City of Long Beach
Working Together to Serve

Memorandum

Date: May 29, 2025

To: Eric Lopez, Director of Public Works

CC: Tom Modica, City Manager
April Walker, Assistant City Manager
Kevin Riper, Financial Management Director

From: Laura Doud, City Auditor

Subject: Street Projects and Pavement Management Performance Audit

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Please find attached the *Street Projects and Pavement Management Performance Audit* conducted by Matrix Consulting Group, a public sector management consulting firm commissioned by the City Auditor's Office (Office). The audit reviewed how the City manages its street projects, which included over $310 million spent between Fiscal Years (FY) 2020 through 2024. This memo summarizes the key findings of the 84-page report.

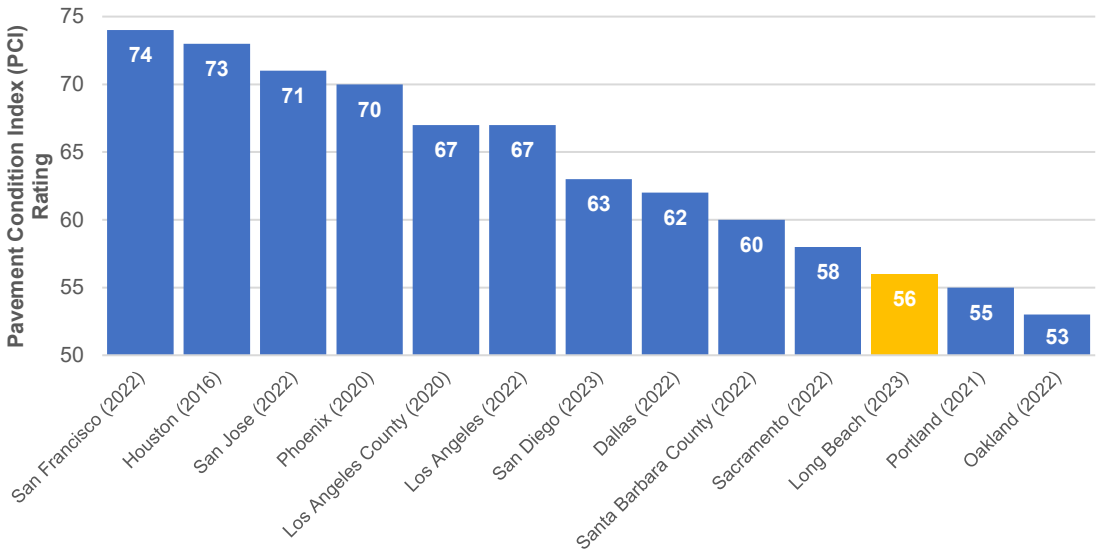
Audit Summary

The Public Works Department (Public Works) is responsible for the repair, rehabilitation, and overall maintenance of the City of Long Beach's (City's) street infrastructure. Street projects are funded through multiple sources, with major funding from the City's Measure A, Los Angeles County's Measure M, and the State of California. The audit evaluated whether the City is effectively managing street projects in alignment with its Pavement Management Program and Capital Improvement Program.

The audit found that the City lacks a centralized system to track street project progress, limiting its ability to evaluate performance, manage timelines and costs, and report outcomes. As a result, critical project data such as budgeted versus actual costs and staff time by phase is not consistently reviewed or reported. Without this information, it is difficult for the City to know whether projects are delivered cost-effectively. Additionally, the City does not have enough funding to complete the necessary Citywide street repairs or achieve its target pavement rating. This shortfall highlights the gap between current street investments and long-term street infrastructure needs.

The City's Pavement Management Plan is updated every two years and rates street conditions using a Pavement Condition Index (PCI) from 0 to 100, with 100 being the highest possible rating (the pavement is in no distress and is new) and 0 being the lowest (the pavement has completely degraded and is no longer viable). The City has set a target PCI of 60; however, the 2023 Pavement Management Plan reported a PCI of 56, a decrease from the 2021 PCI of 58. Among benchmarked cities and counties, Long Beach had the third-lowest PCI, ranking below both Los Angeles County and the City of Los Angeles.

Pavement Condition Index (PCI) Ratings of Benchmarked Cities and Counties
**Dates below indicate the latest available data.*



We acknowledge that over the past two years, Public Works has significantly accelerated project spending, with annual expenditures averaging $85 million compared to the $47 million average between 2020 and 2022. However, more than $220 million in previously budgeted funds that have been allocated to specific projects remain to be spent, including $150 million allocated to Arterial Corridors, Arterial Streets, and Residential Streets.

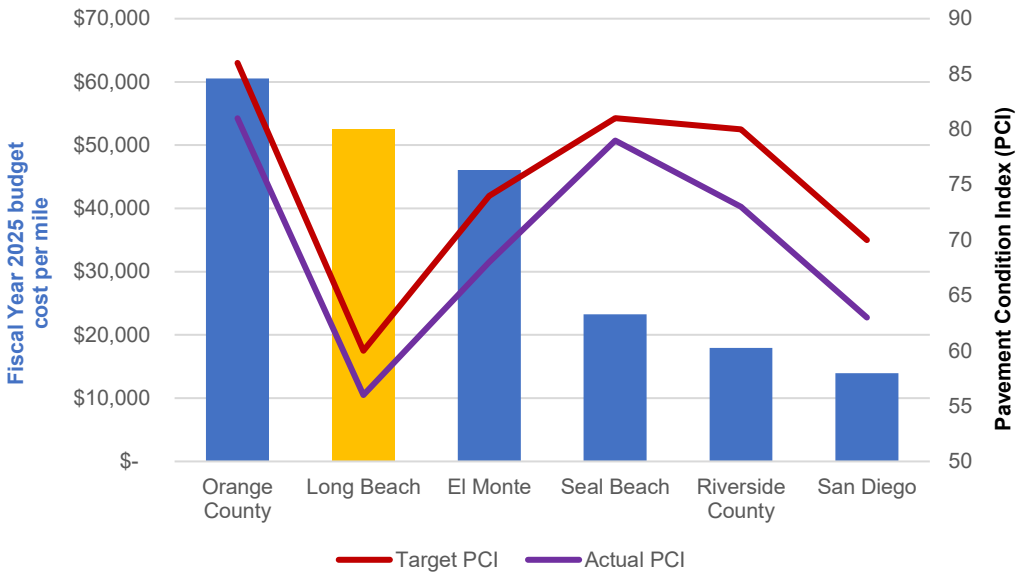
The audit identified several opportunities to improve the City's management of street projects. We recommend Public Works prioritize implementing the recommendations to operate more efficiently and deliver street projects more cost-effectively, ensuring that future investments in City streets are maximized.

Key Findings

1. **The City's current funding plan falls short of what is needed to achieve its pavement rating goals.** While the City has increased spending, significant investments are still needed to raise its overall PCI rating. The City's current PCI of 56 and target PCI of 60 are the lowest among benchmarked cities and counties. However, the budgeted amount from FY 2025 to FY 2027 reflects the City's commitment to improving street conditions, with an average planned investment of approximately $52,527 per mile, the second highest among benchmarked cities and counties.

Average Budgeted Cost per Mile and Pavement Condition Index (PCI) Rating of Long Beach Compared to Benchmarked Cities and Counties

Jurisdiction	Population	CL Miles	Target PCI	Actual PCI	FY25 Budget	$ per CL Mile
El Monte, CA	103,794	128	75	68	$5,900,000	$46,093
Orange County	3,140,000	336	86	81	$20,300,000	$60,557
Riverside County	2,500,000	2,258	80	73	$40,500,000	$17,936
San Diego, CA	1,340,000	3,300	70	63	$46,000,000	$13,939
Seal Beach, CA	23,352	49	81	79	$1,150,000	$23,279
Long Beach, CA	449,468	1,009	60	56	$53,000,000	$52,527



Despite planned budget increases, the City's average Capital Improvement Program allocation for streets from FY 2025 through FY 2027 of $53 million annually is $20 million short of the recommended minimum to reach its pavement rating goal. The City should evaluate its funding strategy and explore sustainable solutions to close the funding gap. Without additional investment, the City will struggle to improve overall street conditions.

2. **Public Works lacks a centralized system to manage and track street projects, which limits the ability to assess project performance at a broader level.** Despite managing over 1,000 miles of roadway, Public Works tracks projects using spreadsheets tailored to specific project types with no standardized system to aggregate data. A review found no baseline schedules to compare actual progress against planned timelines. Additionally, no formal policies exist to define reporting frequency and required data elements, resulting in inconsistency across project teams. Implementing a Citywide project management system would improve data consistency, streamline oversight, and support informed decision-making.

3. **Inaccurate construction cost estimates create challenges in budgeting and forecasting future project needs.** Public Works does not track how accurate its initial cost estimates are compared to actual construction bids. While Public Works acknowledges market fluctuations, these changes are not factored into cost estimates or included as contingency adjustments. In one project, average bids were 34% higher than the initial estimates, highlighting the need for improved cost estimation methods. Without tracking this data, the City risks underbudgeting and cost overruns. Improving how costs are estimated would support long-term planning and budgeting.

4. **Staff time on street projects is not tracked in a way that helps assess efficiency and cost-effective project delivery.** While Public Works staff charge time to specific street projects, this information is not analyzed by project phase or in relation to total project costs. Implementing a structured reporting system to track staff time and consultant hours by project phase and as a percentage of total construction costs would help Public Works assess staffing needs and improve project efficiency.

5. **The City can improve consistency in reporting street project information and communication to external stakeholders including the public.** Although street project updates are available, the City lacks a formal communications strategy to provide consistent and timely updates to elected officials and the public. Establishing a structured communication plan with clear guidelines and accountability measures would improve transparency, provide timely project updates, and build public trust.

6. **The City can implement a formal equity process in its planning.** Between 2013 and 2022, the City's street projects were equitably distributed across census block groups and the nine Council Districts despite not having a formal process for considering equity in its project planning. To strengthen and sustain these equitable outcomes, the City should integrate an equity assessment, establish equity metrics, and incorporate them into the Pavement Management Program for ongoing evaluation and monitoring.

Thank you to the Public Works Department and Bureau staff for their assistance and participation in this audit. I am pleased that the Public Works Department and the City Manager's Office have agreed to the audit recommendations and have begun implementing them, as outlined in the enclosed Management Response and Action Plan. The audit identified 34 recommendations to improve existing practices, and the Public Works Department has agreed to implement all recommendations except for two.

We acknowledge that the City is making progress in managing and improving its streets, however, enhanced tracking, better reporting, and efficient spending are necessary to maximize the impact of public funds.

ATTACHMENT

Street Projects and Pavement Management Performance Audit

May 2025

LONG BEACH CITY AUDITOR
LAURA DOUD

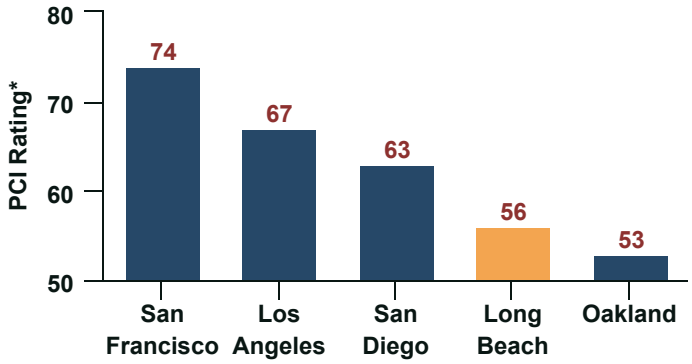
Why This Audit Is Important

Streets are essential to daily life connecting residents to work, school, and City services. Well-maintained streets improve safety, reduce vehicle wear and tear, and support transportation and public safety.

The City's current PCI is 56, lower than benchmarked cities and counties. Additional funding is needed to meet the City's target PCI of 60.

Effective management of street infrastructure is essential, as it directly impacts the quality of life for all Long Beach residents. Without a centralized system to manage street projects, it is difficult for the City to assess whether it delivers projects cost-effectively.

Ratings of Benchmarked Cities



**Street conditions are measured by a Pavement Condition Index (PCI) from 0 to 100, with higher scores indicating better conditions.*

What We Recommend

Evaluate Funding Strategy
Identifies opportunities for increased funding to help reach the City's target PCI of 60

Implement a Centralized System
Helps the City evaluate performance across all streets projects, improve data consistency, and project oversight

Adjust Costs to Reflect Market Changes
Improves project cost estimates, enabling the City to set accurate budgets and forecast needs

Track and Analyze Staff Time
Allows the City to assess staffing and consultant needs and better manage project costs

Establish a Communications Plan
Increases transparency, ensures timely updates, and enhances public trust

Integrate an Equity Assessment
Ensures street projects are fairly distributed by census block and Council District size

What Happens Next

We provided the Department with 34 recommendations to strengthen its project oversight and management processes to improve street conditions. The Department agreed to all recommendations except for two.

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To read the full report, visit our website: CityAuditorLauraDoud.com

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LONG BEACH CITY AUDITOR
LAURA DOUD

Street Projects and Pavement Management Performance Audit: The City Needs to Strengthen its Project Oversight and Management Processes to Improve Street Conditions

May 2025

Report Summary

Why This Audit Is Important

Streets are essential to daily life connecting residents to work, school, and City services. Well-maintained streets improve safety, reduce vehicle wear and tear, and support transportation and public safety.

From Fiscal Years (FYs) 2020 to 2024, the City spent $310 million on street projects. Street conditions are measured through the Pavement Management Plan using a Pavement Condition Index (PCI) ranging from 0 to 100, with higher scores indicating better conditions. The City's current PCI is 56, the lowest among benchmarked cities and counties. Additional funding is needed to reach the City's target PCI of 60.

Effective management of street infrastructure is essential, as it directly impacts the quality of life for all Long Beach residents. Without a centralized system to manage street projects, it is difficult for the City to know whether it delivers projects cost-effectively.

Audit Objective

The audit objective evaluated whether the City is effectively managing street projects.

Acknowledgement

We thank management and staff in the Public Works Department and the Financial Management Department for their collaboration, assistance, and cooperation during this audit.

What We Found

We found that while the City has more than doubled its street project spending over the past two years, the City needs to improve how it manages these projects to enhance street conditions and deliver them more efficiently. Public Works lacks a centralized system for managing projects, which limits its ability to evaluate performance, manage timelines and costs, and report outcomes. Without aggregate project data, it is difficult to determine whether it delivers projects cost-effectively.

Despite planned budget increases, the City's average Capital Improvement Program allocation for streets is $20 million short of the recommended minimum. The City cannot reach its target pavement rating goal and complete the necessary Citywide street repairs without sufficient funding. It is crucial for Public Works to improve its management processes to further maximize the impact of public funds.

What We Recommend

We recommend Public Works implement a Citywide project management system to improve data consistency, streamline project oversight, and support informed decision-making. Public Works should also prioritize improvements to its street project management, including:

- updating project cost estimates to reflect market changes and adding budget contingencies,
- tracking and analyzing staff time and consultant hours by project phase,
- developing and executing a communications plan for consistent, timely updates to the public and elected officials, and
- integrating an equity assessment and equity metrics into project planning and the Pavement Management Program.

By prioritizing these improvements, the City can operate more efficiently and deliver street projects cost-effectively. In addition, the City should evaluate its funding strategy to close the gap between current street investments and long-term street infrastructure needs.

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Street Projects and Pavement Management Performance Audit

Final Report

LONG BEACH, CALIFORNIA

March 3, 2025

matrix consulting group

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1. Introduction & Executive Summary

This audit evaluates the efficiency and effectiveness of street projects and pavement management in the City of Long Beach.

1.1 Executive Summary

The audit intends to determine whether the City has clear goals, guidelines, and policies to guide street paving decisions. Its overarching goal is to ensure the City is appropriately spending or using funds from financial sources within the timeframes and parameters of those funding mechanisms. The overarching framework for the analysis is the City's Pavement Management Program (PMP) and Capital Improvement Program (CIP).

There are six key objectives to be considered:

Objective 1: Determine whether the City's capital street projects are completed in a timely and cost-effective manner. Key metrics include:

1a. % of projects programmed in the PMP completed within the allotted timeframe as set by the City and designated in the Infrastructure Investment Plan (IIP) and/or CIP programs; and

1b. % of projects completed within the awarded design contract(s) schedule and budget (including contingency); and

1c. % of projects completed within the awarded construction contract(s) schedule and budget (including contingency).

Objective 2: Determine whether the Public Works Department consistently reviews project updates and uses a method of tracking street pavement activities.

Objective 3: Determine whether the Public Works Department's staffing levels are appropriate to best maintain the City's street projects and activities (as a percentage of construction cost).

Objective 4: Determine whether the City's plans and budgets provide maximum benefit with the use of available funds and that funds are spent in accordance with the City's plans and goals. This assessment is based on whether the

program meets the Pavement Construction Index (PCI) target during the specified timeframe.

Objective 5: Determine if the City follows restrictions, eligibility, and reporting requirements of the funding sources spent on street projects and that expenses are properly recorded.

Objective 6: Review the historical spending of streets-related capital dollars as compared to census block and tract data.

1.2 Background

In 2016, Long Beach voters approved Measure A, which provides additional funding for street projects, public safety, infrastructure, and other citywide improvements. Measure A is a 10-year sales tax extended from a previous referendum.

- Between 2017 and 2023, out of the over $458 million generated by Measure A, the City has allocated roughly $74 million toward Mobility and Safety projects which include street projects.
- On May 2, 2023, the City approved $90 million in bonds, with $41.35 million dedicated to street repairs with future revenue from Measure A sales tax pledged to repay the debt. Measure A was extended indefinitely by voters in 2020.

The City must spend 85% of the bond funds over the next three years and all funds within five years. If funds are not fully expended within this period, the City could be fined 30% of the total interest paid on the bonds, which could amount to approximately $22 million.

The City develops and updates a pavement management plan (PMP) every two (2) years. This Plan assesses all City-owned pavement assets and rates them by segment, designating a PCI rating. PCI ratings are provided on a 100-point scale, with 100 being the highest possible rating (the pavement is in no distress and is new) and zero (0) being the lowest (the pavement has completely degraded and is no longer viable).

- The City has identified an overall City average PCI target of 60. The goal of the City and the Public Works Department (Department) is to meet or exceed this target.
- The current city-wide average PCI referenced in the 2023 Pavement Management Plan is 56.

Pavement management evaluations were performed in 2018, 2021, and 2023. The Department is currently finalizing plans to provide an additional evaluation in 2025. Results from the 2021 and 2023 evaluations were used to develop funding plans for the

City's Infrastructure Investment Plan (IIP) for fiscal years 2023 – 2027 (Elevate '28). The City utilizes the biannual evaluations to inform its five-year infrastructure investment plans, which include identifying the roads to be repaired within those five years.

Several priority projects were identified for completion through the City's Elevate '28 program. Projects are grouped into seven investment areas:

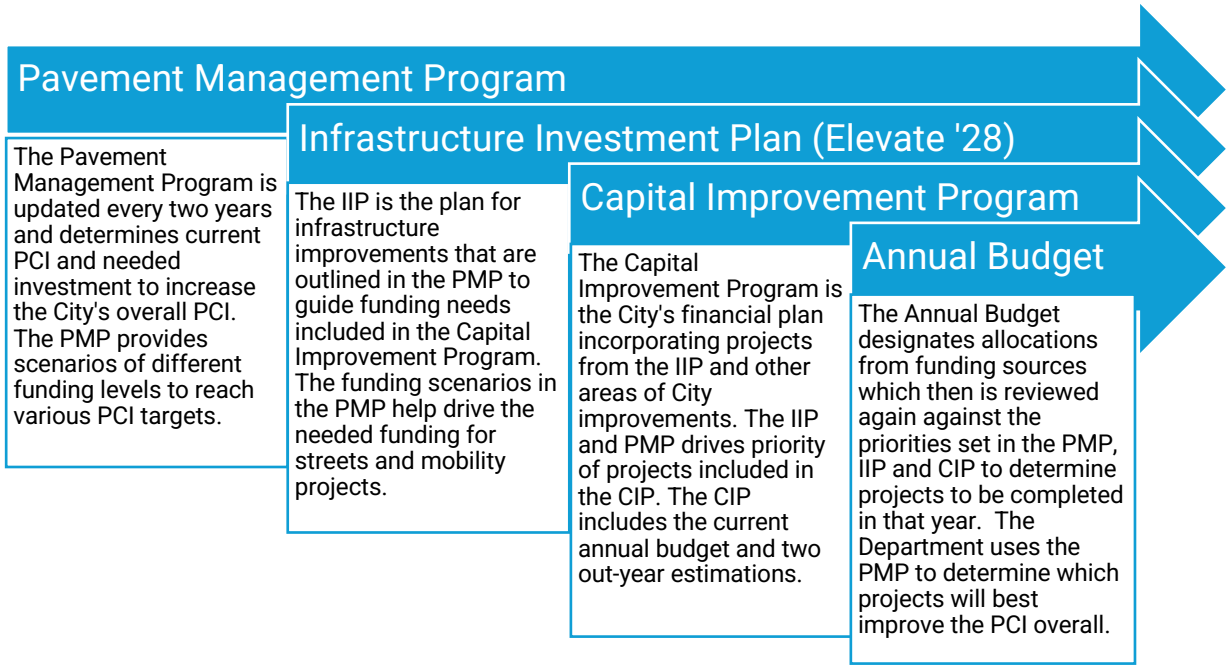
- 2028 Olympic Legacy
- Community & Cultural Investments
- Gold Medal Park Refresh Projects
- Mobility & Safety Improvements
- Park Improvements
- Public Facilities
- ROW, Water Quality, & Climate Action

For this audit, analysis will focus on projects in the Mobility & Safety area, specifically street resurfacing and pavement management.

Multiple mechanisms fund priority projects. Measure A funding, Measure A revenue bonds, and multiple other sources provide substantial funding for the Elevate '28 program and the City's Capital Improvement Program (CIP) Budget.

The graphic below outlines the City's process of developing project plans and funding:

Figure 1.1 Long Beach Streets Project Planning and Funding Workflow



The City's annual CIP identifies upcoming infrastructure expenditures and outlines proposed funding for future years based on an analysis of available funding sources.

Since the adopted budget is constrained by funding availability, the adopted CIP does not meet all identified needs.

The Mobility & Safety section of the annual CIP contains programs designed to maintain and repair the City's Mobility infrastructure and meet the increased mobility needs resulting from economic growth. These projects are funded through a variety of sources, including Measure A, LA Metro Propositions A and C, State Gas Tax Street Improvement Capital, Transportation Improvement Fees generated by Traffic Impact Fees, LA Metro Measures M and R, AB 2766 (Air Quality), State Road Maintenance and Rehabilitation Act, and other Federal, State, and County grants.

Street projects involve renovating or reconstructing pavement assets within the city limits. Pavement management is an asset management system that assesses pavement asset conditions using a Pavement Condition Index (PCI) score and recommends appropriate methodologies for increasing or sustaining those scores for existing assets.

The PCI is calculated by visually surveying a pavement's surface for distresses such as cracking, rutting, scaling, and spalling. The type, severity, and extent of each distress are recorded, and a deducted value is calculated for each distress. The sum of all the deducted values is subtracted from 100 to get the PCI value.

PCI is an American Society for Testing and Materials (ASTM) standard term used in Standard D6433-23, Roads and Parking Lots Pavement Condition Surveys. This methodology is the basis for pavement management programs and plans throughout the United States. In reviewing street projects and the use of pavement management planning as part of this audit, the City's PCI targets for the City overall must be considered as a benchmark metric for success.

The audit found that while pavement management programming is increasing financial resources for street projects, the current funding, resources, and systems have not yet proven to be sufficient to meet the PCI target. This could be due to multiple factors including pavement condition, allowed expenditures per funding source, and cost of construction, among others. It is also important to note that the PCI has not been evaluated since FY 23, the same year that the current five-year plan and additional Measure A bond funding was put into place by City Council. The current 2025 PCI study is underway. Once this is completed, the City will need to evaluate if an increase in programmatic funding is still needed to improve the PCI as desired by the PMP program.

1.3 Summary of Key Findings

The audit identified strengths and areas for improvement, summarized below along with a table of findings and recommendations.

Strengths

1. The City's current rate of expenditure of Measure A Bonds approved in May 2023 is adequate to meet the requirements of 85% expended by May 2026 and 100% expended by May 2028.

2. The expenditure of funds designated for street projects experienced a significant increase in FY2023 and FY2024, indicating a strong emphasis on project execution and accountability. This trend reflects positively on the program's overall progress.

3. Funding for residential street improvements and arterial street rehabilitation projects has remained consistent over the past four (4) fiscal years. This consistency allows for better planning and project execution.

4. Mobility-related CIP expenditures in FY2023 were higher than in prior years. As revenues and funding mechanisms increase, expenditures should follow.

5. The City's GIS department updates and posts maps for the public based on information provided by Project Managers.

6. Current staffing levels are adequate to manage street-related capital projects. However, prolonged vacancies and challenges with filling engineering roles should be addressed.

7. Pavement conditions are evaluated every two to three years, and recommendations from evaluations inform the City's IIP and CIP. This is a best practice for effective pavement management.

8. Project Managers, the Public Works Business Operations Bureau, and the Financial Management Department (Financial Management) provide the California Department of Transportation with the requisite reporting. Past reporting indicates that the City has complied with restrictions, eligibility, and reporting requirements.

9. Projects performed between October 2013 and December 2022 are equitable in their provision to Equity Focus Areas (EFA). Multiple EFAs see a percentage of projects higher than their relative proportion of the City.

Opportunities

1. The Public Works Department does not have a portfolio-wide reporting system that provides aggregate and consistent data for reporting purposes. While some project tracking and reporting occurs in the Department, no policies

address cadence or information required from project managers. Reports should have a defined target audience and provide consistent information regardless of the responsible Bureau or project complexity.

2. There is a need for a more strategic approach to communications regarding the streets program and its projects. In FY2022, the Department added a communications position. This role focuses on communicating the status and expectations of street-related projects. Additionally, staff have developed a Strategic Communications Plan to address shortcomings in current public communication strategies that needs to be adopted and implemented.

3. Actual project costs and timelines of exceed the initial estimates developed during the planning phase. While staff acknowledge market changes, they do not appear to be included as a contingency or considered in estimates. Future PMP models should include inflation metrics to account for changes in the cost of design and construction over time.

4. The Department does not utilize a system-wide project management software system. Instead, projects are tracked by individual project managers on spreadsheets that are tailored for specific project types.

5. While Measure A Bond expenditures are on track to meet requirements, the current roll-over budgets in CIP projects remain high. Expenditures increased in FY2023 and FY2024, but a backlog of over $220 million remains to be spent from prior years in street-related projects.

6. Past funding levels are inadequate to improve the City's PCI. Future years show a planned increase in funding but do not provide the amounts needed to maintain or improve the City's PCI at current levels. The current funding breakdown for the major, minor, and alley networks is not the most impactful allocation with the funding available.

7. Equity is not a defined consideration during project development and prioritization, nor is it integrated into the pavement management evaluation process as an objective and outcome. However, Multiple Equity Focus Areas (EFA) see a higher percentage of projects than their relative proportion of the City.

The table below provides each finding from this analysis with the relevant audit objective, cause of the issue, result or risk of the finding, along with the resulting recommendations.

Finding	Objective	Cause	Result	Recommendations
2.1 The current processes do not adequately define, track, and report on project timeframes. Project schedules are tracked by individual projects by each project manager. Data is inconsistent between various project teams, and no aggregate reporting occurs.	1	Lack of reporting standards and policies.	No aggregate reporting exists for snapshot into the overall portfolio status.	2.1a Define standard criteria and metrics necessary for assessing whether CIP street projects are being delivered cost effectively and timely and that funds are being expended as required. Short-term, these metrics should be integrated into the current tracking tool, Microsoft Excel, through standard and uniform templates used by all Public Works staff responsible for maintaining, reporting, and tracking CIP data and performance. Metrics should include standard formatting, consistent column headings, and data summaries that would enable performance reporting at the programmatic level. 2.1b Microsoft Excel lacks the functionality to adequately manage the CIP long-term. The Department should implement a dedicated software solution. This system should include functionalities such as portfolio management, planning, schedule and cost tracking, file management, and automated reporting. Ideally, it should also include customizable dashboards to visualize data and metrics. 2.1c Create a master document and schedule that outlines all required reporting, the objectives of that reporting, when that reporting takes place and is due, who is responsible for the final reporting product, and the final circulation and or publishing of a given report (i.e. is it a report that has to be filed with the California Department of Transportation, the California Transportation Commission, or a report that is published to the City's website). This master document should represent the single source of truth (SSOT) for all internal and external parties. The SSOT should centralize all data into one location to ensure consistency and accuracy. This practice assists in making data-driven decisions and sharing consistent information. This SSOT for all reporting on CIP street

Finding	Objective	Cause	Result	Recommendations
				projects will enable the Department to identify opportunities for streamlining, yield insights into the delivery of CIP street projects, and support the creation and consistent use of uniform, standard methods and tools for tracking, reporting, and maintain financial and performance data for CIP street projects.
2.2 The Department is not adequately spending the funds allocated to certain street project categories on time. Specifically, actual expenditures in the Arterial Corridor Enhancements and Arterial Streets Rehabilitation categories are not keeping pace with yearly funding amounts. From FY2020 to FY2024, expenditures in these categories average 50% and 55% of the allocated budget, respectively; this percentage does not include the prior year rollover funds allocated to individual projects in the programs each year.	1	Projects are not bid and under construction in a timely manner after funds are allocated.	Projects are funded, but not ready for bid or construction. Delays in this process can cause prices to increase.	2.2a Define the standard criteria and metrics necessary for developing aggregate reporting on project variances. The Department should track final project variances and variances by phase (e.g., design and construction). 2.2b Develop reporting to track staff time allocated to each project phase (by hours and as a percentage of construction). This report should be utilized by project managers in the future to improve the accuracy of scheduling and estimating project needs. 2.2c Develop accurate forecasting models to ensure that yearly expenditures align with yearly program allocations. Prioritize Arterial Street Rehabilitation and Arterial Corridor enhancement projects to spend yearly budget allocations and decrease prior year project rollover funds.
2.3 The Department does not report in aggregate the accuracy or variances of engineers' estimates compared to the construction bids.	1	No aggregate reporting or review of estimates versus actuals.	Estimates for projects are not within an industry accepted standard when compared to bid prices. This causes issues when budgeting and forecasting future needs.	2.3a Utilize multiple methods of estimating the construction cost of projects to ensure accuracy and timely information. Unit pricing should be regularly updated when projects are bid to ensure future projects can utilize accurate historical bid-based information. 2.3b Implement metrics and data sharing to report the trends and accuracy of engineers' estimates to the construction bids.

