

Fleet Modernization – Charging Station Deployment Timelines

AUDIT REPORT

Report Number 23-170-R24 | July 16, 2024



Table of Contents

Cover

Highlights	1
Background	1
What We Did	1
What We Found	1
Recommendations and Management's Comments.....	1

Transmittal Letter	2
---------------------------------	---

Results	3
Introduction/Objective.....	3
Background	3
Finding #1: Charging Stations Deployment Delays.....	6
Recommendation #1	9
Recommendation #2	9
Recommendation #3.....	9
Postal Service Response.....	9
OIG Evaluation	10
Looking Forward.....	10

Appendices	11
Appendix A: Additional Information.....	12
Scope and Methodology	12
Prior Audit Coverage	13
Appendix B: Detailed Comparison of Milestones.....	14
Appendix C: Management's Comments	15

Contact Information	19
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Highlights

Background

As part of its *Delivering for America* plan, the U.S. Postal Service is purchasing and deploying approximately 66,000 electric vehicles and charging stations to support its delivery fleet modernization. The Postal Service generally combined this rollout with its efforts to convert plants into consolidated sorting and delivery centers. It planned to use excess power from converted plants to reduce power upgrades and scheduling risks. The Postal Service expects to complete construction at 130 sites by the end of 2024 and to deploy electric vehicles at an estimated 800 sites by 2028. As of March 26th, 2024, the Postal Service confirmed it completed construction and commissioning at six sites.

What We Did

Our objective was to assess charging station infrastructure deployment timelines. We evaluated construction schedules for the first 29 activated sorting and delivery centers and interviewed facility staff. We also reviewed the Postal Service's process for construction schedule estimation and tracking changes to its project schedule.

What We Found

The Postal Service experienced nationwide charging infrastructure delays. The 29 sites were delayed by an average 219 days compared to its June 2023 baseline schedule. Postal Service staff noted challenges that contributed to these delays, such as weather, utility-specific equipment standards, and utility coordination. However, they did not factor in these foreseeable issues when scheduling, follow schedule management best practices to establish an informed baseline, or use an overarching project management system. Such a system would provide the Postal Service automated tools to collect, analyze, and use information to meet its objectives. To expedite adopting these best practices, the Postal Service should explore obtaining consulting support to evaluate lessons learned, as early delays jeopardize its ability to use electric vehicles, achieve aggressive business objectives, and drive fleet-related sustainability goals.

Recommendations and Management's Comments

We made three recommendations to improve charging station construction deployment processes. Postal Service management's comments and our evaluation are at the end of the finding and recommendations. The U.S. Postal Service Office of Inspector General views management's disagreement with recommendation 1 as unresolved and will work with management through the formal audit resolution process. We consider management's comments responsive to recommendations 2 and 3 and corrective actions should resolve the issues in the report. See [Appendix C](#) for management's comments in their entirety.

Transmittal Letter



OFFICE OF INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

July 16, 2024

MEMORANDUM FOR: RONNIE J. JARRIEL
SENIOR VICE PRESIDENT OF INFRASTRUCTURE AND
OPERATIONS SUPPORT

A handwritten signature in black ink, reading "Amanda H. Stafford", is positioned below the memorandum header.

FROM: Amanda Stafford
Deputy Assistant Inspector General
for Retail, Marketing and Supply Management

SUBJECT: Audit Report – Fleet Modernization – Charging Station Deployment
Timelines (Report Number 23-170-R24)

This report presents the results of our audit of the U.S. Postal Service deployment timelines for charging stations.

All recommendations require OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. All recommendations should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendations can be closed.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Heidi Einsweiler, Director, Sales, Marketing & International, or me at 703-248-2100.

Attachment

cc: Postmaster General
Corporate Audit Response Management
Secretary of the Board of Governors

Results

Introduction/Objective

This report presents the results of our self-initiated audit of the U.S. Postal Service deployment timelines for charging stations (Project Number 23-170). Our objective was to assess charging station infrastructure deployment timelines. See [Appendix A](#) for additional information about this audit.

Background

As part of its *Delivering for America* 10-year plan, the Postal Service (USPS) plans to transform and modernize to improve sustainability, with a goal of driving revenue growth and reducing its greenhouse gas emissions by 40 percent in key areas by fiscal year (FY) 2030. Part of this initiative includes transforming its delivery fleet, which includes purchasing and deploying approximately 66,000 electric vehicles. This fleet modernization plan requires an investment of approximately \$9.6 billion (including a \$3 billion congressional appropriation) for new electric delivery vehicles and charging stations to support an electrified fleet.

