13E-05	6.88E-05	5.62E-06	0.92
2024				2,718	4.94E-05	1.44E-05	1.55E-03	1.13E-05	6.88E-05	5.53E-06	0.91
2025				2,718	4.75E-05	8.31E-06	1.40E-03	1.13E-05	6.88E-05	5.41E-06	0.89
2026				2,718	4.71E-05	8.31E-06	1.40E-03	1.13E-05	6.88E-05	5.32E-06	0.87
2027				2,718	4.70E-05	8.30E-06	1.40E-03	1.13E-05	6.88E-05	5.30E-06	0.87
2028				2,718	4.70E-05	8.27E-06	1.40E-03	1.13E-05	6.88E-05	5.29E-06	0.87
2029				2,718	4.69E-05	8.24E-06	1.40E-03	1.13E-05	6.87E-05	5.29E-06	0.87
2030				2,718	4.69E-05	8.21E-06	1.40E-03	1.12E-05	6.87E-05	5.28E-06	0.87
2023	Rural	Delivery (USPS Drive Cycle) – 100% Rural Curb-line	25.9	7,822	6.42E-04	8.87E-05	1.20E-02	2.33E-04	1.72E-03	4.89E-05	8.05
2024				7,822	6.26E-04	6.61E-05	1.08E-02	2.33E-04	1.72E-03	4.81E-05	7.92
2025				7,822	6.11E-04	4.54E-05	9.74E-03	2.33E-04	1.72E-03	4.70E-05	7.75
2026				7,822	6.08E-04	4.54E-05	9.74E-03	2.33E-04	1.72E-03	4.62E-05	7.62
2027				7,822	6.06E-04	4.53E-05	9.74E-03	2.33E-04	1.72E-03	4.60E-05	7.58
2028				7,822	6.06E-04	4.51E-05	9.74E-03	2.33E-04	1.72E-03	4.60E-05	7.58
2029				7,822	6.05E-04	4.48E-05	9.73E-03	2.33E-04	1.72E-03	4.60E-05	7.57

Simulation Year	Road Type	Driving Mode / Driving Speed	Daily VMT per Vehicle (mi/day)	Annual VMT per Vehicle (mi/year)	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e (MT)
2030				7,822	6.04E-04	4.46E-05	9.73E-03	2.33E-04	1.72E-03	4.59E-05	7.56
Simulation Year	**Road Type**	**Driving Mode**	**Daily No. of Hot Starts (no./day)**	**Annual No. of Hot Starts (no./year)**	**VOC**	**NO_X**	**CO**	**$PM_{2.5}$**	**PM_{10}**	**SO_2**	**CO_2e**
2023	City (Off-Network)	Hot Starts (City Non-Curb-line)	36.9	11,145	4.72E-03	2.46E-03	4.77E-02	2.34E-04	2.65E-04	2.72E-05	4.61
2024				11,145	4.56E-03	2.37E-03	4.62E-02	2.35E-04	2.66E-04	2.70E-05	4.57
2025				11,145	4.42E-03	2.29E-03	4.49E-02	2.35E-04	2.66E-04	2.66E-05	4.52
2026				11,145	4.42E-03	2.29E-03	4.49E-02	2.36E-04	2.66E-04	2.62E-05	4.44
2027				11,145	4.42E-03	2.29E-03	4.48E-02	2.36E-04	2.67E-04	2.61E-05	4.42
2028				11,145	4.42E-03	2.29E-03	4.48E-02	2.36E-04	2.67E-04	2.61E-05	4.42
2029				11,145	4.42E-03	2.29E-03	4.48E-02	2.36E-04	2.67E-04	2.60E-05	4.41
2030				11,145	4.42E-03	2.29E-03	4.48E-02	2.36E-04	2.67E-04	2.60E-05	4.41

Notes:

(1) The unit emissions presented above are for individual vehicles. To calculate the emissions per vehicle (unit emissions), the annual driving distance was determined by multiplying the daily driving distance by 302 working days, which was then multiplied by the MOVES model output emission factors. The emissions were calculated separately for each driving mode (city transit, city delivery, rural transit, and rural delivery) based on the specific number of vehicles proposed for each year.

(2) To calculate emission for Alternative 1, Alternative 2, and the No-Action Alternative, the proposed number of vehicles in Tables F-4.a, F-4.b, and F-4.c, were used along with unit emissions as shown in Table F-4.d.

(3) The model years for this analysis are 2023-2030, assuming that the vehicle years of manufacture are the same as the vehicle deployment years.

(4) Since ICE NGDV, RHD COTS ICE, and LHD COTS ICE vehicles are categorized as the same "light commercial truck" vehicle type in the MOVES model, emission factors shown in Table F-5.a were used for the emissions analyses for these vehicle types.

Table F-4.e
New BEV NGDV and LHD COTS BEV – Unit Emissions from MOVES Model (tpy per Vehicle)

Simulation Year	Road Type	Driving Mode / Driving Speed	Daily VMT per Vehicle (mi/day)	Annual VMT per Vehicle (mi/year)	$PM_{2.5}$	PM_{10}
2023	City	Transit (23.5 mph)	5.2	1,570	1.12E-05	8.65E-05
2024				1,570	1.12E-05	8.65E-05
2025				1,570	1.12E-05	8.65E-05
2026				1,570	1.12E-05	8.65E-05
2027				1,570	1.12E-05	8.65E-05
2028				1,570	1.12E-05	8.65E-05
2029				1,570	1.12E-05	8.64E-05
2030				1,570	1.12E-05	8.64E-05
2023	City	Delivery (USPS Drive Cycle) – 23% City Curb-line and 77% Non-Curb-line	15.4	4,651	5.78E-05	4.51E-04
2024				4,651	5.78E-05	4.51E-04
2025				4,651	5.78E-05	4.51E-04
2026				4,651	5.78E-05	4.51E-04
2027				4,651	5.78E-05	4.51E-04
2028				4,651	5.78E-05	4.51E-04
2029				4,651	5.78E-05	4.51E-04
2030				4,651	5.78E-05	4.51E-04
2023	Rural	Transit (23.5 mph)	9	2,718	8.86E-06	6.61E-05
2024				2,718	8.86E-06	6.61E-05
2025				2,718	8.86E-06	6.61E-05
2026				2,718	8.86E-06	6.61E-05
2027				2,718	8.86E-06	6.61E-05
2028				2,718	8.86E-06	6.61E-05
2029				2,718	8.86E-06	6.60E-05
2030				2,718	8.85E-06	6.60E-05
2023	Rural	Delivery (USPS Drive Cycle) – 100% Rural Curb-line	25.9	7,822	2.16E-04	1.70E-03
2024				7,822	2.16E-04	1.70E-03
2025				7,822	2.16E-04	1.70E-03
2026				7,822	2.16E-04	1.70E-03
2027				7,822	2.16E-04	1.70E-03
2028				7,822	2.16E-04	1.70E-03
2029				7,822	2.16E-04	1.70E-03
2030				7,822	2.16E-04	1.70E-03

Notes:

(1) The unit emissions presented above are for individual vehicles. To calculate the emissions per vehicle (unit emissions), the annual driving distance was determined by multiplying the daily driving distance by 302 working days, which was then multiplied by the MOVES model output emission factors. The emissions were calculated separately for each driving mode (city transit, city delivery, rural transit, and rural delivery) based on the specific number of vehicles proposed for each year.
(2) There are no direct emissions associated with hot starts for BEVs.
(3) To calculate emissions for Alternative 1, Alternative 2, and the No-Action Alternative, the proposed number of vehicles in Tables F-4.a, F-4.b, and F-4.c, were used along with the unit emissions as shown in Table F-4.e.
(4) The model years for this analysis are 2023-2030, assuming that the vehicle years of manufacture are the same as the vehicle deployment years.
(5) Since both BEV NGDV and LHD COTS BEV vehicles are categorized as the same “light commercial truck” vehicle type in the MOVES model, emission factors shown in Table F-5.b were used for the emissions analyses for these vehicle types.

Table F-4.f
LLVs to be Replaced – Unit Emissions from MOVES Model (tpy per Vehicle)

Simulation Year	Road Type	Driving Mode / Driving Speed	Daily VMT per Vehicle (mi/day)	Annual VMT per Vehicle (mi/year)	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2023	City	Transit (23.5 mph)	5.2	1,570	3.41E-03	7.01E-03	4.28E-02	4.40E-05	1.24E-04	5.26E-06	0.89
2024				1,570	3.41E-03	7.01E-03	4.28E-02	4.40E-05	1.24E-04	5.26E-06	0.89
2025				1,570	3.41E-03	7.01E-03	4.28E-02	4.40E-05	1.24E-04	5.26E-06	0.89
2026				1,570	3.41E-03	7.01E-03	4.28E-02	4.40E-05	1.24E-04	5.26E-06	0.89
2027				1,570	3.41E-03	7.01E-03	4.28E-02	4.40E-05	1.24E-04	5.26E-06	0.89
2028				1,570	3.41E-03	7.01E-03	4.28E-02	4.40E-05	1.24E-04	5.26E-06	0.89
2029				1,570	3.41E-03	7.01E-03	4.28E-02	4.40E-05	1.24E-04	5.26E-06	0.89
2030				1,570	3.41E-03	7.01E-03	4.28E-02	4.40E-05	1.24E-04	5.26E-06	0.89
2023	City	Delivery (USPS Drive Cycle) – 23% City Curb-line and 77% Non-Curb-line	15.4	4,651	1.55E-02	2.30E-02	1.53E-01	1.49E-04	5.54E-04	2.18E-05	3.71
2024				4,651	1.55E-02	2.30E-02	1.53E-01	1.49E-04	5.54E-04	2.18E-05	3.71
2025				4,651	1.55E-02	2.30E-02	1.53E-01	1.49E-04	5.54E-04	2.18E-05	3.71
2026				4,651	1.55E-02	2.30E-02	1.53E-01	1.49E-04	5.54E-04	2.18E-05	3.71
2027				4,651	1.55E-02	2.30E-02	1.53E-01	1.49E-04	5.54E-04	2.18E-05	3.71
2028				4,651	1.55E-02	2.30E-02	1.53E-01	1.49E-04	5.54E-04	2.18E-05	3.71
2029				4,651	1.55E-02	2.30E-02	1.53E-01	1.49E-04	5.54E-04	2.18E-05	3.71
2030				4,651	1.55E-02	2.30E-02	1.53E-01	1.49E-04	5.54E-04	2.18E-05	3.71
2023	Rural	Transit (23.5 mph)	9	2,718	3.91E-03	1.18E-02	6.29E-02	8.19E-05	1.44E-04	7.70E-06	1.29
2024				2,718	3.91E-03	1.18E-02	6.29E-02	8.19E-05	1.44E-04	7.70E-06	1.29
2025				2,718	3.91E-03	1.18E-02	6.29E-02	8.19E-05	1.44E-04	7.70E-06	1.29
2026				2,718	3.91E-03	1.18E-02	6.29E-02	8.19E-05	1.44E-04	7.70E-06	1.29
2027				2,718	3.91E-03	1.18E-02	6.29E-02	8.19E-05	1.44E-04	7.70E-06	1.29
2028				2,718	3.91E-03	1.18E-02	6.29E-02	8.19E-05	1.44E-04	7.70E-06	1.29
2029				2,718	3.91E-03	1.18E-02	6.29E-02	8.19E-05	1.44E-04	7.70E-06	1.29
2030				2,718	3.91E-03	1.18E-02	6.29E-02	8.19E-05	1.44E-04	7.70E-06	1.29
2023	Rural	Delivery (USPS Drive Cycle) – 100% Rural Curb-line Delivery	25.9	7,822	5.21E-02	4.99E-02	3.87E-01	3.34E-04	1.83E-03	6.63E-05	11.39
2024				7,822	5.21E-02	4.99E-02	3.87E-01	3.34E-04	1.83E-03	6.63E-05	11.39
2025				7,822	5.21E-02	4.99E-02	3.87E-01	3.34E-04	1.83E-03	6.63E-05	11.39
2026				7,822	5.21E-02	4.99E-02	3.87E-01	3.34E-04	1.83E-03	6.63E-05	11.39
2027				7,822	5.21E-02	4.99E-02	3.87E-01	3.34E-04	1.83E-03	6.63E-05	11.39
2028				7,822	5.21E-02	4.99E-02	3.87E-01	3.34E-04	1.83E-03	6.63E-05	11.39
2029				7,822	5.21E-02	4.99E-02	3.87E-01	3.34E-04	1.83E-03	6.63E-05	11.39

Simulation Year	Road Type	Driving Mode / Driving Speed	Daily VMT per Vehicle (mi/day)	Annual VMT per Vehicle (mi/year)	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2030				7,822	5.21E-02	4.99E-02	3.87E-01	3.34E-04	1.83E-03	6.63E-05	11.39
Simulation Year	**Road Type**	**Driving Mode**	**Daily No. of Hot Starts (no./day)**	**Annual No. of Hot Starts (no./year)**	**VOC**	**NO_X**	**CO**	**$PM_{2.5}$**	**PM_{10}**	**SO_2**	**CO_2e**
2023	City (Off-Network)	Hot Starts (City Non-Curb-line)	36.9	11,145	5.33E-02	4.70E-02	8.22E-01	1.71E-03	1.93E-03	3.66E-05	7.68
2024				11,145	5.32E-02	4.69E-02	8.21E-01	1.71E-03	1.93E-03	3.65E-05	7.67
2025				11,145	5.32E-02	4.69E-02	8.21E-01	1.71E-03	1.93E-03	3.65E-05	7.67
2026				11,145	5.32E-02	4.69E-02	8.21E-01	1.71E-03	1.93E-03	3.65E-05	7.67
2027				11,145	5.32E-02	4.69E-02	8.21E-01	1.71E-03	1.93E-03	3.65E-05	7.67
2028				11,145	5.32E-02	4.69E-02	8.21E-01	1.71E-03	1.93E-03	3.65E-05	7.67
2029				11,145	5.32E-02	4.69E-02	8.21E-01	1.71E-03	1.93E-03	3.65E-05	7.67
2030				11,145	5.32E-02	4.69E-02	8.21E-01	1.71E-03	1.93E-03	3.65E-05	7.67

Notes:

(1) The unit emissions presented above are for individual vehicles. To calculate the emissions per vehicle (unit emissions), the annual driving distance was determined by multiplying the daily driving distance by 302 working days, which was then multiplied by the MOVES model output emission factors. The emissions were calculated separately for each driving mode (city transit, city delivery, rural transit, and rural delivery) based on the specific number of vehicles proposed for each year.

(2) To calculate emissions for Alternative 1, Alternative 2, and the No-Action Alternative, the proposed number of vehicles in Tables F-4.a, F-4.b, and F-4.c, were used based on unit emissions as shown in Table F-4.f.

(3) MOVES model for LLVs was run based on the vehicle make year being equal to the national average mixture of 1994 vehicles for every simulation year (2023-2030). The 2024 emission factors for 1994 vehicles were applied to simulation years 2024-2030, as explained on Page F-5 (Footnote No. 30).

(4) LLVs are categorized as “passenger truck” vehicle type in the MOVES model; therefore, emission factors shown in Table F-5.c were used for the emissions analyses.

Table F-4.g
Delivery POVs to be Replaced – Unit Emissions from MOVES Model (tpy per Vehicle)

Simulation Year	Road Type	Driving Mode / Driving Speed	Daily VMT per Vehicle (mi/day)	Annual VMT per Vehicle (mi/year)	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2023	Rural	Transit (23.5 mph)	9	2,718	5.45E-04	1.56E-03	1.66E-02	2.28E-05	7.67E-05	7.49E-06	1.23
2024				2,718	5.38E-04	1.50E-03	1.70E-02	2.39E-05	7.79E-05	7.49E-06	1.23
2025				2,718	5.52E-04	1.50E-03	1.75E-02	2.36E-05	7.76E-05	7.50E-06	1.23
2026				2,718	4.85E-04	1.33E-03	1.72E-02	2.32E-05	7.72E-05	7.49E-06	1.23
2027				2,718	4.76E-04	1.35E-03	1.76E-02	2.45E-05	7.86E-05	7.53E-06	1.24
2028				2,718	4.71E-04	1.31E-03	1.73E-02	2.39E-05	7.79E-05	7.53E-06	1.24
2029				2,718	4.64E-04	1.07E-03	1.68E-02	2.34E-05	7.74E-05	7.53E-06	1.24
2030				2,718	4.65E-04	1.00E-03	1.67E-02	2.44E-05	7.85E-05	7.53E-06	1.24
2023	Rural	Delivery (USPS Drive Cycle) – 100% Rural Curb-line	25.9	7,822	7.15E-03	5.82E-03	1.02E-01	2.92E-04	1.79E-03	6.29E-05	10.41
2024				7,822	7.25E-03	5.47E-03	1.04E-01	2.83E-04	1.78E-03	6.29E-05	10.42
2025				7,822	7.60E-03	5.48E-03	1.07E-01	2.89E-04	1.78E-03	6.30E-05	10.42
2026				7,822	6.62E-03	4.54E-03	1.03E-01	2.94E-04	1.79E-03	6.29E-05	10.40
2027				7,822	6.58E-03	4.09E-03	1.06E-01	2.90E-04	1.78E-03	6.32E-05	10.45
2028				7,822	6.75E-03	4.00E-03	1.04E-01	2.90E-04	1.78E-03	6.32E-05	10.45
2029				7,822	6.94E-03	4.00E-03	1.04E-01	2.90E-04	1.78E-03	6.32E-05	10.45
2030				7,822	5.92E-03	1.82E-03	1.07E-01	2.76E-04	1.62E-03	4.92E-05	8.11

Notes:
(1) The unit emissions presented above are for individual vehicles. To calculate the emissions per vehicle (unit emissions), the annual driving distance was determined by multiplying the daily driving distance by 302 working days, which was then multiplied by the MOVES model output emission factors. The emissions were calculated separately for each driving mode (rural transit, and rural delivery) based on the specific number of vehicles proposed for each year.
(2) To calculate emissions for Alternative 1, Alternative 2, and the No-Action Alternative, the proposed number of vehicles in Tables F-4.a, F-4.b, and F-4.c, were used based on unit emissions as shown in Table F-4.g.
(3) MOVES model for Delivery POV was run for all vehicle manufacture years for every simulation year (2023-2030), and the emission factors for all make years from 1960 to 2023 were weighted and averaged based on the vehicle distribution percentage by make year, based on internal USPS data.
(4) Delivery POV vehicles are categorized as “passenger truck” vehicle type in the MOVES model; therefore, emission factors shown in Table F-5.d were used for the emissions analyses.

Table F-4.h
Direct Emission Increases from Proposed New Vehicles for All Alternatives (tpy)

Alternative	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
Alternative 1	121	58	1,358	17	95	1.73	261,131 MT
Alternative 2	115	54	1,288	18	101	1.70	256,479 MT
No-Action Alternative	275	129	3,064	26	107	4	608,547 MT

MT = metric tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Table F-4.i
Direct Emission Decreases from LLVs and Delivery POVs to be Replaced for All Alternatives (tpy)

Alternative	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
Alternative 1	-5,979	-6,591	-76,559	-132	-225	-6	-1,059,312 MT
Alternative 2	-6,047	-6,664	-75,365	-127	-224	-6	-1,069,017 MT
No-Action Alternative	-6,272	-6,924	-77,763	-130	-225	-6	-1,069,399 MT

MT = metric tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Table F-4.j
Net Changes of Direct Emissions for All Alternatives (tpy)

Alternative	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
Alternative 1	-5,858	-6,533	-75,201	-115	-130	-5	-798,181 MT
Alternative 2	-5,931	-6,609	-74,078	-109	-123	-5	-812,538 MT
No-Action Alternative	-5,997	-6,794	-74,699	-105	-118	-2	-460,852 MT

MT = metric tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Vehicle Emission Factors from MOVES (grams/mile)

Table F-5.a
New Vehicles – ICE NGDV, RHD COTS ICE, & LHD COTS ICE – Light Commercial Truck Emission Factor (grams/mile)

Model Year	Make Year	Road Type	Driving Mode / Driving Speed	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2023	2023	City	Transit (23.5 mph)	0.023	0.007	0.679	0.007	0.051	0.002	364.927
2024	2024			0.023	0.005	0.611	0.007	0.051	0.002	358.872
2025	2025			0.022	0.003	0.549	0.007	0.051	0.002	351.177
2026	2026			0.022	0.003	0.549	0.007	0.051	0.002	345.319
2027	2027			0.022	0.003	0.549	0.007	0.051	0.002	343.833
2028	2028			0.022	0.003	0.549	0.007	0.051	0.002	343.611
2029	2029			0.022	0.003	0.549	0.007	0.051	0.002	343.390
2030	2030			0.022	0.003	0.549	0.007	0.051	0.002	343.126
2023	2023	City	Delivery (USPS Drive Cycle) – 23% City Curb-line and 77% Non-Curb-line	0.037	0.008	0.863	0.013	0.089	0.003	514.225
2024	2024			0.036	0.006	0.777	0.012	0.089	0.003	505.671
2025	2025			0.035	0.004	0.699	0.012	0.089	0.003	494.824
2026	2026			0.035	0.004	0.699	0.012	0.089	0.003	486.549
2027	2027			0.034	0.004	0.699	0.012	0.089	0.003	484.382
2028	2028			0.034	0.004	0.699	0.012	0.089	0.003	484.048
2029	2029			0.034	0.004	0.699	0.012	0.089	0.003	483.717
2030	2030			0.034	0.004	0.699	0.012	0.089	0.003	483.322
2023	2023	Rural	Transit (23.5 mph)	0.017	0.007	0.577	0.004	0.023	0.002	308.272
2024	2024			0.016	0.005	0.519	0.004	0.023	0.002	303.175
2025	2025			0.016	0.003	0.466	0.004	0.023	0.002	296.681
2026	2026			0.016	0.003	0.466	0.004	0.023	0.002	291.749
2027	2027			0.016	0.003	0.466	0.004	0.023	0.002	290.551
2028	2028			0.016	0.003	0.466	0.004	0.023	0.002	290.377
2029	2029			0.016	0.003	0.466	0.004	0.023	0.002	290.206
2030	2030			0.016	0.003	0.466	0.004	0.023	0.002	290.000
2023	2023	Rural	Delivery (USPS Drive Cycle) – 100% Rural Curb-line	0.074	0.010	1.392	0.027	0.200	0.006	933.784
2024	2024			0.073	0.008	1.255	0.027	0.200	0.006	918.206
2025	2025			0.071	0.005	1.129	0.027	0.200	0.005	898.501
2026	2026			0.070	0.005	1.129	0.027	0.200	0.005	883.433

Model Year	Make Year	Road Type	Driving Mode / Driving Speed	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2027	2027			0.070	0.005	1.129	0.027	0.200	0.005	879.343
2028	2028			0.070	0.005	1.129	0.027	0.200	0.005	878.698
2029	2029			0.070	0.005	1.129	0.027	0.200	0.005	878.056
2030	2030			0.070	0.005	1.129	0.027	0.200	0.005	877.291

New Vehicles – ICE NGDV, RHD COTS ICE, & LHD COTS ICE – Light Commercial Truck Hot Start Emission Factors (grams/start)

Model Year	Make Year	Road Type	Driving Mode / Driving Speed	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2023	2023	City (Off-Network)	Hot Start (City Non-Curb-line)	0.384	0.200	3.879	0.019	0.022	0.002	375.374
2024	2024			0.371	0.193	3.760	0.019	0.022	0.002	372.330
2025	2025			0.360	0.187	3.651	0.019	0.022	0.002	367.555
2026	2026			0.360	0.187	3.651	0.019	0.022	0.002	361.416
2027	2027			0.360	0.187	3.650	0.019	0.022	0.002	360.150
2028	2028			0.360	0.187	3.649	0.019	0.022	0.002	359.788
2029	2029			0.360	0.186	3.648	0.019	0.022	0.002	359.268
2030	2030			0.360	0.186	3.646	0.019	0.022	0.002	358.924

Notes:

(1) Emission factors selected based on the following assumptions: (1) Fuel-Gasoline, (2) City – Urban Unrestricted Roadway (national scale) & Rural – Rural Unrestricted Roadway (national scale), (3) Vehicle Speed for transit segment – 23.5 mph, (4) Driving mode for City delivery consists of 23% USPS-specific drive cycle for City Curb-line and 77% City Non-Curb-line, and driving mode for Rural delivery consists of 100% USPS-specific drive cycle for Rural Curb-line, (5) Weekday travel, and (6) Annual average emission factors averaged between winter months and summer months.

