

Performance Audit of the City's Streetlight Repair Program

October 2026 | OCA-27-03

Finding 1

Information system limitations and inconsistent use of available performance data hindered the Streetlight Repair Program's ability to evaluate productivity, address the growing repair backlog, and deliver services effectively and equitably.

Finding 2

Insufficient oversight of streetlight electricians increases the risk of misuse of limited Program resources.

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The Office of the City Auditor would like to thank staff from the following departments and agencies for their assistance during this audit:

- Transportation Department
- Department of General Services
- Performance and Analytics Department



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Performance Audit of the Streetlight Repair Program

Why OCA Did This Study

The City of San Diego's (City) Transportation Department is responsible for maintaining more than 60,000 streetlights throughout the City. Streetlights help improve nighttime visibility for motorists and pedestrians, and support public safety and residents' quality of life. The Streetlight Repair Program responds to routine repair requests, emergency incidents, such as knocked-down poles, and underground utility locate requests known as DigAlerts.

Recently, the Program has experienced significant service-delivery challenges, with a large backlog of streetlight repair requests, and lengthy and growing repair times. Accordingly, **we conducted a performance audit to determine whether the Streetlight Repair Program is designed and operated to deliver timely, efficient, equitable, and accountable streetlight repair services throughout the City.**

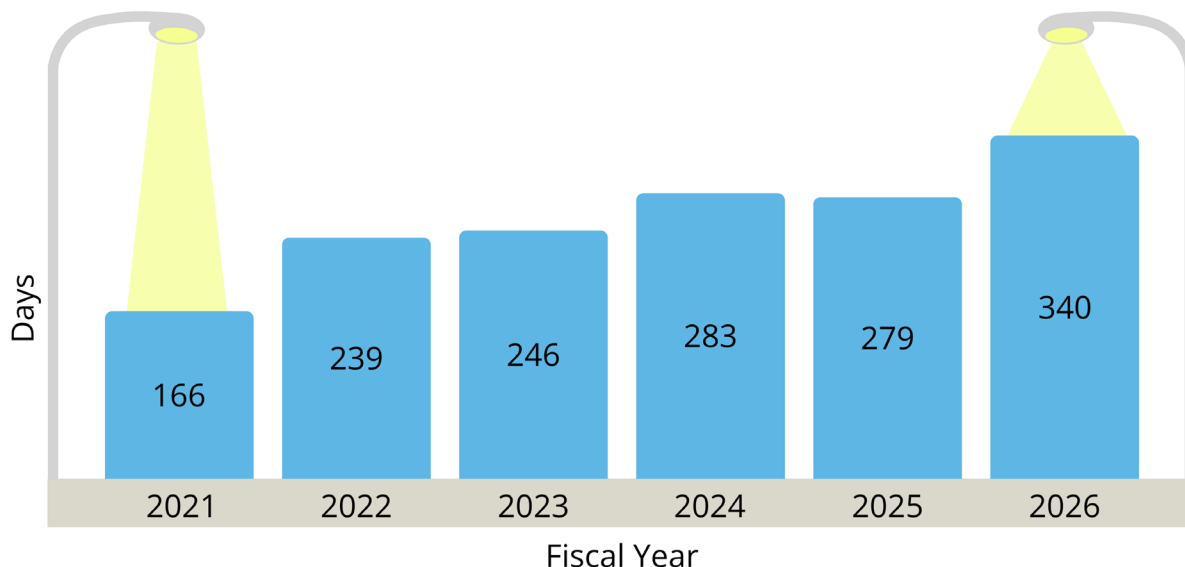
What OCA Found

Overall, we found that system limitations, limited use of data, and insufficient oversight of field staff have hindered effective management and monitoring streetlight repair operations, contributing to a growing repair backlog and longer repair times.

Finding 1: Information system limitations and inconsistent use of available performance data hindered the Streetlight Repair Program's ability to evaluate productivity, address the growing repair backlog, and deliver services effectively and equitably.

- Streetlight service levels declined despite increased staffing, labor hours, and overtime. From FY2021 through FY2026, average repair time increased to 340 days, while the backlog grew to more than 7,500 requests by early FY2027. Incoming streetlight repair and DigAlert workloads remained relatively stable. While systems limitations prevented management from evaluating historical performance, they did not establish other processes or improvements to capture key operational information needed to evaluate performance and inform operational decisions.
- An FY2025 change in its operating model was made without reliable information. In March 2025, the Program devoted regular working hours primarily to DigAlerts and most overtime hours to streetlight repairs. However, based on workload and productivity data, there is likely capacity to complete some streetlight repairs during regular hours. Doing so could help manage the streetlight repair backlog and improve repair response times.

Exhibit 11: Average Time to Complete a Streetlight Repair More Than Doubled from FY2021 to FY2026



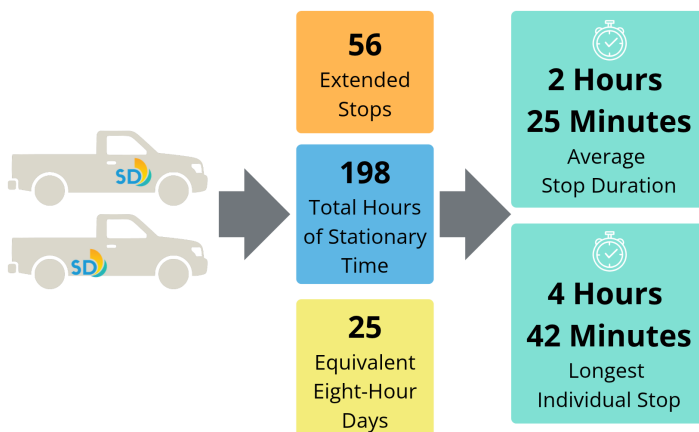
Source: OCA generated based on SAP streetlight work order data during the FY2021–FY2026 period.

Finding 2: Insufficient oversight of streetlight electricians increases the risk of misuse of limited Program resources.

- The Program did not routinely use available information to monitor field activities and identify patterns warranting review. The Program did not have standardized procedures to use available vehicle tracking data for employee oversight.
- We identified City vehicles with a total of 333 hours of extended stops where no worksites could be verified. We provided our analysis to management and Transportation initiated a fact-finding review.
- Because the Program does not track vehicle assignments or review digital tracking data, it cannot easily verify emergency callback activity.
- We could not independently verify 20 of 127 callback overtime claims (16 percent) that we reviewed.
- In addition, 55 percent of callback-related work orders involving multiple electricians did not identify all employees who claimed overtime for responding.
- However, these weaknesses do not necessarily establish that the overtime claims were improper.

Exhibit 25: Telematics Data Identified a Recurring Pattern of Extended Stops by Two City Vehicles

Repeated Extended Stops During Regular Work Hours



Source: OCA generated based on GeoTab telematics reports.

What OCA Recommends

We made **12 recommendations** to improve the Streetlight Repair Program's efficiency, performance management, and accountability. Key recommendations include:

- Improve the completeness and consistency of operational information and establish reliable measures for evaluating workload, productivity, repair activity, and resource needs. Periodically use this information to assess and adjust staffing, overtime, contractors, equipment, and workflows.
- Use reliable performance information for periodic reviews of staffing, overtime, contractor use, equipment, and workflows; adjust resources and operations as needed to improve service delivery.
- Improve the tracking and reconciliation of contractor-performed repairs to accurately assess contractor productivity, costs, and results in reducing the repair backlog.
- Strengthen oversight by routinely using telematics information to document vehicle assignments, identify activity warranting supervisory review, and improve controls for monitoring callback overtime.
- Complete fact-finding reviews of the vehicle activity and callback overtime issues we identified and take appropriate corrective or disciplinary action if warranted.

Management **agreed with all 12 recommendations**. However, Program management raised concerns regarding the accuracy, completeness, and context of certain information and analyses presented in the report. OCA addresses these concerns starting on page 70 of the report.

For more information, contact Andy Hanau, City Auditor, at (619) 533-3165 or cityauditor@sandiego.gov.

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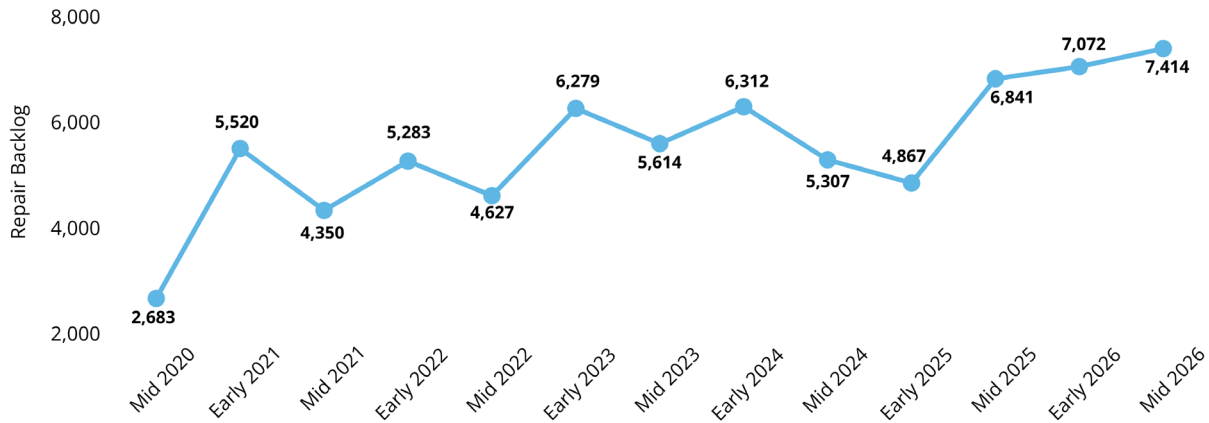
Background

Streetlights are an essential component of the City's public infrastructure and help promote public safety by improving nighttime visibility for motorists and pedestrians. Research has consistently found that maintaining functional street lighting can reduce crime, decrease traffic crashes and nighttime collisions, and improve residents' perceptions of safety. As a result, timely and effective streetlight repairs are important to protecting public safety and maintaining residents' quality of life.

The Transportation Department's Street Division is responsible for maintaining more than 60,000 streetlights throughout the City. To restore service when streetlights fail, the Streetlight Repair Program (Program) receives service requests from residents and City staff, dispatches electricians to repair malfunctioning streetlights, responds to emergency incidents (such as knocked-down poles and exposed electrical wiring), and locates and marks underground City electrical infrastructure before excavation activities. The Program primarily operates on a complaint-driven model, with most routine repair work initiated through resident- and City staff-submitted Get It Done service requests. Emergency repairs and underground utility locate requests (DigAlerts) are also incorporated into the Program's daily workload based on operational needs.

As of July 1, 2026, more than 1 in 10 of the City's approximately 60,000 streetlights had an outstanding repair request.

During the fiscal year (FY) 2021 through FY2026 period, the Program experienced significant operational challenges. As shown in **Exhibit 1**, between the beginning of FY2021 and the beginning of FY2027, the backlog of outstanding streetlight repair requests increased from approximately 2,700 to more than 7,500, an increase of approximately 181 percent. However, the backlog fluctuated considerably during the intervening years, ranging from approximately 4,400 to 6,300 outstanding requests between mid-FY2021 and early FY2025, before increasing sharply during FY2025 and FY2026. Consequently, as of July 1, 2026, more than 1 in 10 of the City's approximately 60,000 streetlights had an outstanding repair request. A backlog of this magnitude means streetlights can remain nonfunctional for extended periods, which can present public safety risks as well as increase City liability.

*Exhibit 1***The Streetlight Repair Backlog Fluctuated During the Audit Period Before Increasing Sharply Beginning in FY2025**

Source: OCA generated based on backlog dashboard data provided by Street Division and SAP service notification data for July 1, 2020 through July 1, 2026.

As the backlog has continued to grow, it has become increasingly important to determine why the Program has been unable to keep up with service level demand and whether the Program has reliable performance information to evaluate productivity, monitor operations, and support informed management decisions.

Therefore, we conducted this performance audit in accordance with the Office of the City Auditor's Fiscal Year 2026 Audit Work Plan to determine whether the Streetlight Repair Program is structured and operated to deliver timely, efficient, and equitable streetlight repair services throughout the City. Specifically, our audit assessed whether:

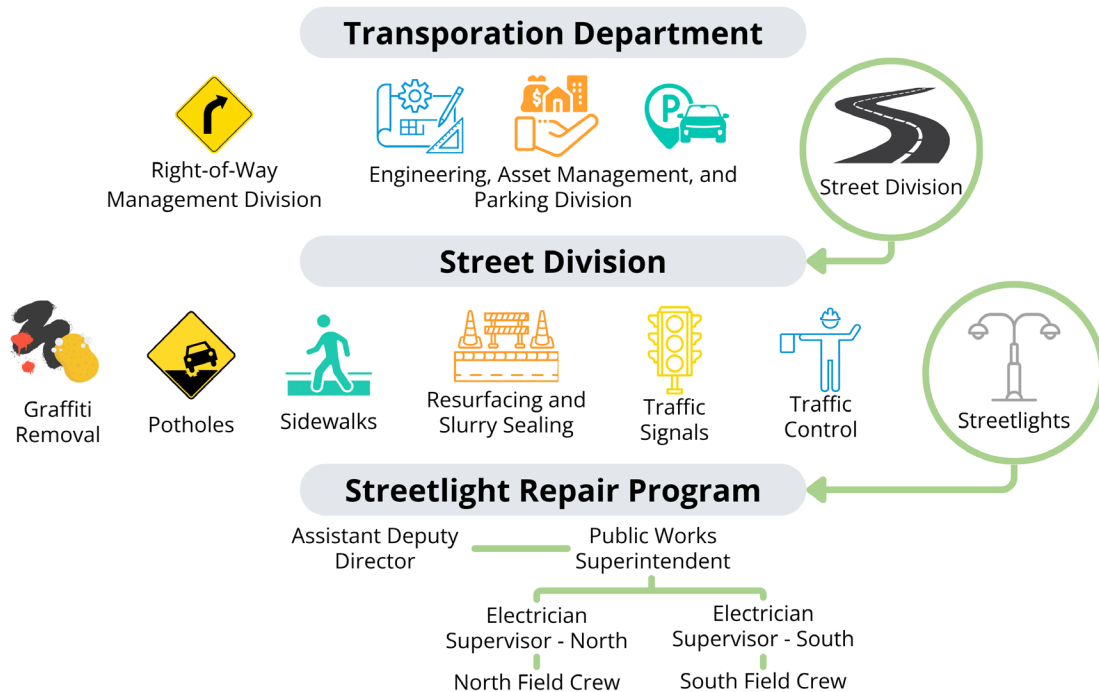
- Streetlight repairs are prioritized, routed, and completed in a timely and cost-effective manner;
- Program management has established clear performance expectations and effective supervisory controls to ensure accurate reporting, appropriate use of City resources, and accountability for repair activities; and
- The Street Division monitors and helps ensure that streetlight repair services are delivered equitably across neighborhoods.

The Streetlight Repair Program is part of the Transportation Department's Street Division.

As shown in **Exhibit 2** below, the Streetlight Repair Program is housed within the Transportation Department, which is organized into three divisions: (1) the Engineering, Asset Management, and Parking Division; (2) the Right-of-Way Management Division; and (3) the Street Division. Within the Street Division, the Program is managed by an Assistant Deputy Director, a Public Works Superintendent, and two Electrician Supervisors, each of whom oversees a geographically assigned north or south field crew. In FY2026, both the north and south crews had 20 budgeted FTE positions. The Program's electricians and other field staff are organized into these north and south crews to support streetlight maintenance and emergency response activities throughout the City. Program electricians are represented by Local 127, while Electrician Supervisors are represented by the Municipal Employees Association (MEA), their respective recognized employee organizations.

Exhibit 2

The Streetlight Repair Program is Organized Within the Transportation Department's Street Division



Source: OCA generated based on the Transportation Department's organizational charts.

Streetlight electricians perform multiple operational responsibilities.

As shown in **Exhibit 3**, Streetlight Program electricians perform several critical operational responsibilities. Streetlight repair work ranges from routine activities, such as replacing failed lamps, fuses, wiring, and other electrical components, to more complex electrical and structural work. In addition to these routine repairs, electricians respond to emergency incidents involving knocked-down poles, exposed energized wiring, and other conditions that present an immediate public safety risk. They also locate and mark underground City electrical infrastructure before excavation activities in response to requests submitted through California’s “Before You Dig” system (commonly referred to as DigAlerts). These requests are generated whenever contractors, utility companies, City crews, or other excavators submit excavation notifications so that underground utilities can be identified and protected before digging. Because emergency incidents can occur at any time, the Program also maintains an on-call callback system that ensures electricians are available to respond to emergencies outside normal working hours.

Exhibit 3

Streetlight Electricians Perform a Range of Operational Functions



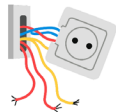
Routine Streetlight Repairs

Replacing lamps, fuses, or wiring



Dig Alerts

Locating and marking underground electrical infrastructure before excavation



Emergency Streetlight Repairs

Urgent repairs during regular working hours, such as knocked-down poles and exposed wiring



Callback Emergencies

After-hours responses to urgent streetlight hazards to make repairs or secure the area until permanent repairs can be completed

Source: OCA generated based Street Division’s documented operational procedures and interviews with Program management and staff.

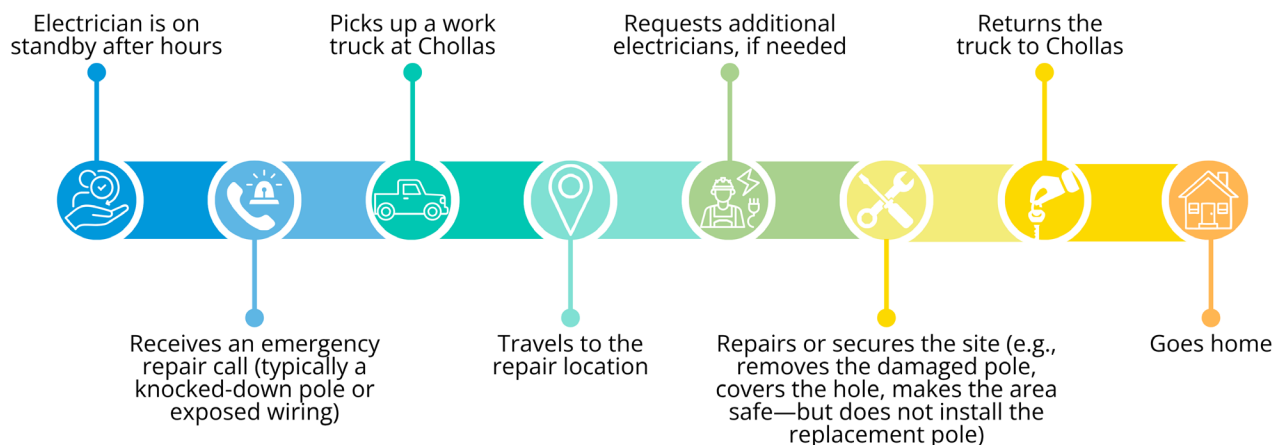
The Program relies on an after-hours callback system to respond to emergency streetlight incidents outside of normal working hours.

The Program's callback system requires designated standby electricians to respond to emergency incidents that occur outside normal working hours. These responses may include traffic collisions involving streetlight poles, exposed energized wiring, or other conditions that present an immediate public safety risk. As shown in **Exhibit 4**, the Program's expected callback process is for the standby electrician to travel to the Chollas Operations Yard to retrieve a work vehicle before responding to an emergency incident after normal working hours. If additional assistance is needed, the standby supervisor or electrician may request one or more additional electricians to respond. Depending on the nature of the incident, the electrician(s) may complete the repair or temporarily secure the site until a permanent repair can be performed during regular working hours. Once the emergency response is complete, the electricians are expected to return the work vehicle to Chollas before going home. Under the department's callback procedures, employees responding to a callback are compensated for their travel time and actual time worked but receive a minimum of four hours of callback pay even if the response requires less time.