As part of its strategic plan, the Postal Service is consolidating delivery units and package sorting by converting plants into sorting and delivery centers (S&DC). Simultaneously, the Postal Service will roll out electric vehicles at some of these facilities. By executing these initiatives at the same time, the Postal Service intended to reduce scheduling risks and the need for substantial power upgrades by using excess power from the plants, as S&DCs often have industrial-grade electrical capacity.

Planning Efforts for Fleet Electrification

As of May 2024, the timeline for fleet electrification, including charging station construction, was as follows:

Timeline:

- **August 2022:** Congress enacted the Inflation Reduction Act of 2022, which included \$3 billion for the Postal Service to purchase zero-emission delivery vehicles and install related infrastructure.
- **February 2023:** Postal Service awarded \$74 million in contracts for more than 14,000 charging stations to be delivered through February 2026.¹
- **March 2023:** Postal Service orders transformers and related supplies in anticipation of long lead times for electrical equipment.
- **March 2023:** First S&DC receives funding approval for construction of charging station infrastructure.
- **October 2023:** First S&DC completes construction of charging stations and infrastructure.²
- **February 2024:** First electric commercial off-the-shelf (COTS) vehicles deployed where charging stations were completed.³
- **April 2024:** Postal Service announced its intent to install charging stations at approximately 130 sites to support over 11,000 electric vehicles by the end of calendar year 2024.
- **August 2024:** Electric NGDV scheduled to be delivered.

¹ The Postal Service has an indefinite delivery/indefinite quantity contract for charging stations.

² Infrastructure includes upgrading electrical capacity by installing transformers, digging trenches within the parking lot, installing conduit and electrical lines leading up to each charging station, and installing the charging station.

³ As part of its fleet modernization efforts, the Postal Service plans to acquire 21,000 electric-powered COTS vehicles alongside 45,000 purpose-built, electric-powered Next Generation Delivery Vehicles (NGDV).

The agency will continue to deploy new delivery vehicles through, at least, the end of FY 2028. In total, the agency plans to deploy electric vehicles at an estimated 800 sites.⁴ As of June 11, 2024, the Postal Service had approved 100 site designs and construction was in progress at 50 sites.

Responsibilities Related to Charging Station Deployment

Due to the magnitude of the investment and the complexity of electrifying the Postal Service's fleet, the Postal Service engaged multiple business areas, including the NGDV Program Management Office, Facilities, and the Fleet Management organization. In March 2024, the Postal Service announced that these offices would be part of a new Infrastructure and Operations Support organization, focusing on the execution of network transformation initiatives. Key responsibilities of each business area include:

- The NGDV Program Management Office leads the Postal Service's fleet electrification and construction efforts by establishing site design standards and coordinating with Facilities project managers regarding construction completion.
- Facilities Management maintains a centralized project schedule for charging station deployment, which tracks site-specific schedules for construction completion. Facilities staff manages construction contractors and monitors site-specific schedules for both charging station and S&DC construction. Contractors provide Facilities staff with weekly observation reports, including updated site-specific schedules.
- Fleet Management assigns vehicle types (for example, an electric vehicle vs. gas-powered vehicle) to specific routes and uses the project schedule to determine whether sites have completed construction and are prepared for vehicle deployment.

Preparations to Support Fleet Electrification

To support its electric vehicle acquisition, the Postal Service invested in charging station infrastructure nationwide. USPS Facilities required varying levels of investment depending on site-specific factors, such as existing electrical capacity and available parking areas. Because electric vehicle charging may change a facility's power requirements, the Postal Service had to assess existing power supply at each facility as they developed site-specific designs.

The Postal Service finalized designs for each site, which included the quantity of charging stations and other supplies required for construction, as well as site-specific designs for electrical infrastructure.⁵ Upon completion of a design, the Postal Service then coordinated with the local utility provider for its electrical needs and with local governments to secure necessary permits. To ensure sufficient power supply, utility providers were, at times, responsible for procuring equipment for upgrading the electrical grid, but this process was often completed without Postal Service involvement.

Next, the Postal Service's contractors began construction by digging to install underground electrical conduit and cables to connect power to the point where each charging station would be installed. Contractors then installed charging stations and related equipment and finalized construction by paving and striping the parking lot.

According to the Postal Service, plans for charging station and electric vehicle deployment are fluid and constantly evolving as the program advances. In June 2023, the Postal Service established a one-year implementation schedule. Among other things, this schedule identified when it expected to complete the charging station infrastructure design and construction phases. The Postal Service provided our team with schedule updates to its planned construction completion dates in September 2023, November 2023, and January 2024.

⁴ Postal Service officials noted that the 800-site target is an estimate based on the best information available as of March 2024 and this target may change and evolve over time.

⁵ Equipment with long lead times that may be ordered when site-specific designs are finalized include distribution transformers, electrical transfer switches, large disconnect switches, electrical switchboards, distribution panelboards, electrical paneling, and electrical conduits.