Finding	Objective	Cause	Result	Recommendations
2.4 The Department is on track to meet the requirements of the Measure A Bond issued in May of 2023.	1	Quarterly expenditures are adequate to meet the deadlines.	The City will not incur penalties because of bond requirements.	2.4a Continue to monitor expenditures of Measure A Bond funds. If quarterly expenditures drop below $2.26 million before May 2026, the Department should immediately determine if the average expenditures from past quarters and forecasted expenditures for projects will result in meeting the May 2026 deadline. 2.4b Maintain current expenditure levels to ensure all bond proceeds are expended before the May 2026 and May 2028 deadlines.
3.1 The Business Operations Bureau adequately uses the financial system to track CIP revenues and expenditures. Project managers' spreadsheets track project work and budgets within the divisions responsible, but the reporting data and how that information is used and disseminated are inconsistent.	2	Lack of reporting standards and policies.	No aggregate reporting exists for snapshot into the overall portfolio status.	3.1a Develop a policy for the cadence and content of required project updates from project managers and a procedure for providing relevant updates. 3.1b Develop a Project Status Report template to be used for all projects and updated monthly. These Project Status Reports should be uniform so that they can roll up to an aggregated program-level report. 3.1c Implement capital project software to manage capital projects and enhance the ability to generate automated, standardized reporting.
3.2 External reporting is occurring, mostly in the form of GIS maps and website updates. There is, however, no external reporting strategy or formalized campaign regarding what or how often information is to be communicated to elected officials and to the public for all projects. External reporting needs to be formalized. The Department does provide project updates in the form of moratorium maps	2	Lack of reporting standards and policies.	No aggregate reporting exists for snapshot into the overall portfolio status.	3.2a Develop a public education campaign to address project selection, progress, and equity. This should include a strategic approach to the communication of the streets program that includes policies and procedures for items such as the timing of publishing Project Status Reports to elected officials and residents of Long Beach, guidelines on when updates are expected and who is responsible, and clear expectations on the overall accountability for the communications plan. 3.2b Consider partnering with the Communications Information Bureau to produce a quarterly digital newsletter that can be posted to the City's social media

Finding	Objective	Cause	Result	Recommendations
and GIS updates, but there are opportunities to enhance the delivery of information.				sites and distributed to the Department's mailing list. This newsletter should include project updates, upcoming project details, and contact information for questions or concerns from the public. 3.2c Provide a yearly report to the City Council through a presentation that includes project status data, PMP updates, and a work plan for the next 12 – 18 months. This update could be part of the yearly budget process. 3.2d Utilize PowerBI to provide consistent and accurate reporting across all websites and data sources. The current PowerBI project tracker has updated data in some project categories but is lacking in others.
3.3 The Department does minimal programmatic reporting of the CIP street projects.	2	Lack of reporting standards and policies.	No aggregate reporting exists for snapshot into the overall portfolio status.	3.3a Implement a programmatic reporting system to manage, track, and communicate the projects more effectively to staff and stakeholders. 3.3b Develop a specialized position with primary responsibility for the Department's reporting. 3.3c Develop and maintain a master list and schedule that will serve as the Department's single source of data for all external reporting.
3.4 The Department recently added a Communications position to promote the Streets CIP. This is a positive step toward developing and implementing a communications plan for the Streets CIP.	2	Addition of communications position in the Department.	Improved communication of streets CIP projects to external stakeholders.	3.4a Work with the Program Specialist and Administrative Analyst III to develop and implement a communications plan focused on educating the public and reporting the metrics of the Streets CIP.
4.1 Staffing levels are adequate to deliver the planned Streets CIP through Fiscal Year 2028.	3	Adequate staffing levels.	The Department has enough positions to manage the amount of	4.1a Establish a consistent department-wide method to track staff and consultant hours by project phase, including both planned and actual time. Use this data

Finding	Objective	Cause	Result	Recommendations
			funding they receive for CIP Streets projects.	to develop a staffing model that forecasts workload and staffing needs for future CIP and IIP plans. 4.1b Develop methods for reporting and analyzing staff time data as a percentage of construction cost. Use this data to develop a staffing model that forecasts workload and staffing needs for future CIP and IIP plans and to enhance cost-effectiveness and project delivery efficiency. 4.1c Set percentage targets for in-house and consultant-led projects for each program and track the actual work completed in-house versus outsourced. Incorporate these targets into the staffing model used for workload analysis.
4.2 The Department would benefit from adding additional positions trained in project management.	3	Most staff managing projects are Engineers.	Positions are difficult to hire when a professional engineer is required.	4.2a Enhance project management skills by requiring training for all project managers, reclassifying engineering positions to allow for alternate qualifications such as a PMP Certification, or adding a Project Manager position to each engineering team to support the engineering project managers.
5.1 The City's planned funding and future budgets do not provide maximum benefit with available funds. Additional funds must be allocated to the Minor Network to have the greatest impact on the PCI.	4	Lack of adequate funding for the Streets CIP.	PCI will continue to decrease over time and the backlog of projects will grow.	5.1a The greatest opportunity to increase the PCI is to allocate additional funding to the City's Minor Network. Future budgets should be reviewed for opportunities to re-allocate additional funds to the Minor Network per the PMP funding recommendations.
5.2 The City's planned funding and future budgets are inadequate to reach and maintain the desired	4	Lack of adequate funding for the Streets CIP.	PCI will continue to decrease over time and backlog will grow.	5.2a The Minor Network's PMP project maintenance backlog was 41% in 2023. Additional funding for the minor network should be considered as a one-time influx to reduce the PMP project maintenance backlog and increase the PCI. Once the backlog is reduced

Finding	Objective	Cause	Result	Recommendations
network PCI of 60 at current expenditure rates.				and PCI has increased, maintenance funding to stabilize the PCI will be required (slurry and crack seal). To reduce the current backlog in the minor network and increase the PCI, funding levels should be between $44.3 million and $72 million per year. 5.2b The Major Network's PMP project maintenance backlog was 17% in 2023. The recommended budget is between $23.8 million and $46.7 million to maintain the current PMP project maintenance backlog and increase PCI. At $23.8 million, the network will remain within the PCI target of 60 and the backlog of 17%. Funding for the major network should remain at or above $23.8M to ensure the PCI target is consistently met and the backlog does not increase over time. 5.2c The current funding backlog for the road network projects, including Arterial Corridors, Arterial Streets, and Residential Streets, totals over $150 million. The impact of these funds on the PCI is not easily estimated due to incomplete information on project completion. Prior-year projects and funds should be prioritized to ensure that the intended implications for the City's overall PCI and maintenance backlog are achieved.
6.1 There is no evidence to suggest the City is not properly managing funds. The City appears to be adhering to the restrictions, eligibility, and reporting requirements of the various funding sources.	5	Reporting requirements at the state level are met.	Reports are submitted in a timely manner to the requisite state agencies for streets related funding.	6.1a Implement a project management software to automate the data collection needed for reporting, reducing staff time spent collecting the information and redundancies in reporting and risk of error.
7.1 From October 2013 to December 2022 projects were equitably allocated to census block groups	6	Equity is not a consideration in the	Seniors have a higher percentage of projects relative to their	7.1a Incorporate an equity assessment, with guidance from the City's Equity Office, into the project "BlueSheet" form for Project Managers to utilize while developing

Finding	Objective	Cause	Result	Recommendations
in the City identified as Equity Focus Areas (EFAs). EFAs for BIPOC, LEP, Limited Income, and Seniors have a higher percentage of projects relative to their proportion of the City, while Density block groups show a lower-than-average proportion of projects based on population.		planning of projects and funding allocation.	proportion of the city but Density block groups do not.	initial prioritization criteria and perimeters for street projects. 7.1b Incorporate equity metrics and outcomes into the specifications for ongoing evaluation and monitoring of the Pavement Management Program. Examples of equity metrics that can be applied to measuring the success of the PMP include the following: 1. Measure the spread of PCI within a given Council District to identify inequities between Council Districts. 2. Prioritize assessment of the PCI near essential services like hospitals, schools, employment centers, and transit facilities. 3. Assess the level of investment relative to the level of need (based on PCI) for each Council District. This will enable the City to strategically make proportionate investments relative to need throughout the City. 7.1c Develop a communication plan and strategy to involve stakeholders representing equity-focused demographics during the development of the PMP. 7.1d Organize stakeholder meetings throughout the PMP development to address the needs of underserved communities. These meetings should include leaders and representatives from block groups with an EFA designation and consider the relative project count.

2. CIP Budget and Schedule Project Metrics (Objective 1)

This Chapter will focus on **Objective 1** of the performance audit:

Objective 1. Determine whether the City's capital street projects are completed in a timely and cost-effective manner. Key metrics include:

1a. % of projects programmed in the PMP completed within the allotted timeframe as designated in the IIP and/or CIP programs.

1b. % of projects completed within the awarded design contract(s) schedule and budget (including contingency).

1c. % of projects completed within the awarded construction contract(s) schedule and budget (including contingency).

Timelines for project delivery are rooted in the pavement management program recommendations and the CIP budget documentation. These variables are defined by the PMP and the CIP document and by comparing actuals to budgeted amounts for projects in the CIP. For this audit, timelines are represented by the project team's understanding of when funding was allocated, expected project timelines based on the engineer's estimates, and expectations of contractor performance dictated in bid documents and contracts.

The City utilizes the Complete Street Design Framework[1] to address arterial and local street design. This framework focuses on design to ensure that streets are safe for people of all ages and abilities, balances the needs of different modes of use, and supports local land uses, economies, cultures, and natural environments. Several factors are considered in this framework, including public transportation users, pedestrians, and cyclists. Projects deliver improvements that include not only resurfacing but upgrades to accessibility, the creation of bicycle facilities, the replacement of street signs, sidewalk repair, and bridge rehabilitation. This model is a best practice and should continue. However, it generally increases the time required for the planning and design phase of projects.

[1] Complete Streets Policy Framework, https://smartgrowthamerica.org/resources/elements-complete-streets-policy/

2.1 Defining, Tracking, and Reporting on Project Schedules

FINDING 2.1: **The current processes do not adequately define, track, and report on project timeframes. Project schedules are tracked by individual projects by each project manager. Data is inconsistent between the various project teams, and no aggregate reporting occurs. No comparison of baseline schedules to actual timelines is occurring.**

2.1 Analysis

The Department tracks project schedules individually as projects rather than in aggregate by program. Individual project managers track project schedules and timelines at the project level, mostly using Microsoft Excel.

The data reviewed in the audit does not reflect the use of consistent and standard terminology for criteria critical to assessing the delivery of projects. Data is organized primarily at the project manager level in Excel spreadsheets that do not have standard formatting, consistent column headings, and data summaries that would enable performance reporting at the programmatic level. To measure the performance of the PMP and the delivery of CIP street projects, standardized criteria need to be developed, including definitions for how timelines and dates are to be assigned to project phases, how these will be tracked, and what is to be reported.

The Department has many internal working documents for project managers to track their projects. Several teams deliver different elements of CIP programs and have set up their own systems to manage the projects, mostly using Excel. However, the Department has not implemented capital project management software to assist the project managers. While these individualized methods work for the team members, they do not consistently collect and report data, making the project management portfolio less efficient and transparent.

The following images illustrate a few of the methods currently used by staff internally to track project information:

Figure 2.1 Arterials and Corridors Report

Project Title	Project #	Project Budget-ITD Revised Budget as of 08/16/2024	ITD Actual as of 08/16/2024	PO Balances as of 08/16/2024	ITD Revised Budget - Actual as of 08/16/2024	Current Design Phase	Expected Phase Finish
HARDING STREET BETWEEN ORANGE AVE & CHERRY AVE	3003040076	2,200,000	2,005,773	23,936	170,291		
VICTORIA ST: SUSANA RD-LONG BEACH BLVD	3003040080	4,606,076	1,534,150	869,651	2,202,275		August '24
PRE-CONSTRUCTION							
BELLFLOWER BLVD BETWEEN ATHERTON & LCD	3003040058	1,539,510	67,071	1,613,425	(140,985)	On hold	
ATLANTIC AVENUE BETWEEN ANAHEIM ST & PCH	3003040071	2,200,800	49,464	210	2,151,126	100%	
XIMENO AVENUE BETWEEN ANAHEIM & PCH	3003040054	2,978,659	222,027	11,019	2,745,613	80%	July '24
LONG BEACH BLVD:PCH -WILLOW STREET	3003040079	5,581,377	129,309	283,741	5,168,327	60	Jan '25
5TH, 6TH, 7TH STREET DECOUPLING (SHOEMAKER)							
W 7th St: Maine - Long Beach Blvd. ~~5TH, 6TH, 7TH STREET: LA RIVER TO ATLANTIC AVE~~	3003040087	1,500,000	7,610	-	1,492,390		TBD
DEL AMO BLVD BETWEEN LONG BEACH BLVD & ATLANTIC AVE	3003040075	5,543,404	377,785	61,581	5,104,038	90%	August '24
E WARDLOW: STEVELEY AV-NORWALK	3003040085	2,631,000	117,257	210,768	2,302,975	60%	Jan '25

Figure 2.2 Completed Major Streets Projects Report

Project Title	Project #	Council District	Funding Source	Phase	Funding Year(s)	old Council District	Comments	Date completed	
E 10TH STREET BETWEEN TEMPLE AVE & OBISPO AVE	3003040040			Completed				12/31/20	
XIMENO AVENUE BETWEEN BROADWAY & 4TH ST	3003040041			Completed				5/29/20	
CARSON STREET BETWEEN CLARK AVE & BELLFLOWER BLVD	3003040043			Completed				5/29/20	
LONG BEACH BLVD BETWEEN 31ST ST & WARDLOW RD	3003040045			Completed				6/30/20	
E 10TH STREET BETWEEN ORANGE AVE & CHERRY AVE	3003040048			Completed				9/22/20	
SANTA FE AVENUE BETWEEN WILLOW ST & 27TH ST	3003040037			Completed				11/9/21	
OUTER TRAFFIC CIRCLE BETWEEN HATHAWAY AVE & LAKEWOOD BLVD	3003040049			Completed				11/9/21	
ATHERTON STREET BETWEEN PALO VERDE AVE & KNOXVILLE AVE	3003040050			Completed				11/9/21	
CARSON STREET BETWEEN CITY LIMITS & CLARK AVE	3003040013			Completed				2/1/22	
E WILLOW STREET BETWEEN SAN VICENTE AVE & STUDEBAKER RD	3003040026			Completed				3/17/22	
SOUTH STREET BETWEEN ATLANTIC AVE & WALNUT AVE	3003040029			Completed				3/10/22	
DEL AMO BLVD BETWEEN ATLANTIC AVE & ORANGE AVE	3003040046	8		Completed		8	complete	5/24/22	
ATLANTIC AVENUE BETWEEN E 10TH ST & E ANAHEIM ST	3003040027	6		Completed		6	complete	5/26/22	
ANAHEIM STREET BETWEEN OREGON AVE & PACIFIC AVE	3003040001	1	PROP C	Completed		1	completed		NOC awaiting Mouhsen's signature
Spring Street Bicycle Lane Gap Closure (Btw. Atlantic Ave & Junipero Ave)	3003060024	5	MOU-COLB & COSH	Completed					Awaiting NOC from City of Signal Hill
LOYNES DRIVE BETWEEN BELLFLOWER BLVD & PCH	3003040068	3	MEASURE A	Completed		3	100% complete,		NOC awaiting Mouhsen's signature
SAN ANTONIO DR BETWEEN LB BLVD & ATLANTIC AVE	3003040061	5,8	RMRA	Completed		8	close out	May-22	
WARDLOW ROAD BETWEEN STUDEBAKER RD & STEVELY AVE	3003040059	4,5	PROP C, GAS TAX	Completed		5	SOC week of 3/6		
NEW YORK STREET BETWEEN LEWIS AVE & ATLANTIC AVE	3003040064	6	PROP C	Completed		6			

Figure 2.3 Residential Streets Project Report

Project	Location	Funding	Contractor (s)	Work and Impact	Status - Time Frame
Residential Streets Improvement Projects					
FY24 - Cerritos Ave (Rehabilitation)	6th St to7th St - Westside half	Measure A & M	WCA - 35926 AAA - R7153	Street Rehabilitation - includes reconstruction of sidewalks, curb and gutter and coldmilling and resurfacing the roadway and striping. No parking and limited access during various construction activities. No parking notices will be posted in advance.	In Construction August - September 2024
FY24 - W 17th St (Rehabilitation)	San Francisco Ave to Oregon Ave	Measure A & M	WCA - 35926 AAA - R7153	Street Rehabilitation - includes reconstruction of sidewalks, curb and gutter and coldmilling and resurfacing the roadway and striping. No parking and limited access during various construction activities. No parking notices will be posted in advance.	Plans released to AAA to schedule. Construction is anticipated October - December 2024
FY24 - ACCESS RD (Rehabilitation)	W PACIFIC COAST HWY To SAN FRANCISCO AVE	Measure A & M	WCA - 35926 AAA - R7153	Street Rehabilitation - includes reconstruction of sidewalks, curb and gutter and coldmilling and resurfacing the roadway and striping. No parking and limited access during various construction activities. No parking notices will be posted in advance.	Plans released to AAA to schedule. Construction is anticipated October - December 2024
FY24 - ACCESS RD (Rehabilitation)	ACCESS RD To W PACIFIC COAST HWY	Measure A & M	WCA - 35926 AAA - R7153	Street Rehabilitation - includes reconstruction of sidewalks, curb and gutter and coldmilling and resurfacing the roadway and striping. No parking and limited access during various construction activities. No parking notices will be posted in advance.	Plans released to AAA to schedule. Construction is anticipated October - December 2024
FY24 - Golden Shore (Rehabilitation)	Access Rd to Access Rd	Measure A & M	WCA - 35926 AAA - R7153	Street Rehabilitation - includes reconstruction of sidewalks, curb and gutter and coldmilling and resurfacing the roadway and striping. No parking and limited access during various construction activities. No parking notices will be posted in advance.	In design. Construction anticipated Oct - Dec 2024
FY24 - Cerritos Ave (Rehabilitation)	Cerritos Ave (3rd St to 6th St)	Measure A & M	WCA - 35926 AAA - R7153	Street Rehabilitation - Includes reconstruction of sidewalks, curb and gutter and coldmilling and resurfacing the roadway and striping. No parking and limited access during various construction activities. No parking notices will be posted in advance.	In Construction August - September 2024

While developed for different purposes, these examples contain good information but illustrate the inconsistent formatting and incomplete data that exist at the project manager level.

None of the examples provided refer to the initial baseline schedules, and the data collected for the project does not actively report on the baseline versus completed timelines. This creates a challenge in determining whether the City's CIP street projects are being completed in a timely and cost-effective manner as defined by the PMP and CIP.

These examples also illustrate the lack of a project management tool for staff to effectively manage the CIP. Regarding reporting project delivery timeliness, the Department should develop standardized criteria and metrics for assessment. Leadership should also define parameters to be tracked and reported by all project managers, including the initially defined completion date and the actual completion date for each phase of a project. Based on the collected data, there are currently no baseline schedule comparisons to report on actual project deliverables in each project phase (i.e., feasibility, planning, design, permitting, and construction) compared to the initial schedules defined in the PMP and CIP documents. To assist with this:

- All project managers should utilize a standardized project management system with the same tracking and reporting structures, even if all aspects of one program don't apply to another.
- There are tools in use now that can be utilized to consolidate the information and generate reports. Spreadsheets can be developed based on project type, and the City's PowerBI tool can analyze and present data if a reporting methodology is integrated.
- Capital project management software can be configured to ensure consistent data tracking and can be used to automate reporting, reducing staff time spent aggregating the necessary information for reporting.

The Department produces reporting on the CIP, the PMP, and Measure A, and some of that reporting is comprehensive. However, that reporting does not include the metrics cited above to enable the City to accurately and adequately assess whether streets are being delivered on time. While these metrics may be available to project managers, they are not regularly shared or included in reporting methodologies. The data needed to develop reporting at the programmatic level to measure if the paving program is meeting the defined objectives does exist, but it is not maintained in aggregate. Projects can be delayed for many reasons, but these delays can also often result in increased costs, making it critical to understand the timeliness of project delivery in aggregate.

Standardized reporting enables leaders to recognize areas of strength and identify areas of improvement in the overall project delivery.

2.1 Recommendations:

(2.1a) Define standard criteria and metrics necessary for assessing whether CIP street projects are being delivered cost-effectively and timely and that funds are being expended as required. In short, these metrics should be integrated into the current tracking tool, Microsoft Excel, through standard and uniform templates used by all Public Works staff responsible for maintaining, reporting, and tracking CIP data and performance. Metrics should include standard formatting, consistent column headings, and data summaries that would enable performance reporting at the programmatic level.

(2.1b) Microsoft Excel lacks the functionality to manage the CIP long-term adequately. The Department should implement a dedicated software solution. This system should include functionalities such as portfolio management, planning, schedule and cost tracking, file management, and automated reporting. Ideally, it should also include customizable dashboards to visualize data and metrics.

(2.1c) Create a master document and schedule that outlines all required reporting, the objectives of that reporting, when that reporting takes place and is due, who is responsible for the final reporting product, and the final circulation and or publishing of a given report (i.e. is it a report that has to be filed with the California Department of Transportation, the California Transportation Commission, or a report that is published to the City's website). This master document should represent the single source of truth (SSOT) for all internal and external parties. The SSOT should centralize all data into one location to ensure consistency and accuracy. This practice assists in making data-driven decisions and sharing consistent information. This SSOT for all reporting on CIP street projects will enable the Department to identify opportunities for streamlining, yield insights into the delivery of CIP street projects, and support the creation and consistent use of uniform, standard methods and tools for tracking, reporting, and maintain financial and performance data for CIP street projects.

2.2 Project Expenditures

FINDING 2.2: The Department is not adequately spending the funds allocated to certain street project categories on time. Specifically, actual expenditures in the

Arterial Corridor Enhancements and Arterial Streets Rehabilitation categories are not keeping pace with annual funding amounts. From FY2020 to FY2024, expenditures in these categories average 57% and 59% of the allocated budget, respectively; this percentage does not include the prior year rollover funds allocated to individual projects in the programs each year.

2.2 Analysis

The Public Works Business Operations Bureau provides administrative and financial support to the Department. It works with project managers and other Bureau Managers to determine future CIP needs and the availability of funding for projects.

The tables below represent proposed budgets and actual past expenditures for mobility and safety projects in the City. For this audit, only programs managed by the Engineering and Transportation Management Bureaus are included in the analyzed expenditures.

The City's Pavement Management Program is primarily administered and managed through the Transportation Project Management Bureau. This bureau is responsible for corridor projects, major and arterial street design and delivery, and local street and alley design and delivery. The Engineering Bureau manages bridge improvements and ADA projects. These programs are most integrated with the pavement management program and mobility-focused projects and, thus, are the focus of this analysis. Expenditures managed by the Engineering and Transportation Project Management Bureaus are outlined below.

In the table below are ADA Improvements encompassing three different ADA programs: ADA Sidewalk Improvements, ADA Curb Ramps, and ADA Rapid Response.

Table 2.1 Total Mobility Expenses, Programs Managed by Engineering & Transportation Management Bureaus (FY2020 – FY2024)

Program	FY2020	FY2021	FY2022	FY2023	FY2024
ADA Improvements	$6,603,148	$8,506,172	$5,276,247	$15,221,632	$11,671,709
Alley Improvements	$1,633,544	$2,124,226	$951,994	$3,419,525	$3,021,210
Arterial Corridor Enhancement	$664,201	$2,891,765	$2,518,101	$11,991,063	$18,272,437
Arterial Street Rehab.	$9,280,541	$11,480,422	$8,813,564	$9,122,407	$8,501,616
Bikeway & Ped. Imp.	$4,664,624	$3,447,714	$9,792,806	$14,670,237	$9,276,794
Bridge Improvements	$3,945,105	$3,873,532	$3,948,500	$17,155,131	$9,766,546
Residential Street Imp.	$18,660,940	$14,443,733	$16,626,272	$15,901,231	$22,687,987
Total	**$45,452,103**	**$46,767,564**	**$47,927,484**	**$87,481,226**	**$83,198,299**

The table below shows the total spending in each program category managed by the Engineering and Transportation Project Management Bureaus.

Table 2.2 Total Expenditure and Percent of Total (FY2020 – FY2024)

Program	Total Spent	% of Total
ADA Improvements	$47,278,909	15.21%
Alley Improvements	$11,150,499	3.59%
Arterial Corridor Enhancements	$36,337,567	11.69%
Arterial Street Rehabilitation	$47,198,550	15.18%
Bikeway & Ped. Improvements	$41,852,175	13.46%
Bridge Improvements	$38,688,814	12.45%
Residential Street Improvements	$88,320,163	28.41%
Total	**$310,826,677**	**100.00%**

The Engineering and Transportation Project Management Bureaus spent over $310 million in five years on street infrastructure projects in the City. Over half of the expenditures were on residential and arterial streets and bike & ped. improvements.

As Table 2.3 below indicates, expenditures over the past five fiscal years averaged 346% of the allocated budget. This indicates that expenditures are greater than budgeted amounts in the programs analyzed, and thus, some appropriated funds from prior years are also being spent as large projects progress.

Table 2.3 Percent of Budget Expended, Programs Managed by Engineering & Transportation Management Bureaus (FY2020 – FY2024)

Program	FY2020	FY2021	FY2022	FY2023	FY2024	Average
ADA Improvements	88%	85%	34%	146%	114%	**93%**
Alley Improvements	149%	91%	238%	-	1,511%	**398%**
Arterial Corridor Enhancement	45%	22%	33%	87%	96%	**57%**
Arterial Street Rehab.	58%	67%	62%	54%	56%	**59%**
Bikeway & Ped. Imp.	-	137%	680%	431%	258%	**301%**
Bridge Improvements	395%	387%	790%	3,431%	1,953%	**1,391%**
Residential Street Imp.	98%	133%	127%	110%	157%	**125%**
Average	**119%**	**132%**	**281%**	**608%**	**592%**	**346%**

**100%+ indicates rollover funds from prior years were also spent in that year.*

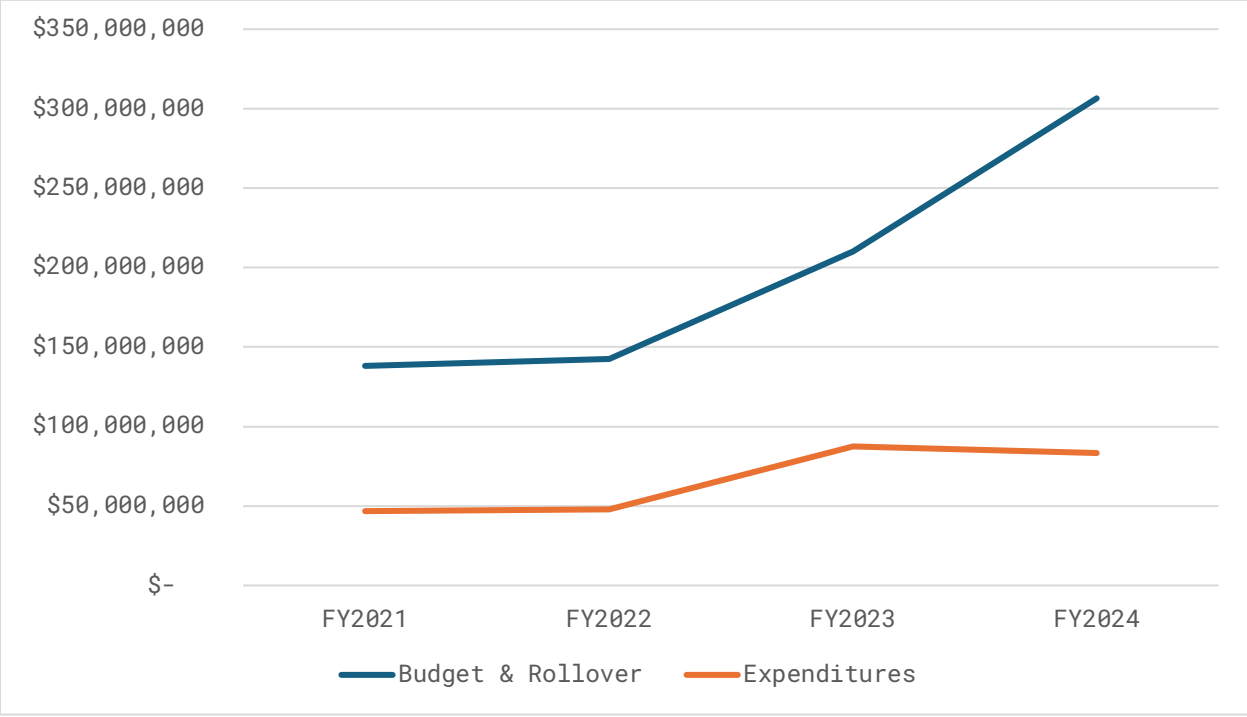
While the expenditure rate expressed above is trending positively for the Department, it remains less than 55% when yearly budget allocation is combined with unspent prior-year appropriations. Expenditures are considered in Table 2.4 and Figure 2.4.

Table 2.4 Percent of Budget + Roll Over Funds Expended, Programs Managed by Engineering & Transportation Management Bureaus (FY2021 – FY2024)

Program	FY2021	FY2022	FY2023	FY2024	Average
ADA Improvements	46%	25%	81%	44%	**45%**
Alley Improvements	48%	134%	195%	99%	**115%**
Arterial Corridor Enhancement	19%	11%	27%	20%	**18%**
Arterial Street Rehab.	21%	16%	14%	11%	**14%**
Bikeway & Ped. Imp.	23%	67%	64%	19%	**42%**
Bridge Improvements	43%	44%	52%	36%	**43%**
Residential Street Imp.	70%	82%	65%	71%	**68%**
Average	**39%**	**54%**	**71%**	**43%**	**52%**

Tables 2.3 and 2.4 represent the yearly expenditures in the Engineering and Transportation Project Management Bureaus as a percentage of the budget and finds in project accounts rolled over from prior year allocations. Figure 2.4 represents this relationship graphically using funding amounts, rollover balances, and actual expenditures.

Figure 2.4 Budget + Rollover Funds and Expenditures, Programs Managed by Engineering & Transportation Management Bureaus (FY2021 – FY2024)



It is essential to recognize that some rollover budget will always exist, as projects are generally funded at the start of the each phase (i.e., design, construction) and it may take multiple budget cycles for projects to get through each phase, especially for the arterial corridor projects. However, the City has opportunities to improve transparency by clearly communicating anticipated rollovers in contrast to rollovers of funded projects that are delayed or behind schedule.

The data shows expenditures in ADA Improvements, Arterial Corridor Enhancements, and Arterial Street Rehabilitation may be insufficient to keep pace with budget allocations each year, considering the additional rollover funds. Projects in these categories should be prioritized for completion. As budgets are evaluated for future funding, like the proposed FY25 Measure A bond, the Department should review expenditures in these categories and adjust funding allocations to maximize project progress and completion each year.