Exhibit 4

After-Hours Emergency Calls Require Standby Electricians to Retrieve a Work Vehicle and Respond to the Incident

Streetlight Callback Process



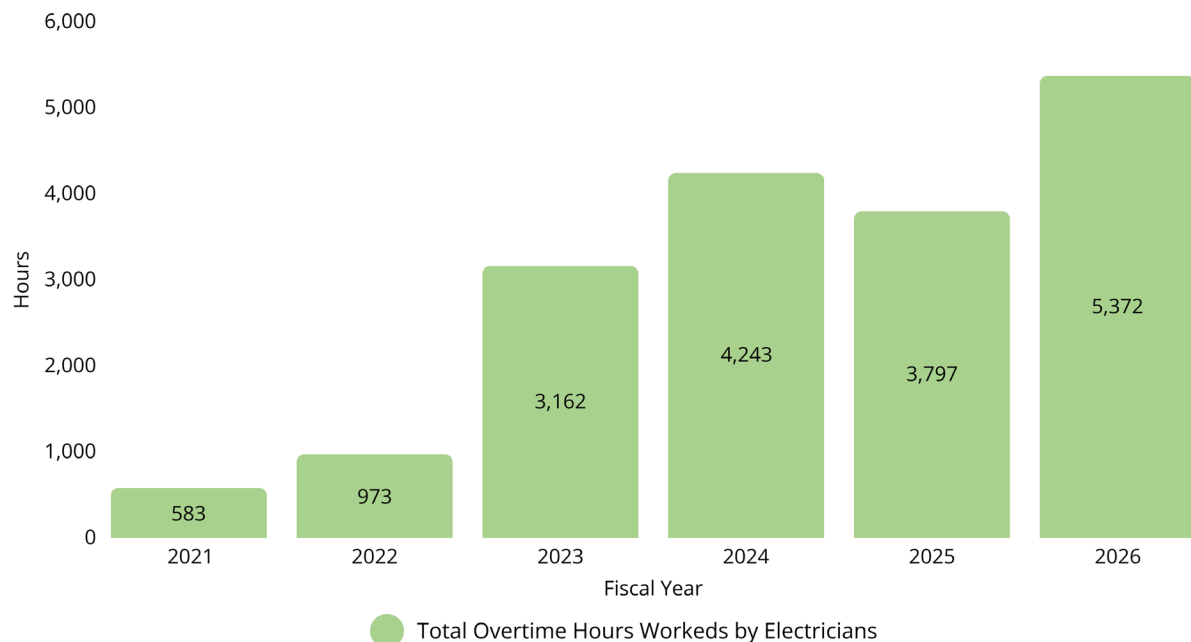
Source: OCA generated based on Program callback policy and interview with Program management and staff.

The Program's streetlight repair operations shifted to overtime work only due to budget restrictions.

Prior to February 2025, Streetlight Program electricians generally performed both routine streetlight repairs and DigAlert responses during their regular working hours, with overtime used to supplement these activities. However, in February 2025, as part of Citywide efforts to address the City's budget deficit, department leadership directed Program management to restrict overtime work to reimbursable and/or emergency repairs.¹ Around the same time, the Program began devoting electricians' regular working hours primarily to DigAlert responses and emergency streetlight repairs. As shown in **Exhibit 5** below, these budget restrictions resulted in a temporary decline of approximately 11 percent (446 hours) in overtime hours worked by streetlight electricians in FY2025, before overtime hours increased again in FY2026 following City Council approval of additional overtime funding.

Exhibit 5

Streetlight Electricians' Overtime Hours Temporarily Declined in FY2025 Following Citywide Budget Restrictions



Source: OCA generated based on SAP labor hours data for the Streetlight Repair Program for FY2021 through FY2026.

¹ Reimbursable repairs are repairs performed for other City departments or projects when a non-General Fund funding source reimburses the Streetlight Repair Program for the work performed, such as through project-specific funding or interdepartmental cost recovery.

According to Program management, the City's overtime restrictions resulted in the Program largely suspending routine non-emergency streetlight repairs for approximately eight months (February 2025 through September 2025) during regular working hours. During this period, electricians primarily responded to DigAlert requests and emergency streetlight repairs during their regular working hours to ensure compliance with State-mandated DigAlert response deadlines and to address immediate public safety risks. Program management stated that, beginning in October 2025, the Program implemented its current operating model, under which electricians continued to respond to DigAlert requests during regular working hours while routine non-emergency streetlight repairs resumed primarily during overtime following City Council approval of additional overtime funding.² However, because the additional overtime funding was designated primarily for repairs within Community Parking Districts (CPDs), most routine streetlight repairs completed on overtime were concentrated in those areas.³

Multiple information systems support streetlight operations.

The Program relies on multiple systems—including Get It Done, SAP, and BlueWorx—to receive service requests, manage repairs, and document completed work.

The Streetlight Repair Program relies on several information systems to receive and manage streetlight repair requests and document completed work. These systems include:

- **Get It Done** serves as the City's public service request system through which residents report streetlight outages and other infrastructure concerns.
- **SAP** is the City's work management system used to create notifications and work orders, assign repairs, and record completed work.
- **BlueWorx** is a mobile application used by electricians to document repair activities in the field and upload information into SAP.

The Program also has access to GeoTab, the City's vehicle telematics system, which records vehicle locations and operational information,

² During FY2026, the Program primarily relied on two overtime funding sources to perform routine streetlight repairs outside regular working hours: (1) a portion of \$1.9 million in additional General Fund funding allocated to the Transportation Department in September 2025, including \$1.57 million for personnel expenditures, such as overtime to support streetlight repairs and other Transportation services; and (2) \$1.8 million in Community Parking District (CPD) funding allocated to Transportation in October 2025 for eligible infrastructure work, including streetlight repairs, within participating CPD boundaries.

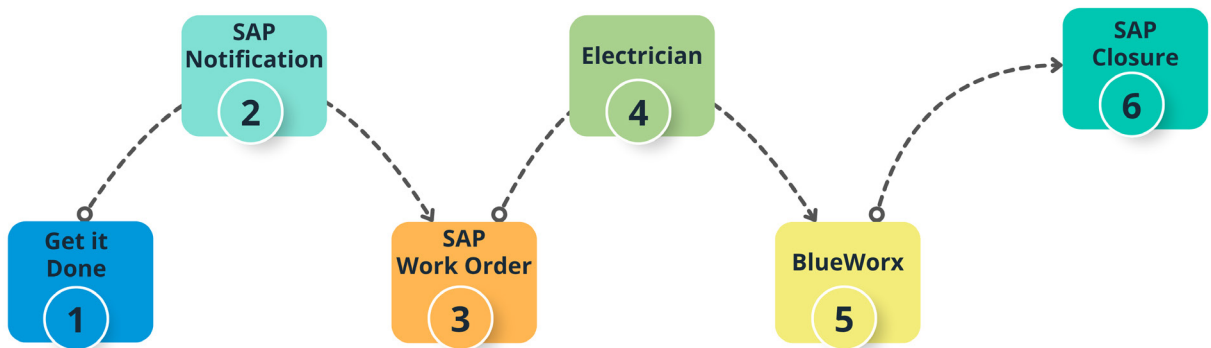
³ Community Parking Districts (CPDs) are geographically defined areas in which parking meter and parking-related revenues are reinvested to support transportation-related improvements and services within the district. During FY2026, the City Council approved the use of CPD funds to support overtime streetlight repairs within eligible CPD boundaries.

including travel time, idle time, vehicle diagnostics, and fuel usage. The system includes reporting and exception-monitoring capabilities that can help management monitor fleet utilization, identify operational inefficiencies, and support employee accountability. However, according to Program management, GeoTab has historically been used primarily to support fact-finding investigations rather than routine supervisory oversight or productivity monitoring.⁴

As shown in **Exhibit 6** below, the Streetlight Repair Program follows a multi-step workflow in which service requests are received, converted into work orders, assigned to electricians, documented in the field, and ultimately closed upon completion.

Exhibit 6

Streetlight Repair Requests Flow Through Multiple Information Systems from Initial Report to Completed Repair



Source: OCA generated based on interviews with Program management and staff.

The Program uses separate systems to manage DigAlert responses.

The Program has historically used separate software to manage DigAlert operations. From FY2021 through September 2025, the Program used DigSmart, a utility notification system that received DigAlert requests from California's "Call Before You Dig" program and allowed the Program to document its required response to excavation requests. DigSmart supported basic work management functions, including tracking incoming requests and recording the Program's required "positive responses" indicating that underground City electrical infrastructure had been reviewed and, if necessary, marked

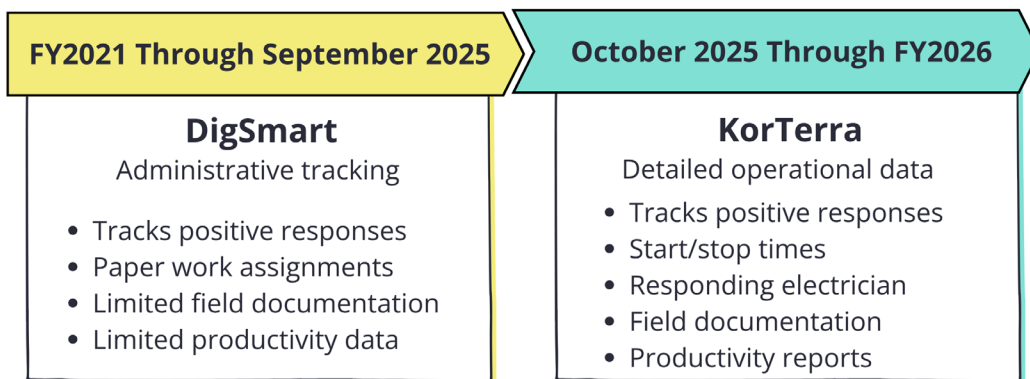
⁴ A fact-finding investigation is a formal internal City process used to gather and evaluate information concerning alleged employee misconduct or performance-related issues that could result in disciplinary action.

before excavation.⁵ However, according to Program management, DigSmart primarily supported administrative tracking and documentation rather than day-to-day field operations. Supervisors assigned DigAlert work to electricians using paper tickets rather than through DigSmart, and DigSmart provided limited operational information regarding field activities or electrician productivity, which is discussed in further detail in **Finding 1**.

Beginning in October 2025, the Program implemented KorTerra, a dedicated utility-locate management system that provides substantially greater operational information. As shown in **Exhibit 7**, KorTerra enables the Program to electronically assign work, record responding electricians, capture start and stop times, document completed field activities and generate productivity reports that were not available through DigSmart.

Exhibit 7

KorTerra Significantly Expanded the Program’s Ability to Monitor DigAlert Operations



Source: OCA generated based on DigSmart and KorTerra reports and interviews with Program management.

Because KorTerra was implemented near the end of our audit period, historical productivity information available for much of our review period was substantially more limited than information available after implementation.

⁵ For purposes of this report, a “positive response” refers to the electronic notification submitted in response to a DigAlert request indicating that the utility operator determined whether underground City electrical facilities were present within the proposed excavation area and, if necessary, marked those facilities.

The City used a private contractor to help reduce the streetlight repair backlog.

To help reduce its growing backlog of streetlight repair requests, the Program supplemented its streetlight repair workforce by issuing two Job Order Contract (JOC) task orders to a private contractor, CTE Inc. As shown in **Exhibit 8**, the two task orders were issued between May 2023 and March 2024, and included approximately 2,600 streetlight repairs at a total cost of approximately \$2.9 million.

Exhibit 8

The City Used Two Task Orders Under a Job Order Contract to Supplement Streetlight Repair Operations.



Source: OCA generated based on contractor invoices and City contracts with CTE provided by Program management.

According to Program management, the first task order included approximately 700 streetlight repairs, while the second included approximately 1,900 repairs. Together, the contracts represented one of the Program's primary strategies for reducing the growing repair backlog during the audit period.

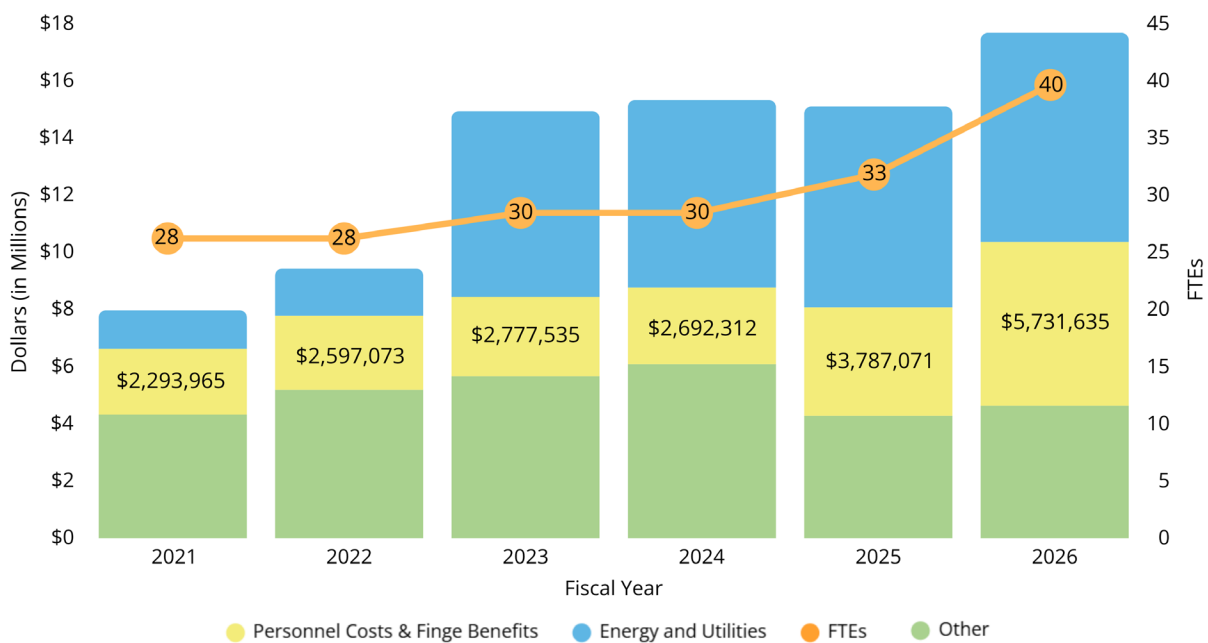
The Program received increased staffing and financial resources during the audit period, with larger increases occurring in FY2025 and FY2026.

The City increased resources for the Streetlight Repair Program throughout the audit period, although the timing and nature of these increases varied. As shown in **Exhibit 9**, the Program's actual expenditures increased from approximately \$8.0 million in FY2021 to \$17.7 million in FY2026, an increase of 122 percent. A significant portion

of the expenditure growth occurred between FY2022 and FY2023, when energy and utilities costs increased substantially and became one of the Program's largest ongoing expenses. As a result, according to Program management, the growth in total expenditures does not solely represent additional resources available for streetlight repair operations.

Exhibit 9

Program Resources Increased During the Audit Period, with Staffing Growth Accelerating in FY2025 and FY2026



*The Other category consists of Capital Expenses, Contracts & Services, Information Technology, Debt Expenses, Supplies, Transfers Out, and Other Expenses.

Source: OCA generated based on review of the Streetlight Program's General Fund actual expenditures and budgeted staff positions from FY2021 through FY2026.

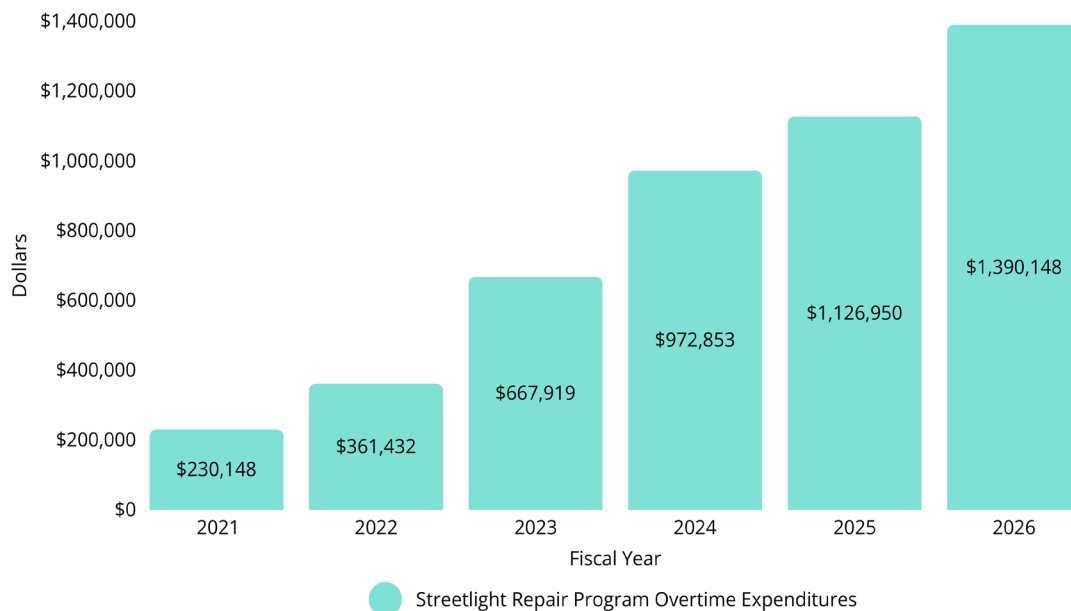
The Program nevertheless received additional staffing and other resources to increase its capacity to support streetlight operations. Budgeted positions increased gradually from 28 in FY2021 to 30 in FY2023, before increasing to 33 in FY2025 and 40 in FY2026. Overall, budgeted positions increased by 43 percent during the audit period, with most of that growth occurring in the final two years. Consistent with the FY2026 staffing increase, personnel costs, including fringe benefits, rose from approximately \$3.8 million in FY2025 to \$5.7 million in FY2026, an increase of approximately 51 percent.

However, according to Program management, not all additional positions represented equivalent increases in streetlight repair or DigAlert capacity. Program management also noted that vacancies, hiring timelines, training requirements, and compensation increases affected the extent to which higher personnel expenditures translated into additional productive capacity.

The Program also increasingly relied on overtime during the audit period. As shown in **Exhibit 10**, General Fund overtime expenditures increased from approximately \$230,000 in FY2021 to nearly \$1.4 million in FY2026, an increase of approximately 504 percent. Overtime expenditures increased in each year of the audit period, providing additional paid staff time beyond regular working hours. However, the purpose and availability of overtime changed during the audit period. In particular, as noted above, the Program restricted overtime beginning in February 2025 as part of Citywide budget restrictions and largely suspended routine non-emergency streetlight repairs during this period. According to Program management, routine non-emergency repairs did not resume until October 2025, after the City Council approved additional overtime funding for streetlight repairs.

Exhibit 10

The Streetlight Repair Program's General Fund Overtime Expenditures Have Increased From \$230,148 to Nearly \$1.4 Million From FY2021 Through FY2026



Source: OCA generated based on review of the Streetlight Program's General Fund overtime expenditures from FY2021 through FY2026.

Finding 1

Information system limitations and inconsistent use of available performance data hindered the Streetlight Repair Program's ability to evaluate productivity, address the growing repair backlog, and deliver services efficiently and equitably.

Finding Summary

From Fiscal Year (FY) 2021 to FY2026, the Transportation Department's (Transportation) Streetlight Repair Program (Program) experienced declining service levels. The average time required to complete a streetlight repair increased from approximately 166 calendar days to 340 calendar days, while the backlog of outstanding repair requests increased from approximately 2,700 at the beginning of FY2021 to more than 7,500 at the beginning of FY2027. At the same time, Program staffing resources steadily increased, with larger staffing increases in FY2025 and FY2026, and significant growth in total labor and overtime hours.