Based on the Postal Service’s September 2023 update, which showed 15 sites with charging station construction completion by the end of October 2023, the U.S. Postal Service Office of Inspector General (OIG) announced an audit in November 2023. Our original objective was to assess whether a selected site was sufficiently prepared for electric vehicle deployment. After announcing the audit, we conducted two site visits at locations the schedule indicated would be complete by the end of October. Upon arrival on November 20 and 21 at the Annapolis, MD, and Hanover Park, IL, sites, respectively, we found neither site was complete.

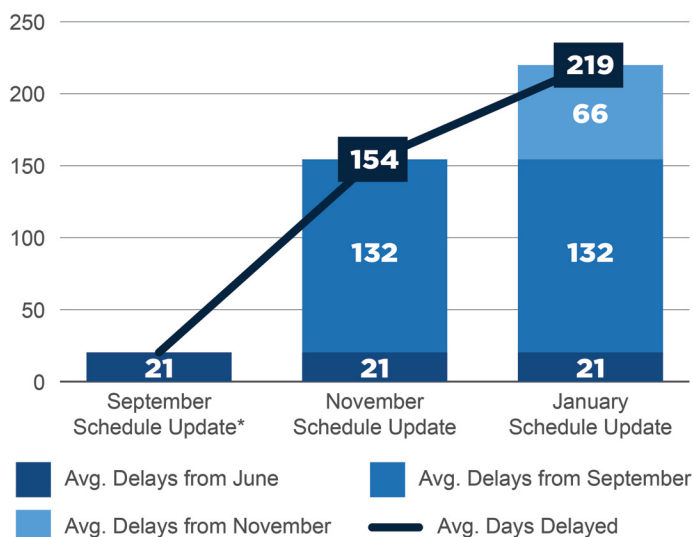
Following our site visits, the Postal Service provided an updated schedule on November 30, 2023, showing that it would only complete construction at one site by the end of November 2023, with others to follow in December and throughout 2024. Without a sufficient sample of sites to evaluate, we revised our objective to report on charging station infrastructure timelines, as schedule slippages pose risks to a successful rollout of new delivery vehicles and timely achievement of the Postal Service’s goals. As of March 26th, 2024, the Postal Service confirmed it completed construction and commissioning at six sites.⁶

⁶ Two additional sites had not fully completed commissioning of all charging stations or utility-side upgrades as of March 26th, 2024. However, the Postal Service stated these sites are fully capable of charging the vehicles that have been deployed prior to completing all site construction or commissioning activities.

Finding #1: Charging Stations Deployment Delays

The Postal Service encountered delays in deploying charging stations and related infrastructure nationwide. For the 29 S&DCs first slated for activation, we found that construction at all 29 sites was delayed when comparing the January 2024 schedule to the initial schedule from June 2023. The average delay between the June 2023 and January 2024 schedules was 219 days. The shortest delay for the same timeframe was 64 days, while the longest delay was 368 days from the initial estimate for construction completion. Figure 1 shows, for each of the schedule updates provided by the Postal Service, how average delays grew across all 29 sites compared to the initial June 2023 schedule. [Appendix B](#) details a list of the 29 sites with schedule updates provided to OIG staff and the total days delayed when using the June schedule as a baseline.

Figure 1. Average Delay in Calendar Days for 29 Sites



*Based on an average of 23 out of 29 sites as construction timeline estimates were not produced for 6 sites in September 2023 that were produced for the June, November, and January schedules.

Source: OIG analysis based on schedule data provided by the Postal Service.

“For the 29 S&DCs first slated for activation, we found that construction at all 29 sites was delayed when comparing the January 2024 schedule to the initial schedule from June 2023.”

Postal Service staff noted challenges that contributed to these delays. For example, staff described initial implementation obstacles including:

- Weather-related delays,
- Site-specific conditions requiring additional construction,
- Utility-specific regulations regarding usage of certain types of electrical supply equipment, and
- Coordination issues with local utilities for capacity upgrades and procurement of electrical equipment.

While we recognize that some of the conditions faced by the Postal Service were outside its control, it did not establish realistic completion dates that should have factored in many of these foreseeable issues while planning schedules. The agency also did not adopt schedule management best practices during its rapid deployment. Specifically, the Postal Service did not establish a fully informed baseline schedule, nor did it develop or use a project management system.