Figure 2.5 Spending per Program Type (FY2020 – FY2024)

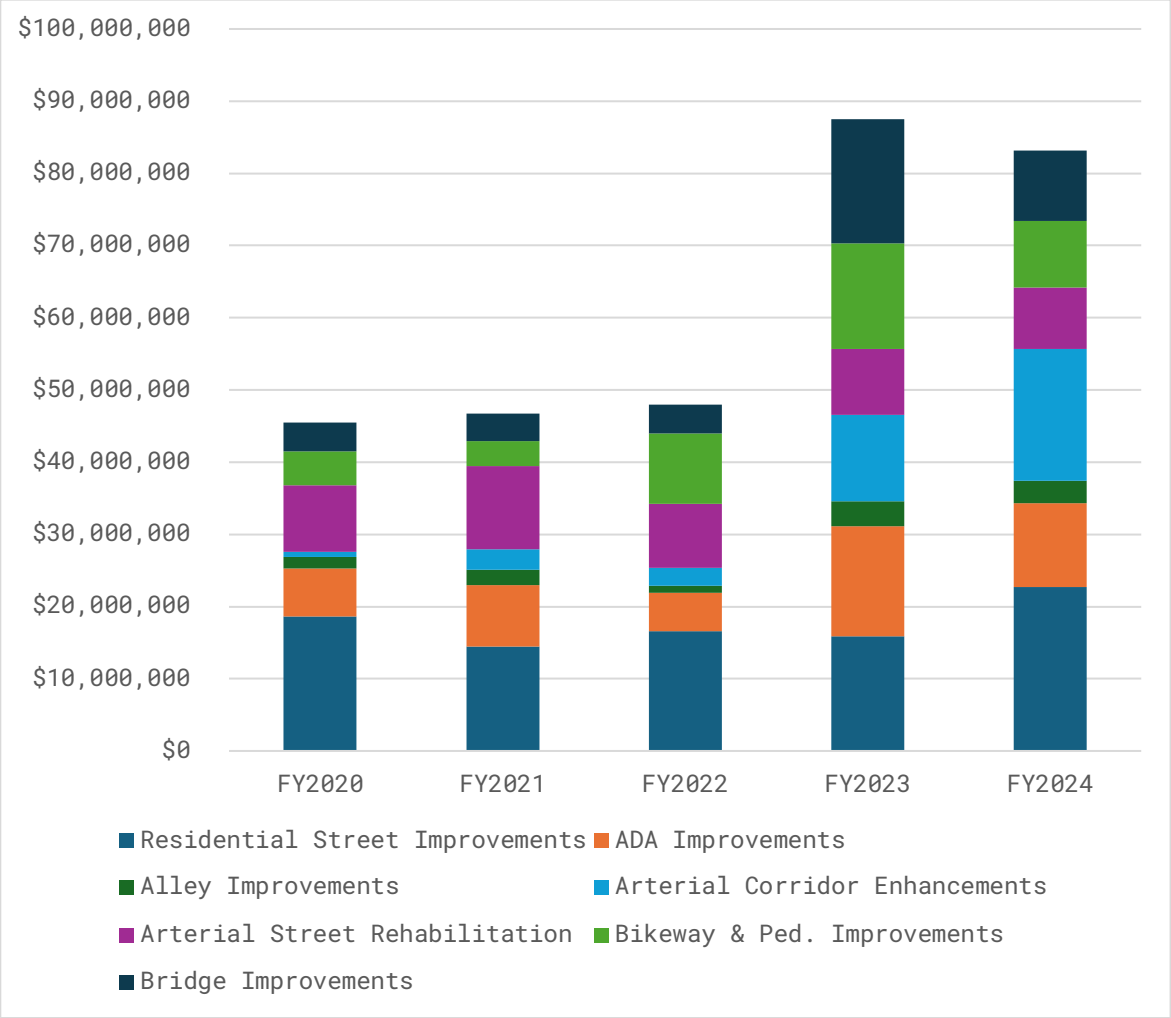


Figure 2.5 shows a substantial increase in spending in both FY2023 and FY 2024. This increased spending is critical to meeting funding requirements and increasing the PCI. It is a positive sign that the City is prioritizing the spending of funds and is moving projects out of design and into construction. This is likely due to a number of factors, including a greater focus from the Public Works Department and changes that have been made by leadership in staffing and project delivery.

Overall, expenses have trended upwards in the past five years, with the highest growth in Arterial Corridor Enhancements, from $664,201 in FY2020 to $18,272,437 in FY2024 (2,652% increase). Increases are also seen in ADA Improvements at 77%, Alley Improvements at 85%, Bikeway and Pedestrian Improvements at 99%, and Bridge Improvements at 148%. While this growth is a positive trend in the Department, as shown

in Figure 2.4, expenditures must outpace budgets to reduce the year-over-year rollover in project accounts and complete projects funded by Measure A.

Only the Residential Street Improvement program has consistent programmatic expenditures. Other programs, like Bridge Improvements, vary drastically from year to year. This fluctuation may be due to changing funding priorities or large project initiation.

Like the project timelines, the Department tracks revisions to project budgets but does not track and report on project variances individually or in aggregate. This information is necessary for determining the cost-effectiveness of project delivery and should be tracked by project phase and in aggregate.

This is illustrated by the information provided in Figure 2.1. The image illustrates how the project managers track project expenditures for a given arterials and corridors project and the resulting available budget. There are several issues with the document:

- The budget versus actual expenditures variance is not maintained and presented in a way that is immediately apparent and that enables programmatic-level reporting by project managers. The City's financial ledger system (MUNIS) is robust and maintains all budgetary details for projects, but project managers should also be tracking these important project performance indicators in a consistent and easily understood manner. The variances in each phase of the projects should be tracked and used to develop aggregate reporting.
  - The Department should set a metric and report on variance information. For example, for each type of project (i.e., residential, arterial, etc.), what is the variance from the initial defined budget for each phase (i.e., design, construction, etc.) compared to the final cost of that stage? This information can then be reported in aggregate for the streets program.
- On this same spreadsheet, there is a column entitled "funding year(s)." For funding with a key date, such as the deadline for appropriation, commitment, or expenditure, project managers should measure the time from appropriation to the date the funding must be committed and/or fully expended. Analysis and reporting should include the percentage of appropriated funding for a project that has been committed or expended through a given date. This information is tracked and available for review in MUNIS, but it is not clear that project managers review data managed in MUNIS to produce estimates or provide reporting.

2.2 Recommendations:

(2.2a) Define the standard criteria and metrics necessary for developing aggregate reporting on project variances. The Department should track final project variances and variances by phase (e.g., design and construction).

(2.2b) Develop reporting to track staff time allocated to each project phase (by hours and as a percentage of construction). This report should be utilized by project managers in the future to improve the accuracy of scheduling and estimating project needs.

(2.2c) Develop accurate forecasting models to ensure that yearly expenditures align with yearly program allocations. Prioritize Arterial Street Rehabilitation and Arterial Corridor enhancement projects to spend yearly budget allocations and decrease prior year project rollover funds.

2.3 Analysis of Projects Estimates and Costs

FINDING 2.3: The Department does not report in aggregate the accuracy or variances of engineers' estimates compared to the construction bids.

2.3 Analysis

The City's corridor projects are generally bid and constructed as one contract. Residential streets are generally bid as packages with task orders to initiate work on multiple streets or segments. Industry standards call for engineer's estimates on these projects to be within 10% of the low bid in 50% or more of projects.[2]

The following tables provide information on recent estimates as compared to the bids received.

Table 2.5 Recent Project Estimates and Bids Received

Project	Estimate	Bid #1	Bid #2	Bid #3	Bid #4	Bid #5
Artesia	33,614,000	34,118,000	36,404,000	36,760,000	36,927,000	41,677,000
Market	9,794,501	7,994,311	7,975,000	8,077,570	9,976,596	-
Residential (R-7153)	997,243	1,112,457	1,306,360	1,402,465	1,505,700	-

[2] https://www.fhwa.dot.gov/programadmin/contracts/ta508046.cfm

Table 2.6 Engineer's Estimates Versus Bids Received, % Differential

Project	Bid #1	Bid #2	Bid #3	Bid #4	Bid #5	Average
Artesia	1%	8%	9%	9%	19%	9%
Market	-23%	-23%	-21%	2%	-	-16%
Residential (R-7153)	12%	31%	41%	41%	-	34%

The project team reviewed two corridor projects and found that the engineer's estimate was within the 10% expected threshold for one of the two projects reviewed. Estimates for Artesia and Market were reviewed and compared to the bids received for the projects. The Artesia project bids were, on average, within 9% of the estimate provided. However, the Market project bids were, on average, 16% lower than the estimates prepared.

The provided residential street project bid tabs and engineer's estimates indicate that for bid number R-7153 (2019 - Local Street Improvements), the estimates are not within the 10% range. Instead, the average of the received bids was 34% higher than the engineer's estimates. The project team recognizes that prices continue to increase, but there should be a standard methodology used by all project managers to update estimates accordingly or to increase the contingency budgeted in each project. Additional analysis should be performed to determine if the +34% average is statistically accurate or if the project referred to above (R-7153) was an outlier.

Using the small sample size, engineers' estimates for recent corridor projects and residential contracts appear to be below the actual bids received. This is most concerning for the residential contract, where the estimates are well below the bids received.

Multiple estimating techniques should be utilized to ensure successful bidding of projects. These techniques include historical bid-based, cost-based, a combination of historical bid and cost-based, and risk-based. The method used for estimating should be established based on project complexity.[3]

- Historical Bid-Based: uses unit line-item pricing from a previous bid that is adjusted for project conditions
- Cost-Based: considers factors related to the actual performance of the work and requires expertise in construction methods and performance
- Combination: uses unit pricing for specific items and cost-based for non-standard items to provide a better estimate

[3] https://www.fhwa.dot.gov/programadmin/contracts/ta508046.cfm

- Risk-Based: uses risk identification to determine cost and schedule completion

The Department should utilize multiple methods of estimating to ensure accuracy and timely information. Unit pricing should be regularly updated when projects are bid to ensure future projects can utilize accurate historical bid-based information. Combining this method with cost-based estimating can result in the most accurate and up-to-date estimates for projects with relatively low complexity. Risk-based estimating may be the best option for projects with larger complexity and higher risk potential to ensure all risks are considered. Right-of-way acquisition, encroachment, and availability of materials are all considered in risk-based estimates.

In speaking with Department staff, the availability of contractors to complete the work has become an issue, likely also contributing to the resulting differences between the engineer's estimate and the bid prices. To alleviate this, the Department should consider alternative bid options, including modifying how the residential street program projects are packaged and bid to encourage interest from additional bidders.

2.3 Recommendations:

(2.3a) Utilize multiple methods of estimating the construction cost of projects to ensure accuracy and timely information. Unit pricing should be regularly updated when projects are bid to ensure future projects can utilize accurate historical bid-based information.

(2.3b) Implement metrics and data sharing to report the trends and accuracy of engineers' estimates to the construction bids.

2.4 Measure A Bond Spending Trends

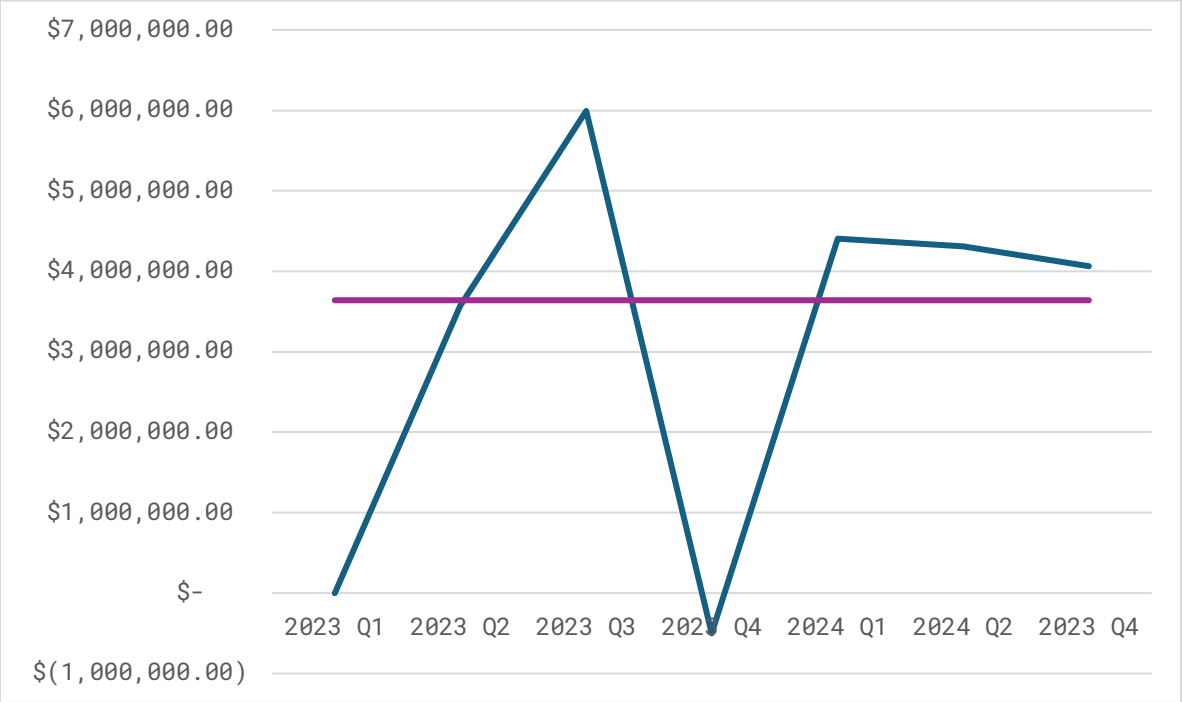
FINDING 2.4: The Department is on track to meet the requirements of the Measure A Bond issued in May of 2023.

2.4 Analysis

In 2016, Long Beach voters approved Measure A, which provides much-needed additional funding for street projects. On May 2, 2023, the City approved $90 million in bonds, with $41.35 million going to street repairs. The City has three years to expend 85% of these funds and five years to spend all the funds. If funds are not fully expended within this period, the City could be fined equal to 30% of the total interest paid on the bonds.

The City is on track to meet the deadlines defined by the bond and explained above. Average quarterly expenditures are $3.64 million through Q3 of 2024. To meet the 85% requirement, average expenditures must remain above $2.26 million and above $1.5 million to meet the 100% in five years requirement. Figure 2.6 shows expenditures over five quarters beginning with Q2 of 2023. The purple line represents the average quarterly expenditures for the six-quarter period.

Figure 2.6 Quarterly Measure A Bond Expenditures



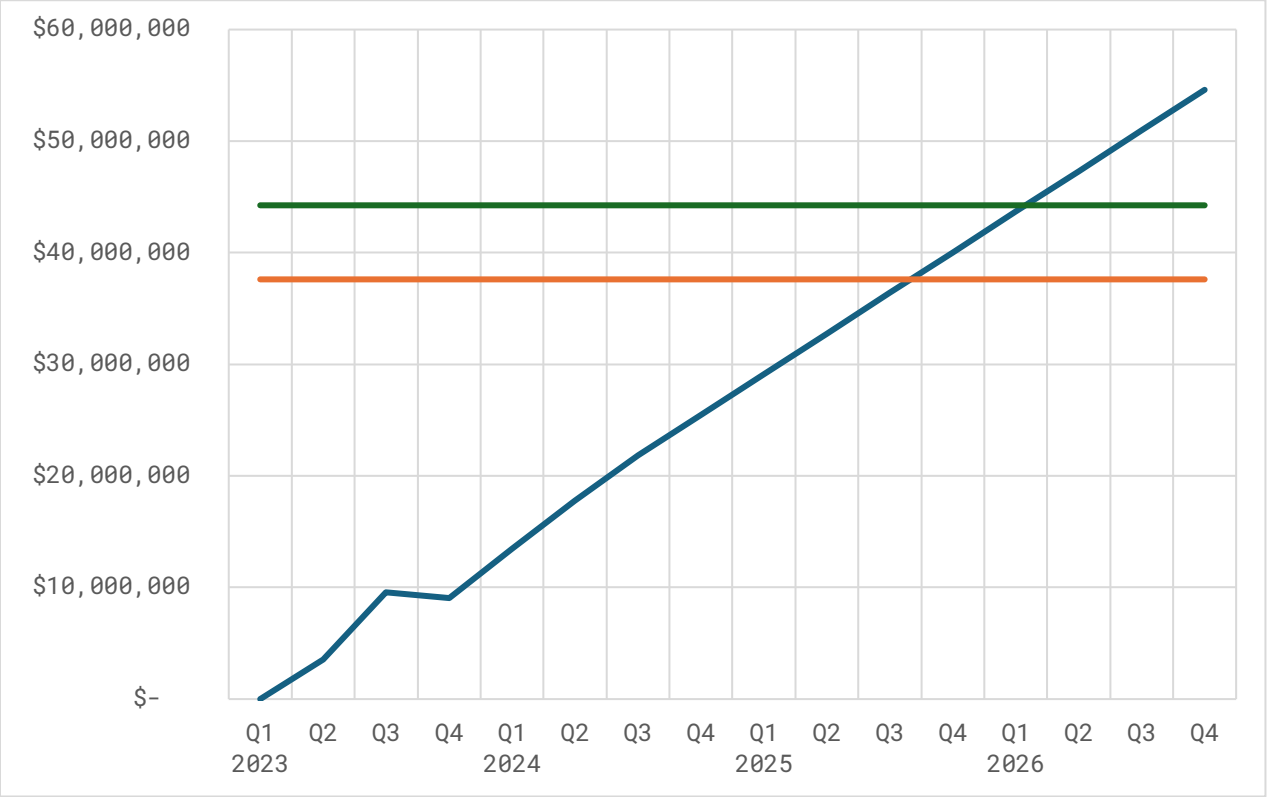
If the Department continues to meet the current average expenditures per quarter, the City will spend the May 2023 Measure A bond proceeds in the fourth quarter of 2025 before the required May 2026 deadline. However, if quarterly expenditures drop below $2.25 million, the City risks missing the May 2026 deadline. If quarterly expenditures drop below $1.45 million, the City is at risk of missing the May 2028 deadline. If the 2026 deadline is met and the City expends the required 85% ($37,612,500), the required quarterly expenditures to then meet the 2028 deadline drops to $830,000.

Table 2.7 Required Expenditures to Meet Bond Requirements

	Required Expenditures	Quarterly Expenditure Average to Meet Requirements
2026 Requirement (85%)	$37,612,500	$2,253,240
2028 Requirement (100%)	$44,250,000	$1,494,012
Remaining to Spend if May 2026 Deadline is Met	$6,637,500	$829,688

In Figure 2.7, the green line represents the total bond amount to be spent by May of 2028. The orange line represents the 85% requirement to be spent by May 2026. As shown in the graph, the City is on track to meet both deadlines.

Figure 2.7 Past and Forecasted Expenditures of Measure A Bond Proceeds



2.4 Recommendations:

(2.4a) Continue to monitor expenditures of Measure A Bond funds. If quarterly expenditures drop below $2.26 million before May 2026, the Department should immediately determine if the average expenditures from past quarters and forecasted expenditures for projects will result in meeting the May 2026 deadline.

(2.4b) Maintain current expenditure levels to ensure all bond proceeds are expended before the May 2026 and May 2028 deadlines.

3. Project Reviews and Updates (Objective 2)

This Chapter will focus on **Objective 2** of the performance audit:

Determine whether the Department consistently reviews project updates and uses a method of tracking street pavement activities.

3.1 Internal Reporting

Internal reporting related to the CIP is currently initiated by project managers and includes feedback from Budget Analysts and Financial Management.

> **FINDING 3.1:** The Business Operations Bureau adequately uses the financial system to track CIP revenues and expenditures. Project managers' spreadsheets track project work and budgets within the divisions responsible, but the reporting data and how that information is used and disseminated are inconsistent.

3.1 Analysis

The City's financial system is used to track all CIP project budgets. All Elevate '28 projects are reported quarterly with input from project managers. The quarterly update information is then disseminated to the public via the Elevate '28 website. A sample of the report is shown below:

Figure 3.1 Sample - Measure A Bond Spend Quarterly Report

Bond Spend Down Metrics				
% of Bond Time Elapsed	5-Year Bond Spend Trend	% of 85% of Bonds Spent to Date	% of 3 Year Elapsed	3-Year Bond Spend Trend
22%	176%	45%	36%	125%

Measure A Bond Spend Down Report - As of 6/30/2024			
NOTE: 85% of bond proceeds must be spent within 3 years (by May 2026), with 100% of bond proceeds spent within 5 years (by May 2028). As of June 30 actuals, 13 months (or 22%) of 5 year term has elapsed.			
Overall % of Bond Spent	60,250,000	23,037,936	38%
MAJOR PROJECT / PROJECT	Revised Budget as of 6/30/2024	ITD Actual as of 6/30/2024	Revised Budget less Actuals
ALLEY IMPROVEMENTS	1,756,500	1,756,500	-
CITYWIDE ALLEY REPAIRS	1,756,500	1,756,500	-
ARTERIAL CORRIDOR ENHANCEMENTS	3,200,000	582,973	2,617,027
ANAHEIM ST: LA RIVER TO PCH	300,000	82,973	217,027
Artesia Great Boulevard	500,000	500,000	-
LONG BEACH BLVD PED/TRAFFIC/STRTSCP	300,000	-	300,000
PACIFIC AVE CORRIDOR IMPROVEMENTS	300,000	-	300,000
ARTERIAL CORRIDOR ENHANCEMENTS	1,800,000	-	1,800,000

This report is a good resource to track the Elevate ’28 projects. These reports provide quarterly reviews of project status and funding. The detailed information in the reports is downloaded from MUNIS and used to review project actuals and revised budgets. However, there is, in general, a lack of consistency between project managers in the reporting data and how that information is used and disseminated. Project managers are responsible for maintaining working project budgets throughout the duration of their work to ensure budgets are not out of line with expenditures and any issues are resolved between the issuance of these quarterly reports.

It is imperative that reporting is done on a regular schedule for all projects using consistent data and format. To effectively communicate the work completed and the progress the Bureaus are making on projects, project managers should develop and update a Project Status Report monthly. For accuracy, this report should be reviewed and confirmed with the Business Operations Bureau and Financial Management.

Metrics that should be incorporated into this Project Status Report include the following:

- Planned project milestones reflecting project phases, including solicitation published date, bids received, project awarded, project start, and project end.
- Budgeted costs, project funding source(s), actual costs, and variance.
- Appropriated funds that have specific dates for commitment and expenditure.

These Project Status Reports should be uniform to roll up to an aggregated program-level report for street projects and the PMP.

The City has a diverse and substantial CIP. A project management software package should be considered to assist the Department in regular reporting and reduce redundant practices related to invoicing and updating documents. Project management platforms and software are often highly customizable and could be tailored to serve the needs of each Bureau tasked with managing projects. Additionally, most comprehensive project management platforms and software can be integrated via an Application Programming Interface (API) with the City's financial management package. Consolidation of files, consistency in reporting, limiting redundant practices, project communications, and increased efficiencies are all benefits of implementing a robust project management software.

3.1 Recommendations:

(3.1a) Develop a policy for the cadence and content of required project updates from project managers and a procedure for providing relevant updates.

(3.1b) Develop a Project Status Report template to be used for all projects and updated monthly. These Project Status Reports should be uniform so that they can roll up to an aggregated program-level report

(3.1c) Implement capital project software to manage capital projects and enhance the ability to generate automated, standardized reporting.

3.2 External Reporting

Regular reporting to elected officials and the public can improve public perception and address perceived inequities in project selection and concerns over lack of progress.

FINDING 3.2: External reporting is occurring, mostly in the form of GIS maps and website updates. There is, however, no external reporting strategy or formalized campaign regarding what or how often information is to be communicated to elected officials and to the public for all projects. External reporting needs to be formalized. The Department does provide project updates in the form of moratorium maps and GIS updates, but there are opportunities to enhance the delivery of information

3.2 Analysis

Project updates are provided to the public and other City departments on the City's website and through the City's GIS database. In addition, the public is able to attend Measure A Advisory Committee quarterly meetings where project updates are reviewed. Maps are updated to reflect completed and proposed projects and show where a moratorium exists for utility or road work. Examples of maps provided on the City website are shown in the following diagram(s).

Figure 3.2 Street Moratorium Map

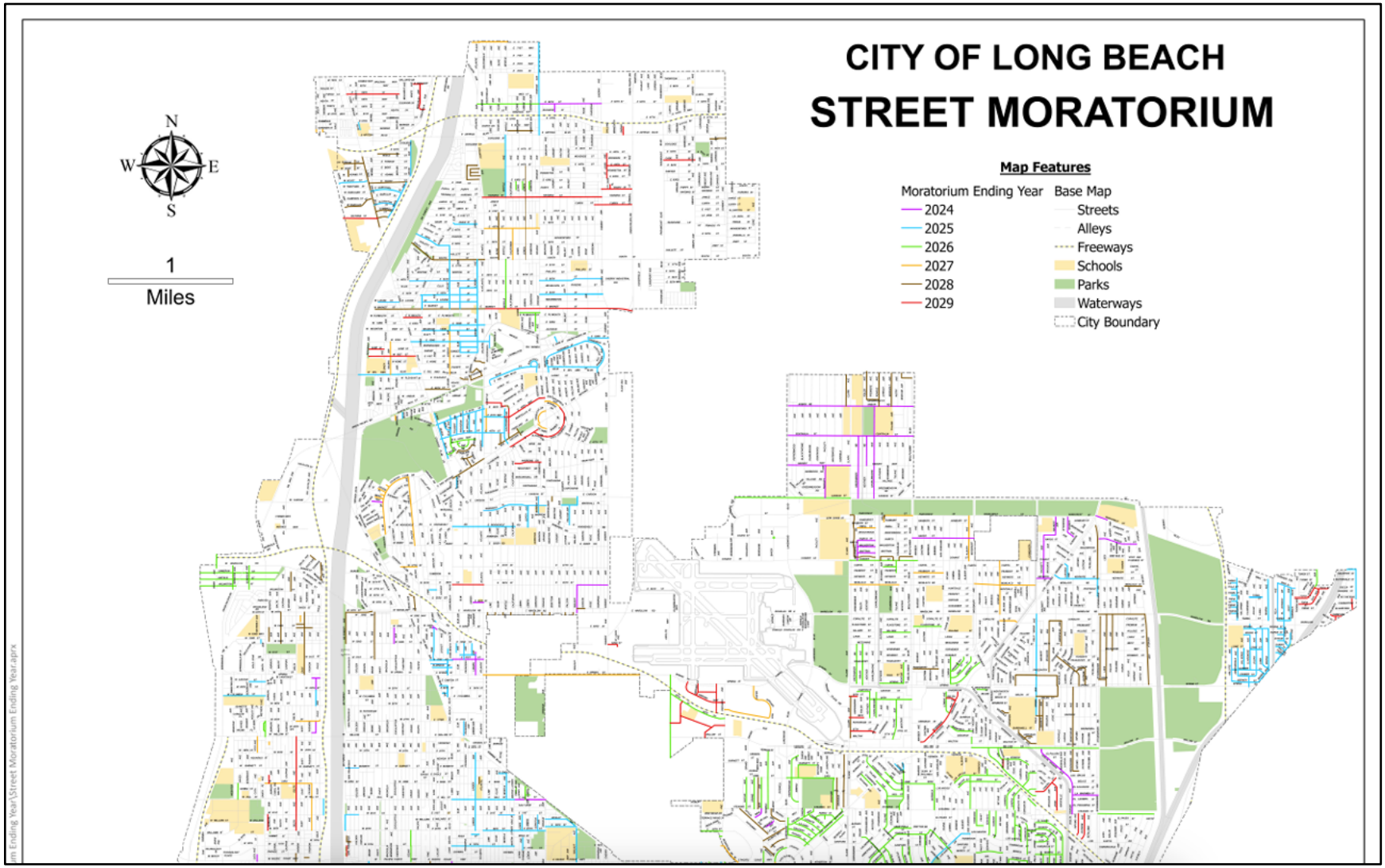


Figure 3.3 Calendar Year 2024 Projects

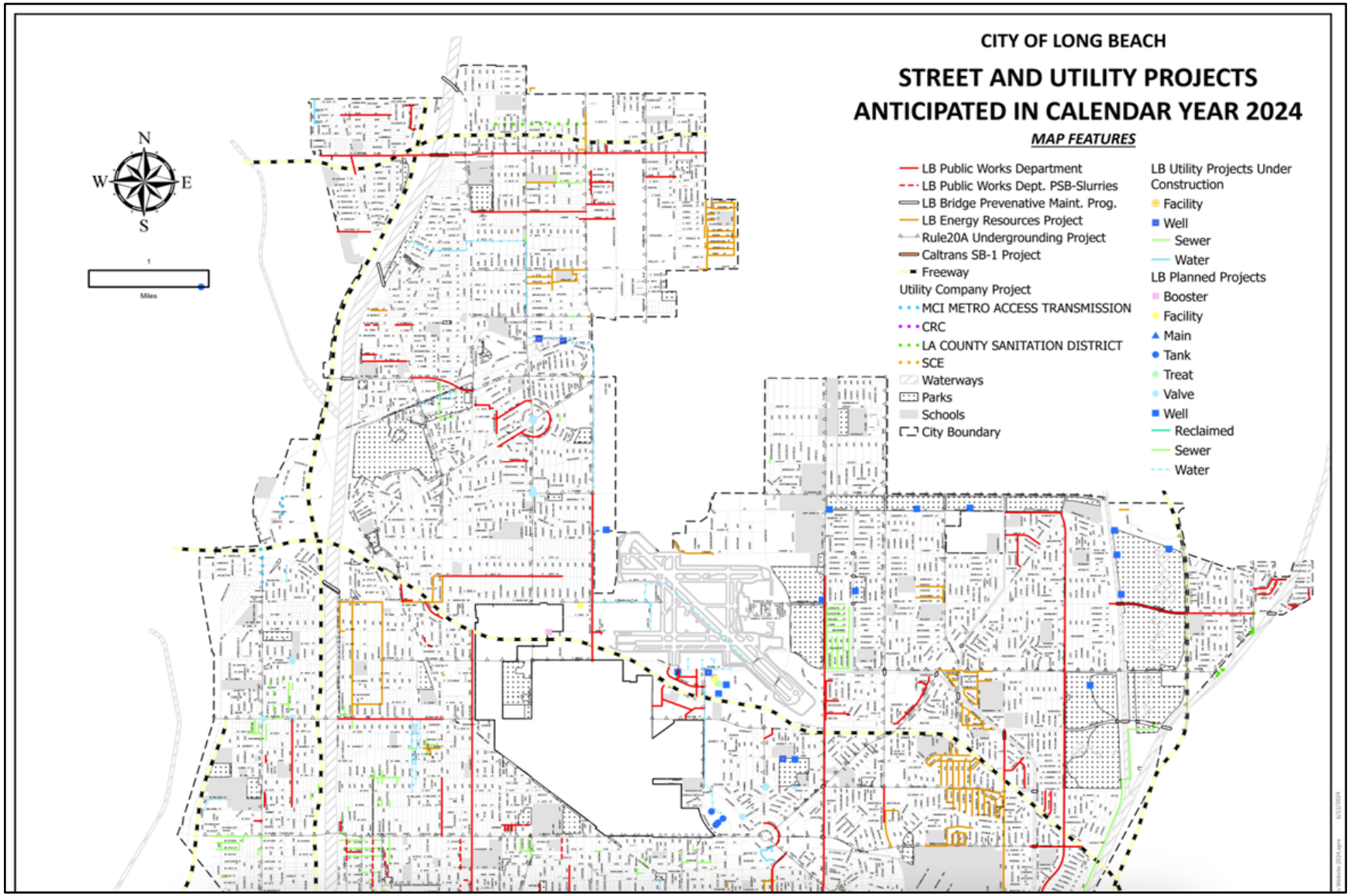


Figure 3.4 Completed & Planned Street Projects (FY2023-FY2027)