We found that limitations in the Program's information systems constrained its ability to evaluate historical workload, productivity, and resource utilization. However, the Program also did not establish sufficient supplemental processes or system improvements to capture key operational information needed to evaluate performance and inform operational decisions. These weaknesses have limited management's ability to determine how effectively Program resources are being used and identify opportunities to reduce the growing repair backlog. Specifically, we found:

- **The Streetlight repair backlog grew while Program staffing resources increased:** The Program ended FY2026 with significantly more staffing and labor resources than earlier in the audit period. At the same time, incoming workloads of DigAlerts and streetlight repairs remained relatively constant from FY2021 through FY2026. However, at the end of FY2026, the Program had a much larger streetlight repair backlog and longer average repair times than before.
- **System limitations were not sufficiently addressed through alternative processes or improvements:** Program systems did not consistently capture information needed to reliably evaluate workload, productivity, and resource utilization, and the Program did not establish sufficient supplemental processes or system improvements to address these gaps.
- **A major operational change was made without reliable information on DigAlert workload:** Beginning in February 2025, the Program devoted regular working hours almost exclusively to DigAlerts and, beginning in October 2025, shifted most routine streetlight repairs to overtime. While this change was made with the commendable intent of ensuring timely response to DigAlerts, as required by State law, the Program lacked reliable historical information showing how much electrician time DigAlerts required

and had not established an alternative method for measuring that workload. Once this operational change was made, the streetlight repair backlog began to rapidly increase.

- **Available KorTerra data indicates likely capacity for some regular-time repairs:** In October 2025, the Program implemented a new system (KorTerra) to enable better tracking of DigAlert work. Start/stop information available beginning in January 2026 showed that recorded DigAlert field responses averaged approximately 26 minutes, including travel time. This is also consistent with our field observations, during which DigAlerts took about 20 minutes to complete. However, KorTerra data shows that electricians complete an average of 9 DigAlerts per day. This suggests that DigAlerts may not require the full regular workday and that additional capacity likely exists for streetlight repairs, which would help the Program manage the streetlight repair backlog and respond to broken streetlights more quickly.
- **The Program has not yet routinely used newer KorTerra information to evaluate performance:** KorTerra data showed that while electricians completed 9 DigAlerts per day on average, productivity varied widely between individual electricians. Some electricians averaged up to 13 DigAlerts per day, while others averaged only 6, less than half as many. This further indicates there is likely additional capacity to complete streetlight repairs during regular working time. However, the Program has not routinely analyzed these differences, established performance expectations, or investigated significant employee productivity variances.
- **Operational changes impact equity:** The overtime funding that is available for streetlight repair comes from Community Parking Districts (CPDs)—revenue from parking meters in certain areas of the City— and thus must be spent within CPD boundaries. By dedicating almost all regular working time to DigAlerts and limiting most streetlight repairs to overtime, broken streetlights located outside of CPDs are much less likely to be repaired.
- **Reported DigAlert workload overstated the number of requests requiring an electrician response:** When requesting additional staff to respond to DigAlerts in the field, the Program reported total DigAlert records without distinguishing requests that could be administratively reviewed and closed from those requiring an electrician to respond on site. Specifically, the Program cited a workload of 6,000 DigAlerts per month, without noting that less than half of those required a field response.
- **Incomplete contractor information limited performance evaluation:** From FY2023 to FY2024, the program used a contractor (CTE) to supplement City staff and help address the streetlight repair backlog. Per City policy, CTE was not provided access to SAP to record completed repairs. However, the Program did not establish an alternative process to comprehensively track contractor repairs or the City labor supporting those repairs. As a result, management lacked complete information for evaluating contractor productivity, cost-effectiveness, and City resource utilization.

Collectively, these issues have limited the Program's ability to fully assess how its resources are being used, evaluate employee and Program performance, and determine whether its operating model is the most effective approach for addressing the growing streetlight repair backlog.

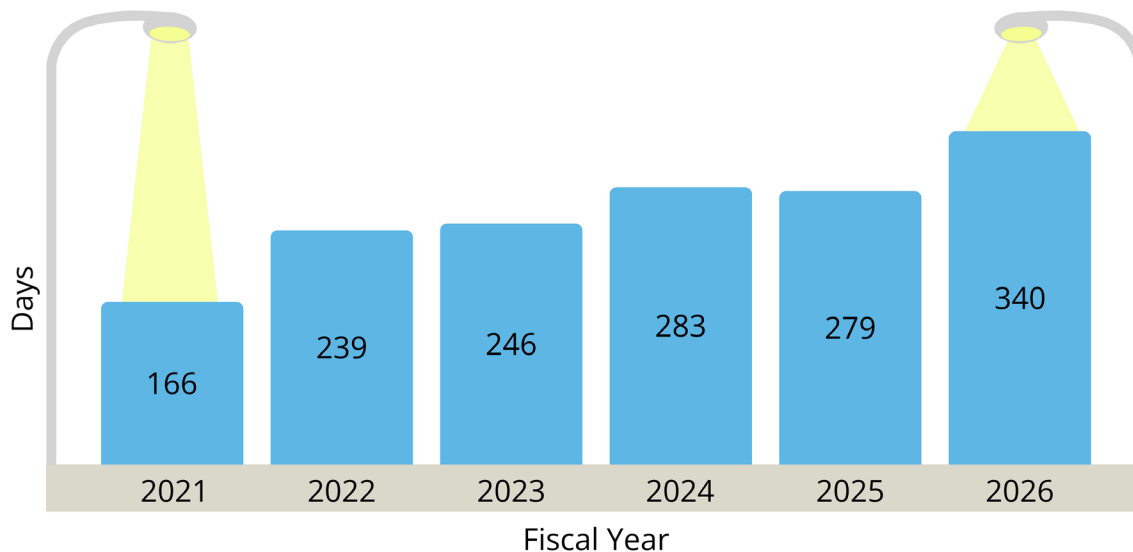
To address these issues, we make five recommendations to improve the collection and use of operational information, establish reliable workload and productivity measures, strengthen contractor performance tracking, and require periodic reviews of staffing, overtime, contractor utilization, workflows, and other resources to ensure they remain aligned with operational demand and desired service levels.

Streetlight repairs take significantly longer as the backlog has grown.

During the audit period, the number of outstanding streetlight repair requests increased from 2,684 at the beginning of FY2021 to 7,552 at the beginning of FY2027, an increase of approximately 181 percent. At the same time, as shown in **Exhibit 11**, the average time required to complete a streetlight repair increased from approximately 166 calendar days in FY2021 to 340 calendar days in FY2026, an increase of approximately 105 percent.

Exhibit 11

Average Time to Complete a Streetlight Repair More Than Doubled from FY2021 to FY2026



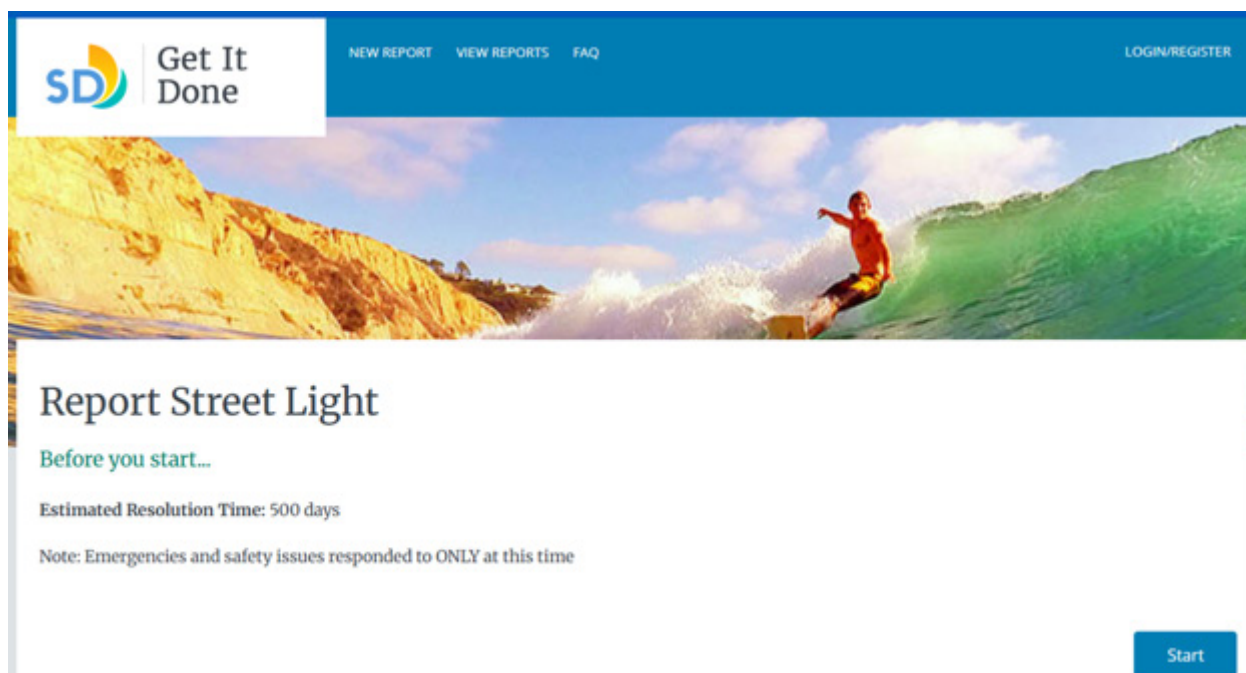
Source: OCA generated based on SAP streetlight work order data during the FY2021–FY2026 period.

Consistent with these longer repair times, the City's Get It Done website currently advises residents that streetlight repair requests have an estimated resolution time of approximately 500 days, as

shown in **Exhibit 12** below.⁶ As the backlog has grown and repair times have lengthened, reported streetlight issues may remain unresolved for extended periods, prolonging the time residents experience reduced nighttime visibility and potentially increasing public safety risks associated with nonfunctioning streetlights.

Exhibit 12

The City's Get It Done Website Estimates a 500-Day Resolution Time for Streetlight Repair Requests



Source: Screenshot of the City of San Diego's Get It Done webpage for reporting streetlight outages as of September 8, 2026

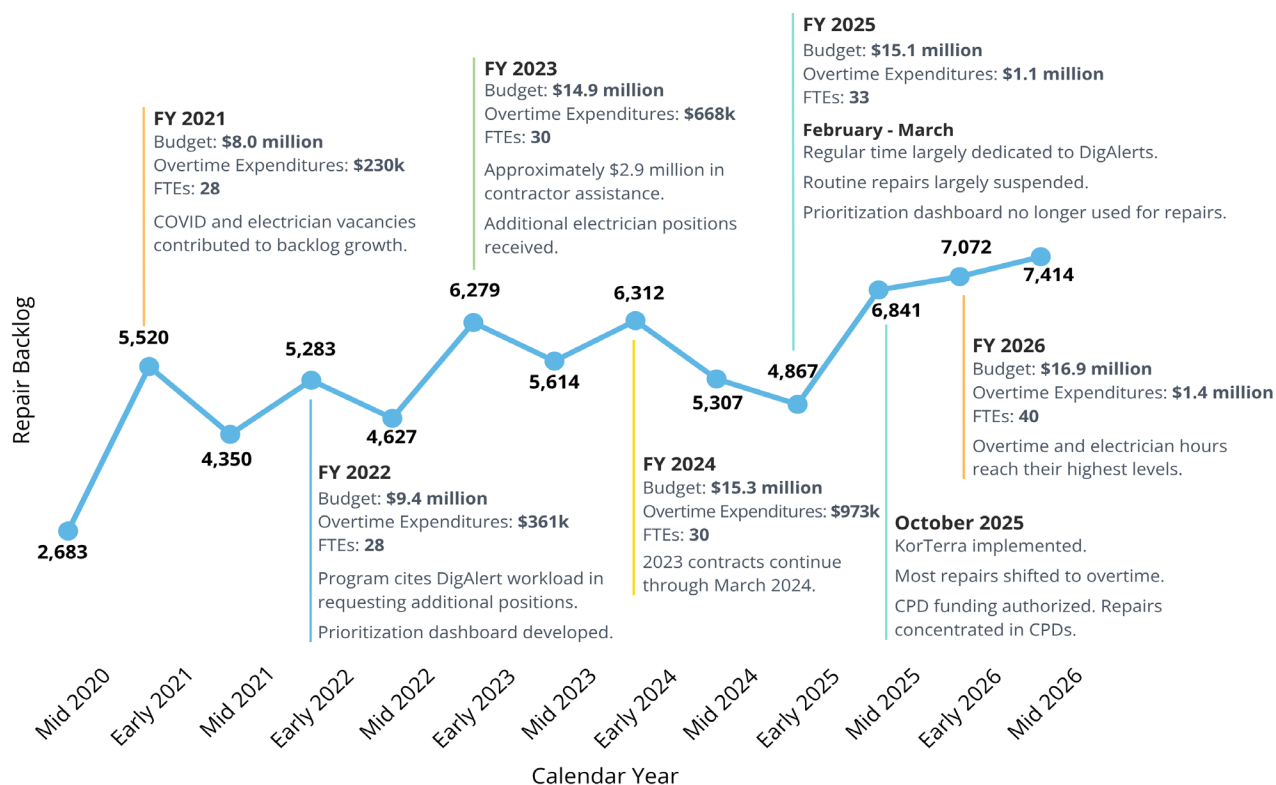
The backlog grew during a period in which the Program received additional resources and changed how those resources were used. As shown in **Exhibit 13**, the streetlight repair backlog fluctuated throughout the audit period but generally trended upward, increasing from approximately 2,700 notifications in mid-2020 to approximately 7,400 by mid-2026. During this period, the Program received additional resources at various points, including additional electrician positions beginning in FY2022, approximately \$2.9 million in contractor assistance during FY2023 and FY2024, and larger increases in staffing and funding in FY2025 and FY2026. Beginning in February 2025,

⁶ According to Transportation, the 500-day estimate displayed on the City's Get It Done portal is derived from historical response times and reflects the average age of notifications at the time they are closed, not the average age of the current backlog or the average completion time for recently closed notifications. As a result, the estimate is not directly comparable to the 340-day average presented in Exhibit 11.

regular working hours became largely dedicated to DigAlert responses and routine non-emergency streetlight repairs were mostly suspended during regular time. When routine repairs resumed in October 2025 following approval of additional overtime funding, most were performed on overtime while regular working hours continued to be devoted primarily to DigAlert responses.

Exhibit 13

The Streetlight Repair Backlog Continued to Grow as Program Resources and Operations Changed During the Audit Period



Source: OCA generated based on SAP budget and repair data and interviews with Program staff.

According to Program management, several factors affected the backlog during the audit period, including the COVID-19 pandemic, vacancies and employee turnover, weather-related events, contractor assistance, and the 2025 change in how electrician work hours were allocated. The backlog fluctuated during the period and declined from some earlier peaks before beginning to increase more sharply in 2025. However, as discussed below, limitations in historical operational information, along with the lack of sufficient supplemental processes to address those limitations, prevented the Program from reliably determining the relative effect of these factors on service levels.

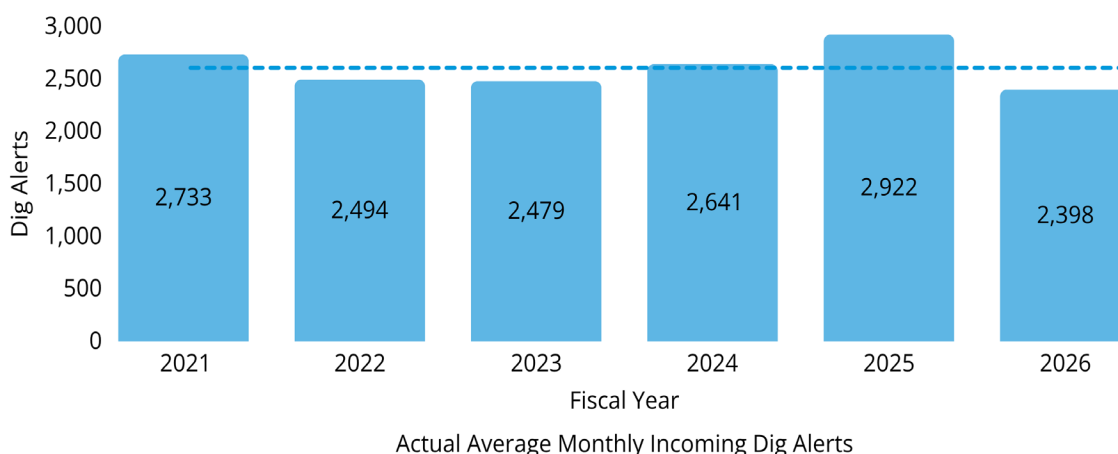
The Program's incoming workload remained relatively stable while available labor hours increased substantially.

To evaluate how the Program used its available workforce, we compared changes in its primary workload with the total regular and overtime hours worked by Program staff. We found that the Program's two principal sources of workload, DigAlert requests requiring field response and incoming streetlight repair notifications, remained relatively stable during the audit period, while the total number of staff hours available to address this work increased substantially.

Specifically, the Program received approximately 2,400 to 2,900 DigAlert requests requiring a field response each month throughout the audit period. As shown in **Exhibit 14**, average monthly DigAlert workload fluctuated from year to year but remained within this relatively narrow range, with no sustained increase from FY2021 through FY2026.

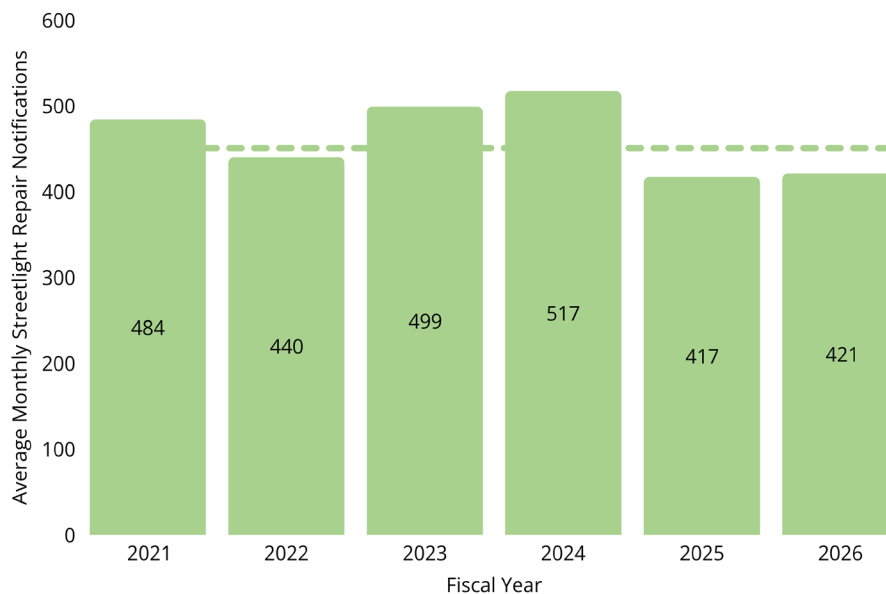
Exhibit 14

Average Monthly DigAlert Requests Requiring a Field Response Remained Relatively Stable During FY2021–FY2026



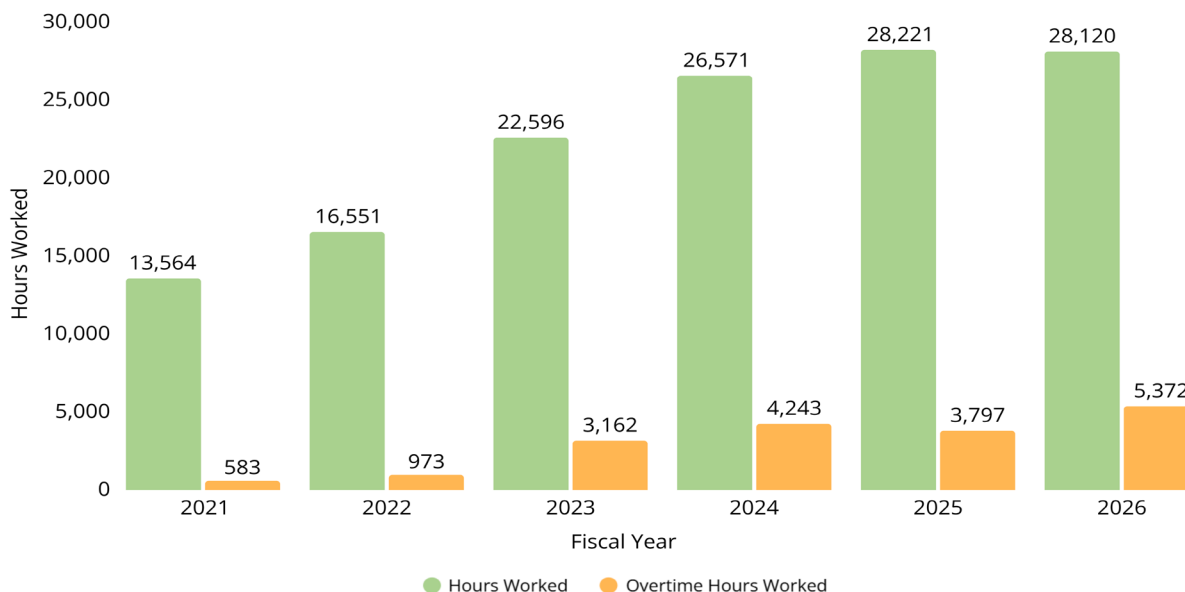
Source: OCA generated based on DigSmart and KorTerra data during the FY2021–FY2026 period.