No Informed Baseline Schedule Established

The Postal Service created a schedule that reflected aggressive business objectives, rather than a realistic baseline. A baseline schedule should be established after capturing all activities, estimating durations, and analyzing risks.⁷ Officials developed the schedule before evaluating site conditions and existing electrical service, which did not capture

⁷ Government Accountability Office, GAO-16-89G, *Schedule Assessment Guide: Best Practices for Project Schedules*, dated December 2015.

activities and durations required for an informed baseline schedule. Instead, the Postal Service slated a generic construction timeline of 180 days or less at 28 out of 29 sites, without gathering information on site-specific conditions for the majority of sites to determine whether that timeframe was realistic. For example:

- *Weather-Related Delays.* The Postal Service planned to complete construction at the Terre Haute S&DC, in central Indiana, by December 28, 2023. However, the site was delayed due to foreseeable winter weather conditions, which makes paving over trenching difficult.⁸ A baseline schedule should have factored in anticipated weather conditions, which ultimately impacted timely completion. In November, the agency revised its estimate to indicate that construction at the Terre Haute S&DC would be completed in March 2024. We found a similar issue with the Postal Service’s November 30 schedule update, which indicated that the Hanover Park S&DC, in Illinois, would be completed by December 28, 2023. However, the site was

only half finished during our November 21 visit, as shown in Figure 2, and we were informed that contractors planned to suspend construction due to foreseeable winter weather conditions.

- *Site-Specific Conditions.* At the Woburn S&DC in Massachusetts, management planned to complete construction by September 28, 2023, but it was delayed because the Postal Service initiated operations inside the new S&DC and could not fully accommodate staff parking while simultaneously constructing charging station infrastructure in the parking lot. Therefore, management had to prioritize building a separate, temporary parking lot for employees first. If the Postal Service had completed a baseline schedule, it could have included the parking lot in the activities to be completed as part of its estimate. After this issue was resolved in October 2023, management then paused construction again due to expected winter weather and peak season, revising its estimated completion date to June 2024.

Figure 2. Incomplete Construction at Hanover Park S&DC



Forthcoming charging station area



In process charging station construction

Source: OIG photos taken at Hanover Park S&DC on November 21, 2023.

⁸ The National Weather Service predicted temperatures of 28 degrees or lower beginning October 29, 2023, in Terre Haute, at which time a widespread hard freeze was likely.

- **Utility-Specific Equipment Standards.** Although the Postal Service pre-purchased electrical supplies to minimize delays common with this equipment,⁹ a group of utility providers in several states follow standards that require features for certain electrical supply equipment.¹⁰ The Postal Service estimated that the Chula Vista and Palo Alto S&DCs in California would still be completed within 180 days – the same amount of time as for those with pre-purchased equipment – despite utility-specific equipment regulations that would prevent it from using its pre-purchased supplies and create potential delays. Establishing a proper baseline schedule requires comprehensively identifying all things that affect the schedule – such as accounting for testing, time for obtaining permits, and other government matters.¹¹ Although the equipment regulations existed before the Postal Service made its June schedule, staff said they were unaware of the standards at the time of scheduling. As a result, the Postal Service did not identify that it should have included additional time for procuring equipment to comply with these standards.

Failure to Use Project Management System

To manage its overarching primary schedule, the Postal Service developed a spreadsheet to centralize information from different offices, including the number of eligible electric vehicle routes and estimated completion dates.¹² As of January 2024, the Postal Service continued to use this spreadsheet, which does not (1) reflect real-time updates, (2) track delays relative to its initial schedule, or (3) identify the causes of site-specific construction delays. Given the volume of data and information required to manage an initiative of this size and complexity, using a project management information system would provide the Postal Service automated tools to collect, analyze, and use information to meet objectives and realize project benefits. For example, sites commonly experienced

“To manage its overarching primary schedule, the Postal Service developed a spreadsheet to centralize information from different offices, including the number of eligible electric vehicle routes and estimated completion dates.”

delays related to utility capacities and procuring related equipment. Postal Service management indicated that there are over 3,300 unique utility providers and did not have any average timeframes to estimate for utility coordination.¹³ Moving forward, a project management system would allow the Postal Service to identify utility related, and other types of delays, and factor average times across the multiple sites to improve its construction scheduling. The Postal Service separately identified the need for a project management system to manage construction, and was in the process of developing a commercial-off-the-shelf software, which it expects to fully implement in June 2025.

The Postal Service cannot go back to establish informed baselines for past sites, as it established initial baselines early in its planning process, and in some cases, without data to benchmark. However, it should employ project management practices now to begin incorporating early data to inform baselines at future sites and develop or use one of many commercially available project management information systems to streamline their processes. Doing so would also allow the Postal Service to automate real-time schedule updates and provide analytical capabilities to help identify opportunities to mitigate delays or capitalize on successes not

⁹ Given the long lead times for equipment, the Postal Service's pre-purchased supplies likely limited significant additional delays throughout many other sites.

¹⁰ The Electric Utility Service Equipment Requirements Committee (EUSERC) consists of utility providers across several states, including, but not limited to, California, Washington, and Arizona. EUSERC members may require features on electrical supply equipment within their network (such as metered disconnects).