(2) Hot start emission factors were incorporated in the City Non-Curb-line routes. Cold starts are already included in the transit emissions.

Table F-5.b
New Vehicles – BEV NGDV and COTS BEV – Light Commercial Truck Emission Factors (grams/mile)

Model Year	Make Year	Road Type	Driving Mode / Driving Speed	$PM_{2.5}$	PM_{10}
2023	2023	City	Transit (23.5 mph)	0.006	0.050
2024	2024			0.006	0.050
2025	2025			0.006	0.050
2026	2026			0.006	0.050
2027	2027			0.006	0.050
2028	2028			0.006	0.050
2029	2029			0.006	0.050
2030	2030			0.006	0.050
2023	2023	City	Delivery (USPS Drive Cycle) – 23% City Curb-line and 77% Non-Curb-line	0.011	0.088
2024	2024			0.011	0.088
2025	2025			0.011	0.088
2026	2026			0.011	0.088
2027	2027			0.011	0.088
2028	2028			0.011	0.088
2029	2029			0.011	0.088
2030	2030			0.011	0.088
2023	2023	Rural	Transit (23.5 mph)	0.003	0.022
2024	2024			0.003	0.022
2025	2025			0.003	0.022
2026	2026			0.003	0.022
2027	2027			0.003	0.022
2028	2028			0.003	0.022
2029	2029			0.003	0.022
2030	2030			0.003	0.022
2023	2023	Rural	Delivery (USPS Drive Cycle) – 100% Rural Curb-line	0.025	0.197
2024	2024			0.025	0.197
2025	2025			0.025	0.197
2026	2026			0.025	0.197
2027	2027			0.025	0.197
2028	2028			0.025	0.197
2029	2029			0.025	0.197

Model Year	Make Year	Road Type	Driving Mode / Driving Speed	$PM_{2.5}$	PM_{10}
2030	2030			0.025	0.197

Notes:

(1) Emission factors selected based on the following assumptions: (1) Tire and brake wear for BEV, (2) City – Urban Unrestricted Roadway (national scale) & Rural – Rural Unrestricted Roadway (national scale), (3) Vehicle speed for transit segment – 23.5 mph, (4) Driving mode for City delivery consists of 23% USPS-specific drive cycle for City Curb-line and 77% City Non-Curb-line, and driving mode for Rural delivery consists of 100% USPS-specific drive cycle for Rural Curb-line, (5) Weekday travel, and (6) Annual average emission factors averaged between winter months and summer months.

(2) There are no direct emissions associated with hot starts for BEVs.

Table F-5.c
Existing Vehicles – LLV – Passenger Truck Emission Factors (grams/mile)

Model Year	Make Year	Road Type	Driving Mode / Driving Speed	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2023	1994	City	Transit	1.969	4.051	24.729	0.025	0.072	0.003	513.083
2024	1994		(23.5 mph)	1.969	4.051	24.729	0.025	0.072	0.003	513.083
2025	1994			1.969	4.051	24.729	0.025	0.072	0.003	513.083
2026	1994			1.969	4.051	24.729	0.025	0.072	0.003	513.083
2027	1994			1.969	4.051	24.729	0.025	0.072	0.003	513.083
2028	1994			1.969	4.051	24.729	0.025	0.072	0.003	513.083
2029	1994			1.969	4.051	24.729	0.025	0.072	0.003	513.083
2030	1994			1.969	4.051	24.729	0.025	0.072	0.003	513.083
2023	1994	City	Delivery	3.026	4.495	29.839	0.029	0.108	0.004	724.554
2024	1994		(USPS Drive Cycle) –	3.026	4.495	29.839	0.029	0.108	0.004	724.554
2025	1994		23% City Curb-line and	3.026	4.495	29.839	0.029	0.108	0.004	724.554
2026	1994		77% Non-Curb-line	3.026	4.495	29.839	0.029	0.108	0.004	724.554
2027	1994			3.026	4.495	29.839	0.029	0.108	0.004	724.554
2028	1994			3.026	4.495	29.839	0.029	0.108	0.004	724.554
2029	1994			3.026	4.495	29.839	0.029	0.108	0.004	724.554
2030	1994			3.026	4.495	29.839	0.029	0.108	0.004	724.554
2023	1994	Rural	Transit	1.306	3.926	20.980	0.027	0.048	0.003	430.849
2024	1994		(23.5 mph)	1.306	3.926	20.980	0.027	0.048	0.003	430.849
2025	1994			1.306	3.926	20.980	0.027	0.048	0.003	430.849
2026	1994			1.306	3.926	20.980	0.027	0.048	0.003	430.849
2027	1994			1.306	3.926	20.980	0.027	0.048	0.003	430.849
2028	1994			1.306	3.926	20.980	0.027	0.048	0.003	430.849
2029	1994			1.306	3.926	20.980	0.027	0.048	0.003	430.849
2030	1994			1.306	3.926	20.980	0.027	0.048	0.003	430.849
2023	1994	Rural	Delivery	6.038	5.787	44.850	0.039	0.213	0.008	1320.599
2024	1994		(USPS Drive Cycle) –	6.038	5.787	44.850	0.039	0.213	0.008	1320.598
2025	1994		100% Rural Curb-line	6.038	5.787	44.850	0.039	0.213	0.008	1320.598
2026	1994			6.038	5.787	44.850	0.039	0.213	0.008	1320.598
2027	1994			6.038	5.787	44.850	0.039	0.213	0.008	1320.598
2028	1994			6.038	5.787	44.850	0.039	0.213	0.008	1320.598

Model Year	Make Year	Road Type	Driving Mode / Driving Speed	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2029	1994			6.038	5.787	44.850	0.039	0.213	0.008	1320.598
2030	1994			6.038	5.787	44.850	0.039	0.213	0.008	1320.598

Existing Vehicles – LLV – Passenger Truck Hot Start Emission Factors (grams/start)

Model Year	Make Year	Road Type	Driving Mode/ Driving Speed	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2023	1994	City (Off-Network)	Hot Start (City Non-Curb-line)	4.336	3.822	66.877	0.139	0.157	0.003	625.441
2024	1994			4.334	3.820	66.865	0.139	0.157	0.003	624.496
2025	1994			4.334	3.820	66.865	0.139	0.157	0.003	624.496
2026	1994			4.334	3.820	66.865	0.139	0.157	0.003	624.496
2027	1994			4.334	3.820	66.865	0.139	0.157	0.003	624.496
2028	1994			4.334	3.820	66.865	0.139	0.157	0.003	624.496
2029	1994			4.334	3.820	66.865	0.139	0.157	0.003	624.496
2030	1994			4.334	3.820	66.865	0.139	0.157	0.003	624.496

Notes:

(1) Emission factors selected based on the following assumptions: (1) Fuel-Gasoline, (2) City – Urban Unrestricted Roadway (national scale) & Rural – Rural Unrestricted Roadway (national scale), (3) Vehicle speed for transit segment – 23.5 mph, (4) Driving mode for City delivery consists of 23% USPS-specific drive cycle for City Curb-line and 77% City Non-Curb-line, and driving mode for Rural delivery consists of 100% USPS-specific drive cycle for Rural Curb-line, (5) Weekday travel, and (6) Annual average emission factors averaged between winter months and summer months.

(2) Hot start emission factors were incorporated in the City Non-Curb-line routes. Cold starts are already included in the transit emissions.

(3) MOVES model for LLVs was run based on the vehicle make year being equal to the national average mixture of 1994 vehicles for every simulation year (2023-2030). The 2024 emission factors for 1994 vehicles were applied to simulation years 2024-2030, as explained on Page F-5 (Footnote No. 30).

Table F-5.d
Existing Vehicles – Delivery POV – Passenger Truck Emission Factors (grams/mile)

Model Year	Make Year[1]	Road Type	Driving Mode/ Driving Speed	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
2023	Average	Rural	Transit	0.182	0.521	5.535	0.008	0.026	0.002	411.680
2024	Average		(23.5 mph)	0.179	0.501	5.682	0.008	0.026	0.002	411.683
2025	Average			0.184	0.502	5.831	0.008	0.026	0.003	412.104
2026	Average			0.162	0.446	5.727	0.008	0.026	0.002	411.624
2027	Average			0.159	0.449	5.858	0.008	0.026	0.003	413.933
2028	Average			0.157	0.436	5.772	0.008	0.026	0.003	413.922
2029	Average			0.155	0.357	5.595	0.008	0.026	0.003	413.720
2030	Average			0.155	0.335	5.583	0.008	0.026	0.003	413.767
2023	Average	Rural	Delivery	0.829	0.675	11.842	0.034	0.207	0.007	1207.941
2024	Average		(USPS Drive Cycle) –	0.841	0.635	12.085	0.033	0.206	0.007	1208.028
2025	Average		100% Rural Curb-line	0.882	0.636	12.423	0.033	0.207	0.007	1208.870
2026	Average			0.768	0.526	11.948	0.034	0.207	0.007	1206.007
2027	Average			0.764	0.474	12.333	0.034	0.207	0.007	1212.062
2028	Average			0.783	0.464	12.119	0.034	0.207	0.007	1211.707
2029	Average			0.805	0.464	12.119	0.034	0.207	0.007	1211.707
2030	Average			0.687	0.212	12.448	0.032	0.188	0.006	940.333

Notes:
(1) Emission factors selected based on the following assumptions: (1) Fuel-Gasoline, (2) Rural – Rural Unrestricted Roadway (national scale), (3) Vehicle speed for transit segment – 23.5 mph, (4) Driving mode for Rural delivery consists of 100% USPS-specific drive cycle for Rural Curb-line, (5) Weekday travel, and (6) Annual average emission factors averaged between winter months and summer months.

Indirect Emissions from Energy Consumption: Modeling Methodology using GREET

The Postal Service estimated indirect emissions from energy consumption using Argonne National Laboratory's Greenhouse Gases, Emissions, and Energy use in Technologies (GREET) model (version 2022), as recommended by EPA, for the same set of pollutants as considered for direct emissions.[32] The GREET model estimates the upstream emissions associated with the production and distribution of vehicle fuels.

Indirect emissions associated with gasoline, required by ICE vehicles, were evaluated on a Well-to-Pump (WTP) basis, which represents the fuel cycle from well pad to fuel pump. This includes emissions associated with the extraction and refining of crude oil, transportation of crude oil to refineries, refining of crude oil into gasoline, and transportation of fuel to the retail pump.

Indirect emissions associated with electricity, required by BEVs, were evaluated using GREET's WTP setting, which in this case represents the generation of electricity at power plants and transmission and distribution of electricity to charging stations.

The GREET model was used to calculate the emission factors in mass per mile (kg/mi) for each individual vehicle considered in this SEIS. The specific average fuel efficiency for each vehicle (see Table F-6.a) was used as the energy input.[33] For ICE vehicles, fuel efficiency was denoted in miles per gallon (MPG). For BEVs, fuel efficiency was converted from miles per kilowatt hour (mi/kWh) to MPG equivalent (MPGe) using a multiplier of 33.7 kWh per gallon. The appropriate fuel/vehicle type was selected under "WTW and C2G Results" tab in the GREET model to retrieve the emission factors for WTP in the "WTP" column. For ICE vehicles, E10 (gasoline) was selected as the fuel, while for BEVs, electricity was selected as the fuel.

Outputs from the GREET model were independent of the vehicle type classification selected for ICE NGDV, RHD COTS ICE, LHD COTS ICE, BEV NGDV, LHD COTS BEV, and LLVs, as the specific MPG or MPGe for each vehicle was used. However, since delivery POVs do not have a single, established MPG value, these vehicles were classified in GREET as SUVs, based on the Postal Service's best available information, to produce national default average emission factors for comparable vehicles.[34]

The GREET model was used to calculate the emission factors (kg/mi) for GHG and criteria pollutants for each vehicle type during the project implementation period. Simulation years for all vehicles were 2023 to 2030. For ICE NGDV, RHD COTS ICE, LHD COTS ICE, BEV NGDV, and LHD COTS BEV, the make years were set as the year each vehicle would be initially deployed, as depicted in Tables F-4.a, F-4.b, and F-4.c. Emission factors were calculated for each simulation year for the vehicles that would be deployed in that year.

For LLVs, emission factors were calculated for each simulation year with a vehicle make year of 1994, as the vehicle make years were between 1987 and 1994. This approach is conservative since using the emission factors for the latest make year (1994) results in minimum LLV emission values, leading to smaller net emission reductions when the LLVs are replaced.

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[32] Cf. OIG Report, Environmental Emissions Assumption 5 regarding power sector emissions (USPS OIG, 2023).
[33] In the GREET model, the Postal Service modified the Energy Sources panel and set E10 (gasoline)/Electricity to be equal to the applicable MPG/MPGe value for each vehicle for the entire duration of the project.
[34] Based on the Postal Service's best available vehicle distribution data for Delivery POVs, SUVs comprise the most vehicles by a strong margin (pickup trucks and vans are well represented, too), and the most common engine type is 6 cylinders, which suggests a vehicle slightly larger than a standard passenger car. Choosing SUV in this SEIS rather than the passenger car used in the NGDV FEIS is less conservative, but well-supported by the available data.

For delivery POVs, emission factors were calculated for each simulation year with a vehicle make year of 2016, as it is the single most common year for delivery POVs in the Postal Service's records. About 75 percent of the delivery POVs are older than 2016, so using 2016 as the make year is a conservative approach for the same reason described above for LLVs.

Total indirect emissions from fuel consumption were calculated for each simulation year by multiplying the number of each proposed vehicle type in that year (i.e., all existing vehicles, NGDV, and COTS vehicles), total VMT per vehicle type, and emission factors (mass per mile) derived from GREET for each vehicle type in that year. Tables F-6.b, F-6.c, and F-6.d provide the anticipated indirect emissions for each vehicle type and year for Alternative 1, Alternative 2, and the No-Action Alternative, respectively. A summary of the changes in indirect emissions under each Alternative is shown in Tables F-6.e through F-6.g. Finally, the emission factors produced by GREET are shown in Tables F-7.a through F-7.g.

Summary of Delivery Vehicles, Annual Mileage, and Indirect Emissions Calculation

Table F-6.a
Summary of Vehicle Type and Model Year for GREET Model

Vehicle	ICE NGDV	BEV NGDV	RHD COTS ICE	LHD COTS ICE	LHD COTS BEV	LLV	Delivery POV
Gross Vehicle Weight Rating (GVWR) (lbs)	8,700	8,700	6,834	8,900	9,500	4,450	various
GREET Vehicle Type	N/A	N/A	N/A	N/A	N/A	N/A	SUV
Fuel Efficiency	12.63 miles per gallon (MPG)	1.28 mi/kWh (=43.14 MPGe)	12.1 MPG	11 MPG	1.13 mi/kWh (=38.08 MPGe)	8.8 MPG	21.54 MPG (produced by GREET)
Vehicle Make Year	2023-2030	2023-2030	2023-2030	2023-2030	2023-2030	1994	2016

Notes:
(1) The fuel efficiency values for BEVs (mi/kWh) account for BEV battery degradation.
(2) The GREET analysis used the vehicle-specific fuel efficiency by incorporating the MPG or mi/kWh (or MPGe) in the Fuel Blend option in GREET for the selected vehicle type throughout the time series years.
(3) The GREET emission factors for the USPS delivery vehicles are based on the given MPG or MPGe fuel efficiency values, and are independent of vehicle type classification. Since vehicle type classification is required in the model, the Postal Service selected Pick Up Truck (PUT) and Van for all delivery vehicle types, although this does not affect the emission factors.

Table F-6.b
Indirect Emissions from Energy Consumption – Alternative 1

Vehicle	Year	Number of Vehicles	Total Annual VMT for All Vehicles (miles/year)	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
BEV NGDV	2023	-	-	-	-	-	-	-	-	-
	2024	76	572,139	0.03	0.19	0.10	0.02	0.03	0.17	239.32
	2025	1,247	9,372,993	0.41	2.57	1.47	0.21	0.37	2.11	3,256.14
	2026	13,504	101,488,459	4.46	27.80	15.92	2.26	3.96	22.81	35,256.73
	2027	20,173	151,610,523	6.67	41.52	23.79	3.37	5.91	34.08	52,668.95
	2028	10,000	75,154,844	3.31	20.58	11.79	1.67	2.93	16.89	26,108.52
ICE NGDV	2023	-	-	-	-	-	-	-	-	-
	2024	1,011	7,399,513	2.14	1.93	1.18	0.14	0.21	0.55	1,542.04
	2025	9,678	70,832,530	20.42	18.07	11.12	1.33	1.97	5.03	14,478.02
	2026	4,311	31,552,779	9.10	8.05	4.95	0.59	0.88	2.24	6,449.32
	2027	-	-	-	-	-	-	-	-	-
	2028	-	-	-	-	-	-	-	-	-
RHD COTS ICE	2023	2,433	18,841,538	5.68	5.12	3.14	0.38	0.56	1.47	4,099.88
	2024	12,067	93,459,819	28.19	25.39	15.57	1.86	2.78	7.30	20,336.65
	2025	-	-	-	-	-	-	-	-	-
	2026	-	-	-	-	-	-	-	-	-
	2027	-	-	-	-	-	-	-	-	-
	2028	-	-	-	-	-	-	-	-	-
LHD COTS ICE	2023	-	-	-	-	-	-	-	-	-
	2024	9,150	57,584,726	19.10	17.21	10.55	1.26	1.88	4.95	13,779.88
	2025	1,600	10,070,522	3.33	2.95	1.81	0.22	0.32	0.82	2,363.53
	2026	-	-	-	-	-	-	-	-	-
	2027	-	-	-	-	-	-	-	-	-
	2028	-	-	-	-	-	-	-	-	-
LHD COTS BEV	2023	-	-	-	-	-	-	-	-	-
	2024	7,200	48,813,257	2.82	18.31	10.11	1.51	2.76	16.17	23,132.36
	2025	2,050	13,897,889	0.69	4.31	2.47	0.35	0.61	3.54	5,470.15
	2026	11,980	81,219,487	4.05	25.20	14.44	2.05	3.59	20.68	31,967.66

Vehicle	Year	Number of Vehicles	Total Annual VMT for All Vehicles (miles/year)	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
	2027	-	-	-	-	-	-	-	-	-
	2028	-	-	-	-	-	-	-	-	-
LLV	2023	1,825	12,433,340	5.16	4.64	2.85	0.34	0.51	1.34	3,718.77
	2024	26,313	174,196,952	72.23	65.07	39.90	4.78	7.12	18.71	52,101.77
	2025	14,120	99,378,325	41.12	36.38	22.38	2.67	3.96	10.14	29,157.30
	2026	29,005	205,934,283	85.21	75.39	46.38	5.54	8.22	21.00	60,420.50
	2027	19,388	143,336,780	59.31	52.48	32.28	3.85	5.72	14.62	42,054.58
	2028	9,611	71,054,862	29.40	26.01	16.00	1.91	2.83	7.25	20,847.28
Delivery POV	2023	608	6,408,198	1.17	1.05	0.64	0.08	0.11	0.30	841.39
	2024	3,191	33,632,502	6.12	5.51	3.38	0.40	0.60	1.59	4,415.90
	2025	455	4,795,609	0.87	0.77	0.47	0.06	0.08	0.21	617.19
	2026	790	8,326,442	1.51	1.34	0.82	0.10	0.15	0.37	1,071.60
	2027	785	8,273,743	1.50	1.33	0.82	0.10	0.14	0.37	1,064.82
	2028	389	4,099,982	0.74	0.66	0.41	0.05	0.07	0.18	527.66
Total Net		**0**	**0**	**-194**	**-51**	**-38**	**-3**	**-1**	**63**	**24,310**

tpy = Tons Per Year
MT = Metric Ton
1.102 English Short Tons (ton) = 1 Metric Ton (MT)
Notes:

(1) The number of vehicles in this table reflects the combined number of vehicles used on both rural and city routes from Table F-3.a. The table displays the active vehicle deployment years (2023-2028) associated with Alternative 1, among the total proposed project period of 8 years (2023-2030).