Similarly, the Program received approximately 420 to 520 new streetlight repair notifications per month during the audit period. As shown in **Exhibit 15**, average monthly repair notifications also fluctuated from year-to-year but did not experience a sustained increase from FY2021 through FY2026.

*Exhibit 15***Average Monthly Streetlight Repair Notifications Remained Relatively Stable During FY2021–FY2026**

Source: OCA generated based on SAP streetlight service notification data during the FY2021–FY2026 period.

In contrast to these relatively stable workloads, the total number of hours worked by Program staff increased substantially. As shown in Exhibit 16, total electrician regular work hours increased from approximately 13,600 hours in FY2021 to more than 28,000 hours in FY2026, an increase of approximately 107 percent. In addition, during the same period, overtime hours increased from approximately 600 hours to more than 5,300 hours, an increase of roughly 821 percent, meaning that the Program had substantially more regular and overtime labor hours available by FY2026 to address workloads that had remained relatively stable.

*Exhibit 16***Streetlight Electricians' Total Labor and Overtime Hours Increased Substantially From FY2021 Through FY2026**

Source: OCA generated based on SAP labor and overtime hours data for the FY2021 - FY2026 period.

The fact that the backlog grew, while available labor hours increased substantially and incoming workloads remained relatively stable, raises questions about how effectively the additional labor capacity translated into increased repair activity. However, the Program did not maintain sufficiently reliable historical information on DigAlert field responses, repair durations, and other work activities, nor did it establish alternative processes to address these information gaps. As a result, neither Program management nor the Office of the City Auditor could conclusively evaluate historical productivity from FY2021 to FY2025, or determine whether opportunities existed to use available labor resources more effectively during that time.

The Program's systems do not capture all key operational information, and management does not consistently use available information to evaluate performance.

The Program uses several systems to manage streetlight repairs and related work, including SAP, BlueWorx, and KorTerra, and has used GeoTab on a limited basis for fact-finding investigations.⁷ These

⁷ According to Program management, GeoTab has primarily been used to support fact-finding investigations rather than as an ongoing management tool to monitor employee productivity and program performance.

systems were developed for different purposes and do not fully integrate, limiting management's ability to readily analyze Program operations. As a result, key information—including repair duration and type, record of all employees and vehicles involved in work activities, DigAlert field-response activity, and contractor-performed repairs—is incomplete, inconsistently documented, or difficult to readily analyze. Management also did not consistently require staff to use available system functionality or establish alternative processes to address these information gaps. Further, when more detailed operational information became available through KorTerra during FY2026, the Program had not yet routinely used it to evaluate workload and employee performance.

Approximately half of repair work orders used the generic classification "Repaired," limiting the Program's ability to readily identify and analyze the types of repairs performed.

The U.S. Government Accountability Office's Standards for Internal Control in the Federal Government (Green Book) recommends that management obtain and use reliable information to support informed decisions and accountability for public resources. We found gaps in information on repair duration and type, employees and vehicles involved in work activities, DigAlert field responses, and inconsistent documentation of completed work, such as before-and-after photographs. For example, approximately 10 percent of streetlight repair work orders did not identify the electrician responsible for the repair. In addition, approximately half of repair work orders used the generic classification "Repaired," requiring management to rely on inconsistent free-text descriptions to determine what work was performed. As shown in **Exhibit 17**, these descriptions varied considerably in the level of detail provided, ranging from generic entries such as "REPAIRED" or "repaired light" to more specific descriptions, such as "repaired base fuses" or "repaired ground fault, new lamps, fuses," making it difficult to consistently identify and analyze the types of repairs performed.

*Exhibit 17***Streetlight Repair Records Contains Limited, Non-Standardized Information About the Work Performed**

Coding code txt	Act. code text	Activity text
STREET LIGHT OUT	REPAIRED	REPAIRED
STREET LIGHT OUT	REPAIRED	REPAIRED
STREET LIGHT OUT	REPAIRED	REPAIRED
STREET LIGHT OUT	REPAIRED	REPAIRED
STREET LIGHT OUT	REPAIRED	repaired
STREET LIGHT OUT	REPAIRED	Repaired lights
STREET LIGHT OUT	REPAIRED	repaired lights
STREET LIGHT OUT	REPAIRED	repaired security lights
STREET LIGHT OUT	REPAIRED	repaired splice new lamps, fuses
STREET LIGHT OUT	REPAIRED	located fuse replaced and repaired
STREET LIGHT OUT	REPAIRED	repaired bad fuses
STREET LIGHT OUT	REPAIRED	repaired ground fault, new lamps, fuses
STREET LIGHT OUT	REPAIRED	repaired bad connection
STREET LIGHT OUT	REPAIRED	repaired bad conductor
STREET LIGHT OUT	REPAIRED	repaired bad splice
STREET LIGHT OUT	REPAIRED	repaired bad connection
STREET LIGHT OUT	REPAIRED	repaired bad connection
STREET LIGHT OUT	REPAIRED	repaired security lights burn test
STREET LIGHT OUT	REPAIRED	repaired hanging and missing globes
STREET LIGHT OUT	REPAIRED	repaired cut wires
STREET LIGHT OUT	REPAIRED	adjust time clock repaired lights

Source: SAP IW65 report containing streetlight repair work orders during the FY2021–FY2026 period.

As summarized in **Exhibit 18**, these and other information gaps, combined with Program management not establishing sufficient processes to address them, hinder the Program's ability to monitor workload and productivity, evaluate resource utilization, and determine whether changes to staffing and work assignments are improving service levels.

Exhibit 18

The Streetlight Repair Program Does Not Have the Reliable Operational Information Needed for Program Management to Effectively Monitor Workload, Measure Performance, and Manage Program Resources

Operational Question	Is the Information Needed for This Assessment Routinely Tracked?
How many new dig alerts require a physical response?	Not accurately (reported all dig alert records rather than just new requests)
Which dig alerts were actually completed?	Not before KorTerra (October 2025)
How much time did electricians spend on repairs versus dig alerts?	No – time not tracked separately
How many hours does each repair type take?	No – repair-specific labor hours unavailable
Which electricians performed the work?	Not consistently
Which work vehicles were used?	Not consistently
How productive are electricians?	Not for most of FY2021-FY2026 period
Are contractors cost-effective?	No, number and type of contractor repair not recorded in SAP

Source: OCA generated based on interviews with Program staff, SAP work order reports, and DigSmart/KorTerra dig alert reports.

Historical DigAlert records did not reliably identify work performed in the field.

California’s “Call Before You Dig” law requires the City to identify and mark its underground facilities, or determine that none are present, before submitting an electronic positive response to the excavator and before excavation begins.

Prior to October 2025, the Program used DigSmart to manage incoming DigAlert requests. According to Program management, supervisors electronically reviewed incoming requests but printed those requiring field work and distributed paper copies to electricians. Because processing individual tickets electronically was time-consuming, supervisors generally entered the positive response and closed the electronic ticket before the associated field work was completed.⁸

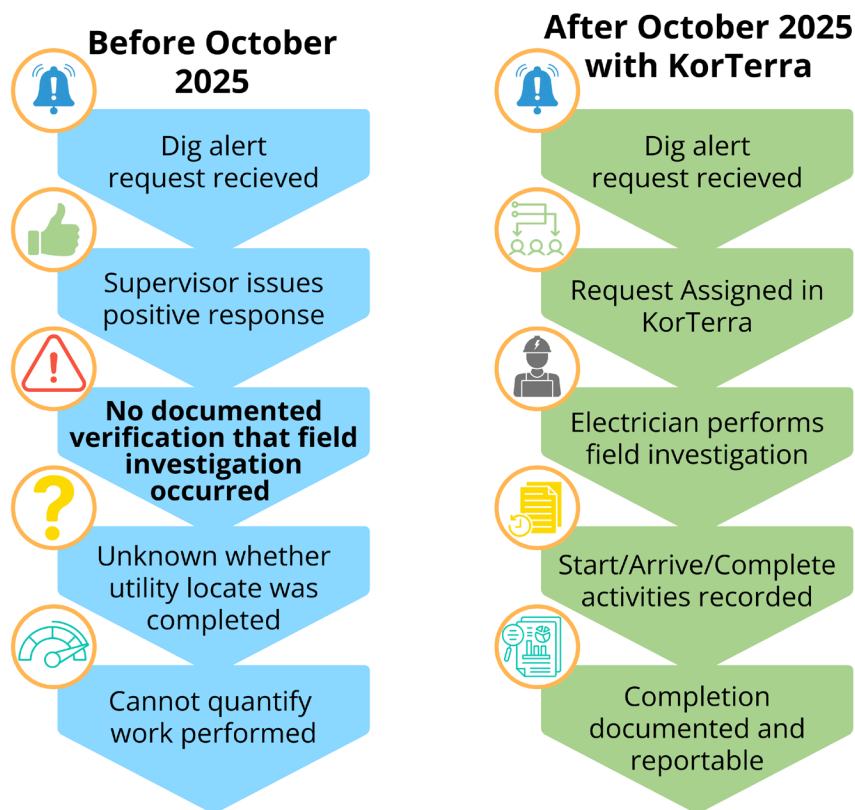
⁸ For purposes of this report, “field work” or “field response” refers to an electrician traveling to the DigAlert location to determine whether City underground facilities are present within the proposed excavation area and, if necessary, locating and marking those facilities.

Historical data limitations prevented reliable measurement of DigAlert productivity and the regular work time devoted to DigAlert responses.

The Program did not consistently retain documentation showing which electrician received each assignment, whether or when the field response occurred, or how long it took. Supervisors also did not consistently verify completion of the field work after distributing the paper tickets. Program management stated that an unknown number of requests recorded as having received a positive response may not have received a corresponding electrician field response.

As a result, historical DigSmart records cannot reliably establish the amount of DigAlert field work performed or how electricians used their regular working hours. The process also increased the risk that excavation could proceed without the City having properly identified and marked its underground infrastructure, potentially resulting in infrastructure damage, safety concerns, City liability, or noncompliance with State requirements. Furthermore, historical data limitations prevented both Program management and our office from reliably determining DigAlert productivity, establishing productivity baselines, or determining how much regular work time electricians devoted to DigAlert responses during the FY2021 through FY2025 period.

According to Program management, these compliance and liability concerns were a primary reason it implemented KorTerra in October 2025. As shown in **Exhibit 19**, KorTerra significantly strengthened the Program's controls by electronically documenting the assignment, field response, and completion of DigAlert requests, and helping ensure that required field work is verified to have been completed before a positive response is submitted.

*Exhibit 19***Implementation of KorTerra Improved the Program's Ability to Document and Verify DigAlert Field Work**

Source: OCA generated based on DigSmart and KorTerra reports as well as interviews with Streetlight Repair Program management.

Implementation of KorTerra represents a significant improvement over the Program's prior process and provides an effective control for documenting utility locate activities and reducing the compliance, safety, and liability risks described above. Program management deserves credit for identifying these concerns and implementing a system that substantially improved the quality and reliability of its DigAlert operational information. As discussed below, while KorTerra now provides substantially better information for evaluating workload and productivity, management has not established a consistent process for routinely using that information.

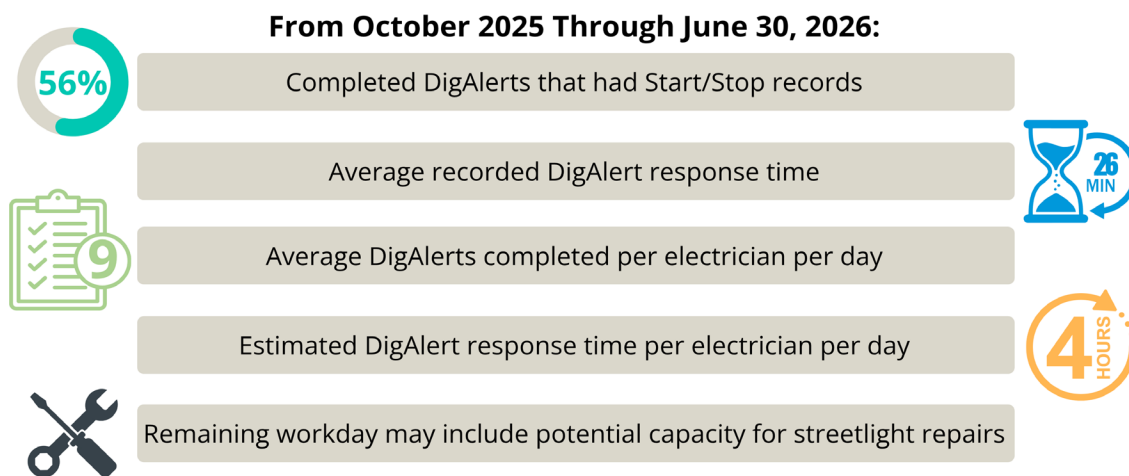
Available KorTerra data indicates that DigAlert responses should generally occupy only a portion of electricians' regular workday.

KorTerra provides management with substantially more reliable information to evaluate DigAlert workload and productivity than was previously available. Although use of its Start/Stop functionality was not yet consistent, approximately 56 percent of completed DigAlert responses from October 2025 through June 2026 contained Start/Stop records.

Our analysis found that DigAlert responses averaged approximately 26 minutes, including travel time, and electricians completed an average of approximately nine responses per workday. Based on these averages, recorded DigAlert responses represented approximately 4 hours of an eight-hour workday. Our field observations were generally consistent with these results; audit staff observed two DigAlert mark-outs that each took less than 20 minutes to complete on site. While this does not mean that all remaining work hours were available for streetlight repairs, the results suggest there may be capacity to complete some routine streetlight repairs during regular working hours, as shown in **Exhibit 20**.

Exhibit 20

Available KorTerra Data Suggests DigAlert Workload May Allow for Some Streetlight Repairs During Regular Working Hours



Note: The Transportation Department has only been using KorTerra since October 2025 and the start/stop function in the system since late January 2026.

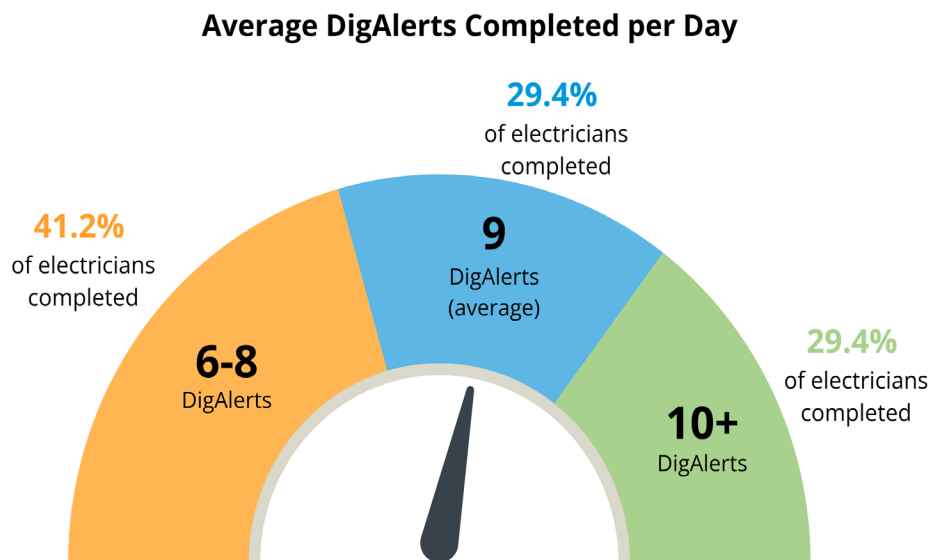
Source: OCA generated based on KorTerra reports from October 2025 through June 2026.

The analysis does not establish how much of the remaining workday was available for streetlight repairs. According to Program management, electricians may also spend time on breaks, administrative responsibilities, assisting other electricians, and other Program responsibilities. In addition, inconsistent use of KorTerra's Start/Stop functionality may impact the precision of our estimate. Nevertheless, the available data indicates that DigAlert responses likely do not require all of electricians' regular working hours and suggests potential capacity to complete some routine streetlight repairs during regular time.

KorTerra data also shows meaningful differences among electricians. As shown in **Exhibit 21**, individual electricians averaged approximately 6 to 13 DigAlert responses per workday. Differences in assignments, travel, and work complexity may explain some variation; however, management has not established a routine process to analyze these differences, established reasonable productivity expectations, or determined when significant variances warrant further review.

Exhibit 21

KorTerra Data Shows Electricians Averaged Approximately 6 to 13 DigAlert Responses per Workday



Improving Productivity Creates Repair Capacity

- More consistent DigAlert productivity
- More streetlight repairs during regular time
- Faster service response times for residents
- Regular working hours become available

Source: OCA generated based on FY2026 KorTerra data.

KorTerra data suggests that dedicating regular working hours almost exclusively to DigAlert responses was likely unnecessary.

Available KorTerra data suggests there may be capacity to incorporate some routine streetlight repairs into regular working hours while continuing to meet DigAlert and other Program responsibilities.

The results above are particularly important because, beginning in February 2025, the Program devoted regular working hours almost exclusively to DigAlert responses and largely suspended routine non-emergency streetlight repairs during regular time. When routine repairs resumed in October 2025 following approval of additional overtime funding, most were performed on overtime while regular working hours continued to be devoted primarily to DigAlert responses. Available KorTerra data indicates that dedicating regular working hours almost exclusively to DigAlert responses was likely unnecessary and suggests there may be capacity to incorporate some routine streetlight repairs into regular working hours while continuing to meet DigAlert and other Program responsibilities. However, management has not routinely analyzed this information to determine whether adjustments to the current operating model could improve the use of available labor resources and help address the repair backlog.

The need for stronger management monitoring of available operational information is also reflected in **Finding 2**. As discussed there, our review of vehicle telematics identified recurring patterns of extended City vehicle stops that warranted additional management review. While these patterns do not establish that the associated employee activity was inappropriate, they demonstrate the importance of routinely reviewing available operational information to identify unusual or significant variances and determine when additional supervisory review is warranted.

The Program's budget request for additional staff reflected DigAlert workload figures that were substantially higher than the actual workload.