¹¹ GAO-16-89G, *Schedule Assessment Guide: Best Practices for Project Schedules*.

¹² The Postal Service was aligning multiple efforts and, as a result, used its spreadsheet to organize information about S&DC completion dates, the number of eligible routes, charging station infrastructure design and construction completion dates, vehicle deployment timelines, etc.

¹³ Understanding the challenges related to working with the utility industry, the Postal Service senior management participates in White House Council on Environmental Quality to share their status and issues. Senior management also proactively joined the Electric Vehicle Working Group formed by the Joint Office of Energy and Transportation, which advances electrification in the U.S. by making recommendations regarding the adoption and integration of electric vehicles.

afforded by a spreadsheet. The ability to analyze its schedule is critical, as best practices recommend analyzing past performance to allow project managers the ability to forecast future performance, and, if conducted early enough, time to analyze and correct anomalies.¹⁴ To expedite adoption of industry best practices, the Postal Service should explore obtaining external consulting support to quickly align to best practices and help evaluate lessons towards the ongoing deployment of charging infrastructure.

Even early delays may jeopardize the Postal Service's ability to begin using its electric vehicles, achieve business objectives, and drive fleet-related sustainability goals. Postal Service officials believe that their progress thus far is significant and unprecedented for a fleet electrification of this magnitude, but also acknowledged that it may not meet its goal to complete 130 sites by the end of calendar year 2024. Specifically, the Postal Service has provided a schedule for only 82 (63 percent) of the 130 sites it planned to complete by the end of 2024, which officials acknowledge was an aggressive schedule. With time-restricted funding from Congress and broader goals to equip an estimated 800 sites with charging infrastructure by the end of FY 2028, engaging with a contractor could

“With time-restricted funding from Congress and broader goals to equip an estimated 800 sites with charging infrastructure by the end of FY 2028, engaging with a contractor could help the Postal Service expedite incorporating best practices for remaining sites and create informed baselines to meet its time-sensitive goals.”

help the Postal Service expedite incorporating best practices for remaining sites and create informed baselines to meet its time-sensitive goals.

Recommendation #1

We recommend the **Senior Vice President of Infrastructure and Operations Support** establish informed baselines for future sites that align with schedule management best practices.

Recommendation #2

We recommend the **Vice President of Facilities** improve schedule management for charging station construction by using a project management system and related analytics to record dynamic updates, centralize information, and analyze performance to inform future construction baselines.

Recommendation #3

We recommend the **Senior Vice President of Infrastructure and Operations Support** evaluate whether contractual assistance is needed for its deployment effort, including aligning the Postal Service's schedule management with best practices.

Postal Service Response

Management disagreed with the finding and recommendation 1 but agreed with recommendations 2 and 3. Regarding the finding, management stated that it required significant coordination to align this effort with its network modernization initiative. It also stated that initial infrastructure schedules were intentionally aggressive, with the expectation that additional data and schedule updates would need regular iterations to reflect ongoing changes. Furthermore, in creating the initial schedules, management stated the Postal Service used site specific information where available, and averages where it was not. Management also stated several elements could not be fully defined until well into the development process.

¹⁴ Performance should be measured, monitored, and reported against the baseline to indicate the effect on downstream work, and trend analysis provides insight into the performance. GAO-19-89G, *Schedule Assessment Guide: Best Practices for Project Schedules*.

Management concluded that the audit report does not consider the timelines related to site assessments, site design, utilities processes, and commissioning.

Regarding recommendation 1, management stated that the Postal Service developed an informed baseline at the outset of the program, defined an aggressive schedule approach, and provided ongoing updates as additional information was made available. Management stated the audit report recommends a more time-consuming, conservative scheduling approach. Regarding recommendation 2, management stated that it has already awarded a contract for this type of application and is engaged in the process of development and configuration. The projected implementation date for the system is June 2025. Regarding recommendation 3, management stated that the Postal Service will continue to assess its resource needs and provided a target implementation date of August 2025.

OIG Evaluation

The OIG considers management's comments responsive to recommendations 2 and 3 in the report, and the corrective actions should resolve the issues identified. In subsequent correspondence, the Postal Service provided updated targeted implementation dates of July 5, 2025, for both recommendations. However, the OIG requests written confirmation when corrective actions are completed. As a result, these recommendations will be closed once the OIG validates that the actions taken have corrected the deficiencies identified during the audit.

Regarding recommendation 1, our report explains where the Postal Service's approach did not align with best practices and industry standards for developing a comprehensive and credible

schedule that reflects on-the-ground conditions. We view management's disagreement with recommendation 1 as unresolved and will work with management through the formal audit resolution process.