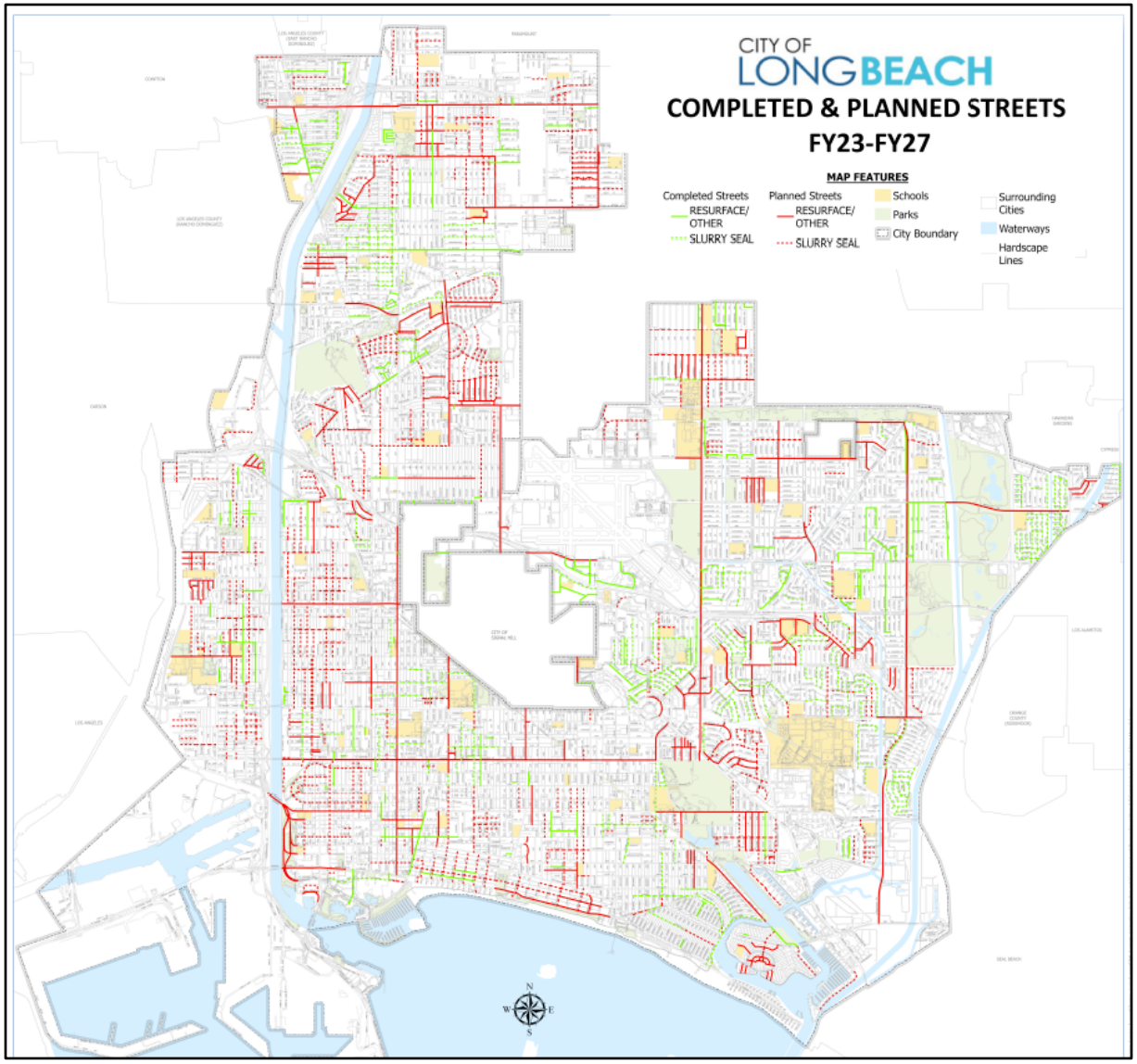
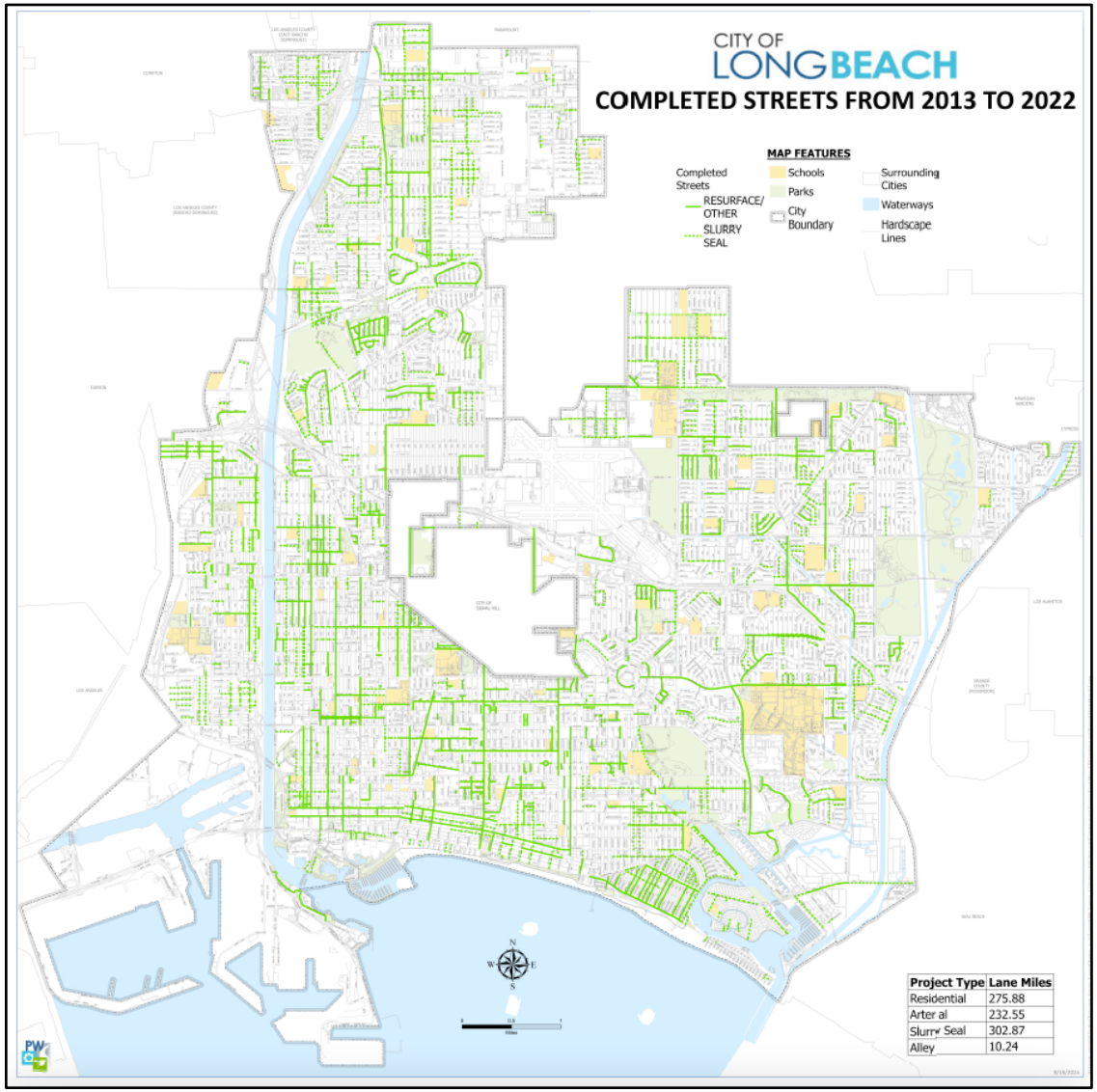


Figure 3.5 Completed Street Projects (FY2013-FY2022)



The Department has taken a proactive approach to providing information to external stakeholders. However, this approach is disjointed and lacks a communications strategy and accountability for keeping the information current. If the information becomes outdated, the public will stop using the website as a resource.

This reporting should also be expanded to help the Department tell the story of the work being done and the progress made using the citizen-approved Measure A funding mechanism. Concern over inequities and project selection can often be addressed through public education and champions in the community.

There are opportunities for the City to take a more strategic approach to the communication of the streets program:

- No policy or procedures dictate the cadence of updates. The Department updates the FY2023 – FY2027 planned/completed street map every quarter, as well as all Elevate '28 project data. Staff receive emails to when it's time to update their datasets. The updating information including the Elevate '28 data and street maps is the responsibility of the Grants Admin Officer. While these duties are listed in the job description, there is no overarching program for staff to know whose responsibility this is, or what happens if this position is vacant. A formalized program would clarify expectations of what is expected, when, and who is responsible.

  It would also be beneficial for this formalized communication plan to be assigned to a position within the Department accountable for making sure everything in the plan is occurring. To maintain public trust, it's essential to keep this information current and make sure updates are occurring according to the plan. This can also reduce the burden on staff if they point the public to the available information and not have to search for and/or update information out of cycle.

- Public Works has a website dedicated to specific active projects that is regularly updated (https://longbeach.gov/pw/projects/). The website is generally updated every few months, but there is no overarching plan to ensure this is done or to guide what information should be included. Staff should develop guidelines as part of the communication plan that dictates frequency of updates and outlines who is responsible for these updates.

  During the project team's investigations, some sites appeared to be updated and accurate, while others remained stagnant. If the communication plan is to provide project updates, parameters need to be set regarding what milestones are to be included and whether and how often project schedules and timelines should be updated. Updates should also include anticipated completion dates and any active

detours or closures. PowerBI and other dashboard reporting can supplement staff time to accurately provide reports on the website.

- Projects are sometimes available on the City's website on multiple pages, with differing amounts of information on each page. Information on multiple web pages should be linked to ensure consistent data. Examples from the website related to the Shoemaker Bridge project are shown below.

Figure 3.6 Public Works Project Page – Shoemaker Bridge

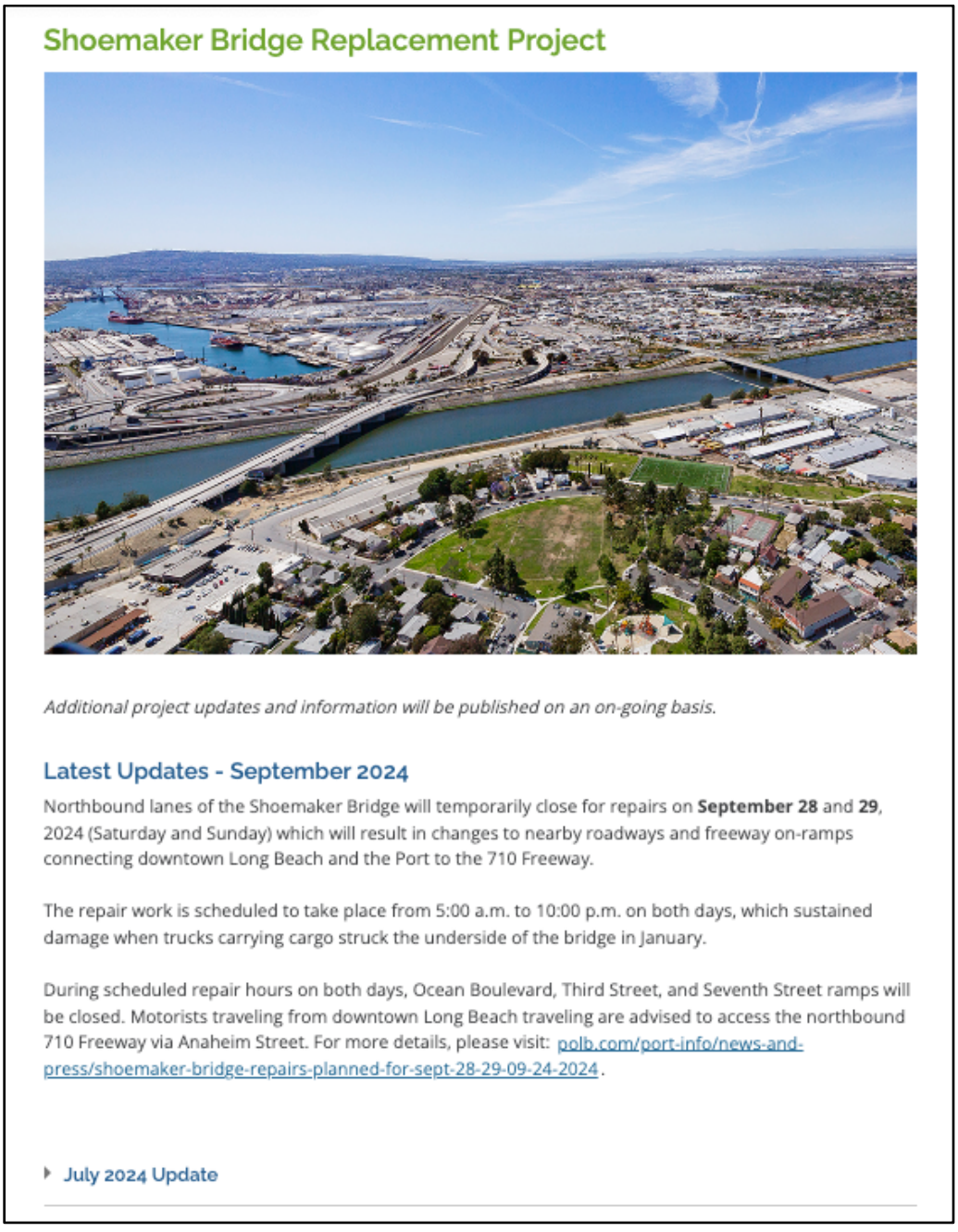


Figure 3.7 Elevate '28 Project Page – Shoemaker Bridge

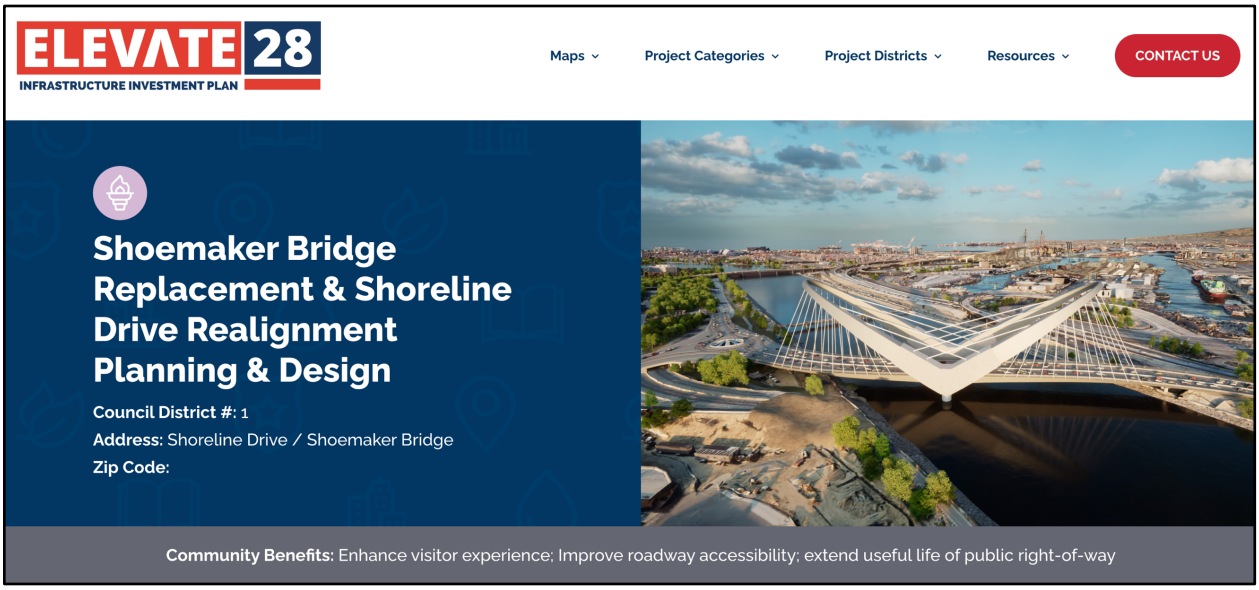
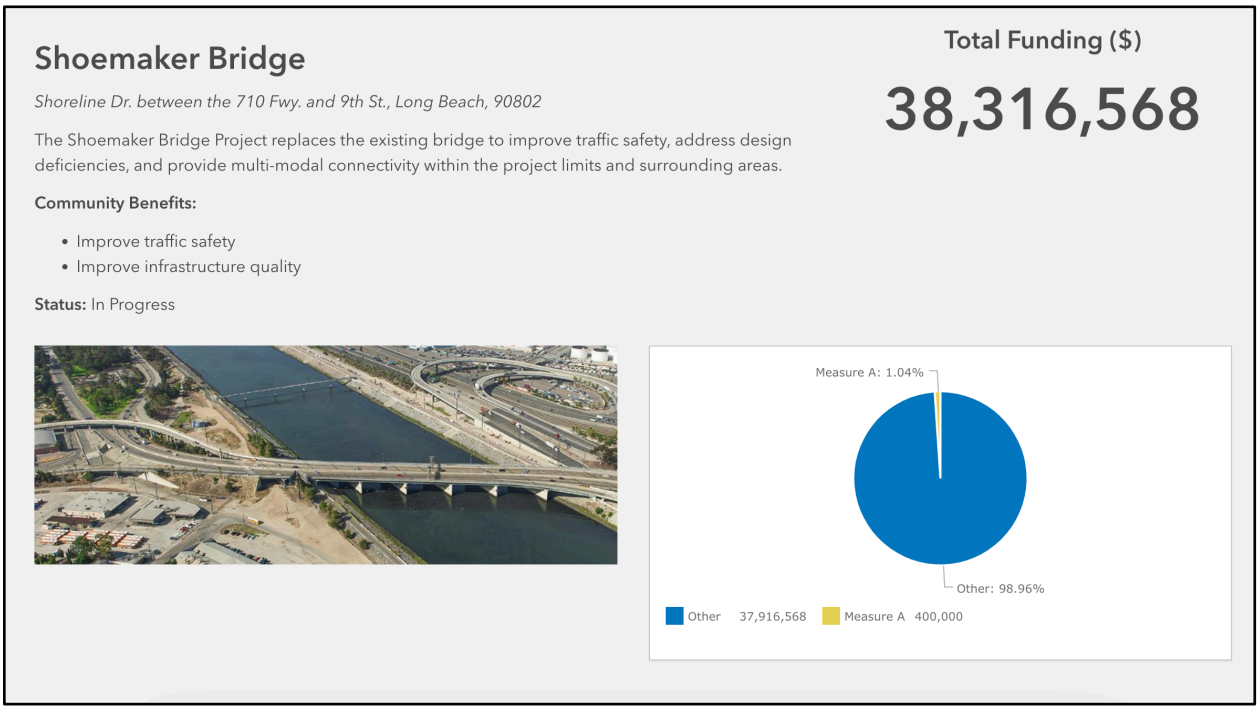


Figure 3.8 Measure A Project Page – Shoemaker Bridge



While the information is not incorrect on any page, differing amounts of information are shown depending on which site is visited. The timeliest information should be duplicated or linked from one central page to the others for each project. The City's use of PowerBI can be expanded to incorporate these updates.

Department leadership should work with the Communications Information Bureau to develop an effective public education campaign about Elevate '28, Measure A funding, and the City's infrastructure project progress. The City's website contains a lot of information, but it is often inconsistent or outdated across pages. A more consolidated approach, with one page per project instead of multiple interfaces, would allow for more consistent messaging and a repository for residents and elected officials to access timely information and updates.

3.2 Recommendations:

(3.2a) Develop a public education campaign to address project selection, progress, and equity. This should include a strategic approach to the communication of the streets program that includes policies and procedures for items such as the timing of publishing Project Status Reports to elected officials and residents of Long Beach, guidelines on when updates are expected and who is responsible, and clear expectations on the overall accountability for the communications plan.

(3.2b) Consider partnering with the Communications Information Bureau to produce a quarterly digital newsletter that can be posted to the City's social media sites and distributed to the Department's mailing list. This newsletter should include project updates, upcoming project details, and contact information for questions or concerns from the public.

(3.2c) Provide a yearly report to the City Council through a presentation that includes project status data, PMP updates, and a work plan for the next 12 – 18 months. This update could be part of the yearly budget process.

(3.2d) Utilize PowerBI to provide consistent and accurate reporting across all websites and data sources. The current PowerBI project tracker has updated data in some project categories but is lacking in others.

3.3 Programmatic Reporting

FINDING 3.3: The Department does minimal programmatic reporting of the CIP street projects.

3.3 Analysis

Programmatic reporting is a structured approach to tracking and communicating the status of a program by collecting, analyzing, and communicating consistent data on a

routine basis. This type of reporting can provide transparency that the restrictions and eligibility of funding sources are being followed and can decrease the risk of some aspect of reporting getting missed, jeopardizing the funding. At a minimum, this reporting should include:

Project status and % complete with consistent phasing applied to all projects	Schedule including any delays or accelerations noted	Budget information (i.e., amount spent, remaining, and any variances	Community engagement including the requirements and status of all engagement	Routine updates (i.e., monthly / quarterly reporting of data to identify trends and improve decision-making

Outside of the required reporting, the Department is doing minimal programmatic reporting. This macro-level reporting is vital to connect the desired outcomes and objectives of the program to what is occurring. Enhanced programmatic reporting has many benefits such as:

- Increased efficiency and effectiveness by streamlining processes and standardizing data collection.
- Improved and better-informed decision-making by having the ability to analyze trends in the data and identify issues.
- Enhanced accountability by tracking the program against established benchmarks and metrics and having the ability to provide clear and consistent financial and performance data.
- Improved communication and less staff time needed with a standardized format to provide clear and consistent information to staff, elected officials, and the public.

Implementing program management software would help automate this reporting and reduce the staff resources needed for both programmatic and regulatory reporting. The recommendations below assume that MUNIS remains the City's software of record, but additional integration with project management or reporting software should be considered.

3.3 Recommendations

(3.3a) Implement a programmatic reporting system to manage, track, and communicate the projects more effectively to staff and stakeholders.

(3.3b) Develop a specialized position with primary responsibility for the Department's reporting.

(3.3c) Develop and maintain a master list and schedule that will serve as the Department's single source of data for all external reporting.

3.4 Communications Staffing

FINDING 3.4: The Department recently added a Communications position to promote the Streets CIP. This is a positive step toward developing and implementing a communications plan for the Streets CIP.

3.4 Analysis

Historically, the Department has not had a position dedicated to developing and implementing a Communications Plan. A Community Information Officer position was added to the FY2022 budget to support the new Community Information Division within the Business Operations Bureau. This position was created to improve internal and external communication and outreach for the Department and its various services and programs. Since then, the Communications Division has grown to include four Administrative Analysts and a Public Affairs Assistant to support the Department's internal and external communication efforts. In addition to the team within the Department, the City Manager's Office also added a Program Specialist in FY2022 to assist in social media coordination citywide. The addition of these positions should be leveraged to increase communication with internal and external stakeholders and provide a uniform reporting method for project updates.

3.4 Recommendations:

(3.4a) Work with the Program Specialist and Administrative Analyst III to develop and implement a communications plan focused on educating the public and reporting the metrics of the Streets CIP.

4. Staffing Analysis (Objective 3)

This Chapter will focus on **Objective 3** of the performance audit:

Determine whether the Department's staffing levels are appropriate to best maintain the City's street projects and activities (as a percentage of construction cost).

The Department manages the City's Streets CIP and related tasks, including grant and funding management, project planning, design, and construction.

The Department has many responsibilities outside of the Streets CIP. They are charged with the effective management, maintenance, and upkeep of the City's non-utility infrastructure, including stormwater, streets, solid waste, traffic management, parking services, pavement markings, right-of-way or landscape maintenance, and facilities management. The Department is led by the City's Director of Public Works, assisted by the Deputy Director of Public Works.

The Department has six bureaus, each managed by a Bureau Manager who reports to the Director of Public Works. These bureaus, and their organizational leader, include:

- Business Operations (Bureau Manager)
- Engineering (City Engineer)
- Transportation Project Management (Bureau Manager)
- Project Management (Bureau Manager)
- Environmental Services (Bureau Manager)
- Public Services & Maintenance (Bureau Manager)

Staff with roles specific to the Streets CIP are spread out among the various Bureaus. Therefore, this chapter will review the general organizational and administrative roles outlined in the entire Department, not just those organizational units that have a role in streets or pavement management.

4.1 Staffing

FINDING 4.1: Staffing levels are adequate to deliver the planned Streets CIP through Fiscal Year 2027.

4.1 Analysis

The table below illustrates the full-time equivalent (FTE) allocation of each Bureau. In the past four fiscal years, the staffing of the Department has increased by over 25%, adding roughly 142 employees to the Department.

Table 4.1 FTE Allocation by Bureau (FY2022 – FY2025)

Bureau	FY 2022	FY 2023	FY 2024	FY 2025
Business Operations	22.84	39.34	44.84	56.00
Engineering	84.16	66.83	91.98	92.82
Environmental Services	242.08	236.45	252.45	283.71
Project Management	38.00	40.50	43.00	48.00
Public Service	123.36	157.95	164.36	179.36
Transportation Project Management	*47.23	*46.56	32.00	40.00
Total	**557.67**	**587.63**	**628.63**	**699.89**

*Previously allocated to Transportation Mobility Bureau.

The table below lists the allocation of staff with project management responsibilities. The FTE count and job titles in this table were provided by staff.

Table 4.2 FTE Allocation in the Engineering & Transportation Project Management Bureaus with Project Management Responsibilities (FY2025)

Position	FY 2025
Bureau Manager / City Engineer	2.0
Project Management Officer	2.0
Assistant City Engineer	1.0
Senior Civil Engineer	4.2
Civil Engineer	11.0
Engineering Assoc / Asst / Capital Projects Coordinator	14.0
Total	**34.2**

Street capital projects' management, design, and construction oversight are primarily divided among the Business Operations, Engineering, and Transportation Project Management Bureaus, with support from others, including the Environmental Services

Bureau. The Public Service Bureau also performs maintenance activities and manages the slurry seal program on City roadways.

To accurately forecast staffing needs, the Department should track the amount of staff time spent on each phase of a project. This information can then be used to determine averages (based on construction dollars) and applied to the 5-Year CIP to determine staffing needs.

- Current workload reports do not adequately and consistently track capital projects, including the status and dollar amounts of projects in construction, nor is there any aggregate reporting relative to this information.
- The Department also does not currently track any information regarding average project costs or hours expended in each phase of a project. These analyses can provide realistic expectations of workload and, therefore, help define the staffing levels needed to manage future workload.

As noted earlier in the report, capital project software would assist the Department in capturing this data. Such a software solution would allow the Department to generate reports showing the average number of hours and percentage of construction cost required for each phase of a project, using the number of hours staff charge for each stage. Without this information, a more generalized approach is used to estimate staffing needs.

Street and corridor programs are managed by the Engineering and Transportation Project Management Bureaus. The Engineering Bureau oversees ADA projects, bridge improvements, and other non-street-related projects. The Transportation Project Management Bureau manages the corridors and arterials program and implementation of the City's Pavement Management Program. The City's three-year history of CIP expenses focused on streets and pavement management is shown below.

Table 4.3 Total Expenses, Programs Managed by Engineering & Transportation Project Management Bureaus (FY2022 – FY2024)

Program	FY2022	FY2023	FY2024
ADA Improvements	$5,276,246	$15,211,632	$11,671,710
Alley Improvements	$951,994	$3,419,525	$3,021,210
Arterial Corridor Enhancements	$2,518,101	$11,991,063	$18,272,437
Arterial Street Rehabilitation	$8,813,564	$9,122,407	$8,501,616
Bikeway & Ped. Improvements	$9,792,806	$14,670,237	$9,276,794
Bridge Improvements	$3,948,500	$17,155,131	$9,766,546
Residential Street Improvements	$16,626,272	$15,901,231	$22,687,987

Program	FY2022	FY2023	FY2024
Total	**$47,927,484**	**$87,481,226**	**$83,198,299**

Funding for the Mobility & Safety portfolio is allocated through the City's annual budget and CIP process. Beginning in FY2019, a significant backlog of funding was observed that continues to grow year over year (see Figure 2.4). In FY2024, the combined starting balances (prior allocations without current budget) for street-related projects were over $260 million. Much of this funding is encumbered and allocated to specific projects or programs, but the relevant expenditures are not keeping up with the increases in funding through Measure A's extension and proposed bond issuances, as shown in Tables 2.3 and 2.4.

The table below represents the total funds being rolled over each year in street-related project accounts. As previously noted, there will always be some rollover funds year over year, and the Department will need to monitor the funds allocated to projects to ensure the rate of spend is proportional to the funding.

As outlined by the table, FY23 had over $150M in beginning balance funds, FY24 increased to $243M (an increase of $90M), but the FY25 beginning balance fell to $223M (a decrease of $20M) showing a reversal in the trend and a significant increase in expenditures.

Table 4.4 Beginning CIP Project Balances for Street Programs (FY2022 - FY2025)

Program	FY2022 Beginning Balance	FY2023 Beginning Balance	FY2024 Beginning Balances	FY2025 Beginning Balances
ADA Curb Ramp Improvements	$5,933,235	$8,397,132	$13,043,899	$14,821,293
Alley Improvements	$309,552	$1,751,176	$2,851,527	$30,317
Arterial Corridor Enhancements	$15,196,629	$30,161,553	$73,288,305	$74,015,868
Arterial Street Rehabilitation	$39,506,356	$47,738,043	$60,835,158	$67,533,542
Bikeway & Ped. Improvements	$13,162,378	19,663,089	$46,432,065	$40,755,271
Bridge Improvements	$8,417,563	$32,724,265	$26,358,144	$17,091,598
Residential Street Improvements	$7,097,388	$10,051,218	$17,339,754	$9,080,767
Total	**$89,623,101**	**$150,486,476**	**$243,364,150**	**$223,328,656**

While not all of the adopted budget is for direct capital project costs, this information can be used to estimate the rough staffing needs of the Engineering and Transportation Project Management Bureaus.

For each FTE, the workable hours in a year is 2,080. Industry standards list targets for billable work of not less than 125 hours per month or 1,500 annually for engineering and

construction staff. Not all staff will have this high of billable targets to be dedicated to the design and project management of capital improvement projects. Examples are provided below:

- The City Engineer and Transportation Project Management Bureau Manager should dedicate roughly 50% of their time to supervising staff and other leadership initiatives. The remaining 50% should be allocated to high-level oversight, input, and review of the CIP and its projects.
- The Project Management Officers and Assistant City Engineers similarly need to allocate 33% to 50% of their time to staff supervision and other duties not directly designing or managing projects.
- Engineers and other project staff with no supervisory responsibilities should have the highest rates of billable work at 1,700 – 1,800 hours annually.

The cost recovery rate for engineering staff is shown in the table below. This rate is used to calculate staffing needs based on a percentage of construction costs. Public Works staff charge their time directly to the CIP projects they work on. Most staff are budgeted in a blended model (CIP and General Fund), so they can charge non-project-specific time to the General Fund and project-specific time to CIP projects.

Table 4.5 Cost Recovery and Project Management Hours of Project Management Staff

Job Title	Cost Recovery Rate	Estimated Direct PM Hours
Group 2		
Bureau Manager / City Engineer	$234.25	1,044
Project Management Officer	$189.10	1,218
Assistant City Engineer	$204.69	1,218
Group 1		
Senior Civil Engineer	$142.79	1,500
Civil Engineer	$103.34	1,750
Engineering Associate / CPC	$91.43	1,750
Average Group 1	**$112.52**	**1,667**
Average Group 2	**$209.35**	**1,160**

For the purposes of this analysis, Group 1 employees include Senior Civil Engineers, Civil Engineers, Capital Project Coordinators, and Engineering Associates. Group 2 employees include Bureau Managers, City Engineers, and Project Management Officers.

The design of capital projects is completed using primarily work outsourced to consulting engineers.

Not all the budgeted CIP is allocated to design and construction. Additional expenditures include permitting, right-of-way acquisition, and other non-construction services. To account for this and the lack of data regarding the split of in-house versus outsourced project design, the project team has estimated that 25% of the approved residential street and non-arterial projects are designed in-house and that all arterial projects are designed using a consulting engineer. For the analysis included in the table below, the following assumptions are made regarding each program area:

- Arterial Projects include projects in the Arterial Corridor Enhancement and Arterial Street Rehabilitation programs.
- Residential Streets are only those funds in the Residential Street Improvements Program.
- Mobility projects consist of ADA Rapid Response, Alley Improvements, Bikeway & Pedestrian Improvements, Bridge Improvements, ADA Curb Ramp Improvements, Median & Parkway Improvements, Neighborhood Traffic Mitigation, and ADA Sidewalk Improvements.
- The Non-Mobility category includes Citywide Sinkhole Repairs, Citywide Striping and Signage, Crack / Slurry Seal, and Traffic Signal Improvements.