(2) To calculate the total annual mileage for Alternative 1, the analysis multiplied the number of vehicles in Table F-4.a by the driving distance for each vehicle type (ICE NGDV, BEV NGDV, RHD COTS ICE, LHD COTS ICE, LHD COTS BEV, LLVs, and Delivery POV) and driving mode (city transit, city delivery, rural transit, and rural delivery), as shown in Tables F-4.d through F-4.g, and then summed the individual miles for each vehicle type.

(3) The analysis calculated the upstream emissions resulting from energy consumption for the vehicles by using the miles traveled each year and the emission factors (kg/mi) from the GREET model shown in Tables F-7.a through F-7.g.

(4) The total net indirect emissions were determined by adding up the emissions from all new vehicles (ICE NGDV, BEV NGDV, RHD COTS ICE, LHD COTS ICE, and LHD COTS BEV) and subtracting the emission from all aged LLVs and Delivery POVs that would be replaced.

Table F-6.c
Indirect Emissions from Energy Consumption – Alternative 2

Vehicle	Year	Number of Vehicles	Total Annual VMT for All Vehicles (miles/year)	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
BEV	2023	-	-	-	-	-	-	-	-	-
NGDV	2024	76	572,139	0.03	0.19	0.10	0.02	0.03	0.17	239.32
	2025	1,247	9,372,993	0.41	2.57	1.47	0.21	0.37	2.11	3,256.14
	2026	13,504	101,488,459	4.46	27.80	15.92	2.26	3.96	22.81	35,256.73
	2027	20,173	151,610,523	6.67	41.52	23.79	3.37	5.91	34.08	52,668.95
	2028	10,000	75,154,844	3.31	20.58	11.79	1.67	2.93	16.89	26,108.52
	2029	10,000	75,154,844	3.31	20.58	11.79	1.67	2.93	16.89	26,108.52
	2030	11,230	84,400,484	3.50	21.50	12.45	1.74	3.03	17.33	27,429.87
ICE	2023	-	-	-	-	-	-	-	-	-
NGDV	2024	1,011	7,399,513	2.14	1.93	1.18	0.14	0.21	0.55	1,542.04
	2025	9,678	70,832,530	20.42	18.07	11.12	1.33	1.97	5.03	14,478.02
	2026	4,311	31,552,779	9.10	8.05	4.95	0.59	0.88	2.24	6,449.32
	2027	-	-	-	-	-	-	-	-	-
	2028	10,000	73,185,563	21.10	18.67	11.48	1.37	2.03	5.20	14,958.97
	2029	10,000	73,185,563	21.10	18.67	11.48	1.37	2.03	5.20	14,958.97
	2030	5,250	38,422,312	11.06	9.63	5.96	0.71	1.05	2.65	7,753.54
LLV	2023	-	-	-	-	-	-	-	-	-
	2024	1,045	7,528,981	3.12	2.81	1.72	0.21	0.31	0.81	2,251.89
	2025	10,500	75,726,107	31.33	27.72	17.06	2.04	3.02	7.72	22,217.81
	2026	16,990	124,345,903	51.45	45.52	28.01	3.34	4.96	12.68	36,482.71
	2027	19,359	143,031,126	59.18	52.36	32.21	3.85	5.71	14.59	41,964.90
	2028	19,125	139,118,082	57.56	50.93	31.33	3.74	5.55	14.19	40,816.82
	2029	19,222	140,140,442	57.98	51.30	31.56	3.77	5.59	14.29	41,116.78
	2030	15,839	116,066,784	47.96	41.76	25.85	3.07	4.56	11.50	33,612.59
Delivery	2023	-	-	-	-	-	-	-	-	-
POV	2024	42	442,672	0.08	0.07	0.04	0.01	0.01	0.02	58.12
	2025	425	4,479,415	0.81	0.72	0.44	0.05	0.08	0.20	576.49
	2026	825	8,695,335	1.58	1.40	0.86	0.10	0.15	0.39	1,119.08
	2027	814	8,579,397	1.56	1.38	0.85	0.10	0.15	0.38	1,104.16

Vehicle	Year	Number of Vehicles	Total Annual VMT for All Vehicles (miles/year)	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
	2028	875	9,222,325	1.67	1.48	0.91	0.11	0.16	0.41	1,186.90
	2029	778	8,199,964	1.49	1.32	0.81	0.10	0.14	0.37	1,055.32
	2030	641	6,756,012	1.22	1.07	0.66	0.08	0.12	0.29	858.68
Total Net		**0**	**0**	**-210**	**-70**	**-49**	**-4**	**-3**	**53**	**6,787**

tpy = Tons Per Year
MT = Metric Ton
1.102 English Short Tons (ton) = 1 Metric Ton (MT)
Notes:

(1) The number of vehicles in this table reflects the combined number of vehicles used on both rural and city routes from Table F-3.b. The table displays the active vehicle deployment years (2023-2030) associated with Alternative 2, among the total proposed project period of 8 years (2023-2030).

(2) To calculate the total annual mileage for Alternative 2, the analysis multiplied the number of vehicles in Table F-4.b by the driving distance for each vehicle type (ICE NGDV, BEV NGDV, LLVs, and Delivery POV) and driving mode (city transit, city delivery, rural transit, and rural delivery), as shown in Tables F-4.d through F-4.g, and then summed the individual miles for each vehicle type. Alternative 2 does not involve the deployment of RHD COTS ICE or LHD COTS ICE vehicles, or LHD COTS BEVs.

(3) The analysis calculated the upstream emissions resulting from energy consumption for the vehicles by using the miles traveled each year and the emission factors (kg/mi) from the GREET model shown in Tables F-7.a through F-7.g.

(4) The total net indirect emissions were determined by adding up the emissions from all new vehicles (ICE NGDV and BEV NGDV) and subtracting the emissions from all aged LLVs and Delivery POVs that would be replaced.

Table F-6.d
Indirect Emissions from Energy Consumption – No-Action Alternative

Vehicle	Year	Number of Vehicles	Total Annual VMT for All Vehicles (miles/year)	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
BEV NGDV	2023	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2024	76	572,139	0.03	0.19	0.10	0.02	0.03	0.17	239.32
	2025	1,247	9,372,993	0.41	2.57	1.47	0.21	0.37	2.11	3,256.14
	2026	9,325	70,083,177	3.08	19.19	11.00	1.56	2.73	15.75	24,346.64
	2027	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2028	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2029	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2030	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ICE NGDV	2023	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2024	1,011	7,399,513	2.14	1.93	1.18	0.14	0.21	0.55	1,542.04
	2025	9,678	70,832,530	20.42	18.07	11.12	1.33	1.97	5.03	14,478.02
	2026	10,675	78,127,672	22.52	19.93	12.26	1.46	2.17	5.55	15,969.13
	2027	20,000	146,375,444	42.20	37.34	22.97	2.74	4.07	10.40	29,918.83
	2028	20,000	146,375,444	42.20	37.34	22.97	2.74	4.07	10.40	29,918.83
	2029	20,000	146,375,444	42.20	37.34	22.97	2.74	4.07	10.40	29,918.83
	2030	14,468	105,887,814	30.48	26.55	16.43	1.95	2.90	7.31	21,367.94
LLV	2023	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2024	1,087	7,971,652	3.31	2.98	1.83	0.22	0.33	0.86	2,384.30
	2025	10,925	80,205,522	33.19	29.36	18.06	2.16	3.20	8.18	23,532.06
	2026	20,000	148,210,849	61.32	54.26	33.38	3.98	5.91	15.12	43,484.61
	2027	20,000	146,375,444	60.56	53.59	32.97	3.93	5.84	14.93	42,946.11
	2028	20,000	146,375,444	60.56	53.59	32.97	3.93	5.84	14.93	42,946.11
	2029	20,000	146,375,444	60.56	53.59	32.97	3.93	5.84	14.93	42,946.11
	2030	14,468	105,887,814	43.75	38.10	23.58	2.80	4.16	10.49	30,664.79
Total Net		**0**	**0**	**-1188**	**-85**	**-53**	**-6**	**-9**	**-12**	**-57,948**

tpy = Tons Per Year
MT = Metric Ton
1.102 English Short Tons (ton) = 1 Metric Ton (MT)
Notes:
(1) The number of vehicles in this table reflects the combined number of vehicles used on both rural and city routes from Table F-3.c. The table displays the active vehicle deployment years (2023-2030) associated with the No-Action Alternative, among the total proposed project period of 8 years (2023-2030).

(2) To calculate the total annual mileage for the No-Action Alternative, the analysis multiplied the number of vehicles in Table F-4.c by the driving distance for each vehicle type (ICE NGDV, BEV NGDV, and LLVs) and driving mode (city transit, city delivery, rural transit, and rural delivery), as shown in Tables F-4.d through F-4.g, and then summed the individual miles for each vehicle type. The No-Action Alternative does not involve the deployment of RHD COTS ICE or LHD COTS ICE vehicles, or LHD COTS BEVs, or the replacement of Delivery POVs.

(3) The analysis calculated the upstream emissions resulting from energy consumption for the vehicles by using the miles traveled each year and the emission factors (kg/mi) from the GREET model shown in Tables F-7.a through F-7.g.

(4) The total net emissions were determined by adding up the emissions from all new vehicles (ICE NGDV and BEV NGDV) and subtracting the emissions from all aged LLVs that would be replaced.

Table F-6.e
Indirect Emissions Increases from <u>New</u> Vehicles for All Alternatives (tpy)

Alternative	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
Alternative 1	110	219	128	17	29	139	241,149 MT
Alternative 2	107	210	123	16	27	131	231,209 MT
No-Action Alternative	206	200	122	15	23	68	170,956 MT

tpy = Tons Per Year
MT = Metric Ton
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Table F-6.f
Indirect Emissions Decreases from LLVs and Delivery POVs <u>to be Replaced</u> for All Alternatives (tpy)

Alternative	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
Alternative 1	-304	-271	-166	-20	-30	-76	-216,839 MT
Alternative 2	-317	-280	-172	-21	-31	-78	-224,422 MT
No-Action Alternative	-323	-285	-176	-21	-31	-79	-228,904 MT

tpy = Tons Per Year
MT = Metric Ton
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Table F-6.g
Net Changes of Indirect Emissions for All Alternatives (tpy)

Alternative	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
Alternative 1	-194	-51	-38	-3	-1	63	24,310 MT
Alternative 2	-210	-70	-49	-4	-3	53	6,787 MT
No-Action Alternative	-118	-85	-53	-6	-9	-12	-57,948 MT

tpy = Tons Per Year
MT = metric tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Vehicle Emission Factors from GREET (kilograms/mile)

Table F-7.a

GREET's Nationwide Emission Profile – Upstream Well-to-Pump (WTP) Emission Factors for BEV NGDV (kg/mi)

Simulation Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Vehicle Make Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
VOC	4.63E-05	4.63E-05	3.99E-05	3.99E-05	3.99E-05	3.99E-05	3.99E-05	3.76E-05
CO	1.66E-04	1.66E-04	1.42E-04	1.42E-04	1.42E-04	1.42E-04	1.42E-04	1.34E-04
NO_x	3.00E-04	3.00E-04	2.48E-04	2.48E-04	2.48E-04	2.48E-04	2.48E-04	2.31E-04
PM_{10}	4.53E-05	4.53E-05	3.54E-05	3.54E-05	3.54E-05	3.54E-05	3.54E-05	3.25E-05
$PM_{2.5}$	2.48E-05	2.48E-05	2.02E-05	2.02E-05	2.02E-05	2.02E-05	2.02E-05	1.87E-05
SO_2	2.65E-04	2.65E-04	2.04E-04	2.04E-04	2.04E-04	2.04E-04	2.04E-04	1.86E-04
CO_2e	4.18E-01	4.18E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01	3.47E-01	3.25E-01

kg/mi = kilograms per mile

Notes:

(1) The GREET model was utilized to calculate the emission factors (kg/mi) for GHG and criteria pollutants for each simulation year (2023-2030), assuming the vehicle make year was the same as the simulation year. These emission factors varied based on the simulation year.

(2) In the GREET model, the emission factors for VOC, CO, NOx, PM_{10}, $PM_{2.5}$, SO_2, and CO_2e for every project year (2023 through 2030) were obtained from the WTP column under the WTW tab.

Table F-7.b
GREET's Nationwide Emission Profile – Upstream Well-to-Pump (WTP) Emission Factors for ICE NGDV (kg/mi)

Simulation Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Vehicle Make Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
VOC	2.62E-04	2.62E-04	2.62E-04	2.62E-04	2.62E-04	2.62E-04	2.62E-04	2.61E-04
CO	1.45E-04	1.45E-04	1.42E-04	1.42E-04	1.42E-04	1.42E-04	1.42E-04	1.41E-04
NO_x	2.36E-04	2.36E-04	2.31E-04	2.31E-04	2.31E-04	2.31E-04	2.31E-04	2.27E-04
PM_{10}	2.58E-05	2.58E-05	2.52E-05	2.52E-05	2.52E-05	2.52E-05	2.52E-05	2.49E-05
$PM_{2.5}$	1.73E-05	1.73E-05	1.70E-05	1.70E-05	1.70E-05	1.70E-05	1.70E-05	1.67E-05
SO_2	6.79E-05	6.79E-05	6.45E-05	6.45E-05	6.45E-05	6.45E-05	6.45E-05	6.26E-05
CO_2e	2.08E-01	2.08E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.04E-01	2.02E-01

kg/mi = kilograms per mile
Notes:
(1) The GREET model was utilized to calculate the emission factors (kg/mi) for GHG and criteria pollutants for each simulation year (2023-2030), assuming the vehicle make year was the same as the simulation year. These emission factors varied based on the simulation year.
(2) In the GREET model, the emission factors for VOC, CO, NOx, PM_{10}, $PM_{2.5}$, SO_2, and CO_2e for every project year (2023 through 2030) were obtained from the WTP column under the WTW tab.

Table F-7.c
GREET's Nationwide Emission Profile – Upstream Well-to-Pump (WTP) Emission Factors for RHD COTS ICE Vehicles (kg/mi)

Simulation Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Vehicle Make Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
VOC	2.74E-04	2.74E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04
CO	1.51E-04	1.51E-04	1.49E-04	1.49E-04	1.49E-04	1.49E-04	1.49E-04	1.47E-04
NO_x	2.46E-04	2.46E-04	2.42E-04	2.42E-04	2.42E-04	2.42E-04	2.42E-04	2.37E-04
PM_{10}	2.70E-05	2.70E-05	2.63E-05	2.63E-05	2.63E-05	2.63E-05	2.63E-05	2.59E-05
$PM_{2.5}$	1.81E-05	1.81E-05	1.77E-05	1.77E-05	1.77E-05	1.77E-05	1.77E-05	1.75E-05
SO_2	7.09E-05	7.09E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05	6.73E-05	6.54E-05
CO_2e	2.18E-01	2.18E-01	2.13E-01	2.13E-01	2.13E-01	2.13E-01	2.13E-01	2.11E-01

kg/mi = kilograms per mile
Notes:
(1) The GREET model was utilized to calculate the emission factors (kg/mi) for GHG and criteria pollutants for each simulation year (2023-2030), assuming that the vehicle make year was the same as the simulation year. These emission factors varied based on the simulation year.
(2) In the GREET model, the emission factors for VOC, CO, NOx, PM_{10}, $PM_{2.5}$, SO_2, and CO_2e for every project year (2023 through 2030) were obtained from the WTP column under the WTW tab.

Table F-7.d
GREET's Nationwide Emission Profile – Upstream Well-to-Pump (WTP) Emission Factors for LHD COTS ICE Vehicles (kg/mi)

Simulation Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Vehicle Make Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
VOC	3.01E-04	3.01E-04	3.00E-04	3.00E-04	3.00E-04	3.00E-04	3.00E-04	3.00E-04
CO	1.66E-04	1.66E-04	1.63E-04	1.63E-04	1.63E-04	1.63E-04	1.63E-04	1.62E-04
NO_x	2.71E-04	2.71E-04	2.66E-04	2.66E-04	2.66E-04	2.66E-04	2.66E-04	2.61E-04
PM_{10}	2.97E-05	2.97E-05	2.90E-05	2.90E-05	2.90E-05	2.90E-05	2.90E-05	2.85E-05
$PM_{2.5}$	1.99E-05	1.99E-05	1.95E-05	1.95E-05	1.95E-05	1.95E-05	1.95E-05	1.92E-05
SO_2	7.80E-05	7.80E-05	7.40E-05	7.40E-05	7.40E-05	7.40E-05	7.40E-05	7.19E-05
CO_2e	2.39E-01	2.39E-01	2.35E-01	2.35E-01	2.35E-01	2.35E-01	2.35E-01	2.32E-01

kg/mi = kilograms per mile
Notes:
(1) The GREET model was utilized to calculate the emission factors (kg/mi) for GHG and criteria pollutants for each simulation year (2023-2030), assuming the vehicle make year was the same as the simulation year. These emission factors varied based on the simulation year.
(2) In the GREET model, the emission factors for VOC, CO, NOx, PM_{10}, $PM_{2.5}$, SO_2, and CO_2e for every project year (2023 through 2030) were obtained from the WTP column under the WTW tab.

Table F-7.e
GREET's Nationwide Emission Profile – Upstream Well-to-Pump (WTP) Emission Factors for COTS BEV (kg/mi)

Simulation Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Vehicle Make Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
VOC	5.25E-05	5.25E-05	4.52E-05	4.52E-05	4.52E-05	4.52E-05	4.52E-05	4.26E-05
CO	1.88E-04	1.88E-04	1.61E-04	1.61E-04	1.61E-04	1.61E-04	1.61E-04	1.52E-04
NO_x	3.40E-04	3.40E-04	2.81E-04	2.81E-04	2.81E-04	2.81E-04	2.81E-04	2.62E-04
PM_{10}	5.13E-05	5.13E-05	4.01E-05	4.01E-05	4.01E-05	4.01E-05	4.01E-05	3.68E-05
$PM_{2.5}$	2.81E-05	2.81E-05	2.29E-05	2.29E-05	2.29E-05	2.29E-05	2.29E-05	2.12E-05
SO_2	3.00E-04	3.00E-04	2.31E-04	2.31E-04	2.31E-04	2.31E-04	2.31E-04	2.11E-04
CO_2e	4.74E-01	4.74E-01	3.94E-01	3.94E-01	3.94E-01	3.94E-01	3.94E-01	3.68E-01

kg/mi = kilograms per mile
Notes:
(1) The GREET model was utilized to calculate the emission factors (kg/mi) for GHG and criteria pollutants for each simulation year (2023-2030), assuming the vehicle make year was the same as the simulation year. These emission factors varied based on the simulation year.
(2) In the GREET model, the emission factors for VOC, CO, NOx, PM_{10}, $PM_{2.5}$, SO_2, and CO_2e for every project year (2023 through 2030) were obtained from the WTP column under the WTW tab.

Table F-7.f
GREET's Nationwide Emission Profile – Upstream Well-to-Pump (WTP) Emission Factors for LLV (kg/mi)

Simulation Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Vehicle Make Year	**1994**	**1994**	**1994**	**1994**	**1994**	**1994**	**1994**	**1994**
VOC	3.76E-04	3.76E-04	3.75E-04	3.75E-04	3.75E-04	3.75E-04	3.75E-04	3.75E-04
CO	2.08E-04	2.08E-04	2.04E-04	2.04E-04	2.04E-04	2.04E-04	2.04E-04	2.02E-04
NO_x	3.39E-04	3.39E-04	3.32E-04	3.32E-04	3.32E-04	3.32E-04	3.32E-04	3.26E-04
PM_{10}	3.71E-05	3.71E-05	3.62E-05	3.62E-05	3.62E-05	3.62E-05	3.62E-05	3.57E-05
$PM_{2.5}$	2.49E-05	2.49E-05	2.44E-05	2.44E-05	2.44E-05	2.44E-05	2.44E-05	2.40E-05
SO_2	9.74E-05	9.74E-05	9.25E-05	9.25E-05	9.25E-05	9.25E-05	9.25E-05	8.99E-05
CO_2e	2.99E-01	2.99E-01	2.93E-01	2.93E-01	2.93E-01	2.93E-01	2.93E-01	2.90E-01

kg/mi = kilograms per mile
Notes:
(1) The GREET model was utilized to calculate the emission factors (kg/mi) for GHG and criteria pollutants for each simulation year (2023-2030) with a vehicle make year of 1994.
(2) In the GREET model, the emission factors for VOC, CO, NOx, PM_{10}, $PM_{2.5}$, SO_2, and CO_2e for every project year (2023 through 2030) were obtained from the WTP column under the WTW tab.

Table F-7.g
GREET's Nationwide Emission Profile – Upstream Well-to-Pump (WTP) Emission Factors for Delivery POV (kg/mi)

Simulation Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Vehicle Make Year	**2016**	**2016**	**2016**	**2016**	**2016**	**2016**	**2016**	**2016**
VOC	1.65E-04	1.65E-04	1.65E-04	1.65E-04	1.65E-04	1.65E-04	1.65E-04	1.64E-04
CO	9.12E-05	9.12E-05	8.97E-05	8.97E-05	8.97E-05	8.97E-05	8.97E-05	8.86E-05
NO_x	1.49E-04	1.49E-04	1.46E-04	1.46E-04	1.46E-04	1.46E-04	1.46E-04	1.43E-04
PM_{10}	1.63E-05	1.63E-05	1.59E-05	1.59E-05	1.59E-05	1.59E-05	1.59E-05	1.57E-05
$PM_{2.5}$	1.09E-05	1.09E-05	1.07E-05	1.07E-05	1.07E-05	1.07E-05	1.07E-05	1.05E-05
SO_2	4.28E-05	4.28E-05	4.06E-05	4.06E-05	4.06E-05	4.06E-05	4.06E-05	3.94E-05
CO_2e	1.31E-01	1.31E-01	1.29E-01	1.29E-01	1.29E-01	1.29E-01	1.29E-01	1.27E-01

kg/mi = kilograms per mile
Note:
(1) The GREET model was utilized to calculate the emission factors (kg/mi) for GHG and criteria pollutants for each simulation year (2023-2030) with a vehicle type of SUV and make year of 2016. As USPS-specific Delivery POV fuel efficiency information was not available, the Postal Service used the default national emission profile set in the GREET model to calculate the emission factors.
(2) In the GREET model, the emission factors for VOC, CO, NOx, PM_{10}, $PM_{2.5}$, SO_2, and CO_2e for every project year (2023 through 2030) were obtained from the WTP column under the WTW tab.