Regarding our finding, we identified several sites where the baseline estimate was deemed unrealistic by Postal Service staff overseeing work for the sites. Although the Postal Service states that it could not initially define the timeframes or anticipate all site conditions until it awarded construction contracts, we reported that each of the Postal Service's subsequent schedule updates in September, November, and January continued to compound delays for our sample of 29 sites. The Postal Service also states that we did not accurately reflect engagement with utilities. While utility engagement was not the focus of this audit, our report does acknowledge that enhanced project management data would help drive optimal utility engagement. Finally, the Postal Service indicates that delays to its aggressive schedule do not affect the project and simply requires more updates. However, the Postal Service acknowledged that it may not meet its 2024 goal. We acknowledge that the Postal Service's site electrification efforts are unprecedented, and their progress is significant. We believe our recommendations will improve the Postal Service's electrification efforts and help them meet their stated goals.

Looking Forward

With a few sites completed, the OIG will continue to provide implementation oversight by evaluating whether specific sites are prepared to charge electric vehicles. We also have ongoing work evaluating the status of the Postal Service's acquisition of new delivery vehicles.¹⁵ Throughout these forthcoming audits, OIG will continue to identify opportunities to enhance the fleet modernization effort.

¹⁵ Project 24-051: Fleet Modernization – Delivery Vehicle Acquisition Status.

Appendices

Appendix A: Additional Information.....	12
Scope and Methodology	12
Prior Audit Coverage	13
Appendix B: Detailed Comparison of Milestones.....	14
Appendix C: Management's Comments	15

Appendix A: Additional Information

Scope and Methodology

The scope for this performance audit was Postal Service deployment of charging stations (and related infrastructure) at S&DCs activated through January 5, 2024. The following 29 S&DCs fell within the scope of this audit:

Athens, GA	Woburn, MA	Gainesville, FL	Bryan, TX	Utica, NY
Panama City, FL	Pasco, WA	Annapolis, MD	Hanover Park, IL	Topeka, KS
Golden, CO	Kokomo, IN	Owensboro, KY	Williamsport, PA	Palo Alto, CA
Rockford, IL	Stewart, NY	Chula Vista, CA	Jackson, MI	Waco, TX
North Atlanta, GA	Stockton West Lane, CA	Columbia, SC	Huntington Station, NY	Terre Haute, IN
Irvine, CA	Morgantown, WV	Bridgeport, CT	Tulsa, OK	

This audit specifically focused on timelines related to charging station deployment including, but not limited to, Postal Service processes for estimating project milestones, Postal Service performance relative to established milestones, and causes or contributing factors to schedule slippages relative to established milestones.

To perform this audit, we:

- Interviewed Postal Service staff to identify processes for developing construction timelines.
- Identified how timelines for milestone events in charging station deployment fared relative to original plans. For sites where material slippages occurred, the audit team identified the causes and magnitude of delays.
- Researched existing Postal Service policies regarding capital and expense reporting and identified whether the Postal Service was required to submit documentation of changes to construction timelines for charging station deployment.
- Interviewed Postal Service staff regarding electrical equipment lead times, project schedule management, procedures for Facilities-related project management, and interactions between the various organizations responsible for aspects of managing charging station deployment.
- Identified Postal Service procedures for estimating timelines for milestone events in charging station deployment (i.e., site design finalization, electrical infrastructure completion, and charging station commissioning).
- Identified Postal Service procedures for tracking timeline performance relative to planned completion dates.
- Estimated Postal Service performance towards meeting their 130-site completion target by the end of calendar year 2024.
- Identified best practices and industry standards for scheduling and project management.

We conducted this performance audit from November 2023 through July 2024 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances.¹⁶ Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We discussed our observations and conclusions with management on June 14, 2024, and included their comments where appropriate.

In planning and conducting the audit, we obtained an understanding of the Infrastructure and Operations Support¹⁷ internal control structure to help determine the nature, timing, and extent of our audit procedures. We reviewed the management controls for overseeing the program and mitigating associated

risks. Additionally, we assessed the internal control components and underlying principles, and we determined that the following five components were significant to our audit objective: control environment, risk assessment, control activities, information and communication, and monitoring. We developed audit work to ensure that we assessed these controls. Based on this work, we identified significant internal control deficiencies within the context of our objective. Our recommendations, if implemented, should correct the weaknesses we identified.

We assessed the reliability of electric supply equipment inventory data by conducting tests for completeness, reasonableness, accuracy, and validity. We determined that the data were sufficiently reliable for the purposes of this report.

Prior Audit Coverage

The OIG did not identify any prior audits or reviews related to the objective of this audit within the last five years.

¹⁶ As noted earlier, Audit Project 23-170 was announced under a different objective in November 2023. Following the receipt of information regarding Postal Service construction progress, Audit Project 23-170 was announced in fieldwork to the Postal Service under the current objective in December 2023.