Table 4.6 FY2024 CIP Staffing Analysis by Program Type

Program Type	In House Design	Consultant Design	Hours Group 1	Hours Group 2	FTE Group 1	FTE Group 2
Arterial Projects	-	$34,200,000	-	3,267.25	-	2.8
Residential Streets	$3,607,250	$10,821,750	3,205.91	1,033.84	1.9	0.9
Mobility	$3,808,451	$11,425,354	3,384.73	1.091.51	2.0	0.9
Non-Mobility	$1,666,305	$4,998,915	1,480.91	477.56	0.9	0.4
Total	**$9,082,006**	**$61,446,019**	**8,071.56**	**5,870.16**	**4.8**	**5.1**

Using this ratio against the FY2024 CIP budget, the design will cost $9.1 million to complete in-house and $61.4 million to be completed by consultants. Assuming design is 10% of construction costs, the average rate of $112.52 for in-house design management and $209.35 for consultant design management will result in roughly 8,072 hours combined. This equates to approximately 4.8 FTEs dedicated to designing and managing the CIP programs and projects listed above.

In addition to the design of projects, the remaining projects will need project management and oversight. Assuming the remaining 75% of the CIP, this equates to $61.4 million for consultant-led projects needing project management and $9.1 million for in-house projects. To estimate the total need for staff managing projects, a construction industry

standard of 2% of the construction cost is used to determine staff needed for project management. Assuming 2% of the construction costs at an average rate of $209.35 (average of City Engineer, Bureau Manager, Project Management Officer, Assistant City Engineer) and $112.52 (average of Senior Engineer, Civil Engineer, and Engineering Associate) equates to roughly 5,870 hours. Assuming positions to manage consultant-designed projects are higher-level, this would equate to roughly 5.1 FTEs to manage the construction of CIP projects.

This requires approximately 9.9 FTE engineers and engineering associates to design and manage the current workload, with an assumed split between in-house staff and consulting engineers. It is important to note that these calculations are based on the FY2024 CIP budget.

Further analysis was completed to better estimate the FTE needs for the remaining balance of funds from Measure A bonds and capital funding, showing staffing projections for fiscal years 2025, 2026, and 2027. Based on Elevate '28 metrics and bond requirements, an estimated balance of $475,871,875 must be spent by 2028 to ensure project completion. Required expenditures for projects managed by the Engineering and Transportation Project Management Bureaus in FY2025 – FY2027 total $212,171,299.

Using this balance and the same staffing methodology, roughly 32.3 employees are needed to manage CIP projects. This recommended FTE does not include support staff.

Table 4.7 Recommended FTEs for CIP Management (FY2025 – FY2027)

Project Type	In House Design	Consultant Design	Hours Group 1	Hours Group 2	FTE Group 1	FTE Group 2
Arterial Projects	-	$80,033,910	-	7,645.93	-	6.6
Residential Streets	$7,364,266	$22,092,798	6,544.93	2,110.60	3.9	1.8
Mobility	$12,243,590	$36,730,771	10,881.39	3,509.02	6.5	3.0
Non-Mobility	$13,426,491	$40,279,474	11,932.68	3,848.04	7.2	3.3
Total	**$33,034,347**	**$179,136,953**	**29,358.99**	**17,133.57**	**17.6**	**14.7**

The FTE allocation in the Engineering and Transportation Project Management Bureaus with project management responsibilities for FY2025 is 34.2 FTEs. Based on the defined assumptions and resulting calculations and noting that these positions have varying degrees of responsibilities outside of managing the Streets CIP, it appears the Department is adequately staffed to deliver the program.

Staff are charging their time to projects by task and phase for the projects they work on within the City's financial system, MUNIS. Project managers have the ability to run

financial reports to see how much City labor and consultant time is spent on each project and project phase. This is a best practice and should continue.

There are opportunities to use this data better to plan for project and staffing needs:

- To enhance project planning and resource allocation, the Department should implement a system to not only capture but also report on staff time spent on projects. This system should capture the time spent by both in-house staff and consultants on specific tasks and phases within each project. This has several benefits:
  - I**mproved project forecasting:** Analyze the time as a percentage of construction cost in each project phase. This data will aid in accurately predicting staffing needs for future projects.
  - **Enhance cost-effectiveness:** Compare the actual time spent in each phase to industry best practices as a percentage of construction cost. This analysis will identify areas for potential cost optimization and improve project delivery efficiency
- Staff time tracking and reporting should be consistent throughout the Department. This information should include both planned and actual time spent in each phase. Despite the wide variety of project types and consistency, specific metrics are needed to enable aggregate reporting that identifies strengths and weaknesses in project management.
- The information should be used to develop a staffing model to predict workload, and staffing needs to execute future CIP and IIP plans.

4.1 Recommendations:

(4.1a) Establish metrics for a consistent department-wide method to track staff and consultant hours by project phase, including both planned and actual time.

(4.1b) Develop methods for reporting and analyzing staff time data as a percentage of construction cost. Use this data to develop a staffing model that forecasts workload and staffing needs for future CIP and IIP plans and to enhance cost-effectiveness and project delivery efficiency.

(4.1c) Set percentage targets for in-house and consultant-led projects for each program and track the actual work completed in-house versus outsourced. Incorporate these targets into the staffing model used for workload analysis.

4.2 Project Management Support

> **FINDING 4.2:** The Department would benefit from adding additional positions trained in project management.

4.2 Analysis

The Department primarily utilizes engineering positions to oversee projects. In several staff interviews, it was noted that finding and retaining engineers has been an increasing challenge in recent years.

Project Management is a discipline, distinct from engineering, that requires a suite of skills different than pure engineering. For engineers tasked with project management, training specific to project management should be required. This can be a PMP Certification or a similar training/certification to show an understanding of project management.

The Department can also infuse project managers into the Department by reclassifying open engineering positions to allow for alternate qualifications such as a PMP Certification with required experience in capital projects, engineering, or construction.

Another consideration is to add a Project Manager position to each engineering team to support the engineering project managers. These positions would support developing, implementing, and updating many of the tracking and reporting recommendations made throughout this report.

4.2 Recommendations:

> (4.2a) Enhance project management skills by requiring training for all project managers, reclassifying engineering positions to allow for alternate qualifications such as a PMP Certification, or adding a Project Manager position to each engineering team to support the engineering project managers.

5. PCI Targets (Objective 4)

This Chapter will focus on **Objective 4** of the performance audit:

Determine whether the City's plans and budgets provide maximum benefit with the use of available funds and that funds are spent in accordance with the City's plans and goals. This assessment is based on whether the program meets the PCI target during the specified timeframe.

The City contracted with Infrastructure Management Services, LLC (IMS) to conduct a comprehensive pavement condition assessment and pavement management analysis on over 1,000 miles of City-maintained roads. IMS produced a Pavement Condition Index (PCI) score for each block (segment) as of March 2023. Prior analyses were completed by IMS in 2018 and 2021.

The City's overall target PCI is an average of 60. A combination of rehabilitation and maintenance applications can improve the overall PCI.

5.1 Available Funding Allocation

> **FINDING 5.1:** The City's planned funding and future budgets do not provide maximum benefit with available funds. Additional funds must be allocated to the Minor Network to have the greatest impact on the PCI.

5.1 Analysis

The following tables and charts represent the PMP results from 2023, 2021, and 2018, respectively:

Table 5.1 Pavement Conditions (2023, 2021, 2018)

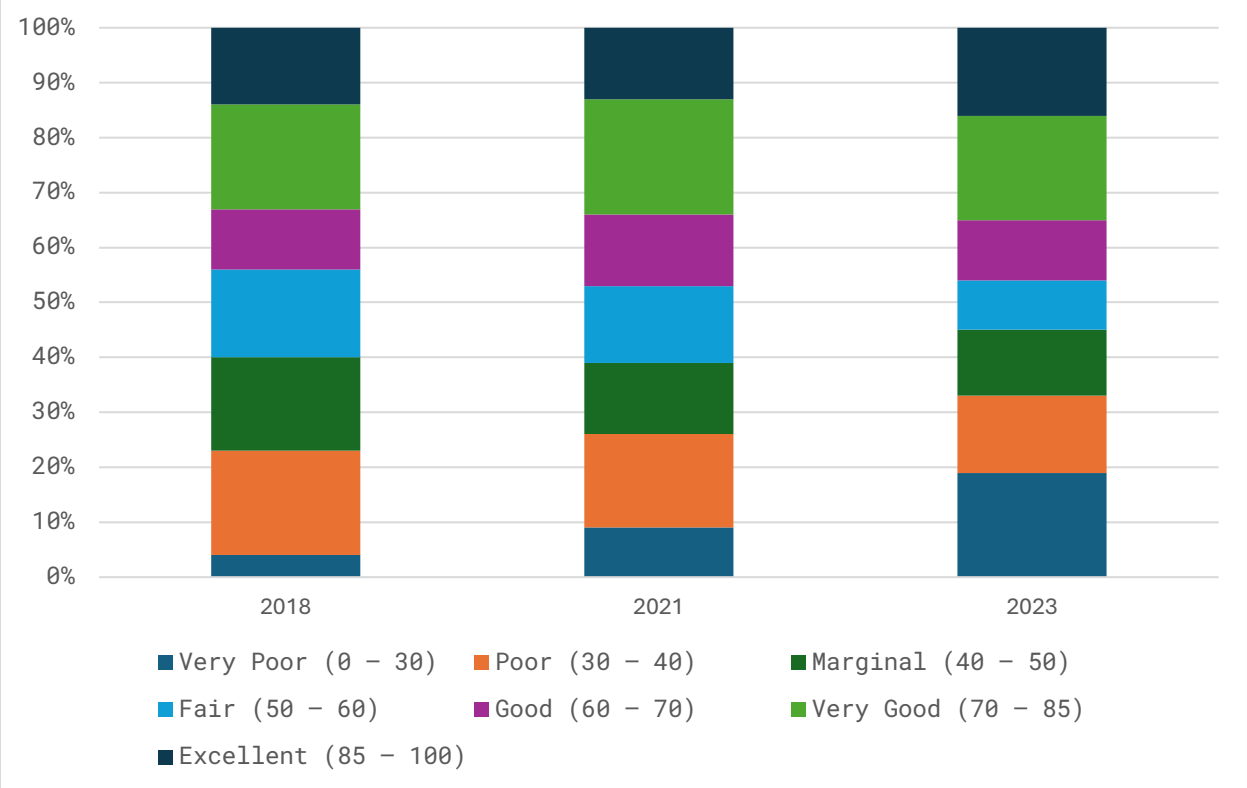
	2023		2021		2018	
Condition	**Percent**	**Miles**	**Percent**	**Miles**	**Percent**	**Miles**
Very Poor (0 – 30)	19%	191.71	9%	91.08	4%	40.16
Poor (30 – 40)	14%	141.26	17%	172.04	19%	190.76
Marginal (40 – 50)	12%	121.08	13%	131.56	17%	170.68
Fair (50 – 60)	9%	90.81	14%	141.68	16%	160.64
Good (60 – 70)	11%	110.99	13%	131.56	11%	110.44
Very Good (70 – 85)	19%	191.71	21%	212.52	19%	190.76
Excellent (85 – 100)	16%	161.44	13%	131.56	14%	140.56
Total	**100**	**1,009.00**	**100**	**1,012.00**	**100**	**1,004.00**

Table 5.2 PCI by Road Type (2023, 2021, 2018)

	2023		2021		2018	
Road Type	**Centerline Miles**	**PCI**	**Centerline Miles**	**PCI**	**Centerline Miles**	**PCI**
Major Network	172	61	172	64	178	61
Minor Network	624	54	624	56	610	64
Alley Network	214	50	216	51	216	50
Overall Network	**1,010**	**56**	**1,012**	**58**	**1,004**	**58**

The following chart illustrates the change in pavement condition for each condition rating.

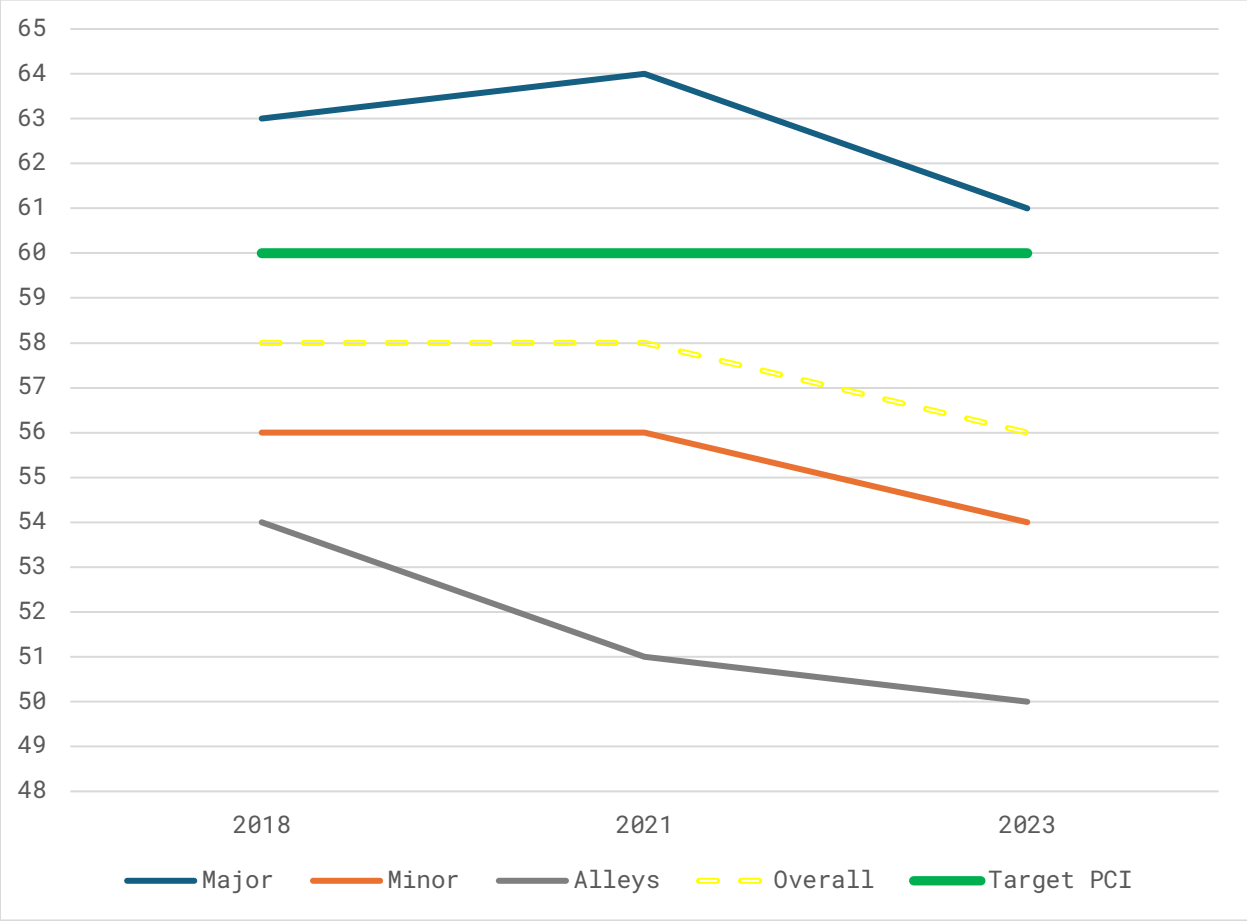
Figure 5.1 Pavement Conditions (2018, 2021, 2023)



As illustrated in the chart, the percentage of pavement rated Very Poor has increased, while other categories, including Poor and Marginal, have seen a decrease.

The chart below illustrates the overall PCI change from 2018 to 2023. The green line represents the City's target PCI of 60.

Figure 5.2 PCI Change from 2018 - 2023



Between 2018 and 2023, there were changes in PCIs in all three categories studied:

- The Major Network had a slight increase from 63 in 2018 to 64 in 2021 but overall has seen a decrease from 2018 to 2023.
- The Minor Network decreased from 56 to 54 between 2018 and 2023.
- The Alley Network decreased from 54 to 50.
- The overall PCI declined from 58 in 2018 and 2021 to 56 in 2023.

The 2023 PMP evaluation also identified an overall 33% backlog for street reconstruction. The 33% maintenance backlog is comprised of the Major Network backlog of 17%, the Minor Network backlog of 41%, and the Alley Network backlog of 30% in 2023. In this case, the backlog comprises pavement segments in poor or very poor condition at the time of the report. A backlog of this magnitude indicates the need for a larger investment in arterial and residential streets if the City wishes to improve the PCI. The PMP recommends an investment of $1.4 billion over the next five years.

In addition, the City's alleyway network has a 30% backlog and a deficit of $96 million in required funding.

The Department has a strong maintenance and preservation program that continues to grow. Crews are performing slurry and crack seal treatments to prolong the life of assets in the City's street network. These pavement preservation methods are incredibly beneficial and are best practices in a pavement management program. These treatments will assist in the long-term preservation of pavement in the network and help reduce the maintenance backlog for residential and arterial streets. However, this treatment is only successful on streets that are in Good or Very Good condition and can only be applied every seven to eight years.

Once the backlog of streets in Fair and Poor condition is addressed, additional preservation options should be tested and implemented to continue protecting and prolonging the life of city-owned assets. These options include rejuvenators, crack sealing, microsurfacing, and others.

To increase the network's PCI, the City must allocate more funds to the Minor Network. It is noted that there are challenges to doing this, as funding sources are often restricted in their allowable application and project types. Future budgets include higher amounts allocated to the City's Major Network. These budgets should be reviewed for opportunities to re-allocate additional funds to the Minor Network to better reflect the allocations given in the PMP funding recommendations.

5.1 Recommendation:

> **(5.1a) The greatest opportunity to increase the PCI is to allocate additional funding to the City's Minor Network. Future budgets should be reviewed for opportunities to re-allocate additional funds to the Minor Network per the PMP funding recommendations.**

5.2 PCI Target

> **FINDING 5.2: The City's planned funding and future budgets are inadequate to reach and maintain the desired network PCI of 60 at current expenditure rates.**

5.2 Analysis

Local agency pavement management plans typically assess current PCI ratings, set the target PCI, and provide information on the costs and financial impact of the improvements needed to meet the target. To provide background and a comparative

consideration of these variables, the following comparative survey provides this data from similar agencies on these measurements and targets.

The following table provides benchmark data of these metrics and targets across similar agencies whose pavement management information was available to the public.

Table. 5.3 Pavement Management Programs

Jurisdiction	Population	CL Miles	Target PCI	Actual PCI	FY25 Budget	$ per CL Mile
El Monte, CA	103,794	128	75	68	$5,900,000	$46,093
Orange County	3,140,000	336	86	81	$20,300,000	$60,557
Riverside County	2,500,000	2,258	80	73	$40,500,000	$17,936
San Diego, CA	1,340,000	3,300	70	63	$46,000,000	$13,939
Seal Beach, CA	23,352	49	81	79	$1,150,000	$23,279
Long Beach, CA	449,468	1,009	60	56	$53,000,000	$52,527
Average				**72.8**	**$27,820,238**	**$35,722**

Table 5.4 PCI Scores from other Large Cities in the United States[4]

City – Year	PCI
San Francisco – 2022	74
Houston – 2016	73
San Jose – 2022	71
Phoenix – 2020	70
Los Angeles County – 2020	67
Los Angeles – 2022	67
San Diego – 2023	63
Dallas – 2022	62
Santa Barbara – 2022	60
Sacramento – 2022	58
Long Beach – 2023	56
Portland – 2021	55
Oakland – 2022	53

These datasets suggest that the current PCI rating of 56 in Long Beach is relatively low compared to other regional and national cities. The Target PCI is also the lowest of the comparative cities. However, the investment the City of Long Beach is making is among

[4] https://www.sandiego.gov/sites/default/files/2024-01/pavement-management-plan-report.pdf

the highest per centerline mile, demonstrating the City's commitment to addressing the deficiency.

The following table shows the estimated street funding for FY2025.

Table. 5.5 Estimated Street Funding (FY2025)

Funding Source	Estimated FY2025 Amount
Community Development Block Grant	$752,000
Gasoline Tax Street Improvement	$4,800,000
General Capital Projects	$2,261,805
Measure A	$33,700,000
Measure M	$11,000,000
Measure R	$6,750,000
Prop A	$783,000
Prop C	$4,252,404
EF – Sol Waste Operating	$599,000
State RMRA	$12,000,000
Traffic Mitigation Program	$442,500
Total	**$77,340,709**

City staff have also identified unfunded capital improvement needs via the pavement management program analysis and comprehensive reviews of city-owned assets.

Table 5.6 Estimated Unfunded Five-Year Need (FY2025)

Program / Project	5-Year Need*
Citywide Street Improvements	$1,400,000,000
Alley Paving	$96,000,000
Sidewalk Management Plan	$631,000,000
Total	**$2,127,000,000***

According to the 2023 PMP Report by IMS, the City's average past funding of $14.7 million per year for Major Roadways, $16.5 million per year for minor roadways, and $2.1 million per year for alleys will result in PCIs of 54, 49, and 51 respectively. With planned funding for the next three years, it is projected PCIs will still decrease, albeit slightly, from their current state to 60, 50, and 47.

Table 5.7 Past vs. Planned Funding for Roadway Network

Road Type	Past Average Yearly Funding[1]	PCI	Future Average Yearly Funding[2]	PCI
Major Network*	$14,710,492	54	$29,192,635	60
Minor Network**	$16,517,323	59	$22,739,667	50
Alley Network	$2,118,940	51	$1,166,667	47
Overall Network	**$33,346,755**	**50.3**	**$53,098,969**	**51.1**

[1]FY2020 – FY2024 average CIP budget
[2] FY2025 – FY2027 average CIP budget
** Arterial Corridor Enhancements, Arterial Street Rehabilitation*
*** Residential Street Improvements*

The future average yearly funding shown above does not include the current budget allocations in project accounts, which includes roughly $152.8 million for the Major Network, $20.2 million for the Minor Network, and $1 million for the Alley Network.

The following table represents the recommended funding levels from the PMP process for PCI improvement at a controlled or steady improvement rate. This is then analyzed against the funding provided for street projects in the CIP to determine if funding was sufficient based on the recommended levels.

Table 5.8 PMP Recommended Funding for Roadway Network based on PCI Control or Steady State

Road Type	Recommended Minimum Yearly Funding (PCI Control)	PCI	Recommended Minimum Yearly Funding (Steady State PCI)	PCI
Major Network*	$29,220,000	60	$33,480,000	61
Minor Network**	$44,290,000	55	$37,760,000	54
Alley Network	$4,740,000	55	$2,050,000	50
Overall Network	**$78,250,000**	**55.9**	**$73,290,000**	**54.4**

** Arterial Corridor Enhancements, Arterial Street Rehabilitation*
*** Residential Street Improvements*

The Department's expenditure rate on CIP projects nearly doubled in FY2023. This increase in expenditure will ultimately improve the funding and will positively affect the City's overall PCI and reduce the maintenance backlog. The maintenance backlog referenced in this chapter refers to the outstanding repair and maintenance work that is due on City streets. However, based on PMP projections, this funding is still insufficient to improve the PCI as recommended in the PMP. This is shown in the fact the PCI has not increased over time based on current funding. The most recent PMP recommends a

minimum of $73,290,000 per year is necessary for a steady rate of PCI increase to 60. The average funding currently at $53,098,969 is $20,191,031 lower than the proposed allocation. This is then further impacted by results of previous sections of this report showing that the Department is currently not spending the total allocation per year provided for street projects.

5.2 Recommendations:

(5.2a) The Minor Network's PMP project maintenance backlog was 41% in 2023. Additional funding for the minor network should be considered as a one-time influx to reduce the PMP project maintenance backlog and increase the PCI. Once the backlog is reduced and PCI has increased, maintenance funding to stabilize the PCI will be required (slurry and crack seal). To reduce the current backlog in the minor network and increase the PCI, funding levels should be between $44.3 million and $72 million per year.

(5.2b) The Major Network's PMP project maintenance backlog was 17% in 2023. The recommended budget is between $23.8 million and $46.7 million to maintain the current PMP project maintenance backlog and increase PCI. At $23.8 million, the network will remain within the PCI target of 60 and the backlog of 17%. Funding for the major network should remain at or above $23.8M to ensure the PCI target is consistently met and the backlog does not increase over time.

(5.2c) The current funding backlog for the road network projects, including Arterial Corridors, Arterial Streets, and Residential Streets, totals over $150 million. The impact of these funds on the PCI is not easily estimated due to incomplete information on project completion. Prior-year projects and funds should be prioritized to ensure that the intended implications for the City's overall PCI and maintenance backlog are achieved.

6. Reporting (Objective 5)

This Chapter will focus on **Objective 5** of the performance audit:

Determine if the City follows restrictions, eligibility, and reporting requirements of the funding sources spent on street projects and that expenses are properly recorded.

State funding spent on transportation projects requires reporting to the California Department of Transportation. Financial Management and the Business Operations Bureau jointly produce the report. Administrative Analysts in the Business Operations Bureau track projects, with support from each program and project manager in the Engineering and Transportation Project Management Bureaus.

6.1 Required Reporting

> **FINDING 6.1:** There is no evidence to suggest the City is not properly managing funds. The City appears to be adhering to the restrictions, eligibility, and reporting requirements of the various funding sources.

6.1 Analysis

Public Works has a defined process to track and deliver the requirements of the funding sources spent on street projects. As street projects are assigned to project managers following the approval of the fiscal year CIP, Administrative Analysts work with project managers to review revenue resources. The Public Works Grant Officer works with the City Engineer and project managers to determine if a project aligns with a grant opportunity and supports the grant application process if deemed appropriate. If a grant is awarded for expenses incurred during the design phase, the project is presented to the City Council to seek approval at the time of award/project initiation. If the grant is awarded for construction expenses, the grant is approved by the City Council when the bid for the construction is approved and awarded.

Project managers are responsible for planning revenue and related expenditures using “BlueSheets”. The BlueSheet includes the project scope, estimated project dates, funding sources, use of funds, and other administrative data. These documents outline the revenue and expenditure plans for capital projects. After review of the BlueSheet, Administrative Analysts assist project managers in ensuring expenditures fall within grant guidelines. Typically, this process is focused on administrative requirements and deadlines. Project Managers are ultimately responsible for confirming eligible uses and requesting extensions if needed.

Figure 6.1 BlueSheet Example

Public Works
Project Kickoff Meeting / Blue Sheet

Project Name:	Carson Street between City Limit and Clark Ave	Meeting Date:	
Project / Detail:	3003040013	Attendees:	
Project Manager:	Thana Sathees		
Administrative Analyst:	Christine Best		
Estimated Project Dates:	May-21		

Project Description:

Carson Street will be repaved from the East City Limits to Clark Avenue. The project will include removing existing pavement and resurfacing the roadway, sidewalk replacement, new curb/gutters, driveway replacement, ADA compliant curb ramps, bus stops, and traffic improvements along the 1-mile corridor. Project also involves tree removal along north side of the road

Funding:

Sources (Include approval # for Prop A and C):

Index Code:			Grant / Detail	Amount
PWCIPCC				$2,225,044
			Total	$2,225,044

Uses of Funds (include staff time):			Amount
Labor Compliance:	2%		$43,942
PLA:	0%		$0
Pre-Design (05):			
Design (10):	13%		$259,657
Construction (30):			$1,997,358
Inspection (40):	10%		$199,736
PM & Mgmt Staff Time	5%		$99,868
Contingency: (50):	10%		$199,736
CIP OH (2.5%)	2.5%		$70,007
Overhead Charges (Explain on reverse)			
Additional Costs (Arts)	1%		$19,974
		Estimated Total:	$2,890,277
		Revenue (Over/(Under) Budget:	($665,233)

Q:\Engineering\MajorStreets&SpecialProjs\3003040013_Carson St, City Limits to Clark Ave PW5063-07\Correspondence\Council Letter\3003040013 Carson Street-WCL-Clark Ave_Blue Sheet_05-04-2021.xlsx 1 of 1

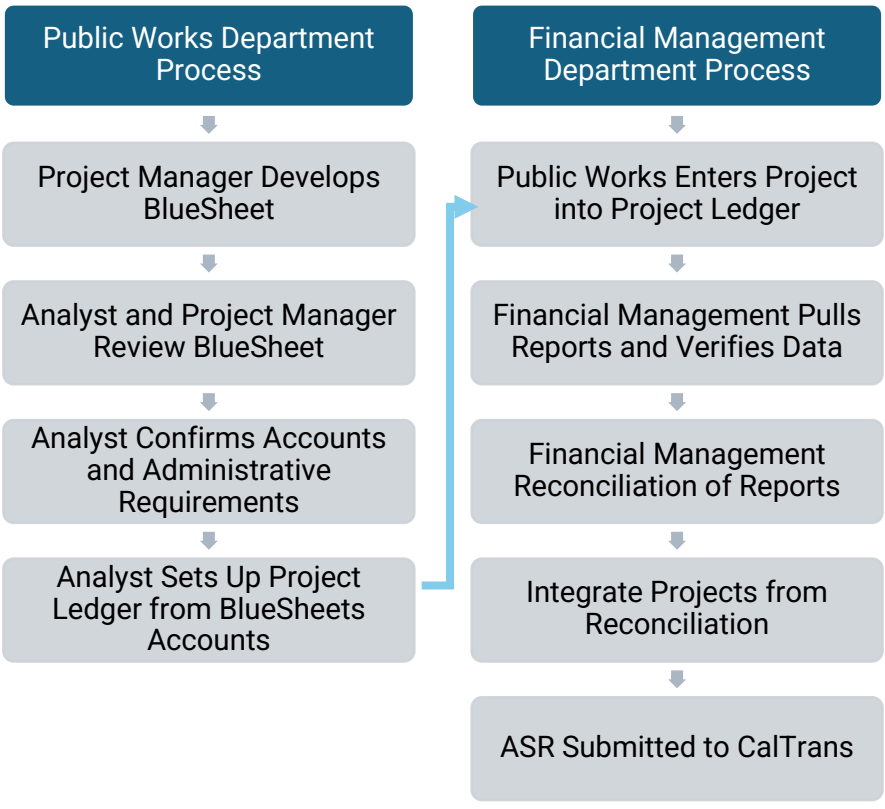
Once all information from the BlueSheet is confirmed and the Project Manager and Administrative Analyst agree with the outlined revenue and expenditure plan, the Administrative Analyst sets up the project in the Project Ledger system.

The reporting process begins when a project is created in the Project Ledger. The Project Ledger is a sub-ledger system that the Department utilizes to categorize expenses and allocate funding sources to projects. A project is 'created' when it is accepted and approved by the City Council. The Business Operations Bureau manages this step of the reporting process.

Financial Management downloads the information provided in Project Ledger and consolidates it using Simpler, a reporting function in the MUNIS system. The reports from Simpler/MUNIS verify that data and expenses are street-related and confirm accuracy and grant drawdown amounts.

Financial Management manages an Excel database with the requisite Annual Street Report (ASR) fields. These fields are linked to the reports referenced above. Once the data fields are complete using the reports, information is verified and sent to the requisite parties for consideration. The steps in this process are illustrated below:

Figure 6.2 CalTrans Annual Streets Report Workflow



The ASR contains street-related expenditures for each fiscal year. These expenditures are reported and documented to ensure funds are spent appropriately and on eligible projects. Reporting is required for continued receipt of State and Federal funding managed by the State of California. These funding sources include Gas Tax, ISTEA

(Intermodal Surface Transportation Efficiency Act), State Highway Safety Improvement Program, State RMRA (Road Maintenance and Rehabilitation Account), Transportation Development Act, Caltrans grants, and other voter-approved measures to fund infrastructure projects.

To date, there are no reported issues or shortcomings with the requisite reporting related to transportation spending outlined above. The City's Financial Transactions Report has been submitted to the California State Controller's office timely, apart from a late submittal in 2020.