Net Aggregated (Direct and Indirect) Emissions

The total aggregated direct and indirect emissions for proposed vehicle replacements were calculated by combining the direct emissions from MOVES and indirect emissions from GREET, as shown in Tables F-8.a, F-8.b, and F-8.c, for Alternative 1, Alternative, 2 and the No-Action Alternative, respectively.

Table F-8.a
Net Aggregated Annual Air Emission Changes
Alternative 1 - Mixed Fleet with Increased BEV Commitment

Emission Type	Vehicle Action	Vehicle Description	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
Direct Only	New	BEV NGDV	0	0	0	5.21	40.77	0	0
	New	ICE NGDV	43.11	20.30	481.05	3.82	15.23	0.64	96,732
	New	RHD COTS ICE	38.74	18.08	448.22	3.67	16.20	0.65	98,537
	New	LHD COTS ICE	39.44	19.62	429.03	2.77	8.26	0.43	65,862
	New	LHD COTS BEV	0	0	0	1.89	14.79	0	0
	Removed	LLVs Replaced	-5,932.26	-6,550.25	-75,804.16	-130.10	-213.27	-5.89	-993,567
	Removed	Delivery POVs Replaced	-47.21	-40.89	-755.22	-1.93	-11.55	-0.44	-65,745
		Direct Total	**-5,858**	**-6,533**	**-75,201**	**-115**	**-130**	**-5**	**-798,181**

Emission Type	Vehicle Action	Vehicle Description	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
Indirect Only	New	BEV NGDV	14.88	92.66	53.07	7.52	13.20	76.05	117,530
	New	ICE NGDV	31.65	28.04	17.25	2.06	3.06	7.83	22,469
	New	RHD COTS ICE	33.87	30.51	18.71	2.24	3.34	8.77	24,437
	New	LHD COTS ICE	22.44	20.16	12.37	1.48	2.20	5.77	16,143
	New	LHD COTS BEV	7.56	47.83	27.01	3.91	6.96	40.39	60,570
	Removed	LLVs Replaced	-292.42	-259.97	-159.80	-19.09	-28.36	-73.05	-208,300
	Removed	Delivery POVs Replaced	-11.91	-10.66	-6.54	-0.78	-1.16	-3.03	-8,539
		Indirect Total	**-194**	**-51**	**-38**	**-3**	**-1**	**63**	**24,310**

Emission Type	Vehicle Action	Vehicle Description	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
Direct + Indirect	New	BEV NGDV	14.88	92.66	53.07	12.73	53.97	76.05	117,530
	New	ICE NGDV	74.76	48.34	498.30	5.88	18.29	8.47	119,202
	New	RHD COTS ICE	72.61	48.58	466.93	5.91	19.54	9.43	122,973
	New	LHD COTS ICE	61.87	39.78	441.40	4.25	10.46	6.20	82,006
	New	LHD COTS BEV	7.56	47.83	27.01	5.80	21.75	40.39	60,570
	Removed	LLVs Replaced	-6,224.68	-6,810.22	-75,963.96	-149.20	-241.63	-78.94	-1,201,867
	Removed	Delivery POVs Replaced	-59.12	-51.55	-761.76	-2.72	-12.72	-3.47	-74,283
		Aggregated Total	**-6,052**	**-6,585**	**-75,239**	**-117**	**-130**	**58**	**-773,871**

tpy = Tons Per Year
MT = Metric Ton
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Table F-8.b
Net Aggregated Annual Air Emission Changes
Alternative 2 - NGDV Only with Increased BEV Commitment

Emission Type	Vehicle Action	Vehicle Description	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
Direct Only	New	BEV NGDV	0	0	0	7.67	60.01	0	0
	New	ICE NGDV	115.38	54.31	1,287.67	10.26	40.86	1.70	256,479
	New	RHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS BEV	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Removed	LLVs Replaced	-6,015.29	-6,640.84	-74,827.02	-125.70	-215.99	-6.11	-1,023,779
	Removed	Delivery POVs Replaced	-31.58	-22.93	-538.45	-1.37	-8.09	-0.30	-45,238
		Direct Total	**-5,931**	**-6,609**	**-74,078**	**-109**	**-123**	**-5**	**-812,538**

Emission Type	Vehicle Action	Vehicle Description	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
Indirect Only	New	BEV NGDV	21.69	134.74	77.31	10.94	19.16	110.28	171,068
	New	ICE NGDV	84.91	75.01	46.18	5.51	8.18	20.88	60,141
	New	RHD COTS ICE	0.00	0.00	0.00	0.00	0.00	0.00	0
	New	LHD COTS ICE	0.00	0.00	0.00	0.00	0.00	0.00	0
	New	LHD COTS BEV	0.00	0.00	0.00	0.00	0.00	0.00	0
	Removed	LLVs Replaced	-308.59	-272.42	-167.74	-20.01	-29.70	-75.78	-218,464
	Removed	Delivery POVs Replaced	-8.42	-7.43	-4.58	-0.55	-0.81	-2.07	-5,959
		Indirect Total	**-210**	**-70**	**-49**	**-4**	**-3**	**53**	**6,786.67**

Emission Type	Vehicle Action	Vehicle Description	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
Direct + Indirect	New	BEV NGDV	21.69	134.74	77.31	18.60	79.17	110.28	171,068
	New	ICE NGDV	200.30	129.32	1,333.85	15.77	49.04	22.58	316,620
	New	RHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS BEV	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Removed	LLVs Replaced	-6,323.88	-6,913.26	-74,994.76	-145.70	-245.69	-81.89	-1,242,242
	Removed	Delivery POVs Replaced	-40.00	-30.37	-543.03	-1.92	-8.90	-2.37	-51,197
		Aggregated Total	**-6,142**	**-6,680**	**-74,127**	**-113**	**-126**	**49**	**-805,751**

tpy = Tons Per Year
MT = Metric Ton
1.102 English Short Tons (ton) = 1 Metric Ton (MT)
N/A = Not Applicable

Table F-8.c
Net Aggregated Annual Air Emission Changes
No-Action Alternative

Emission Type	Vehicle Action	Vehicle Description	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
Direct Only	New	BEV NGDV	0	0	0	1.23	9.65	0	0
	New	ICE NGDV	274.55	129.22	3,063.73	24.42	97.30	4.03	608,547
	New	RHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS BEV	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Removed	LLVs Replaced	-6,271.52	-6,923.58	-77,762.94	-130.28	-225.16	-6.39	-1,069,399
	Removed	Delivery POVs Replaced	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Direct Total	**-5,997**	**-6,794**	**-74,699**	**-105**	**-118**	**-2**	**-460,852**

Emission Type	Vehicle Action	Vehicle Description	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
Indirect Only	New	BEV NGDV	3.52	21.95	12.57	1.78	3.13	18.03	27,842
	New	ICE NGDV	202.16	178.48	109.90	13.11	19.46	49.65	143,114
	New	RHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS BEV	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Removed	LLVs Replaced	-323.26	-285.46	-175.75	-20.97	-31.12	-79.43	-228,904
	Removed	Delivery POVs Replaced	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Indirect Total	**-117.58**	**-85.03**	**-53.29**	**-6.07**	**-8.53**	**-11.75**	**-57,948**

Emission Type	Vehicle Action	Vehicle Description	VOC (tpy)	NO_X (tpy)	CO (tpy)	$PM_{2.5}$ (tpy)	PM_{10} (tpy)	SO_2 (tpy)	CO_2e (MT)
Direct + Indirect	New	BEV NGDV	3.52	21.95	12.57	3.02	12.78	18.03	27,842
	New	ICE NGDV	476.71	307.71	3,173.63	37.53	116.76	53.68	751,661
	New	RHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS ICE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	New	LHD COTS BEV	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Removed	LLVs Replaced	-6,594.78	-7,209.04	-77,938.69	-151.25	-256.28	-85.82	-1,298,303
	Removed	Delivery POVs Replaced	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Aggregated Total	**-6,115**	**-6,879**	**-74,752**	**-111**	**-127**	**-14**	**-518,800**

tpy = Tons Per Year
MT = Metric Ton
1.102 English Short Tons (ton) = 1 Metric Ton (MT)
N/A = Not Applicable

Table F-8.d
Net Aggregated Annual Emission Changes for All Alternatives (tpy)

Alternative	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
Alternative 1	-6,052	-6,585	-75,239	-117	-130	58	-773,871 MT
Alternative 2	-6,142	-6,680	-74,127	-113	-126	49	-805,751 MT
No-Action Alternative	-6,115	-6,879	-74,752	-111	-127	-14	-518,800 MT

tpy = Tons Per Year
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Table F-8.e
Cumulative Aggregated (Direct and Indirect) Emission Changes for All Alternatives (2023-2030) (tpy)

Alternative	VOC	NO_X	CO	$PM_{2.5}$	PM_{10}	SO_2	CO_2e
Alternative 1	-32,112	-35,121	-403,574	-629	-701	271	-3,868,260 MT
Alternative 2	-20,694	-22,532	-250,035	-382	-426	161	-2,680,876 MT
No-Action Alternative	-21,191	-23,770	-258,340	-383	-438	-29	-1,881,736 MT

tpy = Tons Per Year
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Social Cost of GHG

Table F-9.a

Social Cost of CO_2, CH_4, and N_2O, 2023-2050 (in 2020 dollars per MT of pollutant) based on IWG's Technical Support Document

	CO_2 Discount Rate and Statistic				CH_4 Discount Rate and Statistic				N_2O Discount Rate and Statistic			
Emission Year	***(5% Avg)***	***(3% Avg)***	***(2.5% Avg)***	***(3% 95th Percentile)***	***(5% Avg)***	***(3% Avg)***	***(2.5% Avg)***	***(3% 95th Percentile)***	***(5% Avg)***	***(3% Avg)***	***(2.5% Avg)***	***(3% 95th Percentile)***
2023	16	54	80	162	750	1,600	2,100	4,300	6,400	20,000	29,000	52,000
2024	16	55	82	166	770	1,700	2,200	4,400	6,600	20,000	29,000	53,000
2025	17	56	83	169	800	1,700	2,200	4,500	6,800	21,000	30,000	54,000
2026	17	57	84	173	830	1,800	2,300	4,700	7,000	21,000	30,000	56,000
2027	18	59	86	176	860	1,800	2,300	4,800	7,200	21,000	31,000	57,000
2028	18	60	87	180	880	1,900	2,400	4,900	7,400	22,000	32,000	58,000
2029	19	61	88	183	910	1,900	2,500	5,100	7,600	22,000	32,000	59,000
2030	19	62	89	187	940	2,000	2,500	5,200	7,800	23,000	33,000	60,000
2031	20	63	91	191	970	2,000	2,600	5,300	8,000	23,000	33,000	62,000
2032	21	64	92	194	1,000	2,100	2,600	5,500	8,300	24,000	34,000	63,000
2033	21	65	94	198	1,000	2,100	2,700	5,700	8,500	24,000	35,000	64,000
2034	22	66	95	202	1,100	2,200	2,800	5,800	8,800	25,000	35,000	66,000
2035	22	67	96	206	1,100	2,200	2,800	6,000	9,000	25,000	36,000	67,000
2036	23	69	98	210	1,100	2,300	2,900	6,100	9,300	26,000	36,000	68,000
2037	23	70	99	213	1,200	2,300	3,000	6,300	9,500	26,000	37,000	70,000
2038	24	71	100	217	1,200	2,400	3,000	6,400	9,800	27,000	38,000	71,000
2039	25	72	102	221	1,200	2,500	3,100	6,600	10,000	27,000	38,000	73,000
2040	25	73	103	225	1,300	2,500	3,100	6,700	10,000	28,000	39,000	74,000
2041	26	74	104	228	1,300	2,600	3,200	6,900	11,000	28,000	39,000	75,000
2042	26	75	106	232	1,400	2,600	3,300	7,000	11,000	29,000	40,000	77,000
2043	27	77	107	235	1,400	2,700	3,300	7,200	11,000	29,000	41,000	78,000
2044	28	78	108	239	1,400	2,700	3,400	7,300	11,000	30,000	41,000	80,000
2045	28	79	110	242	1,500	2,800	3,500	7,500	12,000	30,000	42,000	81,000
2046	29	80	111	246	1,500	2,800	3,500	7,600	12,000	31,000	43,000	82,000
2047	30	81	112	249	1,500	2,900	3,600	7,700	12,000	31,000	43,000	84,000
2048	30	82	114	253	1,600	3,000	3,700	7,900	13,000	32,000	44,000	85,000
2049	31	84	115	256	1,600	3,000	3,700	8,000	13,000	32,000	45,000	87,000

Emission Year	CO_2 Discount Rate and Statistic				CH_4 Discount Rate and Statistic				N_2O Discount Rate and Statistic			
	(5% Avg)	***(3% Avg)***	***(2.5% Avg)***	***(3% 95th Percentile)***	***(5% Avg)***	***(3% Avg)***	***(2.5% Avg)***	***(3% 95th Percentile)***	***(5% Avg)***	***(3% Avg)***	***(2.5% Avg)***	***(3% 95th Percentile)***
2050	32	85	116	260	1,700	3,100	3,800	8,200	13,000	33,000	45,000	88,000

CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
Source: (IWG, 2021).

Note:

(1) Future damages are converted into present-day value by using a discount rate to determine how much weight is placed on impacts that would occur in the future. Future costs and benefits are generally less significant than present costs and benefits, and the discount rate reflects this level of relative significance. A high discount rate means that future effects are much less significant than present effects, whereas a low discount rate means that they are closer to equally significant as present effects. Higher discount rates result in a lower SC-GHG; if future climate damages are discounted at a high rate, less value is placed on avoiding those damages today.

Table F-9.b
Total Net Aggregated Emissions Per Year Used for Social Cost of Alternative 1

Emission Year	CO_2 (MT)	CH_4 (MT)	N_2O (MT)
2023	-5,904.96	-15.23	-5.89
2024	-114,228.59	-265.86	-96.13
2025	-173,204.93	-415.38	-141.29
2026	-389,735.93	-766.38	-240.83
2027	-556,759.74	-1,012.54	-305.50
2028	-639,553.77	-1,134.55	-337.55
2029	-639,553.77	-1,134.55	-337.55
2030	-639,553.77	-1,134.55	-337.55
2031	-639,553.77	-1,134.55	-337.55
2032	-639,553.77	-1,134.55	-337.55
2033	-639,553.77	-1,134.55	-337.55
2034	-639,553.77	-1,134.55	-337.55
2035	-639,553.77	-1,134.55	-337.55
2036	-639,553.77	-1,134.55	-337.55
2037	-639,553.77	-1,134.55	-337.55
2038	-639,553.77	-1,134.55	-337.55
2039	-639,553.77	-1,134.55	-337.55
2040	-639,553.77	-1,134.55	-337.55
2041	-639,553.77	-1,134.55	-337.55
2042	-639,553.77	-1,134.55	-337.55
2043	-639,553.77	-1,134.55	-337.55
2044	-639,553.77	-1,134.55	-337.55
2045	-639,553.77	-1,134.55	-337.55
2046	-639,553.77	-1,134.55	-337.55
2047	-639,553.77	-1,134.55	-337.55
2048	-639,553.77	-1,134.55	-337.55
2049	-639,553.77	-1,134.55	-337.55
2050	-639,553.77	-1,134.55	-337.55

Table F-9.c
Total Net Aggregated Emissions Per Year Used for Social Cost of Alternative 2

Emission Year	CO_2 (MT)	CH_4 (MT)	N_2O (MT)
2023	0.00	0.00	0.00
2024	-3,491.87	-10.76	-3.19
2025	-42,652.82	-120.89	-35.35
2026	-167,483.61	-326.28	-91.02
2027	-334,453.73	-572.07	-155.65
2028	-448,279.50	-790.85	-216.69
2029	-562,345.30	-1,010.87	-277.84
2030	-671,916.00	-1,202.71	-328.96
2031	-671,916.00	-1,202.71	-328.96
2032	-671,916.00	-1,202.71	-328.96
2033	-671,916.00	-1,202.71	-328.96
2034	-671,916.00	-1,202.71	-328.96
2035	-671,916.00	-1,202.71	-328.96
2036	-671,916.00	-1,202.71	-328.96
2037	-671,916.00	-1,202.71	-328.96
2038	-671,916.00	-1,202.71	-328.96
2039	-671,916.00	-1,202.71	-328.96
2040	-671,916.00	-1,202.71	-328.96
2041	-671,916.00	-1,202.71	-328.96
2042	-671,916.00	-1,202.71	-328.96
2043	-671,916.00	-1,202.71	-328.96
2044	-671,916.00	-1,202.71	-328.96
2045	-671,916.00	-1,202.71	-328.96
2046	-671,916.00	-1,202.71	-328.96
2047	-671,916.00	-1,202.71	-328.96
2048	-671,916.00	-1,202.71	-328.96
2049	-671,916.00	-1,202.71	-328.96
2050	-671,916.00	-1,202.71	-328.96

Table F-9.d
Total Net Aggregated Emissions Per Year Used for Social Cost of the No-Action Alternative

Emission Year	CO_2 (MT)	CH_4 (MT)	N_2O (MT)
2023	0.00	0.00	0.00
2024	-3,572.80	-11.29	-3.24
2025	-43,535.23	-126.74	-35.94
2026	-155,160.71	-355.01	-97.89
2027	-218,912.29	-560.88	-157.08
2028	-282,765.70	-766.76	-216.28
2029	-346,740.71	-972.63	-275.48
2030	-392,994.87	-1,121.57	-318.27
2031	-392,994.87	-1,121.57	-318.27
2032	-392,994.87	-1,121.57	-318.27
2033	-392,994.87	-1,121.57	-318.27
2034	-392,994.87	-1,121.57	-318.27
2035	-392,994.87	-1,121.57	-318.27
2036	-392,994.87	-1,121.57	-318.27
2037	-392,994.87	-1,121.57	-318.27
2038	-392,994.87	-1,121.57	-318.27
2039	-392,994.87	-1,121.57	-318.27
2040	-392,994.87	-1,121.57	-318.27
2041	-392,994.87	-1,121.57	-318.27
2042	-392,994.87	-1,121.57	-318.27
2043	-392,994.87	-1,121.57	-318.27
2044	-392,994.87	-1,121.57	-318.27
2045	-392,994.87	-1,121.57	-318.27
2046	-392,994.87	-1,121.57	-318.27
2047	-392,994.87	-1,121.57	-318.27
2048	-392,994.87	-1,121.57	-318.27
2049	-392,994.87	-1,121.57	-318.27
2050	-392,994.87	-1,121.57	-318.27

Table F-9.e
Social Cost of CO_2, CH_4, and N_2O, 2023-2050 (in 2020 dollars per MT of pollutant) based on EPA's Supplementary Material

Emission Year	CO_2 Discount Rate and Statistic			CH_4 Discount Rate and Statistic			N_2O Discount Rate and Statistic		
	(2.5% Avg)	*(2.0% Avg)*	*(1.5% Avg)*	*(2.5% Avg)*	*(2.0% Avg)*	*(1.5% Avg)*	*(2.5% Avg)*	*(2.0% Avg)*	*(1.5% Avg)*
2023	125	204	351	1,457	1,874	2,564	38,076	57,816	92,040
2024	128	208	356	1,524	1,950	2,650	39,024	59,041	93,625
2025	130	212	360	1,590	2,025	2,737	39,972	60,267	95,210
2026	133	215	365	1,657	2,101	2,823	40,920	61,492	96,796
2027	136	219	370	1,724	2,176	2,910	41,868	62,718	98,381
2028	139	223	375	1,791	2,252	2,996	42,816	63,944	99,966
2029	141	226	380	1,857	2,327	3,083	43,764	65,169	101,552
2030	144	230	384	1,924	2,403	3,169	44,712	66,395	103,137
2031	147	234	389	2,002	2,490	3,270	45,693	67,645	104,727
2032	150	237	394	2,080	2,578	3,371	46,674	68,895	106,316
2033	153	241	398	2,157	2,666	3,471	47,655	70,145	107,906
2034	155	245	403	2,235	2,754	3,572	48,636	71,394	109,495
2035	158	248	408	2,313	2,842	3,673	49,617	72,644	111,085
2036	161	252	412	2,391	2,929	3,774	50,598	73,894	112,674
2037	164	256	417	2,468	3,017	3,875	51,578	75,144	114,264
2038	167	259	422	2,546	3,105	3,975	52,559	76,394	115,853
2039	170	263	426	2,624	3,193	4,076	53,540	77,644	117,443
2040	173	267	431	2,702	3,280	4,177	54,521	78,894	119,032
2041	176	271	436	2,786	3,375	4,285	55,632	80,304	120,809
2042	179	275	441	2,871	3,471	4,394	56,744	81,714	122,586
2043	182	279	446	2,955	3,566	4,502	57,855	83,124	124,362
2044	186	283	451	3,040	3,661	4,610	58,966	84,535	126,139
2045	189	287	456	3,124	3,756	4,718	60,078	85,945	127,916
2046	192	291	462	3,209	3,851	4,827	61,189	87,355	129,693
2047	195	296	467	3,293	3,946	4,935	62,301	88,765	131,469
2048	199	300	472	3,378	4,041	5,043	63,412	90,176	133,246
2049	202	304	477	3,462	4,136	5,151	64,523	91,586	135,023
2050	205	308	482	3,547	4,231	5,260	65,635	92,996	136,799

CO_2 = carbon dioxide CH_4 = methane N_2O = nitrous oxide
Source: (EPA, 2022).