¹⁷ Formerly Facilities and Fleet Management.

Appendix B: Detailed Comparison of Milestones

Sorting & Delivery Center Name	June 2023 Baseline Schedule	September 2023 Schedule Update	November 2023 Schedule Update	January 2024 Schedule Update	Delays From June to January Schedule
Athens, GA	7/5/23	8/15/23	10/15/23	10/15/23^	102
Bryan, TX	8/4/23	10/1/23	12/8/23	3/4/24	213
Stewart, NY	8/28/23	6/15/24	6/1/24	7/1/24	308
Gainesville, FL	9/28/23	10/1/23	7/15/24	9/30/24	368
Utica, NY	9/28/23	10/15/23	6/1/24	6/1/24	247
Woburn, MA	9/28/23	10/15/23	6/1/24	6/1/24	247
Panama City, FL	9/28/23	10/15/23	2/28/24	3/4/24	158
Pasco, WA	9/28/23	10/28/23	12/1/23	1/25/24^	119
Annapolis, MD	10/28/23	10/28/23	4/28/24	9/30/24	338
Owensboro, KY	10/28/23	11/15/23	5/30/24	10/7/24	345
Hanover Park, IL	10/28/23	10/28/23	12/28/23	6/30/24	246
Topeka, KS	10/28/23	10/28/23	3/30/24	6/30/24	246
Golden, CO	10/28/23	10/28/23	3/25/24	5/6/24	191
Williamsport, PA	10/28/23	10/28/23	11/28/23	2/26/24	121
Kokomo, IN	10/28/23	10/28/23	12/28/23	2/2/24^	97
North Atlanta, GA	11/28/23	11/28/23	3/28/24	10/16/24	323
Chula Vista, CA	11/28/23	11/28/23	5/13/24	7/27/24	242
Huntington Station, NY	11/28/23	11/28/23	6/1/24	7/22/24	237
Palo Alto, CA	11/28/23	11/28/23	4/29/24	6/23/24	208
Jackson, MI	11/28/23	11/28/23	4/8/24	4/8/24	132
Waco, TX	11/28/23	11/28/23	12/4/23	1/31/24^	64
Rockford, IL	11/28/23	*	4/8/24	4/8/24	132
Columbia, SC	11/28/23	*	4/15/24	10/30/24	337
Tulsa, OK	11/28/23	*	5/13/24	6/24/24	209
Irvine, CA	12/28/23	12/28/23	5/13/24	7/8/24	193
Terre Haute, IN	12/28/23	12/28/23	3/29/24	3/29/24^	92
Stockton West Lane, CA	12/28/23	*	5/20/24	8/2/24	218
Bridgeport, CT	12/28/23	*	9/15/24	12/9/24	347
Morgantown, WV	12/28/23	*	9/15/24	10/7/24	284

*The Postal Service did not include these sites in its September update.

^As of April 1, 2024, the Postal Service indicated they have either partially or fully completed construction for these sites in our sample.

Appendix C: Management's Comments



July 5, 2024

JOHN CIHOTA
DIRECTOR, AUDIT SERVICES

SUBJECT: Management Response: Fleet Modernization – Charging Station
Deployment Timelines (23-170)

Thank you for providing the Postal Service an opportunity to review and comment on the findings contained in the draft audit report titled: Fleet Modernization – Charging Station Deployment Timelines.

Finding #1: Charging Stations Deployment Delays

The Postal Service disagrees with Finding #1 and how the audit report expresses deployment delays.

As discussed, the Postal Service is undertaking significant organizational changes simultaneously as articulated in our Delivering for America strategic plan. As such, there is a significant level of coordination required across initiatives to ensure successful execution. The fleet modernization initiatives (and thus EV infrastructure development) must be aligned with the development of the network modernization initiatives and be flexible enough to accommodate needed and expected ongoing changes throughout the process.

The Postal Service developed a preliminary EV infrastructure deployment schedule, leveraging the best possible information available at the time it was developed – or an “informed” baseline as the audit report suggests. This included data from preliminary site assessments, which is not at all reflected in the audit report – a rather significant omission. This schedule was developed before the SDC or other network facility layouts and power requirements were established, and long before the financial rigor testing processes were fully established or completed for each of the sites in the initial data set, thereby affecting route estimates and associated space and power needs. In addition, the Postal Service articulated that the process developed for the initial infrastructure schedules was *intentionally* aggressive, with the expectation that additional data and clarity would be provided on an ongoing basis, and that schedules would need regular iterations to reflect these ongoing changes. Interestingly, the audit report suggests that better information is needed to create an “informed baseline”, yet also “*factor average times across multiple sites to improve its construction scheduling.*” This is exactly what was done in creating the initial schedules: the Postal Service used site-specific

Page 1

information where available, and “averages” where it was not. And as elements of each project gained better clarity or new information, schedules were updated accordingly.