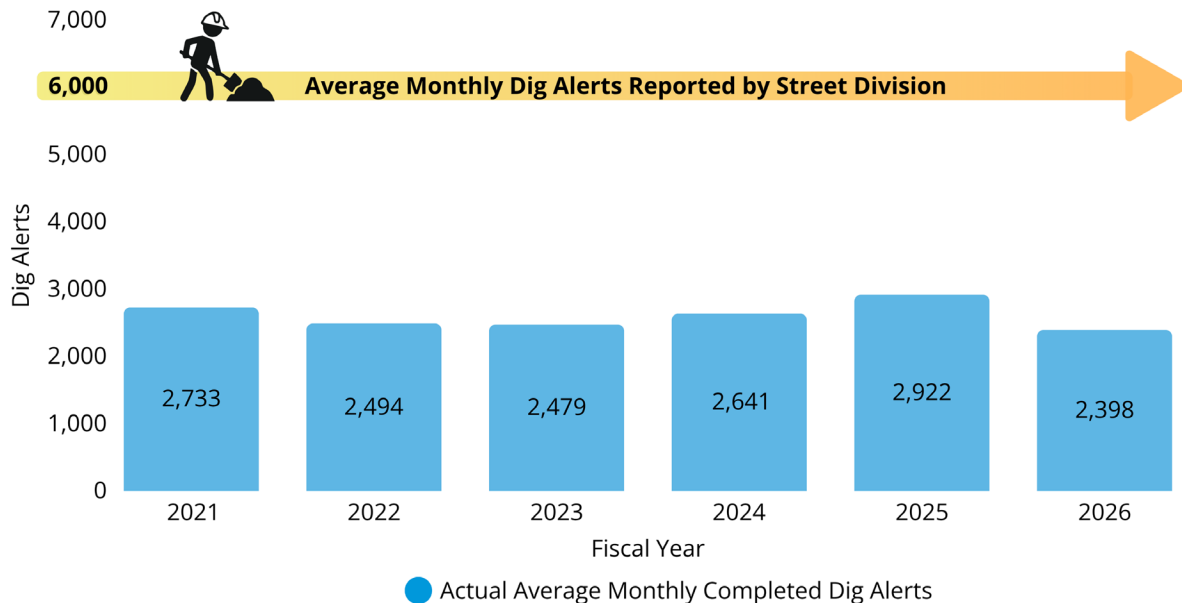
We also found that the Program cited an estimated workload of approximately 6,000 DigAlert transactions per month in a Fiscal Year 2022 budget request that resulted in funding for two additional electrician positions. Program management noted that all incoming DigAlert transactions require some level of supervisory review and processing, including renewals, amendments, and cancellations. However, these transactions do not all represent new requests requiring electrician field response.⁹

⁹ According to Program management, supervisors review incoming DigAlert requests and may close them without a field response when available records and information about the proposed excavation indicate that no City streetlight infrastructure is present or would be affected.

As shown in **Exhibit 22**, our analysis found that the Program actually received approximately 2,600 new DigAlert requests requiring a field response per month, on average, during the audit period after removing renewal, amendment, and cancellation records. Because the additional positions requested were electricians, distinguishing between total DigAlert transactions and requests requiring electrician involvement provides a more relevant measure of the workload those positions were intended to address.

Exhibit 22

The Program Received Approximately 2,600 New DigAlert Requests per Month During FY2021–FY2026, Compared With Approximately 6,000 Monthly Transactions Cited in the FY2022 Staffing Request



Source: OCA generated using DigAlert data provided by the Streetlight Repair Program.

According to Program management, approximately one-half of all DigAlert records are administratively reviewed and closed without requiring a field response, while the remaining requests generally require an on-site inspection or utility locate. Although administratively closed transactions still require supervisory review and processing, they do not represent the same level or type of workload as requests requiring an electrician to travel to the site and perform field work.

However, the approximately 6,000 monthly transactions cited in the FY2022 budget request did not distinguish the portion of DigAlert workload requiring electrician field response. Because the request was

for additional electrician positions, presenting total transaction volume without this distinction did not provide decision makers with a clear understanding of the workload most directly relevant to the requested staffing.

The Program's current operating model has limited its ability to prioritize streetlight repairs based on operational and equity considerations.

The February 2025 operating change affected not only the amount of regular-time labor available for streetlight repairs, but also how the Program determines which repairs are completed. As part of our audit objective, we reviewed the Program's streetlight repair prioritization framework and analyzed whether available information could demonstrate that repair resources were being allocated efficiently and equitably across the City. The Program developed a framework for a prioritization dashboard in 2022 to help determine which outstanding streetlight repairs should be addressed first. The framework considers operational and equity-related factors—including roadway characteristics, public safety, historic service levels, neighborhood equity indicators, and notification age—and is intended to help supervisors geographically cluster repairs while giving greater consideration to higher-priority requests.

Approximately 71% of FY2026 streetlight repairs occurred in Council Districts 1, 3, and 9—the three Council Districts containing Community Parking Districts.

However, the Program's current operating and funding structure limits its ability to use this framework to guide routine repairs Citywide. Since March 2025, regular working hours have been devoted primarily to DigAlert responses. As discussed above, beginning in October 2025, routine streetlight repairs were performed primarily during overtime hours after additional overtime funding became available. Much of the overtime subsequently authorized for routine repairs was restricted to Community Parking Districts (CPDs) and therefore could not be redirected to repairs elsewhere in the City.

According to Program management, targeted overtime funding helped reduce the backlog within the City's CPDs. From October through June, approximately 2,138 service notifications were closed in CPDs and their combined backlog declined approximately 19 percent. The concentration of repair activity is also reflected in FY2026 repair data, which shows that approximately 71 percent of all completed streetlight repairs occurred in Council Districts 1, 3, and 9, the three Council Districts containing CPDs. While not all repairs within these Council Districts were necessarily funded through CPD overtime, the concentration of repairs illustrates how the Program's operating

and funding structure directed a substantial share of repair activity toward these areas. As a result, areas without dedicated funding did not necessarily receive the same level of repair activity based on the operational and equity considerations incorporated into the Citywide prioritization framework.

As discussed above, KorTerra data indicates there is likely capacity to complete some routine streetlight repairs during regular working hours while continuing to meet DigAlert requirements and other Program responsibilities. Incorporating such repairs into regular working hours could give the Program greater flexibility to use its prioritization framework Citywide rather than relying primarily on geographically restricted overtime. Therefore management should routinely analyze workload and productivity information to determine whether changes to the current operating model could improve service levels and better support the framework's operational and equity objectives.

The Program did not establish a comprehensive process for tracking and analyzing contractor performance and costs.

To help reduce the streetlight repair backlog, the City issued two Job Order Contract (JOC) task orders totaling approximately \$2.9 million during FY2023 and FY2024. The contracts were intended to supplement City crews and accelerate streetlight repairs, with the first contract estimated to complete approximately 700 repairs and the second estimated to complete approximately 1,900 repairs.¹⁰

Consistent with the Green Book principles discussed earlier in this finding, management should maintain reliable operational information sufficient to evaluate contractor performance and cost-effectiveness. The Program maintained separate documentation of contractor repairs and reviewed completed work. However, contractor repairs were not systematically captured in SAP, in part because Department of Information Technology restrictions prevented contractors from directly accessing the system. The Program also did not establish a separate system or standardized process to comprehensively track contractor repair counts and types and the City labor supporting contractor work.

¹⁰ Available contractor invoices identified 1,885 completed repairs for one JOC. Invoices for the other JOC documented repair costs but did not identify the total number of repairs; Program management estimated that approximately 700 repairs were completed.

As shown in **Exhibit 23**, contractor records indicate that approximately 2,585 repairs were completed during FY2023 and FY2024, while SAP identified approximately 699, or 27 percent, of those repairs.

Exhibit 23

Street Division Could Only Identify Approximately 27 Percent of Contractor-Performed Repairs in Its Work Management System

Total Repairs
Completed by
Contractor



Total Contractor
Repairs Reported
in SAP



Contractor
Performed Repairs in
Work Management
System



Source: OCA generated using work order data and contractor invoices provided by the Streetlight Repair Program.

Additionally, City electricians performed work supporting the contracts, such as night inspections, but charged this time to internal order numbers rather than specific contractor work orders. As a result, management could not readily combine contractor repair, City labor, and cost information to evaluate contractor productivity, repair costs, and cost-effectiveness, or use this information to inform future contracting decisions.

Recommendations

To help ensure the Streetlight Repair Program collects and uses reliable operational information to effectively monitor performance, evaluate productivity, and support informed management decisions, we recommend the following:

Recommendation 1.1

(Priority 1)

To strengthen operational oversight and improve the reliability of available performance information, the Transportation Department should develop and implement standard operating procedures requiring Streetlight Repair Program supervisors and staff to consistently use existing functionality within the Program's operational systems. Transportation should coordinate with the Department of Information Technology, as needed, to ensure that existing system functionality necessary to support these procedures is available and appropriately configured. At a minimum, the procedures should:

- Require consistent use of KorTerra Start/Stop functionality for DigAlert field responses;
- Require streetlight repair work orders to identify the electrician primarily responsible for completing the work;
- Require electricians to upload before-and-after photographs of completed streetlight repairs into SAP;
- Establish and require consistent use of standardized streetlight repair categories sufficient to identify the general type of repair performed; and
- Require supervisors to periodically review available operational information for completeness, accuracy, compliance with documentation requirements, and unusual or significant performance variances.

Management Response: Agree [See full response beginning on page 61.]

Target Implementation Date: September 2027

Recommendation 1.2

(Priority 1)

To improve the Streetlight Repair Program's ability to capture and analyze operational information, the Transportation Department, in consultation with the Department of Information Technology, should evaluate options for modifying, integrating, or otherwise enhancing the Program's information systems to more efficiently capture key operational information. The evaluation should consider options to:

- Record the start and completion times of streetlight repair activities;
- Identify employees participating in streetlight repairs, including repairs involving multiple employees; and
- Record the City work vehicle assigned to each electrician during each work shift.

Transportation should document the results of its evaluation, including the options considered, recommended system or process changes, and actions and anticipated timelines for implementing the identified improvements. Transportation should implement the identified improvements to ensure the Program consistently captures the operational information described above.

Management Response: Agree [See full response beginning on page 62.]

Target Implementation Date: July 2027

Recommendation 1.3

(Priority 1)

To establish reliable information on DigAlert workload, timeliness, and staff productivity, the Transportation Department should:

- Develop and implement a standardized methodology for calculating and reporting DigAlert workload that includes only requests requiring a field response and excludes administrative transactions, such as cancellations, renewals, and requests assigned to other utility operators;
- Using the Start/Stop information required under Recommendation 1.1, ensure that start and stop times are consistently captured for all DigAlert field responses, along with any other information necessary to accurately measure workload, timeliness, and productivity;
- Provide training to Streetlight Repair Program supervisors and staff on the revised DigAlert workload and field

reporting policies and procedures to ensure they are consistently understood and applied; and

- Develop and implement a policy requiring Program management to routinely monitor and analyze monthly and annual DigAlert workload, timeliness, and productivity metrics at both the program and individual employee levels. Using this information, Program management should establish reasonable productivity expectations for DigAlert field responses and streetlight repairs, periodically evaluate actual performance against those expectations, investigate significant variances, and use the results to improve operational performance and inform staffing and resource allocation decisions.

Management Response: Agree [See full response beginning on page 62.]

Target Implementation Date: September 2027

Recommendation 1.4

(Priority 2)

The Transportation Department, in consultation with the Department of Information Technology, should develop and implement a centralized process to systematically capture and identify contractor-performed streetlight repairs in SAP or another appropriate information system or centralized repository. At a minimum, the process should:

- Require all contractor-completed streetlight repairs to be recorded and identifiable within the system;
- Require contractor-performed repairs to be documented using the standardized repair categories established in Recommendation 1.1, and establish a practical method for capturing this information in the Program's systems or other centralized repository;
- Record City staff time associated with contractor-performed work, including inspections, oversight, corrective work, or other support activities, using standardized repair codes; and
- Capture the information necessary to monitor contractor performance, verify contract completion, compare contractor and City productivity and costs, and evaluate contractor performance, cost-effectiveness, and future contractor utilization decisions.

Management Response: Agree [See full response beginning on page 63.]

Target Implementation Date: January 2028

Recommendation 1.5

(Priority 2)

Once the Transportation Department has implemented Recommendations 1.1 through 1.4 and established reliable baseline performance and productivity information, it should conduct a comprehensive performance management review to evaluate whether staffing, overtime utilization, contractor utilization, equipment, workflows, and other resources are appropriately aligned with operational demand and the City's desired service levels. At a minimum, the review should:

- Evaluate whether staffing levels, overtime utilization, equipment, and workflows are aligned with actual workload and productivity;
- Reassess and establish measurable performance goals for streetlight repairs and DigAlerts using actual workload, productivity, and backlog trends;
- Evaluate the effectiveness and cost-effectiveness of contractor utilization, and determine which work activities are most appropriately performed by City staff and which, if any, are appropriate for contractors; and
- Evaluate the allocation of regular and overtime labor hours, including whether the Program's current allocation of DigAlert responses and routine streetlight repairs remains appropriate based on available workload and performance information.

The Transportation Department should develop and implement a standard operating procedure to require Streetlight Repair Program management to periodically perform this review, or whenever significant operational changes occur, to ensure staffing, productivity goals, contractor utilization, and resource allocations remain aligned with Program demand.

Management Response: Agree [See full response beginning on page 64.]

Target Implementation Date: January 2028

Finding 2

Insufficient oversight of streetlight electricians increases the risk of misuse of limited program resources.

Finding Summary

In addition to the Program-level productivity monitoring limitations discussed in **Finding 1**, we found that limitations in the Transportation Department's (Transportation) Streetlight Repair Program's (Program) existing systems and records, combined with management's lack of standardized procedures for using available information, have limited supervisory oversight of employee activities, verification of work performed, and identification of potential misuse of City time and resources. Specifically, we found:

- **Available vehicle telematics information was not routinely used for employee oversight.** City vehicle telematics data is available to Transportation, and Administrative Regulation 90.74 (AR 90.74) authorizes City Management to monitor, audit, and review telematics data, and requires departments to review telematics information to ensure appropriate use of City vehicles. However, Program management has not routinely used telematics data for employee-level monitoring. According to Transportation, this is consistent with a longstanding City practice of discouraging department supervisors from using telematics for routine employee monitoring, and the Program has not established standardized procedures, reports, or expectations for doing so.
- **Transportation has taken appropriate action to address several prior allegations of abuse of time by employees but did not look for broader patterns or address root causes.** From FY2021 through FY2026, OCA received multiple Fraud Hotline allegations involving abuse of time or misuse of City vehicles within Transportation, including allegations involving the Streetlight Repair Program. Transportation generally responded promptly and took appropriate action on referred allegations but evaluated them individually rather than using additional available information to assess whether the reported conduct reflected broader patterns or underlying management or internal control issues. Therefore, when additional Streetlight Program allegations were received during this audit, we incorporated them into our fraud risk assessment and audit testing to assess whether the alleged conduct reflected broader patterns or control weaknesses that could enable abuse of time, consistent with Government Auditing Standards.¹¹
- **Our analysis identified recurring patterns of extended City vehicle stops that management had not previously identified.** In response to OCA's fraud hotline allegations, we expanded our review beyond the specific incidents reported and

¹¹ The U.S. Government Accountability Office's (GAO) Government Auditing Standards, commonly referred to as the Yellow Book, establishes standards for government audits. Paragraph 8.72 states: "Assessing the risk of fraud is an ongoing process throughout the audit. When information comes to the auditors' attention indicating that fraud, significant within the context of the audit objectives, may have occurred, auditors should extend the audit steps and procedures, as necessary, to (1) determine whether fraud has likely occurred and (2) if so, determine its effect on the audit findings."

identified two City vehicles that remained parked for at least 90 minutes at three nearby locations on 56 occasions during the six-month period reviewed. These stops averaged approximately 2 hours and 25 minutes and totaled approximately 198 hours—equivalent to nearly 25 eight-hour workdays. Program management stated that it was not aware of streetlight-related work at these three locations that would explain the identified vehicle activity. We also identified similar patterns of extended stops at four additional locations, which Program management is currently reviewing as part of its fact-finding investigation. Because that review is ongoing, we do not conclude that the activity at these additional locations was inappropriate.

- **Callback overtime records did not always contain sufficient information to verify work performed.** Available records did not consistently identify all electricians responding to callback emergencies or otherwise provide sufficient information to independently verify their participation. These documentation weaknesses do not demonstrate that overtime was improperly claimed, but they limit management's ability to verify work performed and identify unusual activity warranting further review.
- **Insufficient ongoing oversight increases the risk that limited Program resources may not be used effectively.** Time spent on non-work activities reduces resources available to address the substantial streetlight repair backlog, while inadequate accountability and uneven workloads can negatively affect employees who consistently meet Program expectations. Given the Program's backlog, increasing overtime expenditures, and the City's constrained financial outlook, effective oversight is important to ensure employees are held accountable and limited resources are used for their intended purposes.

To strengthen supervisory oversight and employee accountability, we make seven recommendations, including that Program management complete its investigation of the activity identified by our office and determine whether it represents a broader pattern. We also recommend establishing standardized processes to use available operational information and technology, consistent with AR 90.74, to monitor employee activities, verify work performed, identify unusual activity warranting further review, and strengthen controls over callback overtime.

The Program lacks a systematic process for using available information to monitor field operations and employee activity.

The Streetlight Repair Program has access to information from several systems and records—including SAP, BlueWorx, KorTerra, callback documentation, and the City's GeoTab telematics system—that can support supervisory oversight. The U.S. Government Accountability Office's Standards for Internal Controls in the Federal Government (Green Book) states that management should obtain and use reliable operational information to monitor operations, evaluate internal controls, support decision making, and promote employee accountability.

Callback records did not consistently contain sufficient information to independently verify all electricians' participation in emergency responses.

However, these information sources were developed for different operational purposes, are not integrated, and have limitations in the completeness, accessibility, or usability of information needed for routine employee-level monitoring. At the same time, management has not established standardized procedures or reporting tools to make practical use of the information that is available for ongoing supervisory oversight. As a result, available information has generally been reviewed for individual operational purposes or in response to specific concerns rather than as part of a proactive monitoring process.

As summarized in **Exhibit 24**, limitations in how the Program maintains and uses these information sources affect several aspects of supervisory oversight. Telematics data is not routinely reviewed, callback verification relies primarily on employee-completed paper records, SAP work orders do not consistently identify all responding electricians, and entry/exit records at the City's Chollas Operations Yard are incomplete. In addition, the Program does not use BlueWorx's available vehicle-assignment functionality to document the City work vehicle assigned to each electrician, making it more difficult to link employee work activity with corresponding vehicle activity in GeoTab. Collectively, these limitations make it more difficult for management to identify unusual vehicle activity, verify employee participation in repairs and callbacks, and determine how field time is being used.

Exhibit 24

The Program Lacks a Systematic Process for Using Available Information to Monitor Field Operations and Employee Accountability

	Vehicle Telematics	Callback Overtime Verification	SAP Work Orders	BlueWorx	Chollas Entry/Exit Logs
Current Practice	 Not routinely reviewed	 Relies primarily on employee-completed paper records	 Do not consistently identify all responding electricians	 Available features such as start/stop times and vehicle assignments are not used	 Incomplete and inconsistent
Result	Extended stops at locations with no assigned work may not be identified	Approximately 16% of callback overtime claims reviewed could not be fully verified	Supervisors cannot determine who participated in repairs or callbacks	Management cannot effectively oversee repair activities or verify how field time is spent	Limited independent verification of callback responses

Note: According to Program management, routine supervisory review of vehicle telematics has historically been limited based on its understanding of City practices regarding proactive GPS monitoring. Telematics data is generally reviewed when specific concerns or incidents arise.

Source: OCA generated based on SAP overtime and work order reports, GeoTab reports, Chollas entry/exit logs and interviews with Program management.

Although AR 90.74 requires City management to monitor telematics data, City practice has discouraged supervisors from proactively using GPS data to monitor the efficiency of operations.

Administrative Regulation 90.74 (AR 90.74), administered by the City's Fleet Services Division, establishes City policy for using telematics information to improve vehicle utilization, responsiveness, maintenance, safety, and employee accountability. AR 90.74 provides that City management may monitor, audit, or review telematics data, and requires Department Directors or their designees to review telematics information to ensure compliance with the regulation. However, it does not prescribe routine employee-level monitoring by field supervisors or establish a required frequency or process for such reviews.