Table F-9.f
SC-GHG for Alternative 1 using EPA Supplementary Material

Operational Year	2.5% Discount Rate Future Value (2020 $)	2.0% Discount Rate Future Value (2020 $)	1.5% Discount Rate Future Value (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.0% Discount Rate Present Value (in Base Year: 2023) (2020 $)	1.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)
2023	-984,684	-1,573,853	-2,654,069	-984,684	-1,573,853	-2,654,069
2024	-18,777,641	-29,953,333	-50,369,677	-18,319,650	-29,366,012	-49,625,298
2025	-28,824,789	-46,075,787	-76,943,005	-27,435,849	-44,286,608	-74,685,632
2026	-62,959,577	-100,212,573	-167,728,589	-58,464,227	-94,432,546	-160,401,700
2027	-90,255,696	-143,294,138	-239,003,177	-81,767,206	-132,381,634	-225,185,025
2028	-105,382,667	-166,760,051	-276,975,698	-93,142,922	-151,039,716	-257,105,552
2029	-107,056,656	-169,177,308	-280,807,534	-92,314,619	-150,224,608	-256,810,338
2030	-109,371,333	-172,235,590	-283,998,343	-92,010,301	-149,941,446	-255,890,116
2031	-111,709,630	-175,314,453	-287,847,413	-91,685,296	-149,629,198	-255,525,350
2032	-114,047,927	-177,754,898	-291,696,145	-91,321,410	-148,737,347	-255,115,185
2033	-116,385,089	-180,834,896	-294,904,526	-90,919,846	-148,347,599	-254,109,566
2034	-118,083,832	-183,914,556	-298,753,258	-89,996,977	-147,915,680	-253,621,569
2035	-120,422,129	-186,355,001	-302,602,327	-89,540,583	-146,939,646	-253,092,780
2036	-122,760,426	-189,433,864	-305,811,505	-89,052,914	-146,438,539	-251,996,942
2037	-125,097,251	-192,513,863	-309,660,575	-88,534,727	-145,901,448	-251,397,714
2038	-127,435,548	-194,954,307	-313,508,172	-87,989,856	-144,853,922	-250,759,983
2039	-129,773,845	-198,034,305	-316,717,688	-87,418,897	-144,257,261	-249,583,369
2040	-132,112,141	-201,113,169	-320,566,420	-86,823,446	-143,627,496	-248,883,043
2041	-134,501,128	-204,255,117	-324,486,553	-86,237,538	-143,011,135	-248,203,524
2042	-136,891,586	-207,398,201	-328,407,822	-85,629,481	-142,364,504	-247,490,589
2043	-139,280,572	-210,540,149	-332,327,618	-84,998,886	-141,687,485	-246,743,426
2044	-142,310,247	-213,682,435	-336,247,752	-84,729,569	-140,982,503	-245,964,541
2045	-144,699,570	-216,824,384	-340,167,886	-84,050,868	-140,250,476	-245,154,789
2046	-147,089,691	-219,966,333	-344,728,708	-83,355,322	-139,492,952	-244,770,165
2047	-149,479,015	-223,747,835	-348,648,505	-82,643,263	-139,108,837	-243,894,941
2048	-152,508,689	-226,890,121	-352,568,639	-82,261,752	-138,296,533	-242,992,362
2049	-154,897,676	-230,032,070	-356,488,772	-81,512,535	-137,462,400	-242,063,193
2050	-157,288,134	-233,174,019	-360,409,703	-80,751,685	-136,607,807	-241,108,951
Cumulative SC-GHG from 2023 through 2050	**N/A**	**N/A -**	**N/A**	**-2,193,894,309**	**-3,619,159,191**	**-6,254,829,712**

Note:

(1) The calculation of the social cost of GHG involved multiple steps. First, the net aggregate emissions of CO_2, CH_4, and N_2O were determined as shown in Table F-9.b for each year. Second, the social cost for each gas, as shown in Table F-9.a and Table F-9.e, was multiplied by the corresponding net aggregate emissions to calculate the social cost of CO_2, social cost of CH_4, and social cost of N_2O for each projected year, respectively. Finally, the total annual SC-GHG was calculated by summing up the individual social costs of CO_2, CH_4, and N_2O for each projected year from 2023 through 2050, as shown in Table F-9.i. Social costs are provided in both future values, using the costs per MT provided in the IWG (2021) and EPA (2022) guidance, and present values using 2023 as the base year.

Table F-9.g
SC-GHG for Alternative 2 using EPA Supplementary Material

Operational Year	2.5% Discount Rate Future Value (2020 $)	2.0% Discount Rate Future Value (2020 $)	1.5% Discount Rate Future Value (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.0% Discount Rate Present Value (in Base Year: 2023) (2020 $)	1.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)
2023	0	0	0	0	0	0
2024	-587,725	-935,451	-1,569,995	-573,391	-917,109	-1,546,793
2025	-7,150,070	-11,417,607	-19,051,516	-6,805,540	-10,974,248	-18,492,578
2026	-26,540,410	-42,291,350	-70,862,754	-24,645,409	-39,852,084	-67,767,256
2027	-52,988,788	-84,252,364	-140,725,787	-48,005,226	-77,836,161	-132,589,618
2028	-73,004,858	-115,603,042	-192,135,351	-64,525,657	-104,705,237	-178,351,624
2029	-93,327,409	-147,549,106	-245,023,275	-80,475,932	-131,019,383	-224,084,123
2030	-113,778,530	-179,272,320	-295,755,436	-95,717,922	-156,067,343	-266,483,571
2031	-116,210,803	-182,475,824	-299,759,541	-95,379,618	-155,741,358	-266,099,879
2032	-118,643,075	-185,008,614	-303,763,318	-95,000,875	-154,806,932	-265,669,041
2033	-121,074,145	-188,213,321	-307,094,304	-94,582,928	-154,400,478	-264,613,099
2034	-122,834,501	-191,417,699	-311,098,081	-93,617,674	-153,950,180	-264,101,500
2035	-125,266,774	-193,950,489	-315,102,186	-93,142,847	-152,928,637	-263,547,505
2036	-127,699,046	-197,153,993	-318,434,047	-92,635,490	-152,406,449	-262,398,258
2037	-130,129,787	-200,358,700	-322,438,152	-92,096,389	-151,846,854	-261,771,181
2038	-132,562,059	-202,891,490	-326,440,726	-91,529,536	-150,751,366	-261,104,106
2039	-134,994,331	-206,096,197	-329,772,916	-90,935,548	-150,129,912	-259,871,293
2040	-137,426,604	-209,299,701	-333,776,692	-90,316,085	-149,474,011	-259,139,304
2041	-139,908,858	-212,565,461	-337,850,733	-89,704,790	-148,829,700	-258,425,940
2042	-142,392,643	-215,832,423	-341,925,976	-89,070,545	-148,154,014	-257,677,971
2043	-144,874,897	-219,098,183	-345,999,687	-88,412,940	-147,446,796	-256,894,533
2044	-148,030,270	-222,364,272	-350,073,728	-88,135,192	-146,710,569	-256,078,214
2045	-150,512,853	-225,630,031	-354,147,769	-87,427,598	-145,946,312	-255,229,918
2046	-152,996,309	-228,895,791	-358,894,928	-86,702,586	-145,155,621	-254,828,706
2047	-155,478,892	-232,833,467	-362,968,639	-85,960,447	-144,757,570	-253,912,505
2048	-158,634,265	-236,099,556	-367,042,680	-85,565,829	-143,909,968	-252,967,956
2049	-161,116,518	-239,365,315	-371,116,721	-84,785,106	-143,039,754	-251,995,870
2050	-163,600,304	-242,631,075	-375,191,635	-83,992,352	-142,148,338	-250,997,853
Cumulative SC-GHG from 2023 through 2050	**N/A**	**N/A**	**N/A**	**-2,119,743,452**	**-3,503,906,382**	**-6,066,640,193**

Note:

(1) The calculation of the social cost of GHG involved multiple steps. First, the net aggregate emissions of CO_2, CH_4, and N_2O were determined as shown in Table F-9.c for each year. Second, the social cost for each gas, as shown in Table F-9.a and Table F-9.e, was multiplied by the corresponding net aggregate emissions to calculate the social cost of CO_2, social cost of CH_4, and social cost of N_2O for each projected year, respectively. Finally, the total annual SC-GHG was calculated by summing up the individual social costs of CO_2, CH_4, and N_2O for each projected year from 2023 through 2050, as shown in Table F-9.i. Social costs are provided in both future values, using the costs per MT provided in the IWG (2021) and EPA (2022) guidance, and present values using 2023 as the base year.

Table F-9.h
SC-GHG for the No-Action Alternative using EPA Supplementary Material

Operational Year	2.5% Discount Rate Future Value (2020 $)	2.0% Discount Rate Future Value (2020 $)	1.5% Discount Rate Future Value (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.0% Discount Rate Present Value (in Base Year: 2023) (2020 $)	1.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)
2023	0	0	0	0	0	0
2024	-600,960	-956,448	-1,605,177	-586,302	-937,694	-1,581,455
2025	-7,297,693	-11,652,118	-19,441,426	-6,946,049	-11,199,652	-18,871,048
2026	-25,230,207	-40,124,763	-67,111,026	-23,428,755	-37,810,460	-64,179,415
2027	-37,315,777	-59,014,194	-98,083,683	-33,806,253	-54,519,993	-92,412,900
2028	-49,937,952	-78,613,317	-129,955,021	-44,137,873	-71,202,503	-120,632,090
2029	-62,752,764	-98,579,530	-162,735,729	-54,111,512	-87,535,801	-148,828,691
2030	-72,979,566	-114,215,364	-187,289,504	-61,395,172	-99,431,348	-168,752,861
2031	-74,558,254	-116,282,756	-189,873,803	-61,193,431	-99,246,212	-168,553,087
2032	-76,136,942	-117,958,274	-192,457,784	-60,965,009	-98,702,207	-168,322,085
2033	-77,714,509	-120,026,786	-194,647,967	-60,710,450	-98,463,770	-167,721,775
2034	-78,900,202	-122,094,981	-197,231,948	-60,133,377	-98,196,480	-167,436,755
2035	-80,478,890	-123,770,499	-199,816,247	-59,840,552	-97,592,194	-167,123,796
2036	-82,057,578	-125,837,890	-202,007,233	-59,526,239	-97,276,782	-166,459,418
2037	-83,634,826	-127,906,403	-204,591,533	-59,190,641	-96,937,068	-166,097,488
2038	-85,213,514	-129,581,921	-207,174,392	-58,836,997	-96,281,276	-165,708,749
2039	-86,792,202	-131,650,433	-209,365,696	-58,465,392	-95,900,207	-164,986,667
2040	-88,370,890	-133,717,825	-211,949,677	-58,076,912	-95,496,264	-164,554,605
2041	-89,997,683	-135,845,111	-214,601,344	-57,703,446	-95,113,228	-164,151,054
2042	-91,625,915	-137,973,519	-217,254,132	-57,314,549	-94,709,268	-163,724,337
2043	-93,252,707	-140,100,806	-219,905,480	-56,909,418	-94,283,826	-163,273,313
2044	-95,273,616	-142,228,411	-222,557,146	-56,724,604	-93,838,866	-162,800,096
2045	-96,900,727	-144,355,698	-225,208,812	-56,286,209	-93,374,900	-162,305,206
2046	-98,528,641	-146,482,984	-228,254,595	-55,835,909	-92,893,051	-162,069,226
2047	-100,155,751	-149,003,266	-230,905,943	-55,373,647	-92,638,532	-161,528,849
2048	-102,176,660	-151,130,871	-233,557,610	-55,113,129	-92,118,931	-160,969,267
2049	-103,803,453	-153,258,158	-236,209,276	-54,624,981	-91,583,900	-160,390,946
2050	-105,431,685	-155,385,444	-238,861,746	-54,128,598	-91,034,434	-159,795,101
Cumulative SC-GHG from 2023 through 2050	**N/A**	**N/A**	**N/A**	**-1,381,365,405**	**-2,268,318,849**	**-3,903,230,281**

Note:

(1) The calculation of the social cost of GHG involved multiple steps. First, the net aggregate emissions of CO_2, CH_4, and N_2O were determined as shown in Table F-9.d for each year. Second, the social cost for each gas, as shown in Table F-9.a and Table F-9.e, was multiplied by the corresponding net aggregate emissions to calculate the social cost of CO_2, social cost of CH_4, and social cost of N_2O for each projected year, respectively. Finally, the total annual SC-GHG was calculated by summing up the individual social costs of CO_2, CH_4, and N_2O for each projected year from 2023 through 2050, as shown in Table F-9.i. Social costs are provided in both future values, using the costs per MT provided in the IWG (2021) and EPA (2022) guidance, and present values using 2023 as the base year.

Table F-9.i
Summary of Cumulative Present Value Total SC-GHG from 2023 through 2050 for All Alternatives

Alternative	IWG's TSD (IWG 2021)				EPA Supplementary Material (EPA 2022)		
	5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% 95th Percentile Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.0% Discount Rate Present Value (in Base Year: 2023) (2020 $)	1.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)
Alternative 1	-242,231,532	-914,927,942	-1,383,605,928	-2,716,157,888	-2,193,894,309	-3,619,159,191	-6,254,829,712
Alternative 2	-230,112,943	-877,720,329	-1,329,708,042	-2,611,832,744	-2,119,743,452	-3,503,906,382	-6,066,640,193
No-Action Alternative	-156,162,109	-586,131,486	-885,556,556	-1,724,077,610	-1,381,365,405	-2,268,318,849	-3,903,230,281

MT = metric tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)

Table F-9.j
SC-GHG of Alternative 1 from 2023-2050 using IWG's Technical Support Document (2021)

Operational Year	5% Discount Rate Future Value (2020 $)	3% Discount Rate Future Value (2020 $)	2.5% Discount Rate Future Value (2020 $)	3% 95th Percentile Discount Rate Future Value (2020 $)	5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% 95th Percentile Discount Rate Present Value (in Base Year: 2023) (2020 $)
2023	-143,613	-461,088	-675,266	-1,328,507	-143,613	-461,088	-675,266	-1,328,507
2024	-2,666,801	-8,657,051	-12,739,285	-25,226,399	-2,539,810	-8,404,904	-12,428,571	-24,491,649
2025	-4,237,570	-13,372,742	-19,528,587	-38,770,580	-3,843,601	-12,605,092	-18,587,590	-36,544,990
2026	-8,947,423	-28,651,884	-41,725,424	-84,512,841	-7,729,121	-26,220,533	-38,746,204	-77,341,221
2027	-13,092,073	-41,086,935	-59,680,737	-120,263,511	-10,770,881	-36,505,210	-54,067,802	-106,852,571
2028	-15,008,274	-47,955,063	-69,165,831	-140,257,117	-11,759,375	-41,366,459	-61,132,516	-120,987,021
2029	-15,749,375	-48,594,617	-69,918,840	-142,740,242	-11,752,426	-40,697,227	-60,290,797	-119,542,706
2030	-15,850,922	-49,685,180	-70,895,948	-145,749,467	-11,264,955	-40,398,598	-59,642,296	-118,507,654
2031	-16,592,023	-50,324,734	-72,288,511	-149,096,245	-11,230,135	-39,726,810	-59,330,547	-117,697,953
2032	-17,366,880	-51,415,297	-73,265,618	-151,579,371	-11,194,846	-39,405,544	-58,665,859	-116,172,966
2033	-17,434,391	-52,054,851	-74,995,735	-154,702,051	-10,703,204	-38,733,698	-58,586,548	-115,112,854
2034	-18,288,666	-53,145,414	-75,748,744	-158,048,829	-10,693,004	-38,393,378	-57,731,510	-114,177,837
2035	-18,356,177	-53,784,968	-76,725,852	-161,171,508	-10,221,406	-37,723,694	-57,049,959	-113,042,453
2036	-19,096,997	-55,515,084	-78,118,415	-164,180,733	-10,127,545	-37,803,071	-56,668,690	-111,799,090
2037	-19,277,963	-56,154,638	-79,208,978	-167,001,413	-9,736,681	-37,124,831	-56,058,348	-110,407,607
2038	-20,018,783	-57,245,201	-80,186,085	-170,010,637	-9,629,377	-36,743,516	-55,365,730	-109,123,358
2039	-20,725,847	-57,998,210	-81,578,648	-173,470,870	-9,494,749	-36,142,567	-54,953,412	-108,101,311
2040	-20,839,303	-58,975,318	-82,555,756	-176,480,095	-9,092,119	-35,681,037	-54,255,235	-106,773,360
2041	-21,816,410	-59,728,327	-83,308,765	-178,963,221	-9,065,169	-35,084,097	-53,414,740	-105,122,031
2042	-21,929,866	-60,705,435	-85,038,882	-182,309,999	-8,678,393	-34,619,461	-53,194,178	-103,968,845
2043	-22,569,420	-62,097,998	-86,015,990	-184,793,125	-8,506,177	-34,382,156	-52,493,059	-102,315,473
2044	-23,208,973	-63,075,105	-86,768,999	-188,139,903	-8,330,684	-33,905,977	-51,661,072	-101,134,469
2045	-23,659,983	-63,828,114	-88,499,115	-190,623,029	-8,088,162	-33,311,414	-51,406,009	-99,484,729
2046	-24,299,536	-64,805,222	-89,476,223	-193,632,253	-7,911,232	-32,836,271	-50,705,929	-98,111,865
2047	-24,939,090	-65,558,231	-90,229,232	-196,339,478	-7,732,812	-32,250,306	-49,885,519	-96,586,013
2048	-25,390,099	-66,648,794	-91,959,349	-199,462,157	-7,497,767	-31,831,835	-49,602,007	-95,264,237
2049	-26,029,653	-67,927,902	-92,936,457	-202,169,382	-7,320,599	-31,497,810	-48,906,390	-93,744,876
2050	-26,782,662	-69,018,465	-93,689,466	-205,292,062	-7,173,691	-31,071,357	-48,100,146	-92,420,239

Operational Year	5% Discount Rate Future Value (2020 $)	3% Discount Rate Future Value (2020 $)	2.5% Discount Rate Future Value (2020 $)	3% 95th Percentile Discount Rate Future Value (2020 $)	5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% 95th Percentile Discount Rate Present Value (in Base Year: 2023) (2020 $)
Cumulative SC-GHG from 2023-2050	**N/A**	**N/A**	**N/A**	**N/A**	**-242,231,532**	**-914,927,942**	**-1,383,605,928**	**-2,716,157,888**

Note:
(1) The calculation of the social cost of GHG involved multiple steps. First, the net aggregate emissions of CO2, CH4, and N2O were determined as shown in Table F-9.b for each year. Second, the social cost for each gas, as shown in Table F-9.a and Table F-9.e, was multiplied by the corresponding net aggregate emissions to calculate the social cost of CO2, social cost of CH4, and social cost of N2O for each projected year, respectively. Finally, the total annual SC-GHG was calculated by summing up the individual social costs of CO2, CH4, and N2O for each projected year from 2023 through 2050, as shown in Table F-9.i. Social costs are provided in both future values, using the costs per MT provided in the IWG (2021) and EPA (2022) guidance, and present values using 2023 as the base year.

Table F-9.k
SC-GHG of Alternative 2 from 2023-2050 using IWG's Technical Support Document (2021)

Operational Year	5% Discount Rate Future Value (2020 $)	3% Discount Rate Future Value (2020 $)	2.5% Discount Rate Future Value (2020 $)	3% 95th Percentile Discount Rate Future Value (2020 $)	5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% 95th Percentile Discount Rate Present Value (in Base Year: 2023) (2020 $)
2023	0	0	0	0	0	0	0	0
2024	-85,191	-274,087	-402,431	-795,911	-81,134	-266,104	-392,615	-772,729
2025	-1,062,185	-3,336,407	-4,866,623	-9,661,196	-963,433	-3,144,884	-4,632,122	-9,106,604
2026	-3,755,158	-12,045,241	-17,549,598	-35,605,172	-3,243,846	-11,023,102	-16,296,546	-32,583,776
2027	-7,632,842	-24,031,186	-34,903,991	-70,481,952	-6,279,558	-21,351,398	-31,621,293	-62,622,301
2028	-10,368,452	-33,166,464	-47,832,288	-97,133,228	-8,123,953	-28,609,683	-42,276,773	-83,787,975
2029	-13,716,061	-42,336,268	-60,904,546	-124,457,380	-10,235,136	-35,455,958	-52,517,799	-104,231,096
2030	-16,462,864	-51,630,367	-73,663,088	-151,640,181	-11,699,850	-41,980,213	-61,970,195	-123,297,344
2031	-17,236,654	-52,302,283	-75,127,191	-155,106,043	-11,666,446	-41,287,906	-61,660,384	-122,442,142
2032	-18,043,340	-53,423,434	-76,128,071	-157,691,296	-11,630,898	-40,944,613	-60,957,905	-120,857,247
2033	-18,109,133	-54,095,350	-77,921,137	-160,948,464	-11,117,437	-40,252,021	-60,871,868	-119,760,773
2034	-19,000,009	-55,216,500	-78,713,324	-164,414,326	-11,108,912	-39,889,574	-59,990,949	-118,776,407
2035	-19,065,802	-55,888,416	-79,714,203	-167,671,495	-10,616,552	-39,199,010	-59,271,965	-117,601,413
2036	-19,836,407	-57,681,482	-81,178,306	-170,808,393	-10,519,670	-39,278,283	-58,888,397	-116,312,204
2037	-20,022,470	-58,353,398	-82,299,456	-173,722,610	-10,112,708	-38,578,471	-58,245,563	-114,851,111
2038	-20,793,075	-59,474,548	-83,300,336	-176,859,508	-10,001,825	-38,174,449	-57,516,013	-113,519,388
2039	-21,530,784	-60,266,735	-84,764,438	-180,445,641	-9,863,500	-37,556,237	-57,099,439	-112,447,758
2040	-21,651,054	-61,267,615	-85,765,318	-183,582,539	-9,446,283	-37,067,914	-56,364,543	-111,070,455
2041	-22,651,934	-62,059,801	-86,557,505	-186,167,792	-9,412,346	-36,453,593	-55,497,721	-109,353,957
2042	-22,772,205	-63,060,681	-88,350,571	-189,633,654	-9,011,735	-35,962,625	-55,265,731	-108,145,423
2043	-23,444,121	-64,524,784	-89,351,450	-192,218,906	-8,835,843	-35,725,808	-54,528,594	-106,426,948
2044	-24,116,037	-65,525,663	-90,143,637	-195,684,768	-8,656,267	-35,223,273	-53,670,285	-105,190,205
2045	-24,565,271	-66,317,850	-91,936,703	-198,270,021	-8,397,635	-34,610,788	-53,402,783	-103,475,637
2046	-25,237,187	-67,318,729	-92,937,583	-201,406,919	-8,216,504	-34,109,845	-52,667,471	-102,051,224
2047	-25,909,103	-68,110,916	-93,729,770	-204,200,865	-8,033,581	-33,506,057	-51,820,880	-100,453,295
2048	-26,358,337	-69,232,066	-95,522,836	-207,458,034	-7,783,690	-33,065,620	-51,524,119	-99,083,113
2049	-27,030,253	-70,575,898	-96,523,715	-210,251,980	-7,602,008	-32,725,672	-50,794,130	-97,492,735
2050	-27,822,440	-71,697,049	-97,315,902	-213,509,149	-7,452,194	-32,277,227	-49,961,958	-96,119,482

Operational Year	5% Discount Rate Future Value (2020 $)	3% Discount Rate Future Value (2020 $)	2.5% Discount Rate Future Value (2020 $)	3% 95th Percentile Discount Rate Future Value (2020 $)	5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% 95th Percentile Discount Rate Present Value (in Base Year: 2023) (2020 $)
Cumulative SC-GHG from 2023-2050	**N/A**	**N/A**	**N/A**	**N/A**	**-230,112,943**	**-877,720,329**	**-1,329,708,042**	**-2,611,832,744**

Note:

(1) The calculation of the social cost of GHG involved multiple steps. First, the net aggregate emissions of CO2, CH4, and N2O were determined as shown in Table F-9.c for each year. Second, the social cost for each gas, as shown in Table F-9.a and Table F-9.e, was multiplied by the corresponding net aggregate emissions to calculate the social cost of CO2, social cost of CH4, and social cost of N2O for each projected year, respectively. Finally, the total annual SC-GHG was calculated by summing up the individual social costs of CO2, CH4, and N2O for each projected year from 2023 through 2050, as shown in Table F-9.i. Social costs are provided in both future values, using the costs per MT provided in the IWG (2021) and EPA (2022) guidance, and present values using 2023 as the base year.