While the requirements for reporting are being met, there are opportunities for streamlining and removing redundancies.

- The dual ledger system could be simplified using project management software (outlined in previous chapters) to track expenditures for projects and provide the necessary reports to Financial Management. This would reduce the data entry and tracking need for the Business Operations Bureau by limiting their receipt and invoice entry to only one tracking system to disseminate the information.
- Specialized reports can be developed in project management software and coordinated with Financial Management to compile necessary data efficiently and accurately.

6.1 Recommendation

(6.1a) Implement a project management software to automate the data collection needed for reporting, reducing staff time spent collecting the information and redundancies in reporting and risk of error.

7. Equity Analysis (Objective 6)

This Chapter will focus on **Objective 6** of the performance audit:

Review the historical spending of streets-related capital dollars as compared to census block and tract data based upon BIPOC (Black, Indigenous, and People of Color), income, Limited English Proficiency (LEP), density, limited income (poverty level below 2.0), and seniors (65 years or older).

This performance audit includes an objective to analyze street projects in terms of equity consideration and to review the historical street-related capital spending by census block and tract data based on BIPOC, income, etc.

According to the City's Office of Equity Strategic Plan, "Equity is achieved when everyone can reach their highest level of health and potential for a successful life, regardless of their background and identity. Equity means everyone has what they need to succeed, while equality treats everyone equally. Equality promotes fairness but only works if everyone starts from the same place and needs the same help."

Equity in capital spending should be viewed through this lens. There is currently no documented program to ensure equitable project prioritization. Projects are prioritized based on available funding, PCI impacts, and project load. The following sections will evaluate past project data to determine how projects have been implemented and their equity impacts on the City.

7.1 Equitable Distribution of Projects

> **FINDING 7.1:** From October 2013 to December 2022 projects were equitably allocated to census block groups in the City identified as Equity Focus Areas (EFAs). EFAs for BIPOC, LEP, Limited Income, and Seniors have a higher percentage of projects relative to their proportion of the City, while Density block groups show a lower-than-average proportion of projects based on population.

7.1 Analysis

To assess equity in street project implementation, an analysis was performed using GIS data of completed street projects within the City against Equity Focus Area (EFA) census block groups. This analysis documents whether projects are equitably implemented

across City areas with designations based on typical equity indicators. These EFAs include:

BIPOC	LEP	Density	Limited Income	Seniors
Residents in a block group who are Black, Indigenous, and People of Color (BIPOC) meet or exceed 50%.	Residents in a block group have a higher-than-average (11.9%) Limited English Proficiency (LEP).	A block group has more than or equal to 10,000 housing units per square mile.	Block groups with a ratio of Income to Poverty of less than 2.00.	Block groups that are higher-than-average of other block groups with residents of 65 years or older (average 12.5%).

The data evaluated includes completed street projects measured by number and centerline miles, from October 2013 to December 2022. The City's GIS system also categorizes projects by type. The analysis is broken down into three primary categories:

- All Block Groups with an EFA Designation
- High Equity Focus Areas (HEFAs) - Block Groups with three or more EFA designations, indicating areas of the City with multiple diversity or equity considerations.
- City Council Districts

Demographics

To properly review equity based on the primary variables listed above, the project team reviewed U.S. Census Bureau data to establish the demographics of the City. Based on the 2020 Census, the following tables represent the Race and Ethnicity demographics in Long Beach. The project team used the latest complete data set available from the U.S. Census Bureau to develop these charts. These are typically updated on a ten-year time frame.

Table 7.1 Demographics by Race[5]

Race	2010	2020
One Race	**437,806**	**399,505**
White Alone	213,066	149,347
Black or African American Alone	62,603	58,334

[5] 2020 and 2010 Redistricting Data – U.S. Census Bureau

Race	2010	2020
American Indian and Alaska Native Alone	3,458	7,022
Asian Alone	59,496	60,874
Native Hawaiian and Other Pacific Islander Alone	5,253	4,330
Some Other Race Alone	93,930	119,618
Two or More Races	**24,451**	**67,237**
Total Population	**462,257**	**466,742**

Table 7.2 Demographics by Ethnicity[6]

Ethnicity	2010	2020
Hispanic or Latino	188,412	201,997
Non-Hispanic or Latino	273,845	264,745

The tables below represent the Median Household Income by Family Type, Ratio of Income to Poverty Level, and Age Demographics within the City.

Table 7.3 Median Household Income by Family Type[7]

Type of Family	2012	2022
Families	$52,395	$96,970
Married Couple – Families	$77,361	$130,448
Nonfamily Households	$40,159	$56,245
Median Household Income	**$47,837**	**$80,493**

Table 7.4 Ratio of Income to Poverty Level[8]

Ratio of Income to Poverty Level	2012	2022
Under 2.00	214,178	132,145
2.00 and Above	247,733	311,489

[6] 2020 and 2010 Redistricting Data – U.S. Census Bureau
[7] American Communities Survey – U.S. Census Bureau
[8] American Communities Survey – U.S. Census Bureau

Table 7.5 Age Ranges of Long Beach Residents[9]

Age Range	2012	2022
19 Years and Below	27.70%	22.60%
20 to 39 Years	30.20%	32.60%
40 to 54 Years	32.20%	31.40%
65 Years and Above	9.80%	13.60%

EFA and HEFA Data and Mapping

The following maps represent general data from the GIS system analyzed against EFA and HEFA layers created by the project team.

The maps show the City Census Block Groups with EFA and HEFA designations. Many block groups can be classified by more than one EFA designation, so they are shown in darker shades based on the number of classifications that apply to them.

[9] American Communities Survey – U.S. Census Bureau

Figure 7.1 City Census Block Groups with EFA Designations

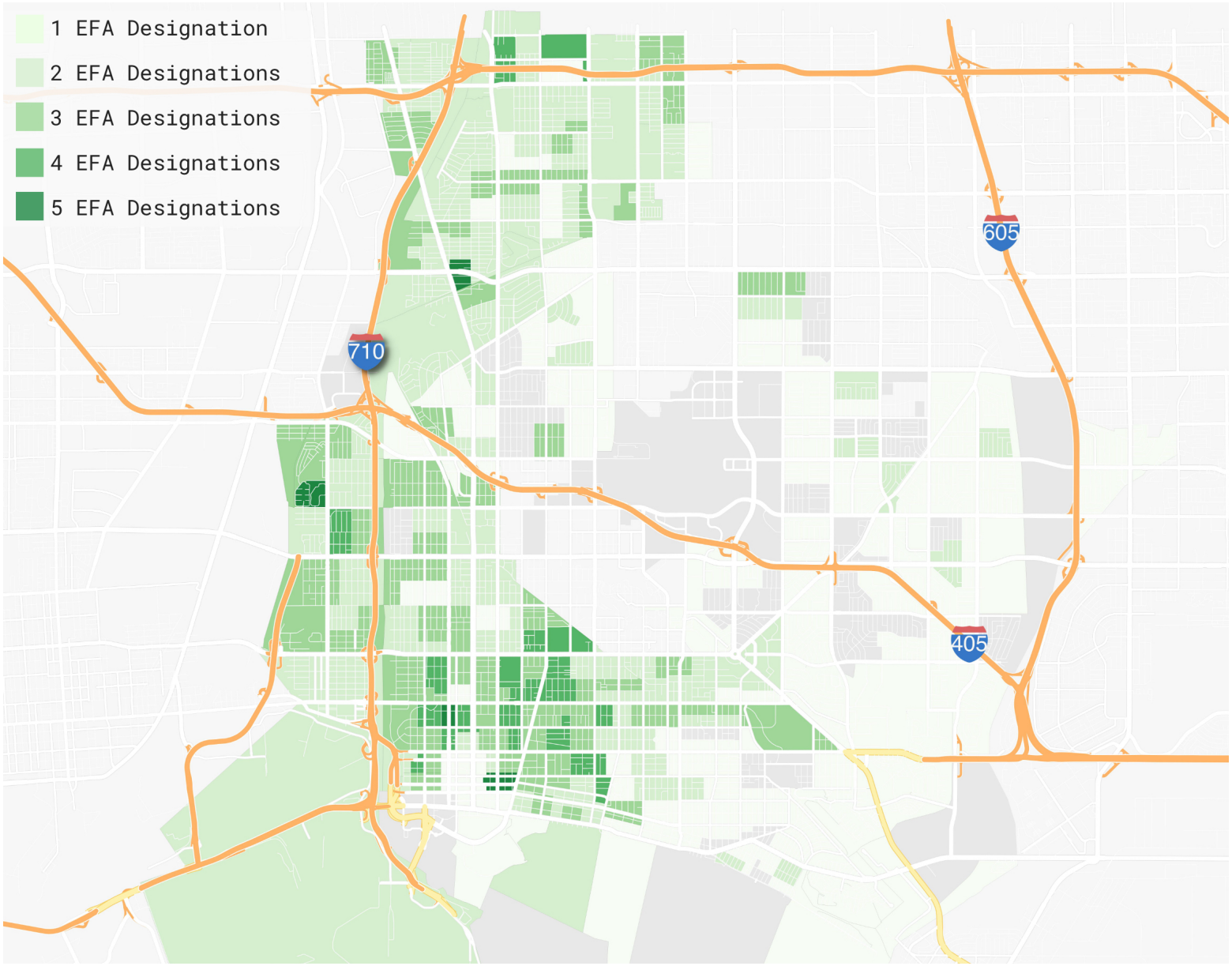
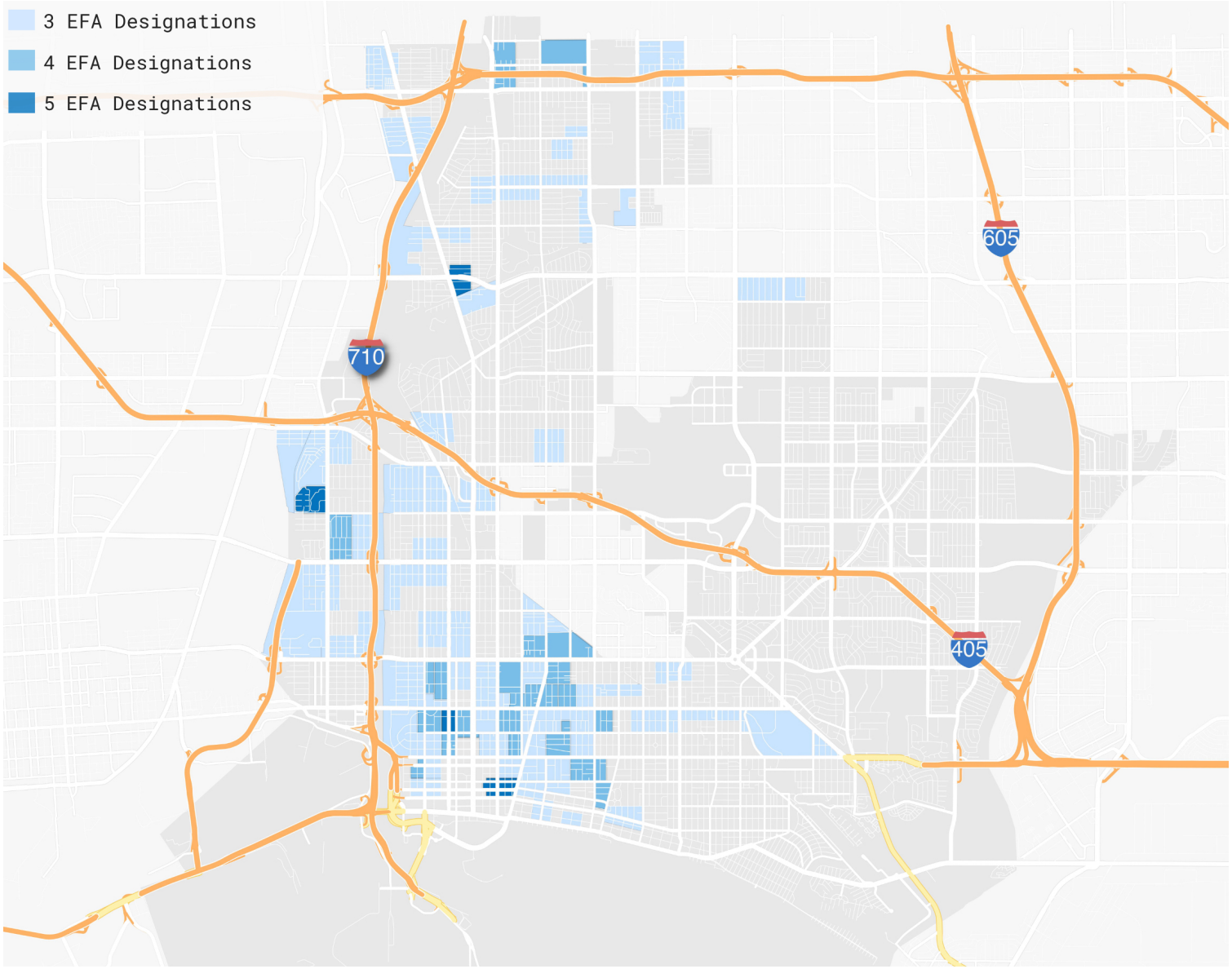


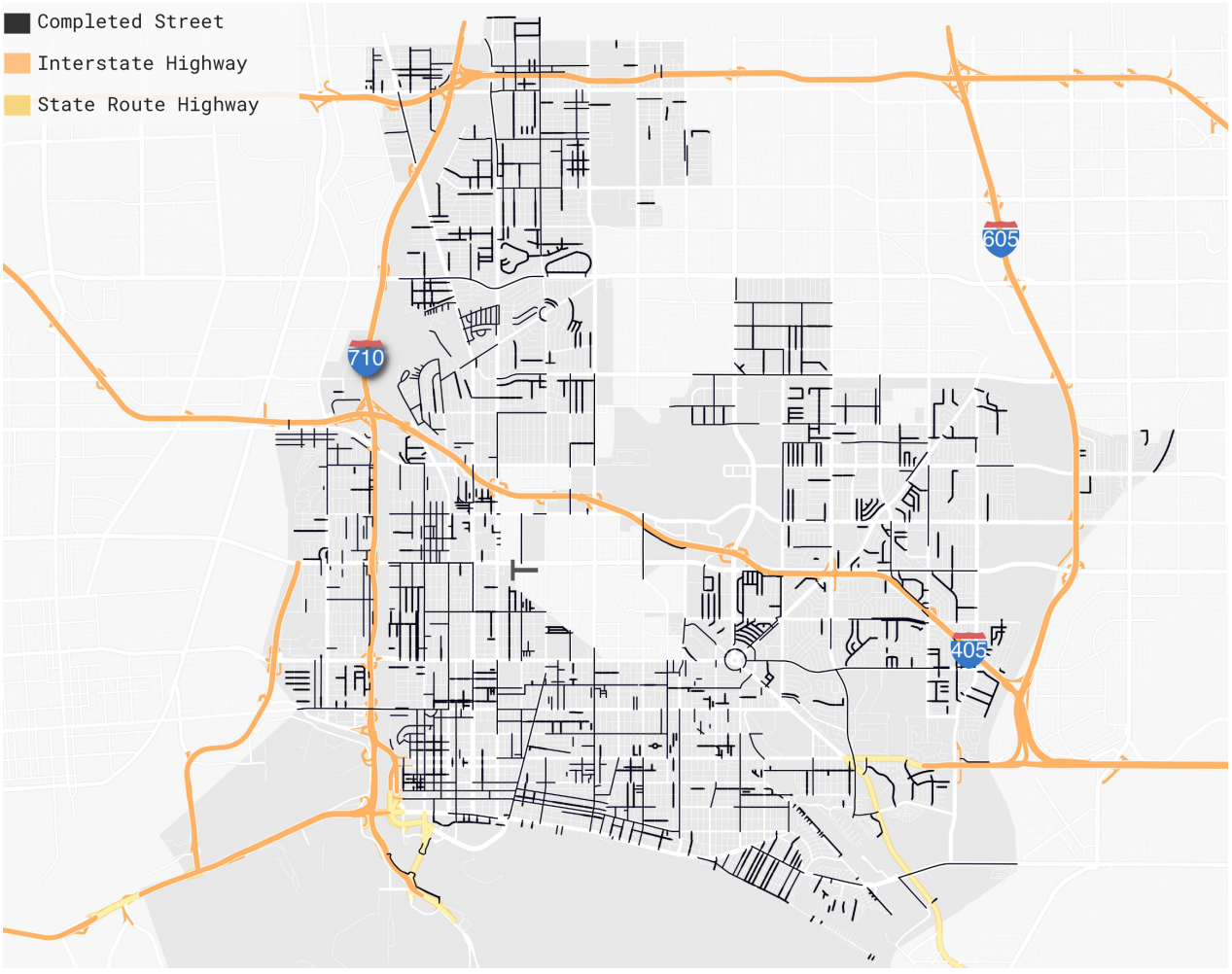
Figure 7.2 City Census Block Groups with HEFA Designations



Completed Streets Mapping

Using the 2022 5-Year Estimates for U.S. Census Block Groups, the following maps and tables present location of completed street projects in relation to equity focus areas. Between October 2013 and December 2022, a total of 2,825 street projects which account for 231.4 centerline miles of street work overall were completed (2023 projects have not yet been integrated as of September 2024).

Figure 7.3 Completed Street Projects from October 2013-December 2022



Comparison of Completed Streets and EFA and HEFA Data

The following maps and tables provide further information both visually and numerically to document the City's street project work in EFAs. This section will focus on all City census block groups and whether they are designated an EFA or non-EFA, and also on High Equity Focus Areas (HEFAs) with three or more EFA classifications.

The tables present a breakdown of data between EFAs and non-EFA designated block groups. Since some block groups have multiple EFA designations, the total City numbers will not equal the sum of the block group type numbers.

Table 7.6 Completed Street Projects by EFA

Block Group Type	Population	Square Miles	No. of Projects	Centerline Miles
BIPOC	195,091	24.1	1,566	122.9
LEP	6,111	6.9	643	48.5
Density	172,644	5.7	569	43.6
LI	168,817	35.1	1,513	119.0
Seniors	41,838	25.6	1,296	106.9
Non-EFA	33,579	10.0	287	25.3
Total City	**464,065**	**53.1**	**2,825**	**231.4**

The table below represents the City's percentage in Population and Square Miles compared to the number of completed street projects and their centerline mileage.

Table 7.7 Completed Street Project by EFA as Percentages

Percentages	Population	Square Mileage	% of Projects	Centerline Miles
BIPOC	42%	45%	55%	53%
LEP	1%	13%	23%	21%
Density	37%	11%	20%	19%
LI	36%	66%	54%	51%
Seniors	9%	48%	46%	46%
Non-EFA	7%	19%	10%	11%

There is a higher percentage of projects in an EFA Block Group than the percentage of projects in a Non-EFA Block Group.

Finally, the City's street projects were analyzed to determine what portion of the corporate limits and population exist in an EFA or non-EFA block group.

Table 7.8 EFA Summary Comparison to Street Project Totals

Totals	Population	Square Mileage	No. of Projects	Centerline Miles
Within an EFA	430,486	43.1	2,538	206
Non-EFA	33,579	10.0	287	25.3
Within an EFA	93%	81%	90%	89%
Non-EFA	7%	19%	10%	11%

Roughly 90% of street projects, by number of projects and centerline miles completed, are within EFA block groups, and 10% are in the remaining areas of the City.

The following table shows the number of projects and miles street projects completed within HEFA Block Groups.

Table 7.9 Completed Street Projects by HEFA

Totals	Population	Square Mileage	No. of Projects	Centerline Miles
Within an HEFA	155,581	8.8	890	67.3
Non-HEFA	308,484	44.0	1,935	164.0
Within an HEFA	34%	17%	32%	29%
Non-HEFA	66%	83%	68%	71%

Nearly 1/3 of all street projects, by number of projects and centerline miles completed, are within HEFA block groups.

The following tables summarize the completed street data by both number of projects completed and miles of projects completed in or near EFAs and HEFAs.

Table 7.10 Number of Street Projects in or Near an EFA or HEFA

Location	# of Completed Street Projects	% of Total Completed Street Projects
In or Near at Least One EFA	2,538	89.8%
In or Near a HEFA	890	31.5%
Not In Any EFA	287	10.2%

Table 7.11 Centerline Miles of Street Projects in or Near an EFA or HEFA

Location	Centerline Miles	% of Total Centerline Miles
In or Near at Least One EFA	206.0	89.1%
In or Near a HEFA	67.3	29.1%
Not In Any EFA	25.3	10.9%

Roughly 90% of street projects have been in or adjoining a block group that has an Equity Focus Area designation, and roughly 30% have been in or adjoining HEFAs.

Based on this information, there is not a significant disparity in equity based on the project location within an EFA or HEFA.

The following maps illustrate the completed street projects within EFAs and HEFAs. The first map shows the completed street projects overlaid on top of the EFA City map. This

visually represents the locations of the City's street projects and their proximity to block groups that are EFA classified. The second map shows the completed streets map overlaid on top of the HEFA map.

Figure 7.4 Completed Street Projects with One or More EFA

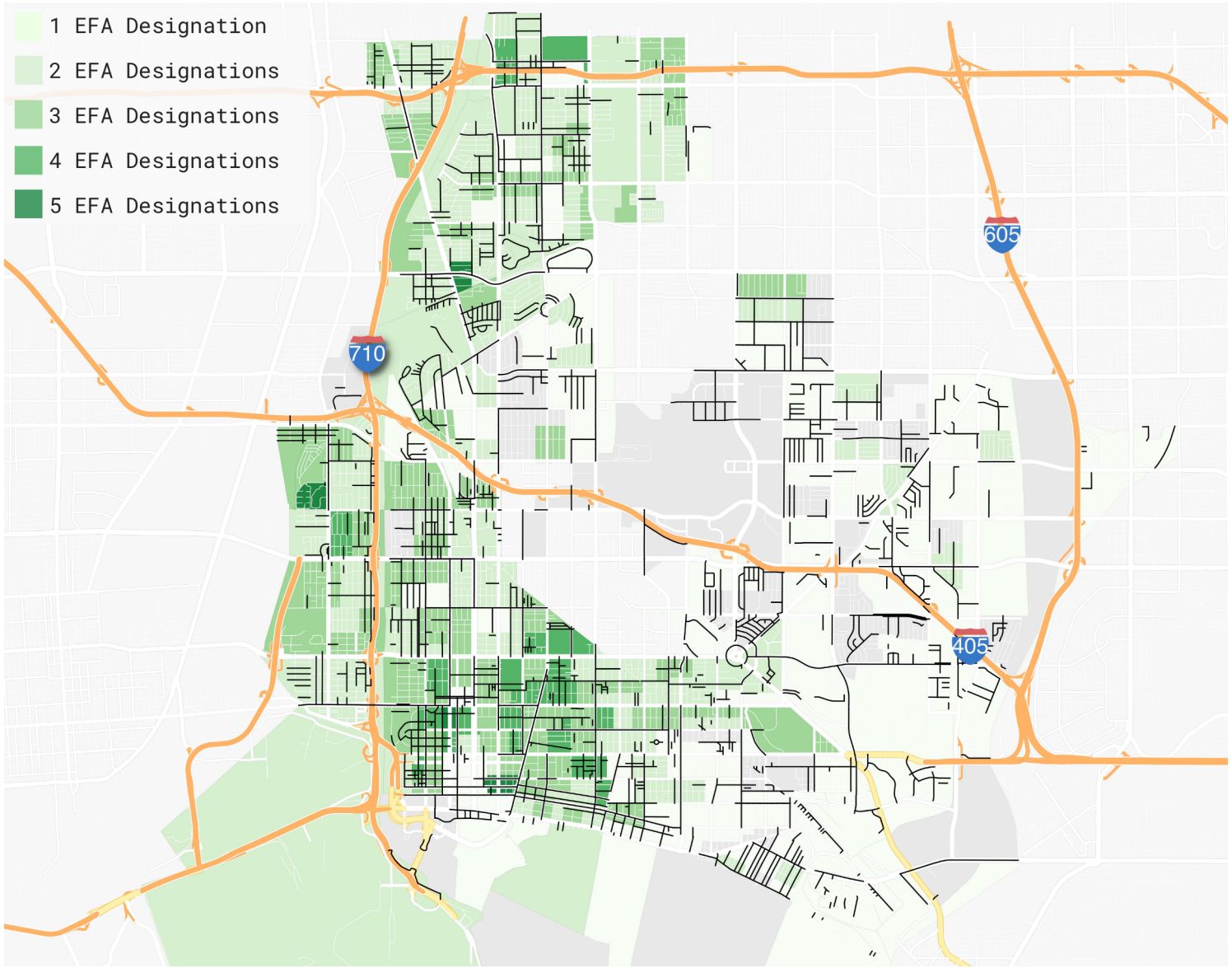
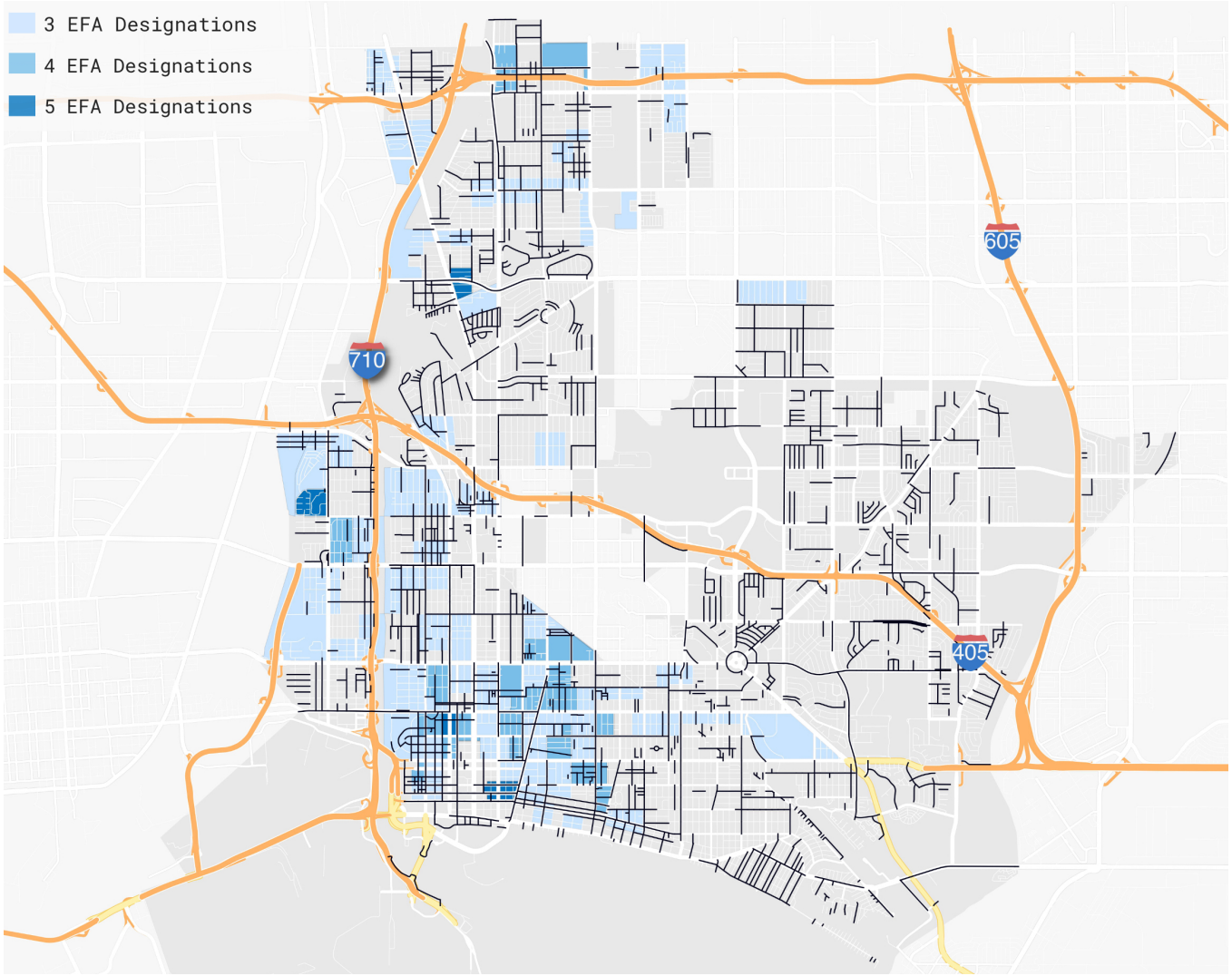


Figure 7.5 Completed Street Projects with HEFAs



Equity Analysis by Street Project Work Type

The following analysis represents a further breakdown of the data, documenting percentages of projects based on their designated project work type. These types are incorporated into the GIS project reporting for each project and are as follows:

Alley Rehab	Rehab and updating of alleys and small corridors
Concrete Alley	Maintenance or construction of alleys or repairs that are Portland cement concrete.
New Street	Construction of a new street or roadway.
Reconstruction	Complete stripping, repaving and rebuilding of an existing street or roadway.
Resurface	Stripping of top surface of asphalt roads and adding a new layer of asphalt.
Slurry Seal	Emulsion-based coating for roadways to extend their useful life and protect them from damage.
Other	No Project Type listed.

Most of the work performed during the review timeframe was street resurfacing (55%), followed by Slurry Seal (33%), and all other types were less than 5%.

The map on the following page represents the City's completed street projects by EFA and work type. The projects shaded in green meet the criteria set out earlier in this Chapter as one of the five EFA classes.