GeoTab contains information, such as vehicle locations, travel routes, stop locations and durations, and idle time, that can help management identify unusual vehicle activity warranting further review. However,

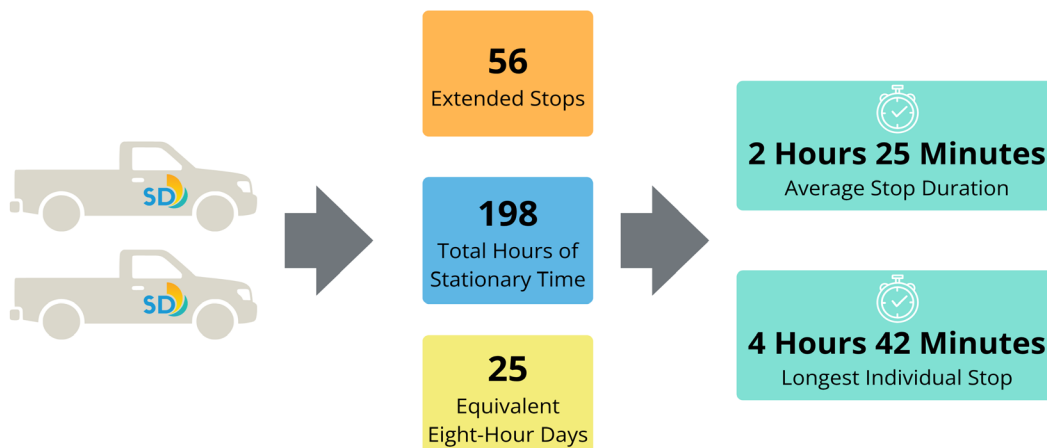
Program management stated that its limited use of this information for routine employee monitoring reflects its understanding of a longstanding City practice discouraging supervisors from proactively using GPS data for this purpose. Consequently, telematics information has generally been reviewed in response to specific incidents, complaints, or fact-finding investigations rather than through routine supervisory monitoring.

Management also noted that reconstructing individual employee activity through GeoTab can require significant time and technical effort. These practical limitations do not preclude the Program from using telematics information for oversight. Rather, standardized, preferably exception-based reporting—supported by appropriate procedures, access, and training—could allow supervisors to identify unusual vehicle activity requiring follow-up without routinely reconstructing individual employees' workdays. As discussed below, our analysis demonstrates the type of recurring activity such a process could identify.

We identified recurring patterns of extended City vehicle stops that warranted management review.

As part of our review of a Streetlight Repair Program fraud hotline allegation, we analyzed available vehicle telematics information to determine whether the reported activity reflected a broader pattern of similar activity. Specifically, we analyzed Program vehicle activity between December 2025 and May 2026 to identify vehicles that repeatedly stopped at the same locations for extended periods.

As shown in **Exhibit 25**, our analysis identified a recurring pattern in which two City vehicles remained parked for at least 90 minutes at three nearby locations on 56 occasions during the six-month period reviewed. Program management stated that it was not aware of streetlight-related work being performed at these locations during the identified periods. The stops averaged approximately 2 hours and 25 minutes and totaled approximately 198 hours of stationary time—equivalent to nearly 25 eight-hour workdays—with individual stops lasting as long as 4 hours and 42 minutes.

*Exhibit 25***Telematics Data Identified a Recurring Pattern of Extended Stops by Two City Vehicles****Repeated Extended Stops During Regular Work Hours**

Source: OCA generated based on GeoTab telematics reports.

The recurring pattern identified above was not an isolated occurrence. As shown in **Exhibit 26** below, our analysis identified similar patterns involving additional Streetlight Repair Program vehicles, including repeated extended stops at a residential location and other locations during regular working hours. Collectively, these additional locations accounted for approximately 135 hours of stationary time during regular working hours, equivalent to nearly 17 eight-hour workdays.

*Exhibit 26***Additional Telematics Data Identified Similar Patterns of Extended Vehicle Stops Which Warranted Supervisory Review**

Location	A	B	C	D*	Total
Extended Stops Identified	23	14	13	11	61
Approx. Stationary Vehicle Time	53 hours	32 hours	26 hours	24 hours	135 hours

* Location D is a residential location. According to Program management, its ongoing fact-finding review has identified potentially legitimate explanations for some vehicle activity at residential locations. The audit does not conclude that the stationary vehicle activity shown above was unauthorized.

Source: OCA generated based on GeoTab telematics reports.

Importantly, prolonged vehicle stops do not, by themselves, establish that employees were inactive or that City time or resources were used inappropriately. GeoTab identifies where and for how long a vehicle remained stationary but does not establish what an employee was doing or whether the activity was authorized. Nevertheless, the frequency, duration, and recurring nature of the stops represented exceptions warranting supervisory review.

Transportation has historically taken appropriate action in response to fraud hotline allegations referred by our office, including investigating reported concerns and taking corrective or disciplinary action when warranted. Consistent with this practice, Transportation promptly initiated a fact-finding review after we shared the results of our current analysis.

Systematic use of available operational information could help management proactively identify recurring patterns warranting further review.

To assist Transportation with its fact-finding review, we provided management with the results of our analyses and the underlying information used to identify the activity warranting further review. This included the specific vehicles, dates, times, stop locations, and durations identified through our telematics analysis. By providing this information, OCA completed much of the initial data analysis needed to identify the specific incidents warranting follow-up, allowing Transportation to focus its fact-finding on determining the reasons for the identified activity and whether it was authorized.

However, these reviews have generally focused on the specific incidents or employees identified in individual allegations rather than determining whether similar activity reflected a broader pattern or identifying underlying control gaps that could allow such activity to occur. Our analysis demonstrates how more systematic use of available information could help management proactively identify recurring patterns warranting further review.

These results also reinforce the productivity-monitoring concerns discussed in **Finding 1**. Available FY2026 KorTerra data shows that completed DigAlert responses averaged approximately 26 minutes, including travel time, and suggests there may be capacity to complete some routine streetlight repairs during regular working hours. Our telematics analysis identified approximately 333 hours of stationary vehicle time across the locations summarized in **Exhibits 25 and 26**. We do not conclude that all, or necessarily any, of this time represented inappropriate or unproductive activity. Rather, the recurring patterns illustrate why management should routinely use available operational information to identify significant variances and determine when additional supervisory review is warranted.

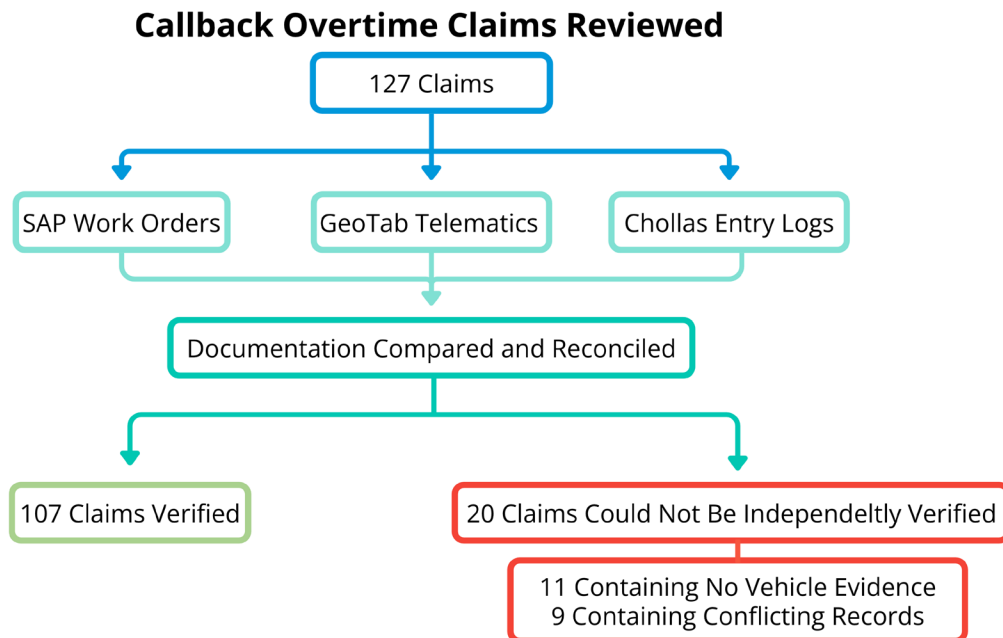
Program management also stated that it had already begun exploring more proactive use of telematics information based on prior fact-finding investigations, and that our audit results have reinforced and informed that effort. However, prior to the audit, management had not routinely analyzed available telematics information to identify recurring patterns, such as those identified above. Without a systematic monitoring process, unusual or potentially inappropriate activity may not be identified and evaluated in a timely manner. To the extent such activity reflects unauthorized use of work time, it reduces labor capacity available for streetlight repairs and other Program responsibilities.

Incomplete and fragmented callback records limit the Program's ability to independently verify overtime claims.

Available records did not allow OCA to independently verify 20 of 127 callback overtime claims reviewed, or approximately 16 percent.

During our audit, our office received fraud hotline complaints alleging potential misuse of City time and resources by Streetlight Repair Program employees. Given these allegations and the documentation and monitoring limitations discussed above, we reviewed all 127 callback overtime claims submitted between March 1 and April 30, 2025, using callback records, SAP repair notification reports, GeoTab telematics information, and Chollas Operations Yard access records.

As shown in **Exhibit 27**, available records did not allow us to independently verify the reported response for 20 of the 127 callback overtime claims reviewed, or approximately 16 percent. For 11 claims, or 9 percent, available telematics information did not identify a City vehicle responding to the reported emergency. For another 9 claims, or 7 percent, inconsistencies among telematics, facility access, and work order records prevented us from confirming that all employees who received callback overtime were present at the reported work location.

*Exhibit 27***Approximately 16 Percent of Callback Overtime Claims We Reviewed Could Not Be Independently Verified**

Source: OCA generated based on Program callback overtime records, SAP work orders, GeoTab telematics data, and Chollas Operations Yard access logs.

The Program's callback documentation and oversight practices limit its ability to independently verify overtime claims. Although standby procedures require supervisor approval before requesting additional field support, management stated that electricians may contact other electricians directly without prior approval. In addition, 55 percent of the callback-related SAP work orders we identified involved two or more responding electricians but the system is not configured to identify all responding employees, and the Program does not use a system to digitally track day-to-day vehicle assignments to individual electricians. Relevant information is also fragmented across paper overtime forms, SAP, GeoTab, and facility access records, making it difficult for supervisors to readily verify who responded to an emergency and whether the associated overtime is adequately supported.

According to Program management, the Department of Finance, in coordination with the Department of Human Resources and the Personnel Department, is developing a Citywide standardized digital callback overtime tracking and verification process. If implemented

as described, this could improve documentation and supervisory verification. However, the Program will still need to ensure that all responding employees and applicable City vehicles are consistently documented so supervisors have sufficient information to verify callback responses.

Our analysis does not establish that the 20 claims we could not independently verify were improper. Rather, particularly in light of the fraud hotline allegations received during our audit, the results demonstrate the importance of stronger controls to verify callback overtime. Although the Program has multiple sources of information that can support this oversight, these records do not consistently identify all responding employees, link employees to the City work vehicles used, or provide a complete and readily reconcilable record of callback activity. As a result, potentially unsupported callback overtime, including potential theft of time, could occur without timely detection.

Recommendations

To strengthen supervisory oversight, improve employee accountability, and ensure the Streetlight Repair Program effectively uses available oversight tools to monitor field operations, verify callback overtime, and safeguard public resources, we recommend:

Recommendation 2.1

(Priority 1)

The Transportation Department should complete its investigations into the incidents of potential abuse of time and misuse of City vehicles the Office of the City Auditor identified.

Management Response: Transportation indicated in its management response that this recommendation has already been implemented. OCA has not independently verified the reported corrective actions and will assess their implementation and effectiveness as part of its audit recommendation follow-up process.

[See full response beginning on page 65.]

Recommendation 2.2

(Priority 1)

To determine whether the incidents of potential abuse of time identified by the Office of the City Auditor represent a broader pattern, the Transportation Department should conduct a comprehensive investigation covering, at a minimum, the most recent six months of operations. At a minimum, the investigation should include all Streetlight Repair Program electricians and assess: (1) excessive non-productive vehicle stops during regular working hours; and (2) callback overtime claims to determine whether reported callback responses can be independently verified.

Based on the results of its investigation for this recommendation and Recommendation 2.1, Transportation should take appropriate corrective and, where warranted, disciplinary action, and provide the Office of the City Auditor with the results of its investigation and a summary of any actions taken.

Management Response: Transportation indicated in its management response that this recommendation has already been implemented. OCA has not independently verified the reported corrective actions and will assess their implementation and effectiveness as part of its audit recommendation follow-up process.

[See full response beginning on page 65.]

Recommendation 2.3

(Priority 1)

The Transportation Department, in coordination with the General Services Department Fleet Services Division, should develop a written standard operating procedure requiring Transportation managers and supervisors to use City telematics data for supervisory oversight, operational monitoring, and employee accountability. At a minimum, the procedure should:

- Describe when and how supervisors should review telematics data;
- Require that supervisors periodically review telematics data using exception reports to identify unusual vehicle activity, included extended stoppages, repeated visits to locations where no City work is assigned, and assigned discrepancies between vehicle locations and reported work activity;
- Clarify the circumstances under which telematics data may be used to monitor compliance with City policies and operational expectations;
- Identify supervisory responsibilities for documenting telematics reviews and follow-up actions; and
- Provide training to supervisors responsible for monitoring field operations.

Management Response: Agree [See full response beginning on page 66.]

Target Implementation Date: July 2027

Recommendation 2.4

(Priority 1)

To ensure that supervisors can effectively monitor the safety and security of their employees and City vehicles while out in the field, the Transportation Department should require electricians to enter their assigned vehicle identification number in SAP and/or BlueWorx. This requirement should be added to the standard operating procedure required in Recommendation 1.1.

Management Response: Agree [See full response beginning on page 66.]

Target Implementation Date: July 2027

Recommendation 2.5

(Priority 1)

The Transportation Department, in coordination with the Department of Information Technology, should configure SAP to record all streetlight electricians and staff responding to a work order and callback repairs, not just the primary electrician.

Management Response: Agree [See full response beginning on page 67.]

Target Implementation Date: July 2027

Recommendation 2.6

(Priority 1)

The Transportation Department, in coordination with the Department of Finance Payroll Division and the Department of Information Technology, should support and follow through on the Department of Finance, Human Resources, and Personnel's initiative to establish and implement a standardized digital callback overtime tracking and verification process to improve supervisory oversight and independent verification of callback overtime claims in accordance with Administrative Regulation 95.01 Overtime Compensation, the Personnel Manual, the Salary Ordinance and the applicable Memorandum of Understanding. At a minimum, the process should:

- Record each individual callback overtime claim and link it to the associated emergency streetlight repair notification or work order;
- Capture key information needed for the Transportation Department to verify callback overtime, including the employee's name, callback date, start and end times, emergency location, purpose of the callback, travel time, and all employees responding to the same emergency;
- Maintain sufficient supporting documentation, including photographs and work order information, to independently verify callback responses; and
- Incorporate additional supervisory review and verification controls, as appropriate, to ensure callback overtime claims are accurate, adequately supported, and consistently applied.

Management Response: Agree [See full response beginning on page 67.]

Target Implementation Date: July 2027

Recommendation 2.7

(Priority 1)

The Transportation Department should also establish written supervisory procedures requiring supervisors to periodically review and reconcile callback overtime claims. At a minimum, supervisors should:

- Analyze callback overtime records for unusual patterns or trends;
- Review available supporting documentation, including telematics data, photographs, and other available records, to verify callback responses; and
- Document the results of these reviews and any corrective actions taken.

Management Response: Agree [See full response beginning on page 68.]

Target Implementation Date: July 2027

Appendix A

Definition of Audit Recommendation Priorities

The Office of the City Auditor maintains a priority classification scheme for audit recommendations based on the importance of each recommendation to the City, as described in the table below.

While the City Auditor is responsible for providing a priority classification for recommendations, it is the City Administration's responsibility to establish a target date to implement each recommendation, taking into consideration its priority. The City Auditor requests that target dates be included in the Administration's official response to the audit findings and recommendations.

PRIORITY CLASS*	DESCRIPTION
1	Fraud or serious violations are being committed. Significant fiscal and/or equivalent non-fiscal losses are occurring. Costly and/or detrimental operational inefficiencies are taking place. A significant internal control weakness has been identified.
2	The potential for incurring significant fiscal and/or equivalent nonfiscal losses exists. The potential for costly and/or detrimental operational inefficiencies exists. The potential for strengthening or improving internal controls exists.
3	Operation or administrative process will be improved.

* The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation that clearly fits the description for more than one priority class shall be assigned the higher priority.

Appendix B

Audit Objectives, Scope, and Methodology

Objective

In accordance with the Office of the City Auditor's Fiscal Year (FY) 2026 Audit Work Plan, we conducted a performance audit of the Transportation Department's Streetlight Repair Program (Program). The objective of this audit was to determine whether the Program is designed and operated to deliver timely, efficient, equitable, and accountable streetlight repair services throughout the City of San Diego (City). Specifically, we assessed whether:

1. Streetlight repairs are prioritized, routed, and completed in a timely and cost-effective manner;
2. Program management has established clear performance expectations and effective supervisory controls to ensure accurate reporting, appropriate use of City resources, and accountability for repair activities; and
3. The Street Division monitors and helps ensure that streetlight repair services are delivered equitably across neighborhoods.

Scope

The primary scope of this audit covered the Program's operations from FY2021 through FY2026. We reviewed Program operations related to routine and emergency streetlight repairs, underground utility locate requests (DigAlerts), staffing and labor utilization, overtime, contractor-performed repairs, geographic and equity considerations, and supervisory oversight of field activities.

Our review included information from the Program's primary work management and operational systems, including SAP, BlueWorx, DigSmart, and KorTerra, as well as Program callback records, Chollas Operations Yard access records, budget and expenditure information, and contractor records. We also analyzed information from GeoTab, the City's vehicle telematics system, which is available to Program management but historically has been used primarily for fact-finding investigations rather than routine operational or supervisory monitoring.

Because the availability and reliability of information varied during the audit period, certain analyses covered shorter periods. For example, KorTerra was implemented in October 2025 and therefore our detailed analysis of DigAlert response times and individual productivity using KorTerra covered October 2025 through June 2026. Our analysis of vehicle telematics focused on activity between December 2025 and May 2026, and our detailed review of callback overtime claims covered March and April 2025.

During the audit, our office received fraud hotline complaints alleging potential misuse of City time and resources by Program employees. We expanded our testing in response to these allegations to determine whether the reported incidents appeared isolated or indicated broader weaknesses in supervisory oversight and employee accountability. Our review of these issues was limited to selected periods and activities and was not designed to identify every potential instance of misuse of City time or resources.