Table F-9.l
SC-GHG of the No-Action Alternative using IWG's Technical Support Document (2021)

Operational Year	5% Discount Rate Future Value (2020 $)	3% Discount Rate Future Value (2020 $)	2.5% Discount Rate Future Value (2020 $)	3% 95th Percentile Discount Rate Future Value (2020 $)	5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% 95th Percentile Discount Rate Present Value (in Base Year: 2023) (2020 $)
2023	0	0	0	0	0	0	0	0
2024	-87,241	-280,494	-411,764	-814,474	-83,087	-272,325	-401,721	-790,752
2025	-1,085,883	-3,408,171	-4,970,452	-9,868,544	-984,927	-3,212,528	-4,730,948	-9,302,049
2026	-3,617,608	-11,538,830	-16,786,667	-33,993,087	-3,125,026	-10,559,664	-15,588,089	-31,108,490
2027	-5,553,776	-17,224,153	-24,986,054	-50,174,519	-4,569,105	-15,303,437	-22,636,132	-44,579,410
2028	-7,365,002	-23,180,946	-33,361,801	-67,199,190	-5,770,672	-19,996,088	-29,486,971	-57,966,612
2029	-9,566,825	-29,059,766	-41,760,154	-84,667,351	-7,138,912	-24,337,096	-36,009,650	-70,907,574
2030	-11,003,669	-33,928,988	-48,283,316	-98,418,291	-7,820,102	-27,587,372	-40,619,075	-80,023,077
2031	-11,493,965	-34,321,983	-49,181,463	-100,738,964	-7,779,568	-27,094,090	-40,365,517	-79,524,268
2032	-12,016,087	-35,145,403	-49,892,726	-102,460,530	-7,745,677	-26,936,025	-39,950,521	-78,527,465
2033	-12,079,741	-35,538,398	-51,109,141	-104,575,092	-7,415,913	-26,443,906	-39,926,379	-77,813,689
2034	-12,680,373	-36,361,818	-51,614,292	-106,895,765	-7,413,952	-26,268,551	-39,337,564	-77,223,775
2035	-12,744,027	-36,754,813	-52,325,555	-109,010,326	-7,096,351	-25,779,086	-38,906,975	-76,457,649
2036	-13,232,502	-37,971,228	-53,223,702	-111,012,731	-7,017,478	-25,856,558	-38,609,558	-75,594,268
2037	-13,408,313	-38,364,223	-54,047,122	-113,052,566	-6,772,109	-25,363,271	-38,250,618	-74,741,064
2038	-13,896,788	-39,187,643	-54,758,385	-115,054,970	-6,684,593	-25,153,057	-37,808,779	-73,849,407
2039	-14,353,437	-39,692,794	-55,656,532	-117,487,800	-6,575,475	-24,735,237	-37,491,628	-73,214,513
2040	-14,465,594	-40,404,057	-56,367,795	-119,490,204	-6,311,291	-24,445,119	-37,044,636	-72,293,539
2041	-15,176,857	-40,909,209	-56,872,947	-121,211,771	-6,306,297	-24,029,849	-36,464,995	-71,199,141
2042	-15,289,014	-41,620,472	-58,089,361	-123,532,444	-6,050,382	-23,735,574	-36,336,506	-70,448,827
2043	-15,682,009	-42,518,619	-58,800,624	-125,254,010	-5,910,384	-23,541,528	-35,884,313	-69,350,109
2044	-16,075,003	-43,229,882	-59,305,776	-127,574,683	-5,770,000	-23,238,192	-35,309,846	-68,577,679
2045	-16,505,428	-43,735,034	-60,522,191	-129,296,250	-5,642,379	-22,824,986	-35,155,203	-67,478,743
2046	-16,898,423	-44,446,297	-61,233,454	-131,298,654	-5,501,642	-22,520,572	-34,700,829	-66,527,945
2047	-17,291,418	-44,951,449	-61,738,606	-133,226,332	-5,361,514	-22,113,134	-34,133,754	-65,538,527
2048	-17,721,843	-45,774,869	-62,955,021	-135,340,894	-5,233,309	-21,862,332	-33,957,346	-64,639,565
2049	-18,114,838	-46,560,858	-63,666,284	-137,268,572	-5,094,630	-21,590,025	-33,503,409	-63,650,713
2050	-18,619,990	-47,384,278	-64,171,436	-139,383,133	-4,987,333	-21,331,884	-32,945,598	-62,748,761

Operational Year	5% Discount Rate Future Value (2020 $)	3% Discount Rate Future Value (2020 $)	2.5% Discount Rate Future Value (2020 $)	3% 95th Percentile Discount Rate Future Value (2020 $)	5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% Discount Rate Present Value (in Base Year: 2023) (2020 $)	2.5% Discount Rate Present Value (in Base Year: 2023) (2020 $)	3% 95th Percentile Discount Rate Present Value (in Base Year: 2023) (2020 $)
Cumulative SC-GHG from 2023-2050	**N/A**	**N/A**	**N/A**	**N/A**	**-156,162,109**	**-586,131,486**	**-885,556,556**	**-1,724,077,610**

Note:

(1) The calculation of the social cost of GHG involved multiple steps. First, the net aggregate emissions of CO2, CH4, and N2O were determined as shown in Table F-9.d for each year. Second, the social cost for each gas, as shown in Table F-9.a and Table F-9.e, was multiplied by the corresponding net aggregate emissions to calculate the social cost of CO2, social cost of CH4, and social cost of N2O for each projected year, respectively. Finally, the total annual SC-GHG was calculated by summing up the individual social costs of CO2, CH4, and N2O for each projected year from 2023 through 2050, as shown in Table F-9.i. Social costs are provided in both future values, using the costs per MT provided in the IWG (2021) and EPA (2022) guidance, and present values using 2023 as the base year.

Sensitivity Analysis

Table F-10.a
Sensitivity Analysis of Net Aggregated Emission Changes for Potential Increased Route Lengths

Pollutant	No-Action: Baseline Route Length (20.6/34.9 Miles)	Alternative 1 Baseline Route Length (20.6/34.9 Miles)		Alternative 1: Route B: +3 miles (23.6/37.9 miles)		Alternative 1: Route C: +10 miles (30.6/44.9 miles)	
CO_2e (MT)	-518,800	-773,871	-49%	-731,131	-41%	-631,405	-22%
VOC (tpy)	-6,115	-6,052	1%	-6,037	1%	-6,003	2%
NOx (tpy)	-6,879	-6,585	4%	-6,557	5%	-6,492	6%
CO (tpy)	-74,752	-75,239	-1%	-75,200	-1%	-75,109	0%
$PM_{2.5}$ (tpy)	-111	-117	-6%	-115	-3%	-108	2%
PM_{10} (tpy)	-127	-130	-3%	-122	4%	-103	19%
SO_2 (tpy)	-14	58	512%	76	636%	116	925%

tpy = Tons per Year N/A = Not applicable
MT = Metric Tons
1.102 English Short Tons (ton) = 1 Metric Ton (MT)
Notes:

(1) Total baseline route length: City: 20.6 miles (5.2 miles transit and 15.4 miles delivery segment) and Rural: 34.9 miles (9 miles transit and 25.9 miles delivery segment).
(2) For all new vehicles, total length for Route B is as follows: City: 23.6 miles (8.2 miles transit and 15.4 miles delivery segment) and Rural: 37.9 miles (12 miles transit and 25.9 miles delivery segment). For existing vehicles to be replaced, total route length for Route B is the same as the baseline route.
(3) For all new vehicles, total route length for Route C is as follows: City: 30.6 miles (15.2 miles transit and 15.4 miles delivery segment) and Rural: 44.9 miles (19 miles transit and 25.9 miles delivery segment). For existing vehicles to be replaced, total route length for Route C is the same as the baseline route length.

Appendix F References

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APPENDIX G

FUEL CONSUMPTION CALCULATIONS

Fuel Consumption Calculation Methodology

Table G-1
Estimated Yearly Gasoline Consumption Change Under Alternative 1, Years 1 – 8

Table G-2
Estimated Yearly Gasoline Consumption Change Under Alternative 2, Years 1 – 8

Table G-3
Estimated Yearly Gasoline Consumption Change Under No-Action Alternative, Years 1 – 8

Table G-4
Estimated Yearly Electricity Consumption Under Alternative 1, Years 1 – 8

Table G-5
Estimated Yearly Electricity Consumption Under Alternative 2, Years 1 – 8

Table G-6
Estimated Yearly Electricity Consumption Under No-Action Alternative, Years 1 – 8

Fuel Consumption Calculation Methodology

The following tables present each Alternative's hypothetical fuel (gasoline and electricity) usage during Years 1 through 8. Beginning in Year 9, the annual gasoline consumption reduction, and electricity consumption increase, relative to existing conditions would be the same as the Year 8 value for an undefined period of time while all 106,480 vehicles are anticipated to remain in service.

The Postal Service derived these estimates using the following equation:

Gas/Electricity Consumption = Sum of [(Average Delivery Route Length/Fuel Efficiency) * 302 Delivery Days * # of Vehicles] for each vehicle type on each route type.

The tables below provide the number of each type of vehicle on each route type in each year. Additionally, the Postal Service used the following data:

- Route Lengths:
  - Rural: 34.9 miles
  - City: 20.6 miles
- Fuel Efficiencies:
  - LLV: 8.8 MPG
  - Delivery POV: 21.54 MPG
  - NGDV ICE: 12.63 MPG
  - NGDV BEV: 1.28 mi/kWh
  - COTS ICE (LHD) Vehicle: 11 MPG
  - COTS ICE (RHD) Vehicle: 12.1 MPG
  - COTS BEV: 1.13 mi/kWh

The LLV MPG value was based on the Postal Service's actual operations and fuel consumption and miles driven. The delivery POV fuel efficiency value was derived from the GREET model for typical SUVs; this estimate does not account for the Postal Service's typical driving pattern (i.e., stop-and-go deliveries), which typically decreases fuel efficiency, and thus is potentially higher than delivery POVs realistically experience.

The MPG values for NGDV, LHD COTS, and RHD COTS ICE vehicles were based on the Postal Service's actual operations and testing of these vehicles on Postal Service curb-line delivery routes. These values differ from the manufacturer-provided data: for example, as shown in Table 3-3.3, COTS vehicles are estimated to achieve 18 to 19 MPG in typical city driving conditions (i.e., the UDDS drive cycle), but 11 to 12 MPG on the USPS drive cycle. The Postal Service's drive cycle (i.e., for curb-line delivery routes) entails stop-and-go driving at low speed over relatively short distances between delivery points, which results in the actual fuel efficiency being lower than would be expected under typical driving conditions.

Similarly, the mi/kWh value for BEV NGDV were derived based on the actual testing of the vehicle on our drive cycle. However, the Postal Service has not tested COTS BEVs for transit and delivery travel, to date. The mi/kWh value used in this SEIS for COTS BEVs is a calculated estimate based on manufacturer-provided information. The Postal Service divided the expected range of the COTS BEV on a single charge (i.e., manufacturer-provided range times the battery capacity warranty) by the total battery size.

Table G-1
Estimated Yearly Gasoline Consumption Change Under Alternative 1, Years 1 – 8

Year	LLVs		Delivery POVs		Gasoline Usage (gallons)	ICE NGDV		COTS ICE (LHD)		COTS ICE (RHD)		Gasoline Usage (gallons)	Gasoline Savings (gallons)
	Rural	City	Rural	City		Rural	City	Rural	City	Rural	City		
1	250	1,575	608	0	1,710,382	0	0	0	0	858	1,575	1,557,152	153,230
2	2,681	25,457	3,799	0	23,066,887	257	754	153	8,997	5,116	9,384	15,101,947	7,964,940
3	5,352	36,906	4,254	0	34,582,516	2,717	7,972	180	10,570	5,116	9,384	21,625,725	12,956,791
4	11,254	60,009	5,044	0	58,370,697	3,813	11,187	180	10,570	5,116	9,384	24,123,966	34,246,731
5	16,515	74,136	5,829	0	75,043,078	3,813	11,187	180	10,570	5,116	9,384	24,123,966	50,919,112
6	19,123	81,139	6,218	0	83,307,837	3,813	11,187	180	10,570	5,116	9,384	24,123,966	59,183,871
7	19,123	81,139	6,218	0	83,307,837	3,813	11,187	180	10,570	5,116	9,384	24,123,966	59,183,871
8	19,123	81,139	6,218	0	83,307,837	3,813	11,187	180	10,570	5,116	9,384	24,123,966	59,183,871
Cumulative Total					**442,697,069**	**Cumulative Total**						**158,904,654**	**283,792,415**

Note: Vehicle numbers reflect cumulative replacements by each year. Total LLVs and Delivery POVs to be replaced: 106,480. Total new ICE vehicles to be purchased: 40,250

Table G-2
Estimated Yearly Gasoline Consumption Change Under Alternative 2, Years 1 – 8

Year	LLVs		Delivery POVs		Gasoline Usage (gallons)	ICE NGDV		Gasoline Usage (gallons)	Gasoline Savings (gallons)
	Rural	City	Rural	City		Rural	City		
1	0	0	0	0	0	0	0	0	0
2	238	807	42	0	876,117	257	754	585,868	290,249
3	2647	8,898	467	0	9,689,315	2,717	7,972	6,194,144	3,495,170
4	6,965	21,570	1,292	0	24,223,214	3,813	11,187	8,692,385	15,530,829
5	12,197	35,697	2,106	0	40,875,052	3,813	11,187	8,692,385	32,182,667
6	16,860	50,159	2,981	0	57,112,073	6,354	18,646	14,486,966	42,625,107
7	21,620	64,621	3,759	0	73,417,809	8,895	26,105	20,281,548	53,136,262
8	25,679	76,401	4,400	0	86,920,866	10,229	30,021	23,323,694	63,597,172
Cumulative Total					**293,114,446**	**Cumulative Total**		**82,256,991**	**210,857,456**

Note: Vehicle numbers reflect cumulative replacements by each year. Total LLVs and Delivery POVs to be replaced: 106,480. Total new ICE vehicles to be purchased: 40,250

Table G-3
Estimated Yearly Gasoline Consumption Change Under No-Action Alternative, Years 1 – 8

Year	LLVs		Gasoline Usage (gallons)	ICE NGDV		Gasoline Usage (gallons)	Gasoline Savings (gallons)
	Rural	City		Rural	City		
1	0	0	0	0	0	0	0
2	280	807	905,870	257	754	585,868	320,002
3	3,114	8,898	10,020,134	2,717	7,972	6,194,144	3,825,989
4	8,622	23,390	26,862,275	5,430	15,934	12,380,025	14,482,250
5	13,705	38,307	43,495,849	10,513	30,851	23,969,530	19,526,319
6	18,788	53,224	60,129,422	15,596	45,768	35,559,034	24,570,387
7	23,871	68,141	76,762,995	20,679	60,685	47,148,539	29,614,456
8	27,548	78,932	88,795,701	24,356	71,476	55,532,372	33,263,329
Cumulative Total			**306,972,245**	**Cumulative Total**		**181,369,512**	**125,602,733**

Note: Vehicle numbers reflect cumulative replacements by each year. Total LLVs and Delivery POVs to be replaced: 106,480. Total new ICE vehicles to be purchased: 95,832

Table G-4
Estimated Yearly Electricity Consumption Under Alternative 1, Years 1 – 8

Year	BEV NGDV		Electricity Consumption (kWh)	COTS BEV		Electricity Consumption (kWh)	Total Electricity Consumption (kWh)
	Rural	City		Rural	City		
1	0	0	0	0	0	0	0
2	23	53	446,984	931	6,269	43,197,572	43,644,556
3	397	926	7,769,634	1,196	8,054	55,496,589	63,266,223
4	4,444	10,383	87,057,493	2,745	18,485	127,372,242	214,429,734
5	10,490	24,510	205,503,214	2,745	18,485	127,372,242	332,875,456
6	13,487	31,513	264,217,936	2,745	18,485	127,372,242	391,590,178
7	13,487	31,513	264,217,936	2,745	18,485	127,372,242	391,590,178
8	13,487	31,513	264,217,936	2,745	18,485	127,372,242	391,590,178
Cumulative Total			**1,093,431,133**	**Cumulative Total**		**735,555,369**	**1,828,986,502**

Note: Vehicle numbers reflect cumulative replacements by each year. Total new BEVs to be purchased: 66,230

Table G-5
Estimated Yearly Electricity Consumption Under Alternative 2, Years 1 – 8

Year	BEV NGDV		Total Electricity Consumption (kWh)
	Rural	City	
1	0	0	0
2	23	53	446,984
3	397	926	7,769,634
4	4,444	10,383	87,057,493
5	10,490	24,510	205,503,214
6	13,487	31,513	264,217,936
7	16,484	38,516	322,932,658
8	19,850	46,380	388,870,536
Cumulative Total			**1,276,798,455**

Note: Vehicle numbers reflect cumulative replacements by each year. Total new BEVs to be purchased: 66,230

Table G-6
Estimated Yearly Electricity Consumption Under No-Action Alternative, Years 1 – 8

Year	BEV NGDV		Total Electricity Consumption (kWh)
	Rural	City	
1	0	0	0
2	23	53	446,984
3	397	926	7,769,634
4	3,192	7,456	62,522,116
5	3,192	7,456	62,522,116
6	3,192	7,456	62,522,116
7	3,192	7,456	62,522,116
8	3,192	7,456	62,522,116
Cumulative Total			**320,827,199**

Note: Vehicle numbers reflect cumulative replacements by each year. Total new BEVs to be purchased: 10,648

APPENDIX H

POSTAL SERVICE'S NGDV STATEMENT TO HOUSE COMMITTEE ON OVERSIGHT AND REFORM (APRIL 5, 2022)

Statement of Next Generation Delivery Vehicle Executive Director Victoria K. Stephen before the House Committee on Oversight and Reform, Hearing: "It's Electric: Developing the Postal Fleet of the Future" – April 5, 2022

STATEMENT OF

NEXT GENERATION DELIVERY VEHICLE EXECUTIVE DIRECTOR

VICTORIA K. STEPHEN

before the

House Committee on Oversight and Reform

Hearing: "It's Electric: Developing the Postal Fleet of the Future"

April 5, 2022

Good morning, Chairwoman Maloney, Ranking Member Comer and Members of the Committee. Thank you for calling this hearing on fleet electrification.

My name is Vicki Stephen, and I am Executive Director of the Postal Service's Next Generation Delivery Vehicle (NGDV) program. My team and I lead a rigorous project management function to help support the broad cross-functional preparation for the NGDV rollout, a cornerstone in our Delivering for America (DFA) 10-year Strategic Plan. The team also leads the execution of the electric vehicle charging infrastructure development and deployment to enable the electrification of our delivery fleet.

I have previously served in a broad variety of executive roles, including as Director of Emerging Business Technology, Lead Executive for Small Business Strategy Development, Director of Mailing Services, and Director of Brand Shipping, and in executive roles in Engineering including serving as the Director of Retail and Delivery Technology. I have worked in a variety of field and operational roles, serving as a Plant Manager, and in operations support and industrial engineering roles, both at the field and Area levels.

Weighing the Tradeoffs of Electrification

The Postal Service welcomes the opportunity to share more broadly both the opportunities and challenges that accompany our move to include a substantial order for electric vehicles in our NGDV delivery fleet procurement. As you know, on March 24, we placed an order for 50,000 vehicles — of which, 10,019 will be battery electric vehicles (BEV) — making good on our pledge to accelerate our electric vehicle strategy as our financial condition improves and as we refine our network and vehicle operating strategy. However, any consideration of our strategic opportunities and challenges must be grounded in a full understanding of not only our unique delivery mission and policy mandates, but also our organizational and financial constraints. We find that many discussions of Postal Service fleet electrification have overlooked these irrefutable limitations. It would be irresponsible for us to do so, however.