Figure 7.6 Completed Street Projects and EFAs by Work Type

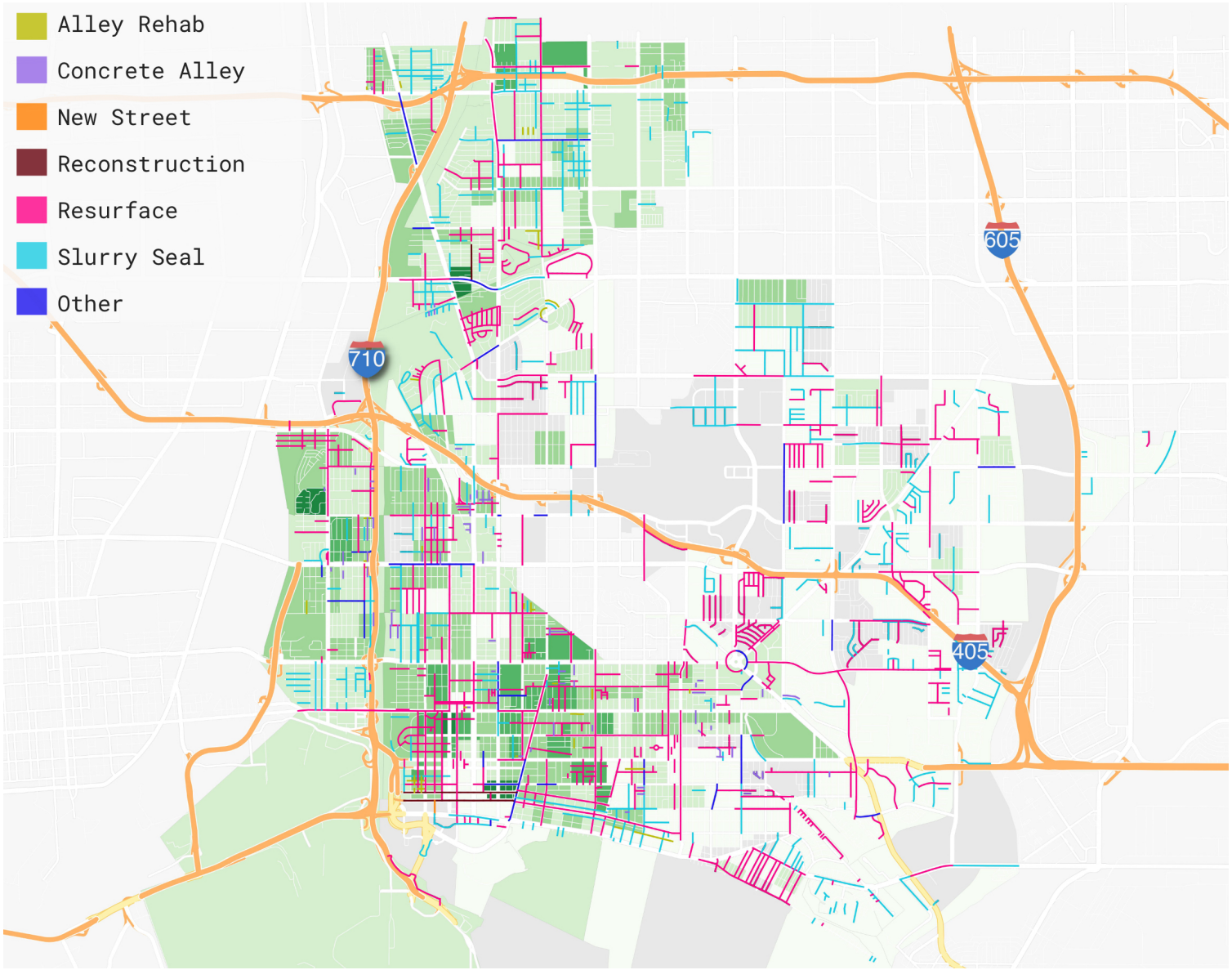


Table 7.12 Projects by Work Type in EFAs or HEFAs

Work Type - # of Projects	Total Completed Street Projects	# In or Near an EFA	% In or Near an EFA	# In or Near a HEFA	% In or Near HEFA	# Not In an EFA	% Not In an EFA
Alley Rehab	52	52	100.0%	32	61.5%	0	0.0%
Concrete Alley	90	85	94.4%	42	46.7%	5	5.6%
New Street	1	1	100.0%	0	0.0%	0	0.0%
Reconstruction	39	39	100.0%	21	53.9%	0	0.0%
Resurface	1,563	1,387	88.7%	554	35.4%	176	11.3%
Slurry Seal	934	839	89.8%	178	19.1%	95	10.2%
Other	146	135	92.5%	63	43.2%	11	7.5%
Total	**2,825**	**2,538**	**89.8%**	**890**	**31.5%**	**287**	**10.2%**

Table 7.13 Centerline Miles by Work Type in EFAs or HEFAs

Work Type - Centerline Miles	Total Centerline Miles	In or Near an EFA	% In or Near an EFA	In or Near a HEFA	% In or Near a HEFA	Not In an EFA	% Not in an EFA
Alley Rehab	3.1	3.1	100.0%	1.6	51.3%	0.0	0.0%
Concrete Alley	5.7	5.5	97.1%	2.7	46.9%	0.2	2.9%
New Street	0.1	0.1	100.0%	0.0	0.0%	0.0	0.0%
Reconstruction	2.7	2.7	100.0%	1.4	54.27%	0.0	0.0%
Resurface	130.0	114.5	88.1%	42.8	32.9%	15.5	11.9%
Slurry Seal	78.6	69.8	88.9%	14.2	18.1%	8.7	11.1%
Other	11.2	10.3	91.7%	4.6	41.3%	0.9	8.3%
Total	**231.4**	**206.0**	**89.1%**	**67.3**	**29.1%**	**25.3**	**10.9%**

Based on analysis of all street projects, the percentages of all project types fall between 88% and 100% within or near an EFA, which aligns with their population and square mileage percentages.

Comparison of Completed Streets and City Council Districts

The following information represents the completed street projects by City Council District. There are nine (9) districts in the City and they represent a different geographical segment of the City's corporate limits. An analysis was performed to see if completed projects are equitable over the nine districts.

Figure 7.7 City Council Districts and Completed Street Projects

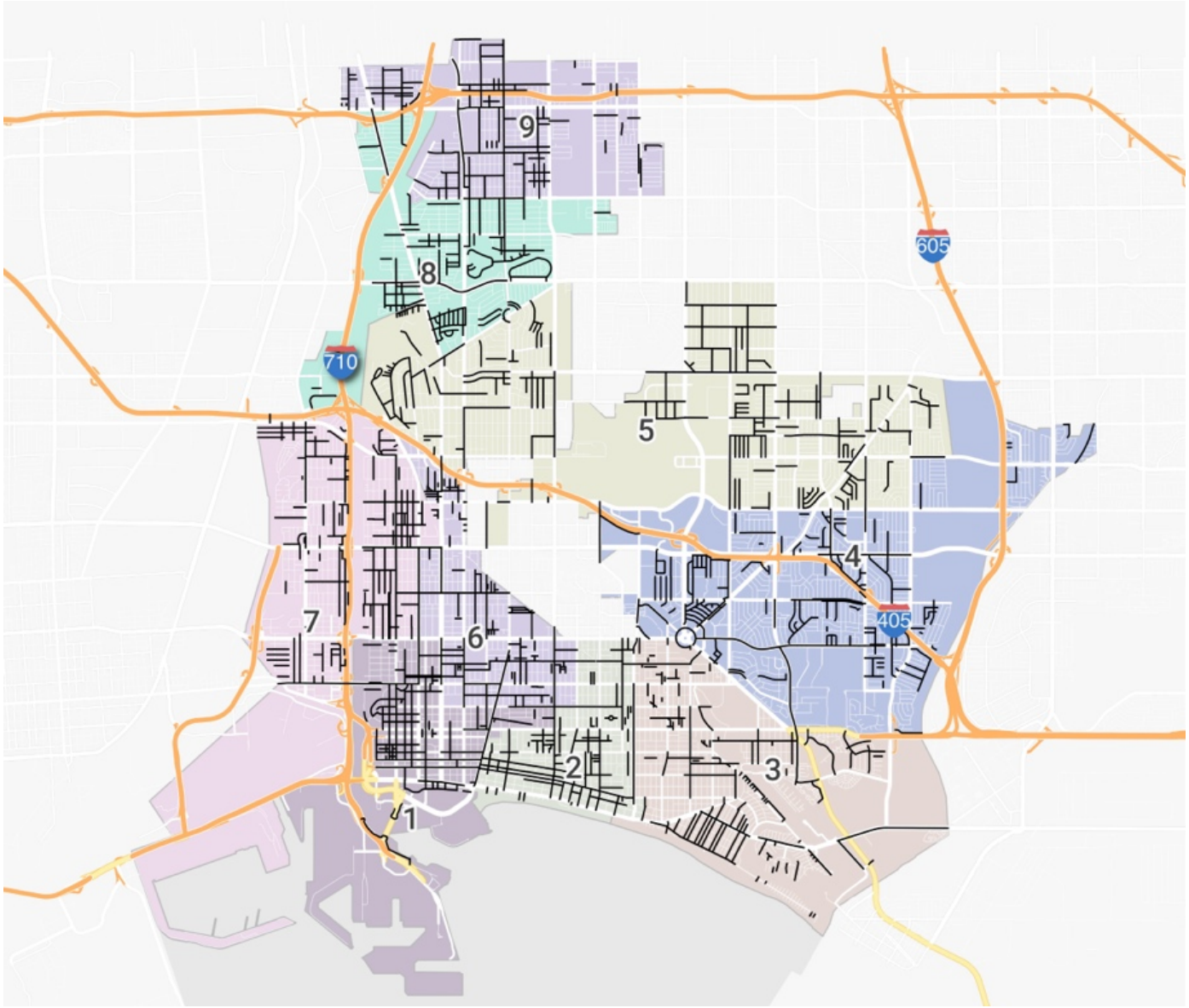


Table 7.14 Street Projects by Council District

Council District	Square Miles of District	% of City in District	# of Projects	% of Projects	# of Centerline Miles	% of Centerline Miles
1	5.0	9.4%	275	10.1%	21.1	9.4%
2	2.2	4.1%	226	8.3%	17.7	7.9%
3	6.6	12.4%	307	11.2%	23.4	10.4%
4	9.8	18.5%	378	13.8%	32.6	14.5%
5	10.3	19.4%	418	15.3%	41.0	18.2%
6	2.5	4.7%	246	9.0%	17.9	8.0%
7	7.9	14.9%	335	12.2%	28.7	12.8%
8	4.4	8.3%	240	8.8%	19.8	8.8%
9	4.4	8.3%	310	11.3%	22.5	10.0%
Total	**53.1**	**100.0%**	**2,735**	**100.0%**	**224.7**	**100.0%**

Table 7.15 Number of Street Projects that Adjoin Multiple Council Districts

Council Districts	# of Projects	% of Projects	# of Centerline Miles	% of Centerline Miles
1 and 2	12	13.3%	0.8	11.8%
1 and 6	16	17.8%	1.0	14.8%
2 and 3	16	17.8%	1.7	24.6%
2 and 6	4	4.4%	0.2	3.7%
3 and 4	1	1.1%	0.2	3.2%
4 and 5	7	7.8%	0.5	7.0%
5 and 8	6	6.7%	0.3	4.4%
6 and 7	15	16.7%	1.3	18.9%
8 and 9	13	14.4%	0.8	11.6%
Total	**90**	**100.0%**	**6.8**	**100.0%**

The data shows that street projects are evenly distributed by Council District in relation to overall size, with smaller districts getting a slightly higher percentage of projects and larger districts getting a slightly lower percentage of projects compared to their relative proportion of the City.

Result

Projects completed between October 2013 to December 2022 were equitable despite the lack of a formalized program to incorporate equity as an objective in the Pavement Management Planning (PMP) process.

7.1 Recommendations:

(7.1a) Incorporate an equity assessment, with guidance from the City's Equity Office, into the project "BlueSheet" form for Project Managers to utilize while developing initial prioritization criteria and perimeters for street projects.

(7.1b) Incorporate equity metrics and outcomes into the specifications for ongoing evaluation and monitoring of the Pavement Management Program. Examples of equity metrics that can be applied to measuring the success of the PMP include the following:

1. Measure the spread of PCI within a given Council District to identify inequities between Council Districts.
2. Prioritize assessment of the PCI near essential services like hospitals, schools, employment centers, and transit facilities.
3. Assess the level of investment relative to the level of need (based on PCI) for each Council District. This will enable the City to be strategic in making proportionate investments relative to need throughout the City.

(7.1c) Develop a communication plan and strategy to involve stakeholders representing equity-focused demographics during the development of the PMP.

(7.1d) Organize stakeholder meetings throughout the PMP development to address the needs of underserved communities. These meetings should include leaders and representatives from block groups with an EFA designation and consider the relative project count.

CITY OF LONG BEACH

Memorandum

Date: April 3, 2025

To: Laura Doud, City Auditor

From: Thomas B. Modica, City Manager

Subject: Public Works Response to CIP Streets Audit

The Public Works Department has thoroughly reviewed the 2024 Streets CIP Audit and the recommendations to improve the Streets CIP project delivery, planning, and project management. Public Works understands the findings and recommendations outlined by the City Auditor's Office and overall concurs with the recommendations outlined within the audit report. We appreciate the opportunity to participate in this audit and work towards improving internal processes to better serve the City and implement the goals of the Streets CIP Program. While the recommendations are generally supported, the Department's responses contain clarifications regarding details regarding available funding, as well as identifying certain recommendations which are not able to be fully implemented due to various factors.

As stated in the audit's opening Executive Summary, "[The Audit's] overarching goal is to ensure the City is appropriately spending or using funds from financial sources within the timeframes and parameters of those funding mechanisms." The Department of Public Works affirms that this audit did not find any instances where Street CIP financial sources were spent outside of the legal timeframes or outside of the parameters of the individualized funding sources, of which there are over a dozen external funding sources contributing to the Streets CIP programs. The Department stands by its strong financial controls and spending mechanisms.

Additionally, the Department of Public Works is investing more funding into the City's street infrastructure than at any time in recent history. In Fiscal Years 2023 and 2024, the Department spent over $87 million and $83 million, respectively, on Streets CIP projects compared to $48 million in Fiscal Year 2022. This significant increase in spending is directly attributed to the historic funding offered in the Elevate '28 Infrastructure Investment Plan, which enabled the Department to establish a comprehensive five-year infrastructure plan and includes an influx of Measure A bond funding. As a historical example, in FY 04, the City invested less than $2 million in Residential Streets CIP; in FY 23, the City invested $28.3 million in the same program. In FY 24 alone, the Department completed over 135 lane miles of street and alley improvements, slurry sealed over 6 million ft^2, installed nearly 7 miles of bicycle lanes, filled over 48,000 potholes, replaced nearly 4,000 traffic and street signs, trimmed over 17,000 trees, restriped 70 miles of pavement, and reviewed 2,000 traffic control plans.

As the Department has communicated to City Council and the public, and as indicated within the audit, further funding is required in both the arterial and residential street programs to significantly increase the City's Pavement Condition Index. To illustrate this point, the Residential Street CIP Program was allocated $28.3 million in FY 23 (the highest the program has ever received in an annual allocation due to Measure A bond funding), however the required allocation outlined in the audit totals $44-72 million annually.

The Department appreciates the audit's thorough review and is encouraged by its conclusion that current staffing levels are appropriate to effectively implement the planned street improvements outlined in the Elevate '28 Plan. This finding affirms the Department's strategic approach to workforce planning, ensuring that the City can meet its infrastructure commitments in a timely and efficient manner. Over the course of the past three fiscal years, Public Works has progressively grown its CIP Project Delivery City staffing levels, as outlined by the chart below:

	FY 23 FTE	FY 24 FTE	FY 25 FTE
Capital Project Coordinator	19	20	25
Civil Engineer, Associate, Assistant	19	23	24
Project Management Officer	5	6	6
Senior Civil Engineer	4	7	9
	47	**56**	**64**

Furthermore, the Department is reassured by the audit's determination that CIP funding for street projects is being directed toward equity focus areas at a rate that exceeds their proportional representation within the City. This outcome aligns with the Department's commitment to equitable investment in historically underserved communities, supporting the City's broader objectives of improving mobility, safety, and accessibility for all residents.

In response to the audit's findings, Public Works acknowledges certain areas requiring improved project tracking, enhanced communication processes, and refined project management procedures. Efforts are already underway to address a majority of these concerns.

In FY 24, the Department established the Transportation Project Management Bureau to standardize transportation project management, expedite project delivery, and improve internal protocols and procedures. This new Bureau includes project managers, civil engineers, and transportation planners to increase project management efficiencies. Despite ongoing hiring process inefficiencies, the Bureau is close to fully staffed and prepared to achieve its goals, which include many of the recommendations presented in this audit.

The Department agrees that the Streets CIP programs would benefit from additional project management training opportunities for staff, standardization of best practices in regard to reporting and tracking phases of projects, and improved collection and utilization of internal data to better forecast and prepare for future projects. Public Works would like to acknowledge the Department's Project Management Manual, which was developed based on the Department's established best practices for project management procedures. Efforts are underway to update and enhance this manual, as well as integrate it into the onboarding process for staff with project management responsibilities.

To fully address and implement the audits recommendations relating to project controls, standardization of reporting, development of templates and benchmarking, data collection,

collecting and analyzing metrics, and assessing variances between different projects and phases, additional staff resources will be required, which will be requested during the FY 26 Proposed Budget.

The Department has undertaken substantial efforts to improve internal processes in recent years. The introduction of the Elevate '28 Infrastructure Investment Plan is a key factor in aligning funding opportunities with the City's long-term infrastructure needs. This plan has made it possible to obtain substantial external funding for critical projects, by ensuring projects are shovel-ready, fully designed, and able to meet grant timelines. As a result, the Department has been able to attract significant additional funding from external sources. Notably, the ability to leverage Measure A funding as matching funds has improved the City's competitiveness in securing county, state, and federal grants.

The Department also recognizes the need for enhanced external communication to better inform the community about ongoing and completed projects across the City. Progress is underway with the Department's Strategic Communication Plan, enhanced internal data collection, and streamlining reporting efforts, as well as a renewed focus on external communication procedures, standards, and best practices. The Department has made efforts to improve communication with stakeholders to ensure greater transparency throughout the project lifecycle through frequent public townhalls and presentation to neighborhood and community groups, as well as updates on the City's website.

The Department recently implemented a comprehensive communications strategy designed to improve the management, tracking, and dissemination of project information to both staff and stakeholders. This strategy equips the Department with the necessary tools to engage in proactive outreach, ensuring the public is well-informed about upcoming projects, recently completed work, and the City's five-year infrastructure investment plan.

Additionally, Public Works has established several new communication initiatives to improve public engagement and enhance project awareness. These include a dedicated Elevate '28 Infrastructure Investment Plan website (www.lbelevate28.com) which showcases the Elevate '28 Infrastructure Investment Plan in detail, including budget, scope, estimated construction start and completion date, and more for individual projects. This data is updated each quarter. Additionally, the website includes quarterly updated maps which showcase the street projects completed to date, as well as the prior 10 years of completed street projects. These efforts are part of a broader commitment to ensuring that project information is transparent, well-organized, and easily accessible to those who need it.

The Department acknowledges that some recommendations from the audit may not be immediately feasible without additional staff support, which may not be achievable given current budget constraints. Additionally, the Department recognizes the audit's recommendations regarding potential changes to the City's approach to investing Street CIP funding. However, a some of the proposed structural changes to CIP funding allocations are not possible due to the specific approved uses restricting the use of various funding sources which make up the CIP Street Programs. It is also important to emphasize that the current Street CIP funding methodology, as presented to City Council, is designed to balance both the rehabilitation of

streets in very poor to poor condition and the preservation of streets in fair to good condition. This mixed approach is rooted in industry best practices and cost-effective asset management strategies.

The most fiscally responsible way to manage a roadway network is to prioritize timely maintenance interventions, as delaying repairs often results in exponentially higher costs. Preserving streets while they are still in fair to good condition is essential to extending their lifespan at a lower cost, thereby reducing the need for more costly reconstructions in the future. If the City were to shift its focus exclusively to rehabilitating streets in very poor to poor condition, the high cost of these projects would significantly limit the number of streets that could be addressed each year. Additionally, failing to maintain streets in fair to good condition would accelerate their decline, ultimately increasing the number of streets requiring costly rehabilitation and placing additional strain on the City's infrastructure budget. For reference, the cost to slurry seal is $\$2/ft^2$ compared to $\$30/ft^2$ for full reconstruction.

A key component of the City's current approach is the work performed by the in-house Crack & Slurry Seal team within the Department of Public Works. This team is responsible for applying crack and slurry seal treatments to streets in good condition, which can extend their service life by an estimated 5 to 7 years before significant degradation occurs. Since Fiscal Year 2023, over 5 million square feet of slurry seal has been applied across the City, contributing to long-term cost savings and improved roadway conditions. Additionally, the team continues to evaluate and test new materials to enhance the effectiveness of slurry seal applications, further supporting the City's commitment to proactive infrastructure maintenance.

The Department remains committed to maintaining a balanced and data-driven approach to Street CIP funding that ensures both immediate rehabilitation needs and long-term preservation strategies are met. This methodology is critical to maximizing the City's investment in its roadway network while providing safe and reliable streets for all residents. Public Works is committed to exploring alternative solutions that address the audit's underlying concerns without compromising service delivery or regulatory compliance, including the consideration of infrastructure bond funding to fund street improvements.

Public Works underscores the complexity of street infrastructure projects, which often involve coordination with multiple agencies, utility companies, and property owners. Delays are sometimes unavoidable due to factors such as unexpected underground conditions, environmental reviews, or year-long regulatory approvals from State and Federal partners. Additionally, the Department often requires multiple fiscal years to accumulate sufficient funding for a project's construction phase. For instance, the average cost for one Arterial Corridor project can range from $25 - 60 million, while the entire Corridor Capital Improvement Program (CIP) receives an average annual allocation of $15 million. This funding structure necessitates a phased approach to project implementation, ensuring that resources are strategically allocated over time to support the successful completion of multiple major infrastructure investments.

Additionally, the Department depends on external grant funding to support these large-scale projects. The process of securing grants is often complex and time-consuming, requiring extensive navigation of approval and award procedures. Furthermore, grant funding can

introduce additional delays due to compliance requirements, disbursement schedules, and other administrative processes. Despite these challenges, leveraging grant funding remains essential to advancing critical infrastructure projects. Since 2023, the Department has completed two corridor projects with two more entering the construction phase this year.

Moving forward, Public Works will continue to refine its internal processes, reinforce project management standards, enhance external communication, and pursue opportunities for additional funding to meet the City's growing infrastructure demands. The Department remains committed to delivering the highest quality street improvements that enhance public safety and mobility and incorporate the long-term vision for the City’s infrastructure growth.

If you have any questions please contact Jonathon Bolin, Acting Business Operations Manager at (562) 570-6350.

ATTACHMENT:
PUBLIC WORKS MANAGEMENT RESPONSE AND ACTION PLAN

CC: ERIC LOPEZ, DIRECTOR OF PUBLIC WORKS
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JOSHUA HICKMAN, DEPUTY DIRECTOR OF PUBLIC WORKS
JONATHON BOLIN, BUSINESS OPERATIONS BUREAU MANAGER OF PUBLIC WORKS
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2.1a	Define standard criteria and metrics necessary for assessing whether CIP street projects are being delivered cost effectively and timely and that funds are being expended as required. Short-term, these metrics should be integrated into the current tracking tool, Microsoft Excel, through standard and uniform templates used by all Public Works staff responsible for maintaining, reporting, and tracking CIP data and performance. Metrics should include standard formatting, consistent column headings, and data summaries that would enable performance reporting at the programmatic level.	H	20	Agree	Public Works Department	The Department recognizes the need for standardized criteria, metrics, templates, and tracking tools to enhance consistency and efficiency across all CIP Programs (Residential Streets, Arterial Streets, Corridors, Crack & Slurry Seal). Standardization will improve program assessments and enable uniform data collection and reporting across programs and Bureaus. In FY 24, the Department established the Transportation Project Management Bureau to standardize transportation project management, expedite project delivery, and improve internal protocols and procedures. This new Bureau includes project managers, civil engineers, and transportation planners to increase project management efficiencies. Despite ongoing hiring process inefficiencies, the Bureau is close to fully staffed and prepared to achieve its goals, which include many of the recommendations presented in this audit. Progress is already underway with the Strategic Communication Plan, Project Charter (serving as the single source of truth for CIP projects), and in-house Project Tracker. However, these efforts have primarily focused on external communication. Additionally, the Department affirms that the Business Operations Bureau has established proper procedures to ensure external CIP funding is utilized efficiently and within required timelines. Regarding timeliness delivery, as the Department applies for and is awarded federal funding for large corridor / multi-modal transportation projects, federal funding can increase the time from design to entering the construction phase due to additional federal requirements to comply with as well as federalize approval for the project's design. To fully address and implement the audits recommendations relating to project controls, standardization of reporting, development of templates and benchmarking, data collection, collecting and analyzing metrics, and assessing variances between different projects and phases, additional staff resources will be required, which will be requested during the FY 26 Proposed Budget.	September 30, 2026
2.1b	Microsoft Excel lacks the functionality to adequately manage the CIP long-term. The Department should implement a dedicated software solution. This system should include functionalities such as portfolio management, planning, schedule and cost tracking, file management, and automated reporting. Ideally, it should also include customizable dashboards to visualize data and metrics.	H	20	Agree	Public Works Department	The Department acknowledges that Excel lacks the necessary functionality for complex project management. While third-party project management software has been purchased in the past, results have been underwhelming, often requiring costly subscriptions and necessary customizations and change orders. Moving forward, the Department will explore streets-specific project management software as well as Microsoft solutions, including Microsoft Project.	June 30, 2026
2.1c	Create a master document and schedule that outlines all required reporting, the objectives of that reporting, when that reporting takes place and is due, who is responsible for the final reporting product, and the final circulation and or publishing of a given report (i.e. is it a report that has to be filed with the California Department of Transportation, the California Transportation Commission, or a report that is published to the City's website). This master document should represent the single source of truth (SSOT) for all internal and external parties. The SSOT should centralize all data into one location to ensure consistency and accuracy. This practice assists in making data-driven decisions and sharing consistent information. This SSOT for all reporting on CIP street projects will enable the Department to identify opportunities for streamlining, yield insights into the delivery of CIP street projects, and support the creation and consistent use of uniform, standard methods and tools for tracking, reporting, and maintain financial and performance data for CIP street projects.	H	20	Agree	Public Works Department	The Department recognizes the value of a master document consolidating all CIP reporting to enhance succession planning and ensure continued accuracy of required reporting. Additionally, the Department recognizes that a single source of truth (SSOT) for CIP Streets data is needed, as current data collection relies on manual quarterly updates from multiple sources. A real-time, accessible data source would significantly improve efficiency and reporting capabilities. Establishing and maintaining this SSOT model will require additional staff resources, which will be requested in the FY 26 Proposed Budget. Additionally, the Department's Communication Information Division is in the final stages of completing individual Project Charters, which will establish the Single Source of Truth (SSOT) for all CIP project communications. This added layer of data collection and reporting will enhance the efficiency of updating and maintaining the Project Charters moving forward.	September 30, 2026
2.2a	Define the standard criteria and metrics necessary for developing aggregate reporting on project variances. The Department should track final project variances and variances by phase (e.g., design and construction).	H	27	Agree	Public Works Department	The Department will analyze a sample of projects completed over the past five years to assess average variance across the project lifecycle, including planning, design, construction, and closeout. Recently completed corridor projects, such as Market and Artesia, and projects nearing construction, such as Studebaker and Anaheim, will serve as benchmarks for planning and designing future corridors. To implement and maintain these standards, additional staff resources will be required, which will be requested in the FY 26 Proposed Budget. Additionally, the Department's project and program managers do utilize benchmarking information from regional partners. The City is an active member of the California Multi-Agency CIP Benchmarking Study Group as well as active in the American Public Works Association. Engineering and Project Management staff attend various regional and national conferences to discuss industry standards and benchmarking, among other related topics.	September 30, 2026
2.2b	Develop reporting to track staff time allocated to each project phase (by hours and as a percentage of construction). This report should be utilized by project managers in the future to improve the accuracy of scheduling and estimating project needs.	H	27	Agree	Public Works Department	Department administrative staff currently have access to financial reports detailing staff time allocated to each project phase. While Project Managers and administrative analysts can conduct these analyses, the practice is not standardized. The Department recognizes the value of implementing this approach consistently across Streets CIP Programs. To support this effort, the Capital Budget Division will develop and implement a standardized internal project closeout report, providing Project Managers with a summary of staff time charged by project phase. This report and procedure will be included in the Department's Project Management Manual and will be a focus in subsequent project manager trainings.	June 30, 2026

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2.2c	Develop accurate forecasting models to ensure that yearly expenditures align with yearly program allocations. Prioritize Arterial Street Rehabilitation and Arterial Corridor enhancement projects to spend yearly budget allocations and decrease prior year project rollover funds.	H	27	Agree	Public Works Department	The Department's CIP spending has grown substantially over the past five years. As outlined in Table 2.3, in FY 23, CIP Streets expenses in recent years have exceeded the annual allocated budget; similar for FY 24. This demonstrates a significant increase in spending, including the utilization of accrued funding from previous years as well as grant funding that is not appropriated within the annual CIP budget, as grant funding is appropriated by City Council throughout the year as grants are awarded and accepted. However, the Department would like to clarify certain aspects of the narrative as well as specific language used in the explanation of Table 2.3. This table accurately reflects the annual CIP expenditures in comparison to the annual CIP budget allocation for each CIP Program individually. However, the reported totals of 608% for FY 23 and 592% for FY 24 are derived from an average of the individual CIP Program averages, rather than a direct comparison of total annual expenditures to the total annual allocated budget. This methodology is misleading, as it does not provide an accurate representation of overall spending relative to budget allocation. For example, in FY 23, Table 2.3 indicates that the Bridge Program spent 3,431% more in actual expenditures than its annual allocated budget. This figure results from the fact that while the Bridge Program's annual CIP budget allocation in FY 23 was $1.35 million, its total expenditures for the year amounted to $15 million. The discrepancy arises because the Bridge Program includes multiple projects funded through external grants, which are not reflected in the annual CIP budget allocation, as previously noted. Since the Bridge Program's high expenditure percentage is factored into the calculation of total averages—without considering the actual financial figures—it skews the overall percentages reported in the table. Due to the methodology used in these calculations, the Department would like to emphasize that the CIP is not exceeding the total approved budget for projects, programs, or the overall CIP. Rather, all expenditures remain within the approved all-years funding and appropriations. As the CIP operates on an all-years funding model, any unspent funds from a given fiscal year are carried forward into subsequent years. This structure ensures that all CIP expenditures remain within their approved multi-year funding allocations and appropriations. However, when analyzed through an annualized lens, this data may appear misleading, as it does not fully account for the multi-year nature of CIP funding and expenditures.Additionally, annual CIP expenditure data will include grant funded expeditures, whereas the annual CIP budget allocation will not include these figures, as explained above, which can skew this data. The rollover of arterial funding is due to earmarks for specific projects that are in the final design stages and approaching the Bid & Award and Construction phases. Once these projects enter construction, the funds in the Department's project ledger will be fully expended. This includes funding for the Studebaker Corridor ($40 million), Anaheim Corridor ($20 million), Shoreline Drive Realignment ($32 million), Clark Avenue ($8.3 million), Del Amo Boulevard ($8.1 million), and Long Beach Boulevard ($5.4 million). Once these projects' construction phases are fully funded and presented to City Council, the funding will be expended as the construction phase progresses. Additionally, the prior year rollover include funds for projects in active construction that have not yet been fully completed or billed. These include Artesia Great Boulevard ($20 million), Market Corridor ($2.1 million), and the ADA Curb Ramp Improvements Program ($11.7 million). The sampling of active projects itemized above total over $140 million of funding that is being held for projects currently in progress. This funding can not be reallocated, as it is essential for the continuation of these projects. The Department conducts regular analyses to ensure that no funds lapse or expire and that CIP programs are expending funds at an expected rate. Furthermore, FY 25's beginning balance reflects a decrease of $20 million from FY 24, indicating a significant reduction in the backlog. In contrast, FY 23 to FY 24 saw an increase of approximately $93 million in accrued funding. This is outlined on Table 4.4. It is also important to note that the funding rollover consists of earmarked funds, which are subject to specific stipulations. For example, LA Metro Prop A funding can only be used for bus stop improvements and public transit programs, and funds allocated to Arterial Streets cannot be redirected to Residential Streets or other programs. Each funding source has defined spending restrictions.	Currently Implemented
2.3a	Utilize multiple methods of estimating the construction cost of projects to ensure accuracy and timely information. Unit pricing should be regularly updated when projects are bid to ensure future projects can utilize accurate historical bid-based information.	M	29	Agree	Public Works Department	The Department's project managers employ various methods for project design and cost estimation, which can include utilizing prior bid unit pricing. For more complex projects, the Department's contracts with subject matter experts to provide cost estimations as part of their design services. In some instances, it would not appropriate for City staff to provide cost estimates. The City contracts with design consultants to provide cost estimates and options for complex or specialized projects, such as Arterial Corridor projects. Additionally, the Department will explore options to develop a centralized database to facilitate data sharing among project managers, as referenced above in response to 2.1c.	Currently Implemented
2.3b	Implement metrics and data sharing to report the trends and accuracy of engineers' estimates to the construction bids.	M	29	Agree	Public Works Department	The Department's project managers and administrative analysts currently have the capability to perform these analyses; however, the metrics are not systematically collected or reported. Effective immediately, this practice will be standardized for all future construction bids. This procedure will be included in the Department's Project Management Manual and will be a focus in subsequent project manager trainings. Establishing and maintaining a shared database for staff access will require additional resources, which will be requested in the FY 26 Proposed Budget.	September 30, 2026
2.4a	Continue to monitor expenditures of Measure A Bond funds. If quarterly expenditures drop below $2.26 million before May 2026, the Department should immediately determine if the average expenditures from past quarters and forecasted expenditures for projects will result in meeting the May 2026 deadline.	L	31	Agree	Public Works Department	The Department maintains strong internal reporting and management of Measure A Bond funding, ensuring expenditures remain on track to meet all required deadlines.	Currently Performing
2.4b	Maintain current expenditure levels to ensure all bond proceeds are expended before the May 2026 and May 2028 deadlines.	L	31	Agree	Public Works Department	The Department maintains strong internal reporting and management of Measure A Bond funding, ensuring expenditures remain on track to meet all required deadlines.	Currently Performing
3.1a	Develop a policy for the cadence and content of required project updates from project managers and a procedure for providing relevant updates.	M	34	Agree	Public Works Department	The Community Information Division is finalizing a department-wide communication strategy, including new tools to better manage, track, and communicate infrastructure projects. To further support these efforts, the Department is introducing a standard Project Charter process, which captures key project details, outlines important considerations, and establishes clear messaging from the outset. This tool helps keep PW teams, leadership, and stakeholders aligned with accurate and up-to-date information. An internal policy for the frequency and content of project updates will be developed in conjunction with this communication strategy.	Currently Underway
3.1b	Develop a Project Status Report template to be used for all projects and updated monthly. These Project Status Reports should be uniform so that they can roll up to an aggregated program-level report.	H	34	Agree	Public Works Department	Public Works is finalizing a department-wide communication strategy, including new tools to better manage, track, and communicate projects. This includes individual, project specific Project Charter, which acts as the Department's single source of truth for each CIP project. The Department is also developing a renewed project status report template for external communication. Additionally staff resources will be requested in FY 26 Proposed Budget to implement project status reports which are updated monthly and made available to the public.	Currently Underway
3.1c	Implement capital project software to manage capital projects and enhance the ability to generate automated, standardized reporting.	H	34	Agree	Public Works Department	Similar to Recommendation 2.1b, the Department agrees that capital project software would improve automated and standardized reporting, along with other project management benefits. The Department will explore further options for transitioning staff to project management specific software, such as Microsoft Project.	September 30, 2026