Methodology

Objective 1: To determine whether streetlight repairs are prioritized, routed, and completed in a timely and cost-effective manner, we:

- Interviewed Program management and staff to understand Program operations, staffing, work assignment practices, repair workflows, DigAlert responsibilities, overtime usage, contractor utilization, and resource allocation decisions.
- Reviewed Program policies, procedures, organizational information, budget documents, staffing information, and other documentation related to streetlight repair operations.
- Analyzed SAP service notification and work order data for FY2021 through FY2026 to evaluate trends in:
 - New streetlight repair notifications;
 - Completed streetlight repairs;
 - The number and age of outstanding repair notifications; and
 - Repair activity by fiscal year and geographic area.
- Analyzed the number of outstanding streetlight repair notifications at the beginning and end of fiscal years to evaluate changes in the Program's repair backlog during the audit period.
- Analyzed SAP labor information to determine trends in regular and overtime hours worked by Program electricians and compared available labor resources with changes in incoming workload, completed repairs, and the repair backlog.
- Reviewed Program budget and expenditure information for FY2021 through FY2026 to evaluate changes in Program resources, including staffing, actual expenditures, and overtime expenditures.
- Analyzed DigSmart and KorTerra data to estimate the number of new DigAlert requests received during the audit period and distinguish new requests from renewals, amendments, cancellations, and other administrative transactions.
- Reviewed the Program's historical DigAlert assignment and response process and interviewed Program management and staff to determine how DigAlert field work was assigned, documented, and verified before implementation of KorTerra.
- Analyzed KorTerra records from October 2025 through June 2026 to evaluate DigAlert field-response workload and productivity. This analysis included:
 - Calculating the average number of DigAlert responses completed by electricians per workday;

- Comparing average daily DigAlert responses among electricians;
 - Analyzing available Start/Stop records to estimate the average time required to complete a DigAlert response, including travel time; and
 - Estimating the portion of an eight-hour workday represented by completed DigAlert responses.
- Reviewed the Program's streetlight repair prioritization framework and interviewed Street Division management and the Performance and Analytics Department staff to understand how the model incorporates operational, public safety, geographic, and equity-related considerations.
 - Reviewed how Community Parking District funding restrictions and the Program's use of overtime affected the geographic distribution and prioritization of routine streetlight repairs.
 - Reviewed contractor agreements, task orders, invoices, repair records, and SAP work order data related to contractor-performed streetlight repairs.
 - Compared contractor records with SAP work order information to determine the extent to which contractor-performed repairs were identifiable in the Program's work management system and whether available information was sufficient to evaluate contractor productivity and cost-effectiveness.
 - Interviewed Program management regarding City staff time used to support contractor activities and assessed whether those costs and activities could be linked to contractor-performed repairs.

Objective 2: To determine whether Program management has established clear performance expectations and effective supervisory controls to ensure accurate reporting, appropriate use of City resources, and accountability for repair activities, we:

- Interviewed Program management, supervisors, and staff regarding supervisory practices, employee performance expectations, work documentation, field oversight, and the use of available management information systems.
- Analyzed SAP work order data to assess the completeness and consistency of employee identification and repair classifications and determine whether available information allowed management to evaluate individual and Program productivity.
- Reviewed the Program's use of DigSmart and KorTerra to assess DigAlert field-response activity, including the overall number of DigAlerts completed, the number completed by individual electricians, and the average time required to complete DigAlerts.
- Reviewed the City's Administrative Regulation 90.74 and interviewed Program management, the Department of General Services' Fleet Services' staff, and employee organization representatives regarding the intended use of City vehicle telematics data for operational oversight, safety, vehicle utilization, and employee accountability.
- Analyzed GeoTab telematics data for Streetlight Repair Program vehicles between December 2025 and May 2026 to identify recurring or prolonged vehicle stops during regular working hours that warranted supervisory review.

- Reviewed all 127 callback overtime claims submitted during March and April 2025 and cross-referenced available callback records, SAP work orders, GeoTab telematics data, and Chollas Operations Yard access records to determine whether the reported emergency responses could be independently verified.

Objective 3: To determine whether the Street Division monitors and helps ensure that streetlight repair services are delivered equitably across neighborhoods, we:

- Reviewed the Program's streetlight repair prioritization model and supporting documentation to identify the operational and equity-related factors used to prioritize outstanding repair notifications.
- Interviewed Program management regarding how geographic clustering, Council District rotation, repair priority, neighborhood equity considerations, and other factors are intended to influence work assignments.
- Reviewed the distribution of routine repair activity inside and outside Community Parking Districts and assessed how geographically restricted overtime funding affected the Program's ability to address the Citywide repair backlog.
- Evaluated whether the Program's current operating model allowed its prioritization framework to consistently guide repair assignments and whether available performance information allowed management to assess the effectiveness and equity of its resource allocation decisions.
- Reviewed research regarding the relationship between functioning streetlights, public safety, crime, traffic safety, and residents' perceptions of safety to understand the potential consequences of prolonged streetlight outages.

Data Reliability

During this audit, we collected and analyzed information from multiple City and Program data sources, including:

- SAP service notification, work order, labor, and overtime data;
- DigSmart and KorTerra DigAlert records;
- GeoTab vehicle telematics data;
- Program callback overtime records;
- Chollas Operations Yard access records;
- Streetlight Repair Program budget, staffing, and expenditure information;
- Contractor invoices, repair records, and contract documentation; and
- Streetlight repair prioritization and backlog information.

We assessed the reliability of these data sources by reviewing the systems and processes used to collect and maintain the information, interviewing knowledgeable City staff, comparing information across independent data sources where possible, reviewing records for missing or inconsistent information, and performing reasonableness and completeness checks relevant to our analyses.

We determined that SAP service notification, labor, budget, GeoTab, KorTerra, and other data used for the specific analyses described in this report were sufficiently reliable for the purposes for which they were used. However, we identified significant limitations in certain Program data.

Specifically, historical DigSmart records did not reliably identify whether assigned DigAlert requests received a field response or which electrician performed the response. Therefore, we did not rely on historical DigSmart records to conclusively evaluate individual electrician productivity or the amount of time devoted to DigAlert field work prior to implementation of KorTerra in October 2025. We also identified limitations in SAP streetlight repair records, including missing employee information and non-standardized repair descriptions, which prevented us from reliably evaluating historical repair productivity by employee or repair type.

Additionally, contractor repair information was maintained separately from SAP and could not be fully reconciled to Program work order records. Therefore, available information was not sufficient to conclusively compare the full cost and productivity of contractor-performed repairs with work performed by City crews.

These data limitations are discussed in the report where they affect our findings and conclusions.

Internal Controls Statement

We limited our review of internal controls to controls relevant to our audit objectives. Specifically, we reviewed controls related to the collection and use of operational and performance information; documentation and verification of streetlight repair and DigAlert work; work assignment and prioritization; supervisory oversight of field activities; use of vehicle telematics; callback overtime documentation and verification; contractor performance tracking; and employee accountability.

Compliance Statement

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. These 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 the audit objectives.



THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: October 14, 2026

TO: Andy Hanau, City Auditor, Office of the City Auditor

FROM: Bethany Bezak, Chief Performance & Logistics Officer, Office of the Mayor
Rolando Charvel, Chief Financial Officer, Office of the Mayor

SUBJECT: Management Response to the Office of the City Auditor's Performance Audit of the Streetlight Repair Program

This memorandum serves as the management response to the Performance Audit of the City's Streetlight Repair Program (Performance Audit). At the time this response was written, the draft Performance Audit provided to management contained two findings and 12 recommendations.

Transportation Department management agrees with the recommendations within the Performance Audit. However, one of the recommendations is most appropriately implemented as a Citywide effort (as noted below). While the Transportation Department agrees that the recommendations would improve the Streetlight Repair Program, the Department doesn't currently have the staffing or technical resources to have supervisors conduct data analysis at the level that the Auditor seeks. The Department will require support from Department of Information Technology (IT) and the Performance and Analytics Department (PANDA) to create enhancements to existing systems, or consolidation of data between systems, for improved program management.

The Performance Audit does not cover the full scope of the Streetlight Repair Program. Significant improvements have been made by the Transportation Department since 2023, even while technology and resource limitations have impacted the Department. As such, information below is provided prior to the management response to recommendations (beginning on Page 5), so that this context is available as part of the management response.

REGULAR MONITORING OF OPERATIONAL DATA

The Transportation Department has consistently used available operational data to monitor workloads, establish priorities, and allocate resources within the Streetlight Repair Program. This includes regular reviews of the following:

- Get It Done requests
- SAP work orders
- DigAlert workload

- Contractor production records
- Fleet dashboard

Those regular reviews help make data-informed decisions to optimize scheduling and routing, shorten resolution times, and reduce maintenance backlogs, including:

- Responding to staffing and resource requests
- Prioritizing repairs across the City
- Targeting overtime deployment for efficiency
- Allocating electrician resources between streetlight repairs and legally time-sensitive underground utility work

For example, DigAlert workload data helped identify capacity constraints that contributed to the decision to redirect resources toward underground utility locating, while subsequent production and backlog data have been used to monitor the effect of that decision on streetlight repairs.

TECHNICAL LIMITATIONS TO TRACKING WORK ACTIVITY

The Transportation Department and other operational departments don't have the technical tools to monitor employee work activity to the level that the Auditor desires for the Streetlight Repair Program. Our current systems do not allow us to track and report how individual employees spend all of their time throughout the workday, largely due to information being spread across a variety of different systems. Despite these technical limitations, the Department has continually worked to improve its data collection, monitoring, and reporting capabilities to better assess workload, production, and employee performance using the tools and information currently available.

Information is spread across systems developed for different purposes—including SAP/BlueWorx, KorTerra (Dig Alert), GeoTab/HERC Rentals ProControl, GIS, and Salesforce/Get It Done. **Those systems do not provide a single integrated view of workload, labor, travel, production, and employee utilization, and this limitation impacts all departments which use these programs.** Prior to this audit the Department has responded to these needs by developing and/or utilizing the following tools:

- Dashboards to monitor work activity
- Manual tracking sheets and reports
- KorTerra – new tracking system for underground locates, replaced largely manual DigSmart process
- GeoTab

For example, recent comparisons of KorTerra (DigAlert) and GeoTab data identified legitimate work activities not captured within KorTerra ticket intervals. While additional integrated reporting would improve performance analysis, the limitations of the existing tools should not be interpreted as an absence of data-informed management. Many of the recommendations in this Performance Audit will require support from Department of IT and the Performance and Analytics Department to create enhancements to existing systems, or consolidation of data between systems, for improved program management.

MAKING ASSUMPTIONS WITH LIMITED DATA OR CONTEXT

Although the Transportation Department agrees with most of the recommendations within the Performance Audit, there were several instances where data that was inaccurate, incomplete, or presented without sufficient context were used to highlight significant increases in the following categories: streetlight repair backlog, expenditures, and staffing. In addition, the Performance Audit uses inconsistent and limited KorTerra data to make sweeping assumptions about work activity. This information was used in the Performance Audit to question whether resources are being utilized properly in the Streetlight Repair Program. **Management believes the Performance Audit lacks sufficient context in each category despite several meetings with auditors in which this context was provided.** Examples include:

- Exhibit 1 shows the backlog for streetlight repair requests over a five-year period and the Performance Audit states that there has been an increase of 181% in the backlog, from the totals of 2,684 in mid-2020 to 7,550 in mid-2026. Management recommended using the early 2021 backlog of 5,520 as an appropriate baseline for comparison rather than mid-2020 because it more accurately reflects the status of streetlight repairs in 2021 following a significant increase in the backlog during a period of massive vacancies due to COVID. Had that number been used, the backlog increase would have been a more modest 34%. As shown in Exhibit 1 of the Performance Audit, the backlog increased and decreased throughout the audit period and was as low as 4,867 in early 2025 – a month before the operational decision to devote electricians' regular working hours primarily to DigAlert responses and emergency streetlight repairs. The backlog then significantly increased in the final 1.5 years of the audit period.
- Exhibit 9 shows the Streetlight Repair Program's actual expenditures increased from about \$8 million in FY21 to \$17.7 million in FY26 – an increase of 122%. The biggest factor driving that increase was energy costs (~\$6 million, or 62% of total increase) – which is out of the Department's control. Another contributing factor out of the Department's control is that all City employees received salary increases of over 20% during the audit period.
- Management strongly disagrees with the Performance Audit's analysis of KorTerra data to determine work productivity among streetlight electricians. While KorTerra currently provides the best data available on DigAlert activity, it is far from perfect. While the audit period covers most of this decade, its conclusions regarding electrician productivity rely heavily on roughly six months of incomplete KorTerra Start/Stop data. This functionality was not available until late January 2026, and most employees did not receive training until February. It was introduced to support a proposed cost-recovery initiative that was subsequently discontinued, and standardized procedures and ongoing requirements for its use were never established. Consequently, only about half of the electricians recorded any Start/Stop activity during the period examined. Moreover, the data captures only underground locate

activities and excludes other legitimate work, including streetlight repairs, travel, administrative responsibilities, training, and other assignments. Additionally, electricians are sometimes assigned to work together or share vehicles due to limited vehicle availability, with completed work potentially recorded under only one employee's account. This can further distort individual activity records by attributing work performed by multiple employees to a single individual. Management believes it is inappropriate to use this limited and inconsistently collected data to conclude that electricians have an additional four hours per day available for streetlight repairs. Management plans to develop and implement standard operating procedures for the KorTerra tracking system so it is used consistently by staff and can provide a more accurate assessment of how long underground locates take.

In each example above, the Auditor's Office chose to use certain data or information to highlight a significant increase or lack of productivity without providing the appropriate context to better understand those numbers.

FRAUD HOTLINE COMPLAINT WITHHELD FOR SEVEN MONTHS

The Performance Audit acknowledges the Transportation Department has "historically taken appropriate action in response to fraud hotline allegations referred by" the Auditor's Office. **In the case referenced in the Performance Audit, Department leadership was not notified of fraud hotline allegations until June 2026, at least seven months after it was reported, despite ongoing audit discussions throughout that same period.** At the time this management response was written, the Transportation Department has completed its investigations into these allegations, and corrective action has been taken for all findings that were substantiated. However, timely notification would have allowed the Transportation Department to address the potential waste of taxpayer dollars and take immediate corrective action to stop the alleged activity.

DEPARTMENT ACTIONS TO BOLSTER STREETLIGHT REPAIRS

It's important to note that the Department leadership took several steps to help bolster streetlight repairs in FY26. The Department sought and received City Council approval in Fall 2025 for two actions. First, having in-house Transportation crews perform a Sidewalk Replacement Capital Improvement Program project. This freed up General Fund dollars that were then used for citywide repairs, including over 800 streetlight fixes. Second, having in-house crews utilize Community Parking District meter revenue for neighborhood repairs. This resulted in 2,068 streetlight fixes in those districts in FY26. Combined, the two actions led to nearly 3,000 streetlights being turned on that otherwise would have stayed dark and it represents one of the many proactive approaches used by the Department.

The Transportation Department is committed to implementing the recommendations within this Performance Audit and will continue to monitor how resources are allocated to streetlight repairs, with the goal of fixing as many streetlights as resources allow and maximizing services to our neighborhoods.

Here are management responses to the various recommendations:

RECOMMENDATIONS

1.1

To strengthen operational oversight and improve the reliability of available performance information, the Transportation Department should develop and implement standard operating procedures requiring Streetlight Repair Program supervisors and staff to consistently use existing functionality within the Program's operational systems. Transportation should coordinate with the Department of Information Technology, as needed, to ensure that existing system functionality necessary to support these procedures is available and appropriately configured. At a minimum, the procedures should:

- Require consistent use of KorTerra Start/Stop functionality for DigAlert field responses;
- Require streetlight repair work orders to identify the electrician primarily responsible for completing the work;
- Require electricians to upload before-and-after photographs of completed streetlight repairs into SAP;
- Establish and require consistent use of standardized streetlight repair categories sufficient to identify the general type of repair performed; and
- Require supervisors to periodically review available operational information for completeness, accuracy, compliance with documentation requirements, and unusual or significant performance variances. (Priority 1)

Management Response: Agree. The Transportation Department has already implemented some of the processes listed in the recommendation, including requiring consistent usage of start/stop functionality for DigAlert, requiring work orders to identify the electrician primarily responsible for completing the work, and requiring before-and-after photos of completed streetlight repairs. Additional software enhancements are required to improve streetlight repair codes and improve supervisors' ability to monitor operational information. These software enhancements may be subject to Department of IT and Performance and Analytics Department resources. The Transportation Department will work with the Department of IT and the Performance and Analytics Department on required system enhancements and formalize these processes in Standard Operating Procedures as requested in the recommendation.

The deliverable to complete Standard Operating Procedures or policies will be completed by the implementation date below. Because the deliverable may require supervisory review of employee performance data, it may be subject to meet and confer. If meet and confer is required, any labor process will be conducted as a second phase, with any resulting changes reported to the Office of the City Auditor.

Target Implementation Date: September 2027

1.2

To improve the Streetlight Repair Program's ability to capture and analyze operational information, the Transportation Department, in consultation with the Department of Information Technology, should evaluate options for modifying, integrating, or otherwise enhancing the Program's information systems to more efficiently capture key operational information. The evaluation should consider options to:

- Record the start and completion times of streetlight repair activities;
- Identify employees participating in streetlight repairs, including repairs involving multiple employees;
- Record the City work vehicle assigned to each electrician during each work shift;

Transportation should document the results of its evaluation, including the options considered, recommended system or process changes, and actions and anticipated timelines for implementing the identified improvements. Transportation should implement the identified improvements to ensure the Program consistently captures the operational information described above. (Priority 1)

Management Response: Agree. The Transportation Department will complete the evaluation requested in the recommendation. Due to the nature of streetlight repairs, it may not always be operationally feasible for all staff responding to a work order to be listed on the work order. This functionality would require employees who are completing the repair to stop work and enter additional employees on the job as they arrive, which may not be feasible for emergency situations. If enhancements are determined to be necessary, implementation will be coordinated with the Department of IT. The timeline for implementation will be determined once the evaluation is complete and any software enhancements are known.

Target Implementation Date: Evaluation will be completed by July 2027. If system enhancements are determined to be necessary, implementation will be coordinated with the Department of IT, and the timeline for implementation will be determined once the evaluation is complete.

1.3

To establish reliable information on DigAlert workload, timeliness, and staff productivity, the Transportation Department should:

- Develop and implement a standardized methodology for calculating and reporting DigAlert workload that includes only requests requiring a field response and excludes administrative transactions, such as cancellations, renewals, and requests assigned to other utility operators;
- Using the Start/Stop information required under Recommendation 1.1, ensure that start and stop times are consistently captured for all DigAlert field responses, along with any other information necessary to accurately measure workload, timeliness, and productivity;

- Provide training to Streetlight Repair Program supervisors and staff on the revised DigAlert workload and field reporting policies and procedures to ensure they are consistently understood and applied; and
- Develop and implement a policy requiring Program management to routinely monitor and analyze monthly and annual DigAlert workload, timeliness, and productivity metrics at both the program and individual employee levels. Using this information, Program management should establish reasonable productivity expectations for DigAlert field responses and streetlight repairs, periodically evaluate actual performance against those expectations, investigate significant variances, and use the results to improve operational performance and inform staffing and resource allocation decisions. (Priority 1)

Management Response: Agree. Beginning in late July 2026, in response to the auditor's recommendations, the Department expanded its DigAlert monitoring to include tracking of DigAlert tickets by employees. However, additional software enhancements are needed to monitor DigAlert workload and may be subject to Performance and Analytics Department resources. The Transportation Department will work with the Performance and Analytics Department on required system enhancements as requested in the recommendation.

The deliverable to complete Standard Operating Procedures or policies will be completed by the implementation date below. Because the deliverable may require supervisory review of employee performance data, it may be subject to meet and confer. If meet and confer is required, any labor process will be conducted as a second phase, with any resulting changes reported to the Office of the City Auditor.

Target Implementation Date: September 2027

1.4

The Transportation Department, in consultation with the Department of Information Technology, should develop and implement a centralized process to systematically capture and identify contractor-performed streetlight repairs in SAP or another appropriate information system or centralized repository. At a minimum, the process should:

- Require all contractor-completed streetlight repairs to be recorded and identifiable within the system;
- Require contractor-performed repairs to be documented using the standardized repair categories established in Recommendation 1.1, and establish a practical method for capturing this information in the Program's systems or other centralized repository;
- Record City staff time associated with contractor-performed work, including inspections, oversight, corrective work, or other support activities, using standardized repair codes; and
- Capture the information necessary to monitor contractor performance, verify contract completion, compare contractor and City productivity and costs, and evaluate contractor performance, cost-effectiveness, and future contractor utilization decisions. (Priority 2)

Management Response: Agree. However, direct contractor access to enter information into SAP is not allowed by the Department of Information Technology due to cybersecurity concerns, and Transportation-hired contractor repairs for streetlights are not funded or planned. Transportation, in coordination with Department of IT, will develop written procedures for tracking contractor work in a centralized repository.