As part of our Universal Service Obligation, the Postal Service delivers to 163 million addresses, in all climates and topographies, six days per week. And Congress has directed that we must do so in a financially self-sufficient manner. This is an impressive daily accomplishment that serves the American people in such an important way. Our reach and responsibility are unmatched—delivering nearly half of global mail volume.

It is vital that we provide our over 200,000 mail carriers with appropriate vehicles to help support this daily service mission. We owe it to these employees and to the communities they serve to provide vehicles that allow carriers to efficiently complete their work, with advanced safety and security features, better fuel economies, and amenities we expect in our own, personal vehicles. The Postal Service's delivery vehicles are part of a very specific and robust mission, which cannot be compared to other private delivery or government fleets in nature, use case or scope. In addition to our unique use case, unlike other agencies that seek to electrify their fleets, the Postal Service is required by law to be financially self-sustaining and operate absent Congressional appropriations. As such, we need to make fiscally responsible decisions and be mindful of what we can afford and execute.

The recently passed *Postal Service Reform Act* helps create the financial headroom necessary to bring us closer to financial sustainability, but it is just one part of our DFA plan that requires significant self-help actions on our part. Acquiring the NGDVs – whether electric or not – is also

a part of the strategic plan, but on the investment side of the ledger. It must be accomplished to satisfy our delivery mission, but it does not address our current losses.

Replacing our aged fleet is a critical part of the organizational transformation of the Postal Service. But it is by no means *the only* critical part. It is well understood that electric vehicles and their infrastructure cost more to purchase than their combustion engine counterparts. Every additional dollar spent on buying electric vehicles is one fewer dollar that can be spent on a long list of other critical capital needs and operational objectives at the Postal Service. Similarly, every investment in the postal delivery network must be weighed against postal rate increases that might also be used, in part, to help pay for it.

The Postal Service remains in a crisis condition. We have many competing operational objectives that we are obligated to address in the immediate term. Our statutory mission is to provide universal postal services in a financially self-sufficient manner. Fleet electrification is a near term opportunity, but not a mission critical one. Our responsibility must be to make fiscally and operationally prudent decisions to ensure that we can serve the American people well beyond the next ten years. Our ambition can also include electrification, but it should not come at too severe a cost, nor should it interfere with other operational and financial objectives.

Even so, we understand there is a larger national interest in moving toward an energy efficient and environmentally sensitive future. We recognize this interest cannot overlook the largest portion of the federal vehicle fleet. In planning our vehicle acquisition strategy, we made the decision to do our part by participating in this national priority. But it is also our responsibility to do so without threatening our mission or thwarting our other organizational objectives. We cannot make decisions about our delivery fleet in isolation, and without reference to the many, often competing, priorities that we face. It would be negligent for an essential service agency with a delivery mission to overlook or under-prioritize:

- Our aging, and in many cases dysfunctional, facilities – many of which suffer from deferred maintenance due to neglect and disinvestment; and which are places of work for our 650,000-person workforce;
- The need to rationalize our delivery network, which was built in and for a different era and volume and mix of mail and packages, and which will influence our electrification rollout planning;
- Acquiring package sortation equipment and annexes to facilitate the flow of mail and packages; and
- Restoring the Postal Service as an employer of choice and career-worthy organization, including by investing in training and development and converting more positions from non-career to career.

We have gained substantial learnings around electrification of our fleet throughout the NGDV procurement process. This has continued following the contract award in February of 2021. These learnings, and our rich and comprehensive experience managing the vehicle fleet needed to support our service mission, informed our purchase order placed on March 24. We evaluated the route characteristics that are best suited to electrification. We analyzed the challenges and feasibility of installing charging infrastructure at the wide variety of over 17,000 facilities that may one day house electric vehicles. We studied the battery technology and capability evolution.

Over the same period, we have begun the implementation of the DFA plan. We are focused on the opportunities and tensions that exist when prioritizing between needed network improvements, route rationalization, facility and technology needs, and workforce considerations, to name a few. These considerations inform the tradeoffs required given our constrained financial condition and our sometimes-competing priorities.

Our recent order demonstrates our ambitious commitment to include electric vehicles as a significant part of our delivery fleet. We are compelled to act prudently to continue to meet our commitment to serve the American public, and we remain resolute in making decisions that are grounded in our financial situation and what we can realistically achieve operationally.

The Urgent Need for Replacement

Many of our 190,000 delivery vehicles have been on the road for more than 30 years and lack basic safety features, including air conditioning, air bags, and anti-lock brakes, which are standard in most vehicles today. Those vehicles also do not incorporate the most modern thinking in ergonomic design, which would help contribute to the health and safety of our employees. We have an urgent need to replace these vehicles that are powered by inefficient gasoline engines. There are also daily operational, maintenance, environmental and direct cost impacts associated with supporting our current delivery fleet.

The safety of the men and women of the Postal Service is our number one priority, and they have waited long enough for the NGDV. We owe it to our carriers and the communities we serve to provide safer, more efficient vehicles to fulfill our universal service obligation to deliver to 163 million addresses in all climates and topographies six days per-week. And we must continue to move forward.

The search for replacement vehicles for our delivery fleet, which started in 2015, resulted in the purpose-built, right-hand drive NGDVs that will deliver air conditioning and heating, improved ergonomics, and some of the most advanced vehicle and safety technology – including 360-degree cameras, advanced braking and traction control, a front-and rear-collision avoidance system that includes visual, audio warning, and automatic braking. The vehicles will also have increased cargo capacity to maximize efficiency and better accommodate the changing mail mix across mail and packages.

NGDV Feature Highlights:

The NGDV serves as the cornerstone for a future-ready delivery fleet that will address varying service requirements, shifting consumer demands, and enable accelerated integration and adoption of emerging technologies over time. It will provide carriers with more fuel-efficient vehicles and advanced safety features, while providing the expanded cargo capacity needed to support today's changing mail mix and package volumes.

This historic investment is part of a broader Postal Service strategy to transform our financial performance and customer service over the next 10 years through significant investments in people, technology, and infrastructure. We have been putting off this kind of capital investment for the better part of a decade given our precarious financial situation, but our DFA plan has made this significant step for the organization possible.

The NGDV program is just one piece in the Postal Service's Mixed Delivery Fleet Strategy, designed to effectively support delivery operations. This approach will enable the delivery fleet to leverage the most appropriate type of vehicle for each route based on the characteristics of that route. For routes that include very little "curbside delivery" to mailboxes located at the curbline, a less expensive Commercial Off the Shelf (COTS) Left Hand Drive vehicle may be a more cost-effective solution to complete delivery activities. Routes with high proportions of curbside deliveries require purpose-built, Right Hand Drive vehicles such as the NGDV to efficiently and ergonomically complete deliveries. This strategy helps moderate overall investment cost, while matching the right vehicle type to the right route.

The NGDV program provides for the introduction of internal combustion engine (ICE) and electric-powered, purpose-built vehicles that deliver significant reductions in emissions and improvements in fuel economy versus the existing delivery vehicle fleet. While the program calls for the fleet mix to be at least 10 percent battery electric vehicle (BEV), the Postal Service

recognizes a 100 percent mix of BEVs would deliver even greater emission benefits, and the program is designed with the flexibility to increase this mix.

We will continue to pursue the acquisition of additional BEVs as funding – from improvements in our financial position due to ongoing implementation the DFA plan, or congressional sources – becomes available, and as our operational strategy evolves and the electric vehicle infrastructure improves. But the process needs to keep moving forward, and the goal of electrification is only one of the factors we must manage in the context of our overall mission.

Unique Scope and Requirements

The Postal Service has very specific vehicle requirements to effectively support our unique service mission over the course of time. The required parameters are essential to operational efficiency, ergonomic design, and maintainability over decades of use. We have received criticism related to vehicle cost and deployment. Yet that criticism usually does not reflect an understanding that the NGDV is a purpose-built vehicle designed to meet our unique use requirements. In other words, the vehicle is more expensive than other options because it is purpose-built, to satisfy our right-hand drive, ergonomic, and maintenance requirements for 20+ years. Also, because the NGDV is purpose built, it represents a niche market that does not benefit from economies of scale. Comparisons to COTS vehicles are simply not valid because those are produced in large quantities for standardized use applicability. The NGDV procurement is what is known as a "boutique" procurement. Manufacturers cannot capitalize on their development costs for creating right hand drive (RHD) vehicles because the vehicle is unlikely to have broad use applications. Moreover, the cost differential between our ICE and BEV NGDV is comfortably within the range of price differentials of commercially available vehicles with both an ICE and a BEV drivetrain.

Myth: Cost for vehicle is too high

RHD: Our first specific vehicle requirement is for RHD in order to efficiently deliver to curbside mailboxes. Approximately 60 percent of all carrier routes with assigned vehicles are defined as "curbside delivery" routes and require a RHD vehicle for effective delivery. Additionally, routes that are characterized as "Park and Loop" or "Dismount" routes typically have some proportion of curbside deliveries, even if they also have some walking segments within the route. All of these route's benefit from use of RHD vehicles for safe ingress/egress from the vehicle, as well as optimization for the curbside delivery points.

Ergonomics: In order to support ergonomic curbside deliveries, the height of the windowsill on the right side of the vehicle must be much lower than in other vehicles so that the height of the sill is near or at the height of the mailbox. If the sill is higher than the mailbox, carriers must lift their arms and wrists above the sill while holding the mail/packages, and then drop their wrists to the level of the mailbox. The space is constrained, and results in difficult positioning and potential carpal tunnel impacts over the course of time. Carriers assigned to curbside delivery routes will go through this motion hundreds of times each day (on average, 500-600 times), 5 or more days per week, for years on end. To prevent repetitive motion injuries that could result from this exposure, the Postal Service specifies a RHD windowsill height that aligns the bottom of the window with the height of the mailbox, with a range of seat positions that place our carriers ranging from 5th percentile female to 95th percentile male in the optimum location, and enables a comfortable, smooth action for carriers to move mail from the vehicle into the mailbox.

Maintainability: The Postal Service has decades of experience in working with a variety of vehicles to support curbside mail delivery. In the 1970-80s, the Postal Service used a range of COTS vehicles. The results with COTS vehicles are very predictable: the wear and tear of postal delivery operations on vehicle components is so severe that COTS vehicles typically last 6-7 years, less than half of the expected useful life for this class of vehicle. COTS vehicles are not designed for the constant starts/stops every day, or for window operation to occur repeatedly through the operating day in bad weather, or even for the doors to be opened/closed repeatedly throughout the day. The vehicle frames are often subject to extensive wear and rust. The maintenance costs associated with supporting these operational needs are significant and extend well beyond COTS vehicle warranty coverage. In the late 1980s, the Postal Service broke this cycle, and shifted to a set of requirements that ruggedized key components of the vehicle to support a 20+ year life cycle. The result was the Long-Life Vehicle (LLV) – of which approximately 160,000 are still operating some 34 years later. This "ruggedized" requirement set is not present in COTS vehicles – and with the LLV, it resulted in a 40+ percent premium on the acquisition cost of the vehicle; however, it enabled the Postal Service to reliably operate and maintain these vehicles over the course of decades of hard daily use. Even COTS vehicles acquired within the last 10 years continue to fail at half of the expected life span, resulting in much more frequent vehicle replacements and associated costs.

Myth: Electrification should be 75 – 100 percent

Of the over 213,000 routes that require a vehicle to support delivery operations, there are 12,500 routes over 70 miles in length that are not candidates for electrification today without the (cost effective) availability of a denser battery. In addition, the Postal Service included an order for 5,000 All-Wheel Drive ICE vehicles in our NGDV order, in instances where the routes and climate are not favorable for BEV application. These vehicles will be deployed to areas with the most difficult winter climates and greatest average snowfall to ensure appropriate traction and maneuverability in these climates. Both of these constraints on BEV capacity will likely lessen with technological improvements over time, but these routes need to be eliminated from the consideration set for electrification based upon current and near-term foreseeable technology. The 70 percent electrification target (provided in response to recent inquiries from Congress regarding the impact that potential congressional funding could have) reflects route constraints and expected availability of sufficient BEV alternatives over the coming years. The Postal Service cannot affordably or realistically reach a higher electrification acquisition percentage by the end of the decade even if provided additional funding, absent technological breakthroughs at affordable price points.

Myth: Battery is too expensive and does not assume trends

The Postal Service has engaged in extensive review of battery capabilities and the materials supply market for battery development. The vast majority of automotive BEV batteries produced and available on the market are for 45 kWh batteries used in primarily passenger vehicle applications. These batteries are now produced in quantities of hundreds of thousands to millions. The cost of BEV batteries has certainly been declining over the last several years; however, the rate of decline, as shown by Bloomberg New Energy Finance (BNEF), is now flattening. Battery costs are currently projected to continue to decline slightly through the end of the decade.

The NGDV battery is a 94kWh battery, more than twice the size of the typical commercially produced, smaller batteries. By comparison to consumer applications, the NGDV is a much larger battery, there are fewer producers, fewer applications, and limited economies of scale to produce them in the marketplace. We also expect that the prices for larger batteries will continue to decline over time, but not at the rates that more high-volume consumer application batteries have declined.

There have also been recent impacts on the marketplace. Raw materials are controlled in very specific regions of the world, and the recent imposition of sanctions against Russia have upset global markets for production of nickel, an essential component in many lithium-ion battery chemistries. Dramatic price increases in nickel since March 2022 have raised EV industry concerns about automakers' lack of control over battery supply chains and the potential for more expensive raw material costs to lead to higher battery costs, after steady declines over the last decade.

The Postal Service now has a contract commitment in place, which locks in pricing and access to the required materials for the initial production quantity and gets the NGDV battery order into the production queue for these valuable resources.

Myth: Maintenance comparison between COTS and EVs was flawed

The Postal Service has more than 30 years of usage and maintenance experience for purpose-built, RHD vehicles. We have extensive records over this time, about the types of system failures and maintenance needs across a fleet of 160,000 vehicles that are used on the postal drive cycle every day for years on end. This extensive experience provides us with exceptional insights into the system components that are most likely to be subject to wear and tear, and the likely expectation that can be used for predictive maintenance purposes. And while the ICE NGDV is a more complex vehicle than the LLV and contains systems that do not exist on the LLV, it provides an exceptional, empirical model for assessing maintenance requirements on the NGDV for the decades ahead. Some systems will be very similar. Data on brake usage, tire wear, air filters, chassis and frame issues, body work – are all examples where our rich 30+ year history with the LLV is expected to very accurately inform expectations for the NGDV.

The Postal Service assembled a team of experts from our fleet management, vehicle engineering and supply management teams, and performed a comprehensive assessment of LLV data. The team organized the data into 22 vehicle subsystems, and assessed component by component, the level of work that would be required to support the same vehicle subsystems on the ICE NGDV. In addition, the team assessed expected requirements for the BEV NGDV. Where the corollary ICE system no longer exists in the BEV version of the vehicle, the associated costs were removed. Where the BEV system has components without Postal history, the team relied on manufacturer and industry research to assess potential impacts. For example, BEVs are much heavier than ICE vehicles, and as such, tire wear is expected to be higher. This factor was incorporated into the analysis. For systems that are common on both versions of the vehicle (Frame, Steering, Suspension, Lights, Body, Instrumentation, Wheels, etc.), the team used the same data.

The team also leveraged data points from the Department of Energy (DOE) and other government sources in completing these estimates. It is noteworthy that DOE and Argonne National Labs applied UDDS drive cycles in developing their recommendations; the Postal Service used our own drive cycle in developing our analysis. Also of note, the Argonne model assumed no maintenance is required on several BEV systems (such as transmission service, motor controllers, engine oil and coolant, or power electronics). BEVs require *less* maintenance, which is reflected in our analysis. But, certainly, BEVs are not maintenance-free. The Argonne model also does not include a mid-life battery replacement in its maintenance and repair costs. The Postal Service expects 20-year life vehicles, and specified 10-year batteries, so this cost was included in the analysis.

The team's comprehensive analysis is based on decades of data for vehicles that will be used in the exact same environment and drive cycles, and comprehensively evaluates the impact of the shift to the NGDV. We recognize that other observers, analysts and even agencies do not have the benefit of our use case-specific experience and data, so they are not able to reach the same informed conclusions.

Myth: Savings could be readily achieved with COTS or other producers

COTS vehicles represent only a small portion of the solution for the Postal Service. As noted above, approximately 60 percent of all routes with vehicles assigned are categorized as curbside delivery routes that require RHD vehicles, and design optimized for ergonomics. The Postal Service actively uses COTS vehicles in the delivery fleet, but as noted above, they are not ruggedized for our drive cycles, and typically fail at half of the expected service life of the asset. The Postal Service actively employs use of the single COTS RHD vehicle available on the market. This vehicle is not optimized for curbside delivery ergonomics – the windowsill is too high, and the "B-pillar" behind the driver door is far too far forward for the carrier to comfortably deliver mail into the required mailbox. In addition, the side mirror is positioned in such a way that it often will strike or impact with the mailbox or obstruct the carrier's access to the box – necessitating the carrier to pull up farther from the mailbox, sticking further into moving traffic, and for some carriers, the distance to avoid hitting the mirrors is so great that they have to park, dismount and walk to the box to make the delivery. When extrapolated across multiple delivery sites and multiple days of the week, these impacts have far-reaching effects on the efficiency of the curbside delivery process, and worse yet, on potential repetitive-motion injury to the carriers.

LHD COTS vehicles cannot be used to deliver to curbside delivery points and would dramatically increase costs and safety concerns for the delivery operation, as carriers would be on the wrong side of the vehicle to insert mail into the mailbox, and would need to dismount into active traffic, and walk around to the right-hand side of the vehicle to put mail into the mailbox. This is impractical and costly and introduces vast inefficiencies and safety risks into the process. These COTS vehicles are also wearing out and require replacement at the 6–7-year mark of their expected 13+ year service life, and thus must be replaced twice as often. The Postal Service actively uses COTS LHD vehicles on routes with very few curbside delivery points. These types of routes do not subject the vehicle to the same abusive stop-and-start USPS drive cycle as those on curbside delivery routes – and yet they still fail at half the expected service life. COTS LHD vehicles have a place in our fleet strategy, but do *not* provide a solution that can be extended to the majority of mounted routes. The Postal Service monitors

developments in the COTS light duty vehicle market and participates in active and ongoing evaluation of COTS alternatives, including potential COTS electric vehicles.

Myth: Our estimates for charging infrastructure are too high

The Postal Service has not yet released a solicitation for Electric Vehicle Supply Equipment (EVSE – or charging station equipment). Those who participate in the solicitation process will be able to submit proposals for evaluation, which could potentially include partnered offerings. All proposals submitted will be evaluated through the solicitation process and assessed for technical effectiveness as well as price. Those determinations will be made in the coming months.

17,768 delivery units have delivery vehicles departing daily in a mix of 39 percent urban locations, 14.5 percent suburban locations, and 46.5 percent rural locations. This incredibly diverse range of carrier facilities and locations may host new and potentially electric vehicles.

Installing infrastructure in a multitude of Postal facilities is challenging, but essential. Even the initial purchase order of 10,019 electric vehicles will strain resources to install infrastructure. The U.S. General Services Administration (GSA) notes that installation costs for EV charging stations for winter/spring 2022 are at least 50-60 percent of the total project. GSA estimates that if an EV charging station costs $7,000, the installation costs will be between $7,000 and $8,400, which is consistent with the Postal Service's estimates. Typical modifications required to install infrastructure will include electrical power panel or transformer upgrades, site surveys and permitting, installation of wiring from power panel to charging stations, and installation of charging station hardware, and may include electrical power panel or transformer upgrades.

The Work to Get Here

Contract Award

The NGDV procurement program formally began in January 2015. After several years of industry outreach, study, evaluation, and prototyping, the Postal Service conducted a robust competitive production competition and awarded Oshkosh Defense an infinite delivery/infinite quantity (IDIQ) contract to manufacture our NGDV in February 2021. The IDIQ contract provides the Postal Service the ongoing ability to purchase between 50,000 and 165,000 NGDVs over the 10-year contract period. The vehicles will be equipped with either fuel-efficient ICE or BEV powertrains.

ICE and BEV drivetrains can be purchased in any proportion by placing delivery orders throughout the contract life; however, our comprehensive Total Cost of Ownership (TCO) model to assess offerors and determine the appropriate mix of vehicles points to a substantially ICE fleet, due largely to higher acquisition and infrastructure costs for BEVs.

Total Cost of Ownership Analysis

In order to be prepared to evaluate delivery vehicle fleet alternatives and the appropriate mix of vehicles, the Postal Service developed a comprehensive TCO model to help us assess delivery fleet opportunities. The Optimal Fleet Mix model allows us to consider individual route characteristics for more than 200,000 carrier routes across the nation and assess the

appropriate vehicle to assign to a given route. For example, COTS vehicles are cheaper to acquire, but make sense to assign on routes with high proportions of “centralized delivery” (neighborhood box units with several delivery points concentrated together), and few curbside delivery points. NGDVs are typically assigned to routes with higher proportions of curbside delivery points since they are designed to efficiently and ergonomically support this type of delivery.

The model considers a very broad range of factors, including route composition; acquisition costs; fuel and electricity rates and 20-year expected pricing trends; monthly average temperature ranges across the country; annual snowfall; maintenance expectations; infrastructure costs; and vehicle type and drive train. These variables are assessed for each of the 200,000+ routes to align the optimal vehicle to the route. It also enables the Postal Service to see how the recommended mix of vehicles may change as a result of assessing individual variables, or for any given acquisition year.

Today it is simply more expensive to acquire a BEV than an ICE for similar vehicle models. Both consumer passenger vehicles and commercial light-duty vehicles available on the market exhibit anywhere from a 30 percent to a near 50 percent premium for BEVs versus comparable ICE. In addition to the vehicle acquisition cost differential, BEVs require funding for the charging system infrastructure as well.