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3.2a	Develop a public education campaign to address project selection, progress, and equity. This should include a strategic approach to the communication of the streets program that includes policies and procedures for items such as the timing of publishing Project Status Reports to elected officials and residents of Long Beach, guidelines on when updates are expected and who is responsible, and clear expectations on the overall accountability for the communications plan.	M	43	Agree	Public Works Department	The Department is conducting the 2025 Pavement Condition Index and will soon begin developing the next five-year street improvement plan. As part of this process, a public outreach campaign will be incorporated to address project selection, progress, and equity. The Pavement Management Plan development process does utilize equity metrics when selecting streets for the next plan. Currently, infrastructure planning and updates are presented on an annual basis to the Budget Oversight Committee and City Council as part of the Budget Development process, as well as to the Measure A Citizen's Oversight Committee each quarter. Furthermore, Department developed the lbelevate28.com website which showcases the Elevate '28 Infrastructure Investment Plan in detail, including budget, scope, construction start, completion date, and more for individual projects. This data is updated each quarter. Additionally, the website includes quarterly updated maps which show the street projects completed to date, as well as the prior 10 years of completed street projects. Additionally, new templates and approaches are being implemented to better inform the community about road work, with an emphasis on building out supporting web pages to serve as a central resource for residents. The Department is also evaluating internal processes and reporting methods to ensure clear policies and procedures for communicating project updates, including the timing of Project Status Reports, guidelines for updates, and overall accountability for the communications plan that is outlined in a standard project charter. As part of this effort, a comprehensive FAQ is being developed to provide residents with clear, accessible information on street projects, timelines, prioritization and decision-making processes.	Immediate
3.2b	Consider partnering with the Communications Information Bureau to produce a quarterly digital newsletter that can be posted to the City's social media sites and distributed to the Department's mailing list. This newsletter should include project updates, upcoming project details, and contact information for questions or concerns from the public.	M	43	Agree	Public Works Department	The Department has prioritized strengthening both internal and external communications, including the development of the Elevate '28 website. This five-year infrastructure plan is one of the most comprehensive municipal infrastructure resources in the region, and the dedicated website provides residents with detailed project information and updates. The Department will continue to explore collaborations with the Office of Public Affairs and Communications (OPAC) in the City Manager's Office to further enhance public engagement. This may include regular updates through LinkLB, with new efforts to maintain and refine project-specific contact lists to ensure timely and targeted communication.	Immediate
3.2c	Provide a yearly report to the City Council through a presentation that includes project status data, PMP updates, and a work plan for the next 12 – 18 months. This update could be part of the yearly budget process.	M	43	Agree	Public Works Department	The Department presents the Proposed CIP Budget to the City Council annually as part of the budget development process, including updates on the Street CIP Programs. The Department will propose an expansion of this presentation to include additional details on Street CIP Programs, project updates, a 2025 PMP update, and update on planned and completed streets in the current five year infrastructure plan.	Immediate
3.2d	Utilize PowerBI to provide consistent and accurate reporting across all websites and data sources. The current PowerBI project tracker has updated data in some project categories but is lacking in others.	M	43	Agree	Public Works Department	The Department has successfully utilized PowerBI to showcase data on the City's Elevate '28 website and Contracts Database. The Department will continue to implement the use of PowerBI across websites and data sources to enhance data flow efficiency and provide staff and the public with real-time access to critical information.	Ongoing
3.3a	Implement a programmatic reporting system to manage, track, and communicate the projects more effectively to staff and stakeholders.	M	44	Agree	Public Works Department	The Community Information Division is implementing a department-wide communications strategy to enhance the management, tracking, and communication of projects for both staff and stakeholders. A key component of this strategy is the newly launched Public Works Communications Hub, a robust SharePoint site designed to centralize all communications-related materials for easy reference and collaboration. This platform ensures that critical documents, project updates, and messaging are readily accessible, streamlining workflows and improving internal coordination. To further support these efforts, the Department is introducing a standard Project Charter process, which captures key project details, outlines important considerations, and establishes clear messaging from the outset. This tool helps keep PW teams, leadership, and stakeholders aligned with accurate and up-to-date information. Additionally, a department-wide calendar is being developed to provide a high-level overview of ongoing projects and upcoming events. Beyond these initiatives, the Community Information Division is continuously identifying opportunities to streamline communication processes, particularly in collaboration with partner departments such as OPAC, TID and Reprographics. Lastly, the Department developed the lbelevate28.com website which showcases the Elevate '28 Infrastructure Investment Plan in detail, including budget, scope, construction start, completion date, and more for individual projects. This data is updated each quarter. Additionally, the website includes quarterly updated maps which show the street projects completed to date, as well as the prior 10 years of completed street projects. These efforts are part of a broader commitment to ensuring that project information is transparent, well-organized, and easily accessible to those who need it.	Immediate
3.3b	Develop a specialized position with primary responsibility for the Department's reporting.	M	45	Agree	Public Works Department	The Department recognizes the necessity of establishing specialized positions to manage internal data, develop automated data systems, create public-facing reports, and collaborate with the CIP teams across various Bureaus. Given the growing complexity and scope of these responsibilities, the Department will be requesting additional staff resources in the Proposed Budget for Fiscal Year 2026. This will ensure adequate support to effectively meet the evolving demands of data management and program coordination.	March 31, 2026
3.3c	Develop and maintain a master list and schedule that will serve as the Department's single source of data for all external reporting.	M	45	Agree	Public Works Department	Similar to Recommendation 2.1c, the Department acknowledges the need for a Single Source of Truth (SSOT) for the Department's CIP Streets data. Currently, this data is manually gathered on a quarterly basis from various sources, which is time-consuming and inefficient. Establishing a real-time data source that can be accessed for on-demand reporting and statistics would significantly streamline operations. The implementation and ongoing maintenance of this SSOT data model will require additional staff resources, which will be requested in the Proposed Budget for Fiscal Year 2026.	September 30, 2026
3.4a	Work with the Program Specialist and Administrative Analyst III to develop and implement a communications plan focused on educating the public and reporting the metrics of the Streets CIP.	L	45	Agree	Public Works Department	The Department is committed to enhancing public education and transparency around the Streets CIP. The existing Pavement Management Program (PMP) website serves as a key resource, providing information on the various types of Streets CIP work, completed street improvements over the past decade, the latest Pavement Condition Index scores for each City street segment, and planned projects within the current five-year infrastructure plan. To improve accessibility and engagement, the Department will implement a comprehensive communications plan that includes synthesizing the existing PMP website content into a more digestible and community-friendly format on the City's website. The plan will also focus on effectively reporting Streets CIP metrics, ensuring residents have clear, up-to-date information on infrastructure investments and progress.	Next Project Management Plan (PMP) Update

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4.1a	Establish a consistent department-wide method to track staff and consultant hours by project phase, including both planned and actual time. Use this data to develop a staffing model that forecasts workload and staffing needs for future CIP and IIP plans.	M	53	Agree	Public Works Department	Department administrative staff currently have access to financial reports detailing staff time and consultant costs allocated to each project phase. While project managers and administrative analysts can perform these analyses as needed, the practice is not standardized. Recognizing its value, the Department will work to standardize this process across the Streets CIP Programs where feasible. To support this effort, the Capital Budget Division will develop a training program to assist staff in forecasting staff costs within their respective CIP Programs. This information will be included in the Department's Project Management Manual and will be a focus in subsequent project manager trainings. The Department acknowledges the information presented in Table 4.6 and would like to provide additional context regarding its staffing model for delivering Streets CIP projects. The Department utilizes a mixed staffing approach that includes both City staff and contracted professionals, such as project designers, construction managers, project managers, and various subject matter experts, to ensure the successful execution of these projects. It is important to note that comparing the duties and costs of City staff to those of contracted project staff is not a direct comparison, as they serve distinct roles. Contracted staff bring specialized expertise that is not readily available within the Department and is essential for the successful delivery of complex infrastructure projects. Additionally, given the volume and scope of work required, the Department does not have the internal capacity to complete all design work in-house. Contracting certain project functions allows the Department to efficiently manage workload demands while leveraging external expertise to ensure high-quality project outcomes.	September 30, 2026
4.1b	Develop methods for reporting and analyzing staff time data as a percentage of construction cost. Use this data to develop a staffing model that forecasts workload and staffing needs for future CIP and IIP plans and to enhance cost-effectiveness and project delivery efficiency.	M	53	Agree	Public Works Department	Department administrative staff currently have access to financial reports detailing staff time and costs allocated to each project phase. While project managers and administrative analysts can perform these analyses as needed, the practice is not standardized. Recognizing its value, the Department will work to standardize this process across the Streets CIP Programs where feasible. To support this effort, the Capital Budget Division will develop a training program to assist staff in forecasting staff costs within their respective CIP Programs. The implementation and ongoing forecasting assignment will require additional staff resources, which will be requested in the Proposed Budget for Fiscal Year 2026.	June 30, 2026
4.1c	Set percentage targets for in-house and consultant-led projects for each program and track the actual work completed in-house versus outsourced. Incorporate these targets into the staffing model used for workload analysis.	M	53	Agree	Public Works Department	The Department will consider this recommendation; however to perform this analysis and track progress, the Department will need additional resources, which will be requested in the Proposed Budget for Fiscal Year 2026. Additionally, the Department wishes to acknowledge that various CIP Programs require a balance of in-house staff as well as subject matter expert consultants. This balance varies program by program, and project by project. Not all project management, construction management, and design services can be or should be performed by City staff, as complex projects require a specialized subject matter expert.	TBD
4.2a	Enhance project management skills by requiring training for all project managers, reclassifying engineering positions to allow for alternate qualifications such as a PMP Certification, or adding a Project Manager position to each engineering team to support the engineering project managers.	L	54	Agree	Public Works Department	The Department agrees that further project management training opportunities offered to project managers and civil engineers is a needed effort. The Department does want to acknowledge the Department's Project Management Manual, which was developed utilizing the Department's best practices surrounding project management procedures. Efforts are underway to refresh this manual and include in subsequent onboarding for staff with project management responsibilities Department-wide. The Department will explore the potential of adding additional Capital Project Coordinator (CPC) positions to the various Streets CIP Programs. However, the fully loaded cost to add five CPCs to the Department (one per major CIP Streets Program) would total roughly $950,000 annually. Staff will evaluate the need for additional CPC's within each team and will need to evaluate if the CIP Programs can absorb the additional ongoing costs.	Immediate
5.1a	The greatest opportunity to increase the PCI is to allocate additional funding to the City's Minor Network. Future budgets should be reviewed for opportunities to re-allocate additional funds to the Minor Network per the PMP funding recommendations.	H	58	Disagree	Public Works Department	While the Department acknowledges the need for additional CIP funding in the Residential Street Program, it is unable to allocate ineligible funds to the program. For example, in FY 25, the Residential Street Program is funded through local Measure A bond funding and RMRA (SB1) funding from the State, while the Arterial Streets Program is funded by LA Metro Prop A (ineligible for Residential Streets), LA Metro Prop C (ineligible for Residential Streets), AB 2766 funding (ineligible for Residential Streets), and Transportation Impact Fees (ineligible for Residential Streets), among other sources, including grant awards for specific Arterial Street projects, which can not be reallocated to the Residential Street Program. Department staff will work internally to explore the reprogramming of funding eligible for both Residential Streets and Arterial Street Improvements (such as LA Metro Measure R, LA Metro Measure M, State Gas Tax, and Long Beach Measure A) in future CIP budgets and the impacts to the current Arterial Street program planned projects. During the next Pavement Management Plan (PMP) development, the Department will explore and consider various funding scenarios for the various Streets CIP needs. It is also important to emphasize that the current Street CIP funding methodology, as presented to City Council, is designed to balance both the rehabilitation of streets in very poor to poor condition and the preservation of streets in fair to good condition. This mixed approach is rooted in industry best practices and cost-effective asset management strategies. The most fiscally responsible way to manage a roadway network is to prioritize timely maintenance interventions, as delaying repairs often results in exponentially higher costs. Preserving streets while they are still in fair to good condition is essential to extending their lifespan at a lower cost, thereby reducing the need for more costly reconstructions in the future. If the City were to shift its focus exclusively to rehabilitating streets in very poor to poor condition, the high cost of these projects would significantly limit the number of streets that could be addressed each year. Additionally, failing to maintain streets in fair to good condition would accelerate their decline, ultimately increasing the number of streets requiring costly rehabilitation and placing additional strain on the City's infrastructure budget. For reference, the cost to slurry seal is $2/ft2 compared to $30/ft2 for full reconstruction. A key component of the City's current approach is the work performed by the in-house Crack & Slurry Seal team within the Department of Public Works. This team is responsible for applying crack and slurry seal treatments to streets in good condition, which can extend their service life by an estimated 5 to 7 years before significant degradation occurs. Since Fiscal Year 2023, over 5 million square feet of slurry seal has been applied across the City, contributing to long-term cost savings and improved roadway conditions. Additionally, the team continues to evaluate and test new materials to enhance the effectiveness of slurry seal applications, further supporting the City's commitment to proactive infrastructure maintenance. The Department remains committed to maintaining a balanced and data-driven approach to Street CIP funding that ensures both immediate rehabilitation needs and long-term preservation strategies are met. This methodology is critical to maximizing the City's investment in its roadway network while providing safe and reliable streets for all residents. If City Council allocates additional general capital to the Residential Streets Program, the Department will use this funding to further improve the City's Residential Streets PCI. Staff will consider the possibility of proposing a street specific land secured infrastructure bond to fully fund the needed residential pavement rehabilitation. Several cities throughout California have issued land secured infrastructure bonds to finance the construction of roads, utilities, parks, etc.	n/a

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5.2a	The Minor Network's PMP project maintenance backlog was 41% in 2023. Additional funding for the minor network should be considered as a one-time influx to reduce the PMP project maintenance backlog and increase the PCI. Once the backlog is reduced and PCI has increased, maintenance funding to stabilize the PCI will be required (slurry and crack seal). To reduce the current backlog in the minor network and increase the PCI, funding levels should be between $44.3 million and $72 million per year.	H	62	Agree	Public Works Department	In FY 23, $30.8 million was allocated towards Residential Streets and Alleys (a large spike due to the Measure A Bond funding). In FY 24, $14 million was allocated towards the programs. In FY 25, the amount was $28 million (another large spike due to Measure A bond funding). This is an average of $24.3 million of annual allocation. Staff will explore options to shift funding from the Arterial Program to the Residential Streets Program. Staff will consider the possibility of proposing a street specific land secured infrastructure bond to fully fund the needed residential street rehabilitation cost of $44-72 million annually. Several cities throughout California have issued land secured infrastructure bonds to finance the construction of roads, utilities, parks, etc. The Department does want to acknowledge that the City is investing more funding into the City's street infrastructure than at any time in recent history. In Fiscal Years 2023 and 2024, the Department spent over $87 million and $83 million, respectively, on Streets CIP projects compared to $48 million in Fiscal Year 2022. This significant increase in spending is directly attributed to the historic funding offered in the Elevate '28 Infrastructure Investment Plan, which enabled the Department to establish a comprehensive five-year infrastructure plan and includes an influx of Measure A bond funding. As a historical example, in FY 04, the City invested less than $2 million in Residential Streets CIP; in FY 23, the City invested $28.3 million in the same program. In FY 24 alone, the Department completed over 135 lane miles of street and alley improvements, slurry sealed over 6 million ft2, installed nearly 7 miles of bicycle lanes, filled over 48,000 potholes, replaced nearly 4,000 traffic and street signs, trimmed over 17,000 trees, restriped 70 miles of pavement, and reviewed 2,000 traffic control plans.	September 30, 2025
5.2b	The Major Network's PMP project maintenance backlog was 17% in 2023. The recommended budget is between $23.8 million and $46.7 million to maintain the current PMP project maintenance backlog and increase PCI. At $23.8 million, the network will remain within the PCI target of 60 and the backlog of 17%. Funding for the major network should remain at or above $23.8M to ensure the PCI target is consistently met and the backlog does not increase over time.	H	62	Agree	Public Works Department	In FY 23, $17 million was allocated towards the Arterial Streets Program. In FY 24, $15 million was allocated towards the program. In FY 25, the amount was $21 million. This is an average of $17.7 million of annual allocation. There is an additional annual CIP allocation to the Arterial Corridor Program, which receives an additional $10-20 million annually; however not all costs of Arterial Corridor projects are related to pavement rehabilitation. The Arterial Corridor Program is responsible for designing and constructing the multi-modal transportation projects, including safe streets elements, protected bikeways and pedestrian travel, enhanced bus lanes, stops, and landings, street lighting, ADA enhancements, sidewalk rehabilitation, and median improvements. Additionally, the Arterial Corridor Program is funded with grant funding specific to each individual project and scope. This grant funding, which can make up a majority of an Arterial Corridor project's budget, is unable to be reallocated to pavement rehabilitation Arterial Street projects. Staff will consider the possibility of proposing a street specific land secured infrastructure bond to fully fund the needed arterial pavement rehabilitation cost of $24-47 million annually. Several cities throughout California have issued land secured infrastructure bonds to finance the construction of roads, utilities, parks, etc.	September 30, 2025
5.2c	The current funding backlog for the road network projects, including Arterial Corridors, Arterial Streets, and Residential Streets, totals over $150 million. The impact of these funds on the PCI is not easily estimated due to incomplete information on project completion. Prior-year projects and funds should be prioritized to ensure that the intended implications for the City's overall PCI and maintenance backlog are achieved.	H	62	Agree	Public Works Department	The Department's CIP spending has grown substantially over the past five years. As outlined in Table 2.3, in FY 23, CIP Streets expenses in recent years have exceeded the annual allocated budget; similar for FY 24. This demonstrates a significant increase in spending, including the utilization of accrued funding from previous years as well as grant funding that is not appropriated within the annual CIP budget, as grant funding is appropriated by City Council throughout the year as grants are awarded and accepted. However, the Department would like to clarify certain aspects of the narrative as well as specific language used in the explanation of Table 2.3. This table accurately reflects the annual CIP expenditures in comparison to the annual CIP budget allocation for each CIP Program individually. However, the reported totals of 608% for FY 23 and 592% for FY 24 are derived from an average of the individual CIP Program averages, rather than a direct comparison of total annual expenditures to the total annual allocated budget. This methodology is misleading, as it does not provide an accurate representation of overall spending relative to budget allocation. For example, in FY 23, Table 2.3 indicates that the Bridge Program spent 3,431% more in actual expenditures than its annual allocated budget. This figure results from the fact that while the Bridge Program's annual CIP budget allocation in FY 23 was $1.35 million, its total expenditures for the year amounted to $15 million. The discrepancy arises because the Bridge Program includes multiple projects funded through external grants, which are not reflected in the annual CIP budget allocation, as previously noted. Since the Bridge Program's high expenditure percentage is factored into the calculation of total averages—without considering the actual financial figures—it skews the overall percentages reported in the table. Due to the methodology used in these calculations, the Department would like to emphasize that the CIP is not exceeding the total approved budget for projects, programs, or the overall CIP. Rather, all expenditures remain within the approved all-years funding and appropriations. As the CIP operates on an all-years funding model, any unspent funds from a given fiscal year are carried forward into subsequent years. This structure ensures that all CIP expenditures remain within their approved multi-year funding allocations and appropriations. However, when analyzed through an annualized lens, this data may appear misleading, as it does not fully account for the multi-year nature of CIP funding and expenditures.Additionally, annual CIP expenditure data will include grant funded expeditures, whereas the annual CIP budget allocation will not include these figures, as explained above, which can skew this data. The rollover of arterial funding is due to earmarks for specific projects that are in the final design stages and approaching the Bid & Award and Construction phases. Once these projects enter construction, the funds in the Department's project ledger will be fully expended. This includes funding for the Studebaker Corridor ($40 million), Anaheim Corridor ($20 million), Shoreline Drive Realignment ($32 million), Clark Avenue ($8.3 million), Del Amo Boulevard ($8.1 million), and Long Beach Boulevard ($5.4 million). Once these projects' construction phases are fully funded and presented to City Council, the funding will be expended as the construction phase progresses. Additionally, the prior year rollover include funds for projects in active construction that have not yet been fully completed or billed. These include Artesia Great Boulevard ($20 million), Market Corridor ($2.1 million), and the ADA Curb Ramp Improvements Program ($11.7 million). The sampling of active projects itemized above total over $140 million of funding that is being held for projects currently in progress. This funding can not be reallocated, as it is essential for the continuation of these projects. The Department conducts regular analyses to ensure that no funds lapse or expire and that CIP programs are expending funds at an expected rate. As stated in the audit's opening Executive Summary, "[The Audit's] overarching goal is to ensure the City is appropriately spending or using funds from financial sources within the timeframes and parameters of those funding mechanisms." The Department of Public Works affirms that this audit did not find any instances where Street CIP financial sources were spent outside of the legal timeframes or outside of the parameters of the individualized funding sources, of which there are over a dozen external funding sources contributing to the Streets CIP programs. The Department stands by its strong financial controls and spending mechanisms.	Currently Implemented

MANAGEMENT RESPONSE AND ACTION PLAN

Public Works

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6.1a	Implement a project management software to automate the data collection needed for reporting, reducing staff time spent collecting the information and redundancies in reporting and risk of error.	H	66	Agree	Public Works Department	Similar to Recommendation 2.1b, the Department agrees that capital project software would improve automated and standardized reporting, along with other project management benefits. The Department will explore further options for transitioning staff to project management specific software, such as Microsoft Project. Additionally, the Community Information Division is implementing a department-wide communications strategy to enhance the management, tracking, and communication of projects for both staff and stakeholders. A key component of this strategy is the newly launched Public Works Communications Hub, a robust SharePoint site designed to centralize all communications-related materials for easy reference and collaboration. This platform ensures that critical documents, project updates, and messaging are readily accessible, streamlining workflows and improving internal coordination. To further support these efforts, the Department is introducing a standard Project Charter process, which captures key project details, outlines important considerations, and establishes clear messaging from the outset. This tool helps keep PW teams, leadership, and stakeholders aligned with accurate and up-to-date information. Additionally, a department-wide calendar is being developed to provide a high-level overview of ongoing projects and upcoming events. Beyond these initiatives, the Community Information Division is continuously identifying opportunities to streamline communication processes, particularly in collaboration with partner departments such as OPAC, TID and Reprographics. These efforts are part of a broader commitment to ensuring that project information is transparent, well-organized, and easily accessible to those who need it. The implementation and ongoing work to maintain these efforts will require additional staff resources, which will be requested in the Proposed Budget for Fiscal Year 2026.	September 30, 2025
7.1a	Incorporate an equity assessment, with guidance from the City's Equity Office, into the project "BlueSheet" form for Project Managers to utilize while developing initial prioritization criteria and perimeters for street projects.	M	84	Disagree	Public Works Department	The Project Blue Sheet is an internal staff cost estimator and project budget report which staff utilize to fully estimate the cost of the project, inclusive of planning, design, construction, contingencies, consultant costs, inspection costs, surveying costs, indirect overhead costs, staff costs, etc. While the Department is open to partnering with the City's Equity Office for the development of the next Pavement Management Plan (PMP) and agrees with a prioritization of equity when programming the Streets CIP projects, the Project Blue Sheet would not be the appropriate tool to develop equity prioritization as the Project Blue Sheet is an internal budgeting report for individual projects. The Project Blue Sheet has no involvement in project prioritization, outside of fully loaded project cost estimation. It is also important to emphasize that the current Street CIP funding methodology, as presented to City Council, is designed to balance both the rehabilitation of streets in very poor to poor condition and the preservation of streets in fair to good condition. This mixed approach is rooted in industry best practices and cost-effective asset management strategies. The most fiscally responsible way to manage a roadway network is to prioritize timely maintenance interventions, as delaying repairs often results in exponentially higher costs. Preserving streets while they are still in fair to good condition is essential to extending their lifespan at a lower cost, thereby reducing the need for more costly reconstructions in the future. If the City were to shift its focus exclusively to rehabilitating streets in very poor to poor condition, the high cost of these projects would significantly limit the number of streets that could be addressed each year. Additionally, failing to maintain streets in fair to good condition would accelerate their decline, ultimately increasing the number of streets requiring costly rehabilitation and placing additional strain on the City's infrastructure budget. For reference, the cost to slurry seal is $2/ft2 compared to $30/ft2 for full reconstruction. A key component of the City's current approach is the work performed by the in-house Crack & Slurry Seal team within the Department of Public Works. This team is responsible for applying crack and slurry seal treatments to streets in good condition, which can extend their service life by an estimated 5 to 7 years before significant degradation occurs. Since Fiscal Year 2023, over 5 million square feet of slurry seal has been applied across the City, contributing to long-term cost savings and improved roadway conditions. Additionally, the team continues to evaluate and test new materials to enhance the effectiveness of slurry seal applications, further supporting the City's commitment to proactive infrastructure maintenance. The Department remains committed to maintaining a balanced and data-driven approach to Street CIP funding that ensures both immediate rehabilitation needs and long-term preservation strategies are met. This methodology is critical to maximizing the City's investment in its roadway network while providing safe and reliable streets for all residents. The Pavement Management Plan development process does utilize equity when selecting streets for the next plan. Utilizing this process, and demonstrated by the auditor's report, the City's investment is deemed to be equitable. If the City Council is interested in reconsidering the City's strategic plan for how the Department approaches the Pavement Management Plan, the Department is more than willing to revisit the plan and discuss new objectives.	n/a
7.1b	Incorporate equity metrics and outcomes into the specifications for ongoing evaluation and monitoring of the Pavement Management Program. Examples of equity metrics that can be applied to measuring the success of the PMP include the following: 1. Measure the spread of PCI within a given Council District to identify inequities between Council Districts. 2. Prioritize assessment of the PCI near essential services like hospitals, schools, employment centers, and transit facilities. 3. Assess the level of investment relative to the level of need (based on PCI) for each Council District. This will enable the City to strategically make proportionate investments relative to need throughout the City.	M	84	Agree	Public Works Department	The Department will share this feedback with the consultant that prepares the Pavement Management Plan and reviews the City's Pavement Condition Index. The Pavement Management Plan development process does utilize equity metrics when selecting streets for the next plan. The Department will request additional equity analyses in subsequent biannual updates to the City's PMP.	Next Project Management Plan (PMP) Update

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7.1c	Develop a communication plan and strategy to involve stakeholders representing equity-focused demographics during the development of the PMP.	M	84	Agree	Public Works Department	The Department is working to enhance public engagement and transparency in the development of the 2025 Pavement Condition Index and the next five-year Streets CIP plan. As part of this effort, a comprehensive public outreach campaign will be launched to involve stakeholders representing equity-focused demographics in discussions on project selection, progress, and equity considerations. This campaign will include targeted outreach efforts, such as presentations at neighborhood and association meetings, translated materials to ensure accessibility, and outreach booths at key community events. The Department will also partner with City Council Offices and the Department of Community Development to directly engage constituents and expand community participation. Additionally, the Department recognizes the need to improve public understanding of street selection criteria and treatment types (e.g., slurry seal vs. full rehabilitation). To ensure transparency and clarity, these elements will be a key focus in the presentation of the upcoming five-year PMP, equipping stakeholders with the information they need to stay informed and engaged in the process. Public Works is involved in and presents directly to the public year-round during community events, such as the Budget Development community meetings, both before the annual budget is developed as well as once the proposed budget has been released. Public Works showcases the current PMP and Elevate '28 plan at these events. Additionally, the Department showcases the PMP and Elevate '28 Plan at events such as the West Side Promise events, presentations to community groups, and presentations to the Budget Oversight Committee, City Council, and the Measure A Citizen's Oversight Committee every quarter highlighting recently completed projects, completed street statistics, as well as updates on projects in progress.	Next Project Management Plan (PMP) Update
7.1d	Organize stakeholder meetings throughout the PMP development to address the needs of underserved communities. These meetings should include leaders and representatives from block groups with an EFA designation and consider the relative project count.	M	84	Agree	Public Works Department	The Department is committed to inclusive and equitable engagement throughout the development of the 2025 Pavement Condition Index and the next five-year Streets CIP plan. As part of this effort, a comprehensive public outreach campaign will be launched to address project selection, progress, and equity considerations, with a focus on reaching underserved communities, including those in EFA-designated areas. This outreach will include presentations at neighborhood and association meetings, translated materials to ensure accessibility, and outreach booths at key community events. Additionally, the Department will partner with City Council Offices and the Department of Community Development to expand direct engagement with residents and community leaders. The Department also recognizes the importance of clarifying street selection criteria and treatment types (e.g., slurry seal vs. full rehabilitation) to improve transparency. These elements will be key components in the next five-year Pavement Management Plan (PMP), ensuring stakeholders have a clear understanding of how projects are selected and prioritized.	Next Project Management Plan (PMP) Update

Priority

H – High Priority - The recommendation pertains to a serious or materially significant audit finding or control weakness. Due to the seriousness or significance of the matter, immediate management attention and appropriate corrective action is warranted.

M – Medium Priority - The recommendation pertains to a moderately significant or potentially serious audit finding or control weakness. Reasonably prompt corrective action should be taken by management to address the matter. Recommendation should be implemented no later than six months.

L – Low Priority - The recommendation pertains to an audit finding or control weakness of relatively minor significance or concern. The timing of any corrective action is left to management's discretion.

Yellow areas - to be completed by the department