Target Implementation Date: January 2028

1.5

Once the Transportation Department has implemented Recommendations 1.1 through 1.4 and established reliable baseline performance and productivity information, it should conduct a comprehensive performance management review to evaluate whether staffing, overtime utilization, contractor utilization, equipment, workflows, and other resources are appropriately aligned with operational demand and the City's desired service levels. At a minimum, the review should:

- Evaluate whether staffing levels, overtime utilization, equipment, and workflows are aligned with actual workload and productivity;
- Reassess and establish measurable performance goals for streetlight repairs and DigAlerts using actual workload, productivity, and backlog trends;
- Evaluate the effectiveness and cost-effectiveness of contractor utilization and determine which work activities are most appropriately performed by City staff and which, if any, are appropriate for contractors; and
- Evaluate the allocation of regular and overtime labor hours, including whether the Program's current allocation of DigAlert responses and routine streetlight repairs remains appropriate based on available workload and performance information.

The Transportation Department should develop and implement a standard operating procedure to require Streetlight Repair Program management to periodically perform this review, or whenever significant operational changes occur, to ensure staffing, productivity goals, contractor utilization, and resource allocations remain aligned with Program demand. (Priority 2)

Management Response: Agree. The Transportation Department has begun implementing many of the recommendations within this Performance Audit to help standardize data entry and evaluate program performance. Once recommendations 1.1 through 1.3 are implemented, the Transportation Department will utilize the required data to complete the program evaluation requested in this recommendation and document the evaluation process in a Standard Operating Procedure. Please note that at this time, Transportation-hired contractor repairs are not funded or planned, and the evaluation will not include an evaluation of contractor work.

The deliverable to complete Standard Operating Procedures or policies will be completed by the implementation date below. Because the deliverable may require supervisory review of employee performance data, it may be subject to meet and confer. If meet and confer is

required, any labor process will be conducted as a second phase, with any resulting changes reported to the Office of the City Auditor.

Target Implementation Date: January 2028

2.1

The Transportation Department should complete its investigations into the incidents of potential abuse of time and misuse of City vehicles the Office of the City Auditor identified. (Priority 1)

Management Response: This recommendation has been implemented. The Transportation Department has completed its investigations, and corrective action has been taken for all findings that were substantiated. As noted in the Audit, the Department has “historically taken appropriate action in response to fraud hotline allegations referred by” the Auditor’s Office. In this case, Department leadership was not notified of the hotline allegations for at least seven months despite ongoing audit discussions throughout that same period. Timely notification would have allowed the Department to address the potential waste of taxpayer dollars and take immediate corrective action to stop the alleged activity.

Target Implementation Date: Completed

2.2

To determine whether the incidents of potential abuse of time identified by the Office of the City Auditor represent a broader pattern, the Transportation Department should conduct a comprehensive investigation covering, at a minimum, the most recent six months of operations. At a minimum, the investigation should include all Streetlight Repair Program electricians and assess: (1) excessive non-productive vehicle stops during regular working hours; and (2) callback overtime claims to determine whether reported callback responses can be independently verified.

Based on the results of its investigation for this recommendation and Recommendation 2.1, Transportation should take appropriate corrective and, where warranted, disciplinary action, and provide the Office of the City Auditor with the results of its investigation and a summary of any actions taken. (Priority 1)

Management Response: This recommendation has been implemented. The Transportation Department conducted a formal investigation into the identified incidents. Based on the investigation conducted, the Department did not identify a broader pattern that warranted further investigation. For the substantiated incidents, appropriate corrective action was taken where warranted.

The Transportation Department also conducted additional review of callback overtime by reviewing SAP service notification completion records, photographs, overtime records, daily work reports, Geotab, and dispatch records. While this review provided evidence that the associated work was completed, the Transportation Department was unable to independently verify the accuracy of all reported callback activity based on available data. As a result, the Transportation Department has implemented additional controls to ensure callback work can

be verified, such as requiring timestamped photos of work, data entry that documents time, locations, and vehicle number, and using City vehicles.

Target Implementation Date: Completed

2.3

The Transportation Department, in coordination with the General Services Department Fleet Services Division, should develop a written standard operating procedure requiring Transportation managers and supervisors to use City telematics data for supervisory oversight, operational monitoring, and employee accountability. At a minimum, the procedure should:

- Describe when and how supervisors should review telematics data;
- Require that supervisors periodically review telematics data using exception reports to identify unusual vehicle activity, included extended stoppages, repeated visits to locations where no City work is assigned, and assigned discrepancies between vehicle locations and reported work activity;
- Clarify the circumstances under which telematics data may be used to monitor compliance with City policies and operational expectations;
- Identify supervisory responsibilities for documenting telematics reviews and follow-up actions; and
- Provide training to supervisors responsible for monitoring field operations. (Priority 1)

Management Response: Agree. The General Services, Risk Management, and Human Resources departments are developing a training and/or Standard Operating Procedure and/or update to AR 90.74 for Citywide telematics data review for applicable departments, and the Mayor will issue direction to operational departments requiring use once complete, which will be completed by the implementation date below. Because the deliverable may require supervisory review of telematics data, it may be subject to meet and confer. If meet and confer is required, any labor process will be conducted as a second phase, with any resulting changes reported to the Office of the City Auditor.

Target Implementation Date: July 2027

2.4

To ensure that supervisors can effectively monitor the safety and security of their employees and City vehicles while out in the field, the Transportation Department should require electricians to enter their assigned vehicle identification number in SAP and/or BlueWorx. This requirement should be added to the standard operating procedure required in Recommendation 1.1. (Priority 1)

Management Response: Agree. The Transportation Department is ensuring all vehicle information is available in SAP and/or BlueWorx and will add the requirement to the SOP required by Recommendation 1.1. Note that the current system functionality allows employees and vehicles to be assigned to a work order but does not allow for an employee to

be assigned a vehicle. The functionality as it currently exists will be implemented as part of this recommendation.

Target Implementation Date: July 2027

2.5

The Transportation Department, in coordination with the Department of Information Technology, should configure SAP to record all streetlight electricians and staff responding to a work order and callback repairs, not just the primary electrician. (Priority 1)

Management Response: Agree. The Department of IT has confirmed this functionality exists within SAP, and Transportation will roll out the functionality to staff and implement to the extent operationally feasible. Due to the nature of streetlight repairs, it may not always be operationally feasible for all staff responding to a work order to be listed on the work order. This functionality would require employees who are completing the repair to stop work and enter additional employees on the job as they arrive or depart.

Target Implementation Date: July 2027

2.6

The Transportation Department, in coordination with the Department of Finance Payroll Division and the Department of Information Technology, should support and follow through on the Department of Finance, Human Resources, and Personnel's initiative to establish and implement a standardized digital callback overtime tracking and verification process to improve supervisory oversight and independent verification of callback overtime claims in accordance with Administrative Regulation 95.01 Overtime Compensation, the Personnel Manual, the Salary Ordinance and the applicable Memorandum of Understanding. At a minimum, the process should:

- Record each individual callback overtime claim and link it to the associated emergency streetlight repair notification or work order;
- Capture key information needed for the Transportation Department to verify callback overtime, including the employee's name, callback date, start and end times, emergency location, purpose of the callback, travel time, and all employees responding to the same emergency;
- The Transportation Department should maintain sufficient supporting documentation, including photographs and work order information, to independently verify callback responses; and
- The Transportation Department should incorporate additional supervisory review and verification controls, as appropriate, to ensure callback overtime claims are accurate, adequately supported, and consistently applied. (Priority 1)

Management Response: Agree. The Finance, Human Resources, Information Technology, and Personnel Departments have collaborated to develop an SAP timecard system enhancement that will allow an employee to enter key callback information. The enhancement for callback time entry builds on the existing process but will now require that

key fields, such as the purpose of the callback, start and end times, travel time, and additional relevant information, such as the associated work orders or other cost objects, be entered consistently and in a format that supports the review for callback pay time entries. The system enhancements are currently being tested for functionality and conformance with City policies. The anticipated go-live date for the timecard enhancements, process documentation, and training is no later than October 31, 2026.

Once the new timecard enhancements and process documentation for callbacks are available to all City departments, the Transportation Department will be responsible for maintaining supporting documentation to verify callback responses and will develop a written process for required documentation and supervisory review of documentation for callbacks.

The deliverable to complete Standard Operating Procedures or policies will be completed by the implementation date below. Because the deliverable may require supervisory review of employee performance data, it may be subject to meet and confer. If meet and confer is required, any labor process will be conducted as a second phase, with any resulting changes reported to the Office of the City Auditor.

Target Implementation Date: July 2027

2.7

The Transportation Department should also establish written supervisory procedures requiring supervisors to periodically review and reconcile callback overtime claims. At a minimum, supervisors should:

- Analyze callback overtime records for unusual patterns or trends;
- Review available supporting documentation, including telematics data, photographs, and other available records, to verify callback responses; and
- Document the results of these reviews and any corrective actions taken. (Priority 1)

Management Response: Agree. Callback pay guidelines are not determined by the Transportation Department and are located within the respective Memorandums of Understanding for Recognized Employee Organizations. The Transportation Department has implemented additional controls to ensure callback work can be verified, such as requiring timestamped photos of work, data entry that documents time, locations, and vehicle number, and using City vehicles. The Transportation Department will develop supervisory procedures to review callback records and implement one round of review prior to target implementation date.

The deliverable to complete Standard Operating Procedures or policies will be completed by the implementation date below. Because the deliverable may require supervisory review of employee performance data, it may be subject to meet and confer. If meet and confer is required, any labor process will be conducted as a second phase, with any resulting changes reported to the Office of the City Auditor.

Target Implementation Date: July 2027

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Andy Hanau
October 14, 2026

Thank you,



Bethany Bezak
Chief Performance and Logistics Officer



Rolando Charvel
Chief Financial Officer

cc: Paola Avila, Chief of Staff, Office of the Mayor
Charles Modica, Independent Budget Analyst
Rania Amen, Chief Community Services Officer & City Engineer, Office of the Mayor
Kris McFadden, Chief Infrastructure Officer, Office of the Mayor
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Randy Wilde, Senior Policy Advisor, Office of the Mayor
Jonathan Behnke, Director, Department of Information Technology
Mike Tully, Director, General Services Department
Julie Rasco, Director, Human Resources Department
Benjamin Battaglia, Director, Department of Finance
Alex Hempton, Director, Performance and Analytics Department



DATE: October 26, 2026
TO: Honorable Members of the Audit Committee
FROM: Andy Hanau, City Auditor
SUBJECT: **City Auditor Comments on the Management Response to OCA's Performance Audit of the Streetlight Repair Program**

Memorandum Summary

The purpose of this memorandum is to provide the Audit Committee with the Office of the City Auditor's comments on management's response to our Performance Audit of the Streetlight Repair Program. Management's response is included as **Appendix C**.

Management's response to the audit contends that certain of the audit findings are based on inaccurate, incomplete, or contextually misunderstood information. The response also implies that OCA inappropriately delayed disclosure of certain allegations received through the City's Fraud, Waste, and Abuse Hotline. We respectfully disagree on both issues.

First, our findings and recommendations are based on sufficient and appropriate evidence and analyses. As discussed throughout the report, there is extensive evidence of significant operational inefficiencies and a lack of accountability within the Program. Taken together, these problems are leading to a waste of taxpayer dollars, contributing to the growing streetlight repair backlog, and delaying responses to resident requests for streetlight maintenance.

Second, our handling of the referenced Hotline allegations was appropriate and allowed OCA to identify a broader pattern of potential employee misuse of City equipment and theft of City-paid time. Notably, Transportation had not investigated these issues despite numerous red flags. Our investigation was fully consistent with Government Auditing Standards, applicable California Government Code and City Charter requirements, investigatory best practices, and OCA's policies and procedures.

Government Auditing Standards, Section 9.52 requires auditors to explain their reasons for disagreeing with management responses in these circumstances. Our explanations are set forth in the Issue sections below.

We appreciate the Transportation Department's (Transportation's) cooperation and assistance throughout the audit. In the course of working closely with Program staff and management, we observed many dedicated City employees working diligently to deliver important services to our residents, which is especially commendable as City departments continue to contend with constrained resources. We also acknowledge Transportation's current and ongoing efforts to address several of the issues identified in our report. Importantly, Transportation agreed with the audit recommendations, which emphasize the need to strengthen employee and Program performance monitoring and accountability to improve operational efficiency and effectiveness. OCA's view is that implementation of these recommendations will ultimately benefit both City residents as well as City employees dedicated to carrying out the mission and objectives of the Program.

Despite management's agreement with our recommendations, their response to our audit indicates that they do not agree with several core findings that, in fact, establish the evidentiary basis for the very same recommendations that they have agreed to implement. In our view, Transportation's response to the audit findings appears to indicate that management does not fully recognize the magnitude of the operational challenges facing the Streetlight Repair Program. Specifically, we are concerned that Transportation's response does not convey the level of urgency necessary to identify and address the underlying factors contributing to the Program's increasing repair backlogs and declining service levels for residents.

As discussed below, we believe our report appropriately recognizes the limitations of the available information and accurately describes what the evidence shows. In several respects, Transportation's response to the audit findings reinforces OCA's central audit conclusions:

1. The Program has not consistently collected and analyzed sufficiently reliable and detailed operational information to determine how effectively its resources are being used; and
2. The Program has not assessed whether its current operating model is the most effective approach for delivering streetlight repair services.

Issue 1: Management incorrectly asserts that the audit makes assumptions with limited data or context, despite overwhelming evidence of significant inefficiencies and accountability problems within the Streetlight Repair Program.

We disagree with Transportation's characterization that the audit relied on inaccurate or incomplete data or made sweeping assumptions without sufficient context. As discussed throughout **Finding 1**, our audit acknowledges the factors affecting the Program's backlog, expenditures, and staffing, including the COVID-19 pandemic, vacancies, employee turnover, rising energy costs, and changes in how electrician resources were allocated. The report also recognizes the limitations of KorTerra data and explicitly notes that recorded DigAlert responses do not account for all activities performed during an electrician's workday. However, as discussed throughout the report, the audit's overall conclusion that inefficiencies and a lack of accountability are impacting the efficiency and effectiveness of the Program is based on extensive evidence, including:

- The Program's staff hours worked more than doubled from FY2021 to FY2026,¹ while incoming DigAlert and streetlight workloads remained relatively stable. At the same time, the streetlight repair backlog and repair wait times significantly increased, and it currently takes the Program nearly a year to respond to resident complaints of streetlight maintenance issues.
- Despite spending \$800,000 to implement a new system to track DigAlert response activity in October 2025 (KorTerra), management has not used the system to evaluate productivity. For example, management was unaware that while some electricians completed an average of 13 DigAlerts per day, others completed only 6—less than half as many.
- Notably, throughout the audit, management repeatedly insisted that OCA focus on Transportation's KorTerra data for analysis of DigAlert responses because Transportation had not ensured that older data from the prior DigSmart system was reliable.² It was only once OCA presented management with the results of our

¹ As discussed in Finding 1, the audit uses staff working hours (staff regular time and overtime) for program capacity. Staff working hours are the best method of evaluating capacity because as management noted during the audit and in the management response, the overall Program budget is affected by factors outside management's control, such as the cost of electricity and employee pay increases. As discussed in the audit, Program staff working hours increased from 13,564 regular time hours and 583 overtime hours (14,147 hours total) in FY2021 to 28,120 regular time hours and 5,372 overtime hours (33,492 hours total) in FY2026, an increase of 137 percent.

² As discussed in Finding 1, management stated that while Transportation sent more than 150,000 positive responses to the State from FY2021 through FY2026 certifying that staff had investigated each DigAlert as required, Transportation did not actually ensure that staff completed the DigAlert responses they were assigned.

analysis of KorTerra data showing that average DigAlert response times suggested electricians likely have capacity to perform streetlight repairs during regular working hours that Transportation began questioning the reliability of its KorTerra data.³

- In 2019, the City adopted AR 90.74, which mandates the use of telematics data to monitor productivity and ensure employee accountability. However, due to a longstanding City practice of discouraging supervisors from using telematics to monitor employee work activity, management was unaware that multiple employees appeared to routinely spend extended time periods on non-work activities. These findings were based on OCA's analysis of Transportation's own vehicle telematics data, rather than assumptions about employee activities. According to the management response, Transportation has since completed investigations that were initiated in response to OCA's analysis and substantiated multiple OCA findings.
- Despite multiple staff completing relatively few DigAlerts per day, and some employees appearing to spend extended periods of City-paid time on non-work activities, Transportation still completed its incoming DigAlert workload. Thus, if all employees completed DigAlerts at a reasonable pace, and if employees were held accountable for work on City-paid time, Transportation would not need to dedicate all regular time to DigAlerts, and regular working time would be available to complete streetlight repairs.

Collectively, these various datapoints indicate that the efficiency and effectiveness of the Program is being impacted by numerous operational problems, including insufficient staff accountability and waste of taxpayer dollars, as well as management's determination that it was necessary to direct all regular-time work to DigAlert responses when it likely was not.

The information in management's response does not change these conclusions nor diminish the need for the recommended improvements in performance monitoring, accountability, and resource management.

³ In addition, in Transportation's May 2026 written response to OCA's data reliability questionnaire, management reported no known limitations or concerns regarding KorTerra's functionality or data accuracy. Furthermore, OCA independently assessed recorded DigAlert response durations, including travel time, and conducted field observations that were generally consistent with the durations recorded in KorTerra.

Issue 2: Management incorrectly implies that OCA inappropriately withheld Fraud Hotline complaints for seven months.

Transportation states that because OCA did not provide management with Hotline allegations discussed in our report until June 2026, they were unable to quickly investigate and take corrective action. However, OCA's independent investigation uncovered a broader pattern of potential abuse of time beyond the initial allegations, and in June 2026, we provided management with extensive data and information indicating potential abuse of time by multiple Program employees. We also note that management's response either misunderstands or misrepresents the circumstances that dictated how we handled the allegations and omits important context that is discussed in detail in our report. Key facts on these matters include:

- While OCA can, and often does, refer Hotline allegations to management for investigation, OCA independently investigates allegations that are especially serious in nature and/or where the evidence suggests a potential broader pattern of misconduct beyond the allegation itself. This is consistent with OCA's City Charter mandate, Government Auditing Standards, as well as audit and investigative best practices.
- The management response accurately notes the audit's acknowledgement that the Transportation Department has historically taken appropriate action in response to individual fraud hotline allegations referred by OCA. However, the management response selectively omits additional context from the report that establishes why OCA investigated the complaints, rather than referring the allegations immediately to Transportation. **Finding 2** of our report states:
"Transportation generally responded promptly and took appropriate action on [past] referred allegations but evaluated them individually rather than using additional available information to assess whether the reported conduct reflected broader patterns or underlying management or internal control issues."
- Specifically, from July 2020 to September 2026, OCA referred 18 Hotline cases to Transportation where the complainant alleged employee theft of time and/or misuse of City equipment. Transportation found 9 (50 percent) of which to be substantiated and/or warranted corrective action. While Transportation did generally take appropriate action on the specific allegations that we referred to the department, Transportation investigated each allegation in isolation but never conducted a broader review nor assessed potential underlying internal control weaknesses.

- OCA's investigation of the referenced Hotline allegations identified a broader pattern of potential employee misuse of City vehicles and theft of City-paid time that Transportation had neither identified nor investigated, despite numerous red flags. Our extensive analyses of the cases were provided to, and discussed several times with, management during the audit to facilitate their review and determination of corrective actions, as appropriate.

In summary, the coordination between OCA's audit and investigative functions allowed us to identify a broader pattern of theft of time and misuse of equipment that management had neither identified nor investigated.

CONCLUSION

We appreciate management's cooperation during this audit; our team valued the input and perspective they provided throughout the engagement. Yet, given the risks to public safety and quality of life, it is important that management understands the magnitude of the operational problems hindering the Program. It is also important to note that management agreed with our recommendations. If implemented with the requisite urgency, those recommendations will improve Program services for residents while creating a culture of accountability for City staff dedicated to advancing the Program's mission and objectives.

Respectfully submitted,



Andy Hanau, MPP, CIA, CFE

City Auditor



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