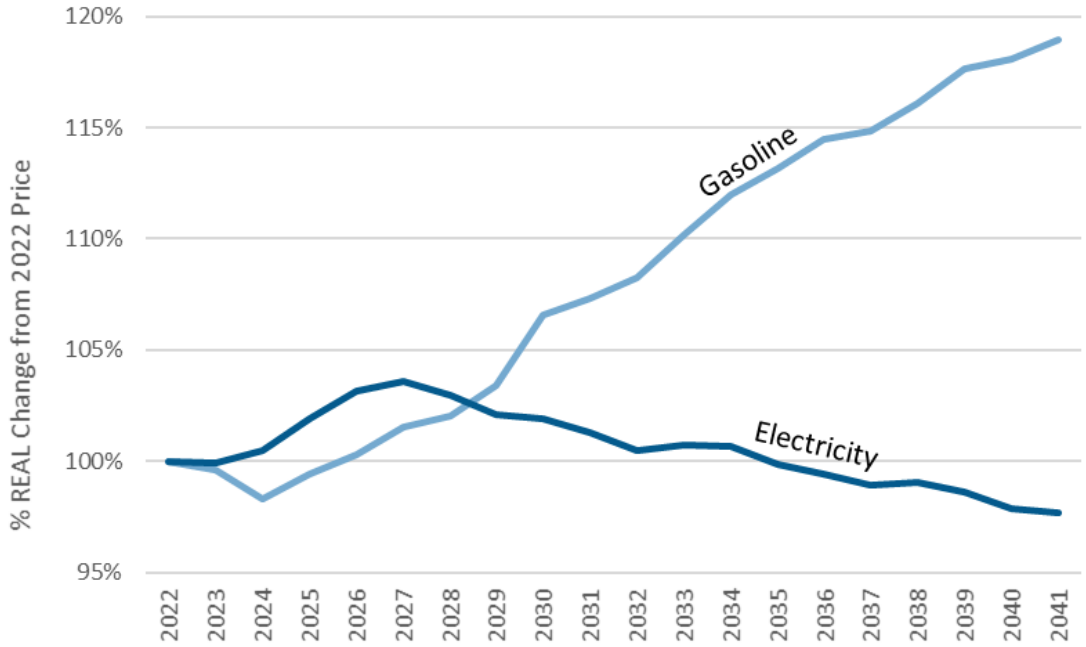
Given projected changes in the market, we expect to see both acquisition costs and battery costs decline before the end of the decade, but BEV options may not reach acquisition price parity with ICE vehicles for many years. Differentials between gasoline and electricity prices are also expected to widen further by the end of the decade. Both of these factors favor BEVs and will make BEVs a clear and compelling choice by later this decade. But the Postal Service has an urgent and immediate need to replace our 30+ year old LLVs with vehicles that are more fuel efficient, produce fewer emissions, and provide our employees and the communities they service with advanced safety features that are now the norm. The Postal Service needed to act now – while BEVs are clearly more expensive. Our TCO analysis shows that for an acquisition made in 2022, BEVs continue to remain more expensive than ICE throughout their 20-year expected life. The OIG’s recently published white paper shows the same results from their independently developed and executed TCO model.

BEVs are typically justified based on fuel and maintenance savings relative to ICE vehicles, so the Postal Service focused deeply on the analysis in these areas.

Fuel Costs:

The fuel cost assumptions in our TCO model were informed by the prices for both gasoline (in $/gallon) and electricity (in $/kWh) in 2020 real dollars. The model assumed 2022 national average fuel costs of $3.09/gallon and $0.109kWh and created future fuel prices based on data published by the US Energy Information Administration (EIA). This data was updated in 2021 by EIA and the Postal Service included these updates in subsequent analyses.

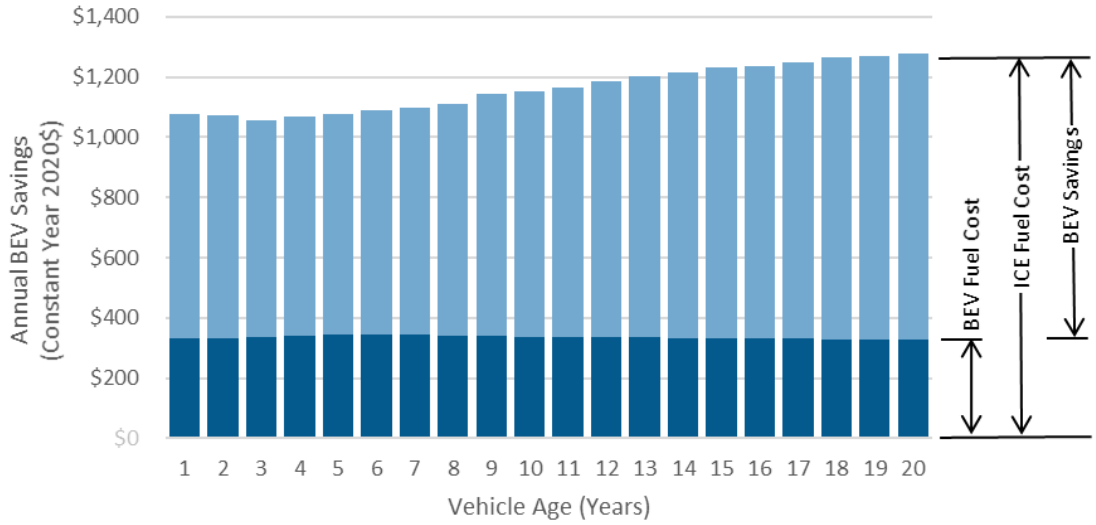
Forecasted 20-Year Real Fuel Price Indices



Source: U.S. Energy Information Administration (EIA)

As depicted in this chart, the USPS projects fuel cost savings for BEV vs ICE to equate to an annual average difference of $827 (per vehicle).

Forecasted 20-Year NGDV Fuel Cost Comparison



In early program planning, the Postal Service openly communicated our intent to acquire at least 5,000 BEV NGDVs within our vehicle delivery order in recognition of the coming shift in the marketplace. We have also continued to run sensitivity analyses to assess the impact of changes in key variables, such as fuel price. These analyses began to show small numbers of BEV vehicles in the vehicle mix recommendation, but well below the 10 percent level planned in the delivery order. The team ran scenarios with baseline gasoline prices at incrementally higher price levels up to $4/gallon. On March 16, 2022, the EIA published updated information in its *Short-Term Energy Outlook*, showing retail gasoline prices through the next couple of years. They project that gas prices will be at $3.79/gallon by the end of 2022, and at $3.33/gallon in 2023. The current escalation in gas prices certainly begins to favor a shift in the vehicle mix toward BEVs; however, these prices are expected to recede, and these lower values are well within the bounds of the TCO analysis. By completing the sensitivity analysis on gasoline prices and trends and given the changes in our financial situation as a result of Congress's enactment of the Postal Service Reform Act of 2022 and operational improvements being realized through our DFA plan, the Postal Service was able to adapt our capital plan and more than double the number of BEVs included in the NGDV delivery order to 10,019. This change is an acknowledgement of the shifting market conditions and is an excellent example of the utility of the TCO model in assessing changing conditions and adjusting accordingly.

Maintenance Costs:

To develop an assessment of maintenance costs, the Postal Service engaged a team of fleet maintenance and engineering experts to use our 30-year history on LLV maintenance on 160,000 vehicles, using the routes and drive cycle to which NGDVs will be subjected for the coming decades. The team used rich historical data to assess the impact on maintenance of shifting to NGDV, which includes a host of new technologies that will also require maintenance. The team prepared a system-by-system analysis of 22 vehicle systems present in the NGDV to assess expected impact to vehicle maintenance and determined projected impact for both ICE and BEV NGDVs. In some cases, the systems differ between BEV and ICE. For example, an ICE vehicle requires an alternator. There is no alternator on a BEV, but instead the BEV requires a DC-DC converter and an onboard charging unit. The team evaluated each system and component and prepared a comprehensive assessment, noting where systems were eliminated, and where new systems were introduced to account for required maintenance activity and related costs.

It is important to note that NGDVs have significantly more complexity and many systems that do not exist in today's LLV fleet. LLV's have no: airbags, anti-lock braking system, traction or stability control, electric parking brakes, collision warning systems or sensors, cameras or display screens, blind spot detectors, proximity warning systems, auto high-beam headlights, electronic locks or pushbutton start. All of these systems will require new support mechanisms – both for parts and labor – perhaps not significantly in the first years of operation, but certainly over the course of decades of use. Our maintenance history data is incredibly useful in identifying the types of issues that are expected to occur over time, and this thorough analytical approach is based on decades of experience, and supplier information for those new components.

Fundamentally, after this comprehensive analysis was completed, there are a few key takeaways that encapsulate our maintenance expectations:

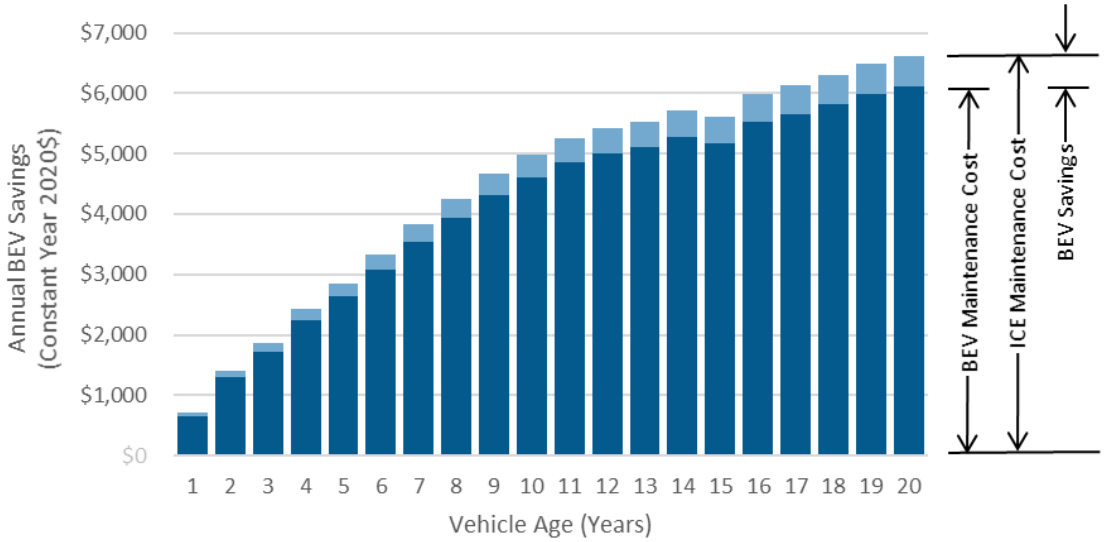
1) We expect NGDV BEVs to require 8 percent less maintenance support than ICE NGDVs, or a "92 percent maintenance ratio" – in other words, we expect to spend $0.92

on BEV maintenance for every dollar spent on ICE maintenance. The Department of Energy (DOE) completed a study that considered BEV maintenance should be at $0.60 for every dollar spent on ICE maintenance, or a 60 percent maintenance ratio. The Postal Service's ratio is higher than DOE's for several reasons, but notably:

a. DOE does not include the replacement cost for the BEV traction battery in its estimates. NGDV batteries have a service life of 10 years, so the Postal Service projections include the replacement cost of the battery approximately halfway through the vehicle's expected service life. The traction battery is the single greatest contributor to the cost differential between ICE and BEV and makes a significant difference in the considered maintenance costs and ratio.
b. DOE does not include maintenance costs for several of the key BEV systems, including the motor controllers, battery charger, power electronics, transmission service, 12 VDC converter, battery charger or charger connectors. These items are NOT maintenance-free, and the Postal Service expects they will need to be repaired or replaced during the life of the vehicle – especially a 20-year vehicle.

The Postal Service's analysis is based on our rich historical data – not projections or vendor cut sheets, but on actual vehicle usage over decades of use. We know the types of vehicle issues that occur for delivery fleet vehicles applied to our drive cycle over decades of use and have applied this experience to the analysis.

Forecasted 20-Year NGDV Maintenance



TCO Summary:

As shown here, both the fuel cost comparison and the maintenance comparison show that costs are lower for supporting and operating BEVs when compared to ICE. However, these relative benefits are not enough to overcome the higher BEV acquisition costs and the infrastructure costs over the 20-year life of the vehicle.

The TCO model is deeply rooted in decades of operational and maintenance experience with purpose-built vehicles optimized for mail delivery and used on the aggressive USPS drive cycle for years. The analysis is informed by rigorous study and evaluation by experts in this field, and

the model is built around expertise and data sets developed by governmental experts in these areas. The Postal Service's model has already been effectively used to conduct ongoing sensitivity analyses and was leveraged to help assess and change our investment and fleet decisions to reflect changing market conditions.

National Environmental Policy Act (NEPA) Requirements Were Carefully Followed

MYTH: The NEPA process conducted by the Postal Service is incomplete, nonresponsive and based on flawed analysis

NEPA requires federal agencies, including the Postal Service, to assess environmental impacts of major actions and consider reasonable alternatives. In early 2021, we initiated the Environmental Impact Statement (EIS) process for our Proposed Action, the purchase over ten years of 50,000 to 165,000 purpose-built RHD NGDV vehicles, at least 10 percent of which would be BEV.

We published a Notice of Intent on March 4, 2021, opening a 45-day public comment period. During this "scoping period," we consulted with the U.S. Environmental Protection Agency (EPA) and the Council on Environmental Quality (CEQ) regarding our plans for the EIS. As part of this consultation, in April and May of 2021, we solicited EPA's comments on our outline for the Draft EIS and the three reasonable alternatives to the Proposed Action under consideration – (1) 100 percent RHD BEV NGDV, (2) 100 percent RHD internal combustion engine (ICE) Commercial Off-the-Shelf (COTS) vehicles, and (3) the statutorily-required "No Action" Alternative. EPA recommended that we consider an additional alternative using hybrid-fuel or all-electric vehicles. In response, we added a fourth alternative, a LHD COTS BEV based on the Ford E-Transit, even though neither the Ford E-Transit nor any other COTS BEV was yet to market. On June 10, 2021, EPA informed us that it appreciated our incorporation of its comments and recommendations as well as the expanded analysis including an all-electric fleet.

Additionally, we publicly reported in February 2021 that we had allocated up to $482 million, of which only a small portion has been spent, for non-recurring engineering and production tooling costs as part of prudent agency planning in the event that our Proposed Action would be the ultimate result of our NEPA review. As this spending neither had an adverse impact on the environment nor limited our choice of reasonable alternatives, it was fully compliant with NEPA. Moreover, neither EPA nor CEQ provided any comment during our months-long consultation process claiming that the design and tooling work posed a problem under NEPA.

We published the Draft EIS on September 3, 2021, which initiated a second 45-day public comment period. We then published the Final EIS on January 7, 2022, initiating a mandatory 30-day wait period. In the Final EIS, we selected the Proposed Action of 50,000 to 165,000 RHD NGDV, with at least 10 percent being BEV and the remainder ICE, as our Preferred Alternative. After EPA requested additional time to review the Final EIS, we agreed to not issue a Record of Decision prior to February 14, 2022.

The 340-page EIS reflects a thorough study of factors including air quality, transportation, noise, socioeconomics, community services, utilities and infrastructure, energy and waste for all four alternatives. As detailed in the EIS, the two NGDV alternatives both resulted in beneficial impacts on air pollutant and greenhouse gas (GHG) emissions, transportation safety, traffic noise, community emergency services, and fuel (gasoline) consumption, versus the baseline, No Action alternative. Under the Preferred Alternative, our total emissions would decline by

nearly 6 million metric tons over 20 years, including a decrease in greenhouse gas emissions of 290,306 metric tons.

While the EIS expressly recognized that the 100-percent BEV NGDV alternative would result in about 200 percent fewer direct and indirect greenhouse gas emissions than the Preferred Alternative, we determined that due to the TCO differential, committing to over 10-percent BEV NGDV was not achievable absent additional funding or a change in financial condition. However, we also designed the Preferred Alternative with enough flexibility to permit us to increase the percentage of BEV NGDV if financial circumstances changed.

The NEPA process attracted more than 39,000 public comments from an array of stakeholders, and we responded to all of the public comments in the Draft and Final EISs. In addition, we carefully considered EPA's comments and requests for a public hearing submitted after the publication of the Final EIS. After thorough review and study, we determined that the EPA's requests for a supplemental EIS and public hearing would not add value to our already year-long review and were not legally required. Concluding that there was no legal or other basis to delay this critical program – a fiscally and environmentally responsible plan to modernize the federal government's largest and oldest vehicle fleet – we published our Record of Decision (ROD) on February 23, 2022, concluding the NEPA process. This ROD also included a point-by-point response to EPA's comments on the Final EIS.

We are proud of the thousands of hours that have been devoted to the NGDV EIS. It is a thorough, professional record of our efforts to take a hard look at the NGDV's environmental impacts, consider reasonable alternatives and mitigation, and consult the public and agencies such as CEQ and EPA. This is what NEPA requires. It does not mandate particular results or substantive outcomes -- NEPA does not require that we select the option with the least environmental impact.

Congressional Engagement

Over the past year, we have made our experts available to policymakers in Congress and the Administration, as policymakers pursued efforts to secure funding to achieve a majority electric Postal delivery vehicle fleet over the next 10 years. Advocates in the Senate, House and Biden Administration have each expressed support at some level for funding electrification of the Postal fleet; but the rate of electrification was sooner and at a higher quantity than our resources and planning contemplated. During the course of these discussions, we have explained the unique Postal use case, vehicle characteristics, route characteristics, financial tensions, and facility and infrastructure considerations. We have provided analysis of the costs of higher fleet electrification percentages (the added differential cost of BEV over ICE vehicles) and charging infrastructure cost. We have pointed out that the NGDV order enables the flexibility needed to increase the level of electrification if funding is provided by Congress or financial conditions improve based upon our own efforts as a result of the implementation of the DRA, even after the order was placed.

It is important to underscore that these discussions with Congress differ in a meaningful way from Administration and Congressional ambition for the non-Postal federal fleet. The non-Postal federal fleet would require appropriations for every dollar of electric vehicle cost since all other agencies are on-budget appropriated agencies. In contrast, the Postal delivery fleet electrification funding being considered by Congress is only for the differential in cost for electrifying vehicles. Most of the vehicle cost would still be borne by the Postal Service, based on the assumption we would buy a vehicle anyway, even if not electric.

Congress has also contemplated some additional funding for supplementary charging infrastructure. We have also engaged in discussions of whether the Postal Service should play a role in public charging infrastructure. That discussion has led to an appreciation that while the Postal Service could potentially play a discrete and limited role, that role is not yet clearly defined and there must be a better understanding of the government-wide strategy before the efficacy of any role for the Postal Service can be evaluated and determined.

Recent Order is Significant and Responsible

On March 24, 2022, the Postal Service announced its initial NGDV order with Oshkosh Defense for 50,000 vehicles – a minimum of which will be for 10,019 BEVs. In doing so, we are making good on our pledge to accelerate our electric vehicle strategy by increasing the quantity of BEVs as our financial condition improves and as we refine our network and vehicle operating strategy. The 10,019 specific delivery routes identified present the best initial application for electric vehicles based on route characteristics and infrastructure opportunities.

Since the NGDV contract was first announced, and consistent with our stated commitment, we have continuously evaluated and adjusted our vehicle purchase strategy based on our future network initiatives, ongoing review of BEV application to our operational strategy, and our financial outlook as we undertake our ongoing implementation of the DFA plan. Based upon this work and our improving outlook, we have determined that increasing our initial electric vehicle purchase from 5,000 to 10,019 makes good sense from an operational and financial perspective.

It is essential to point out that a switch cannot be flipped with regards to the deployment of either ICE or BEV vehicles. Because of the impressive new functionality, both drivetrain versions will require training and transition. The electric vehicles will also require installation of charging infrastructure at all the facilities where they will ultimately be deployed. Because of their height and dimensions, at some locations, facility modifications may also be necessary. Additional training will also be required to operate electric vehicles.

It is important to differentiate between the NGDV *contract* awarded in February of 2021 (funding non-recurring engineering and tooling), and the *delivery order for vehicles* that was signed (under the contract) on March 24 of this year (2022). There has been a fair amount of misunderstanding about how the quantities of the order will be deployed and when. As a reminder, the contract is an IDIQ procurement with a minimum of 50,000 vehicles and a maximum of 165,000. The minimum order quantity will be satisfied by the March order. The order placed in March will result in vehicles delivered within a four-year window (2023-2027).

The production years begin in the third quarter of each year and straddle calendar years. Accordingly, the first vehicles will be delivered beginning in late 2023 and through the second quarter of 2024, with a quantity of 5,000 vehicles as production ramp-up begins. As an aside, a number of those initial vehicles will be allocated to training purposes, and “training the trainers,” so that the deployment is assured of success. In production year 2024-25, 15,000 vehicles will be delivered. In 2025-26, the peak annual manufacturing quantity will be achieved at 20,000 vehicles. In 2026-2027 we expect the remaining 10,000 of the March 24 delivery order to be deployed. If a second order is placed it could occur at any time and depending on when, the production output could remain steady as stipulated by the order.

The flexibility in the NGDV contract allows for future increases in the mix of BEVs on existing orders in subsequent production years, should additional funding become available from internal or other sources, and if the use case for BEVs continues to improve. Through the NGDV program, the Postal Service's commitment to the fiscally responsible roll-out of electric-powered vehicles for America's largest and oldest federal fleet remains ambitious and on schedule. It is expected the NGDVs will begin appearing on carrier routes in late 2023.

Conclusion

The successful signing of the NGDV purchase contract was the culmination of years of careful needs analysis and procurement discipline, all linked to our unique operational imperatives. The resulting NGDV purpose-built delivery vehicles are long overdue and richly deserved by our carriers and the American people they serve. The opportunity to electrify at least 10,019 electric vehicles is a meaningful step in the direction of broader electrification that is a priority for many of our stakeholders. At the same time, the Postal Service must ensure that we make prudent decisions from both a financial and operational perspective, to ensure that we meet our statutory mission of providing universal postal services to the American people in a financially sustainable manner.