In addition, several elements could not be fully defined until well into the development process. For example, some processes (notably, utility outreach) could not even be initiated until site designs were complete. Construction schedules could not be fully defined until contracts were awarded. And some conditions could not be anticipated until on-site conditions were understood (for example, the sinkhole found in one site).

The audit report reflects any variance from the initial baseline as “delays,” seeming to reflect them as construction delays for any of the initial 29 sites included in the report, when in fact, it does not reflect the shifting prioritization of all sites, based on overall program development, emerging decision points, and developing clarity on sites, routes, layouts and power requirements. A site can only measure delays from contracted requirements and dates, which for most sites, emerged much after the initial baseline was developed.

The audit report suggests that deeper information and “pads” for uncertainty should have been incorporated into the baseline. The Postal Service articulated that the schedule was intentionally aggressive and would be adjusted frequently as information was updated – which it has. These two approaches to baseline development represent both a conservative scheduling approach as suggested by the audit report, and an aggressive scheduling approach, as being actively executed by the Postal Service. Neither approach affects the project execution or outcomes – it merely impacts the number of schedule updates needed over time.

There were some general errors or inaccuracies in the report:

- The timeline for the >14,000 EVSE in the initial delivery order required delivery for these units by March 2024. The IDIQ contract runs through 2026.
- The audit report does not consider or reflect the important body of work and associated timelines around the site design development, as well as the role of commissioning in the construction process, or reflect an understanding of usage capabilities prior to completion of utility-side upgrades.
- The report does not correctly acknowledge the number of sites commissioned by March 26, 2024 as 9 sites, rather than the 6 stated in the report. Additional information was supplied to the audit team to correct this, but it was not included in the report.
- The report does not accurately reflect the engagement process and roles in working with utilities, nor does it reflect an understanding that most utilities require completed designs to even initiate discussions, much less provide additional capacity, either on the customer side OR the utility side. The Postal Service has no role in utility-side upgrades.
- The report does not acknowledge the work completed for the initial site assessment process, or how it was used in initial planning.
- The report suggests use of “average” utility timelines (which vary dramatically by utility and location), yet criticizes lack of specificity in site timelines.

There were no monetary/non-monetary impacts articulated in the audit report.

The following are our comments to the recommendations:

Recommendation 1:

We recommend the **Senior Vice President of Infrastructure and Operations Support** establish informed baselines for future sites that align with schedule management best practices.

Management Response/Action Plan:

Management **disagrees** with this recommendation. The Postal Service developed an informed baseline at the outset of the program, defined its aggressive approach to schedule development, and has continued to provide ongoing updates as additional information is made available – and expects to continue doing so throughout program execution. The audit report recommends a much more time-consuming, conservative approach to schedule development, versus the more aggressive stance taken by the Postal Service, with the commitment to ongoing updates. Neither approach affects project execution, only the number and frequency of schedule updates.

Target Implementation Date: N/A

Responsible Official: N/A

Recommendation 2: We recommend the **Vice President, Facilities** improve schedule management for charging station construction by using a project management system and related analytics to record dynamic updates, centralize information, and analyze performance to inform future construction baselines.

Management Response/Action Plan:

Management **agrees** with this recommendation, to the extent that the Postal Service has already awarded a contract for this type of application and is engaged in the process of development and configuration. Regarding schedule management for the charging stations, the Postal Service secured a new software system in December 2023. The team is currently working with the supplier to develop process flows for daily activities with regards to project management. These workflows will be integrated into the new system. The system will be able to utilize custom project types to categorize projects for schedules, budgets, scope and close out. The projected go live implementation date is June 2025.

Target Implementation Date: July 2025

Responsible Official:
Vice President, Facilities

Recommendation 3:

We recommend the **Senior Vice President of Infrastructure and Operations Support** evaluate whether contractual assistance is needed for its deployment effort, including aligning the Postal Service's schedule management with best practices.

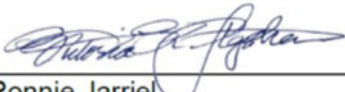
Management Response/Action Plan:

Management **agrees** with this recommendation, to the extent that it is already in process. The Postal Service continuously evaluates its resources to ensure not only budgetary compliance, but program success as well. The Postal Service will continue to assess its resource needs, particularly as new scheduling tools become available to the team.

Target Implementation Date: August 2025

Responsible Official:

Senior Vice President, Infrastructure and Operations Support


for _____

Ronnie Jarriel
Senior Vice President, Infrastructure and Operations Support

cc: Corporate Audit Response Management

OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE



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