



Office of the City Manager

INFORMATION CALENDAR  
December 10, 2024

To: Honorable Mayor and Members of the City Council

From: Paul Buddenhagen, City Manager

Submitted by: Terrance Davis, Director, Public Works

Subject: Audit Status Reports: Fleet Replacement Fund Short Millions and Rocky Road: Berkeley Streets at Risk and Significantly Underfunded

INTRODUCTION

On November 19, 2020, the City Auditor published the [Rocky Road: Berkeley Streets at Risk and Significantly Underfunded Audit Report](#),<sup>1</sup> reviewing the funding resources to sufficiently maintain City streets, and asking if Public Works has clear policies and processes to guide paving decisions.

On June 2, 2021, the City Auditor published the [Fleet Replacement Fund Short Millions Audit Report](#),<sup>2</sup> reviewing the sufficiency of the fund to replace vehicles and asking if Public Works has key information necessary for managing the fleet program.

This is the third status report to City Council on the efforts made to implement the Audit Report's recommendations for both streets paving and fleet. Previous reports were issued on [November 3, 2022](#)<sup>3</sup> and [March 19, 2024](#).<sup>4</sup>

CURRENT SITUATION AND ITS EFFECTS

The street paving audit report included two findings and five recommendations for the Public Works Department and its Engineering Division and Administrative & Fiscal Services Division to review, implement and report to Council. As of this report, three recommendations have been implemented and two recommendations have been partly implemented. All recommendations currently tracking as partly implemented require

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<sup>1</sup> <https://berkeleyca.gov/sites/default/files/2022-01/Rocky-Road-Berkeley-Streets-at-Risk-and-Significantly-Underfunded.pdf>

<sup>2</sup> <https://berkeleyca.gov/sites/default/files/2022-01/Fleet-Replacement-Fund-Short-Millions.pdf>

<sup>3</sup> <https://berkeleyca.gov/sites/default/files/documents/2022-11-03%20Item%2044%20Audit%20Status%20Reports%20Fleet%20Replacement.pdf>

<sup>4</sup> <https://berkeleyca.gov/sites/default/files/documents/2024-03-19%20Item%2013%20Audit%20Status%20Reports%20%20Fleet%20Replacement%20Fund%20Short%20Millions.pdf>

funding source availability for appropriation to streets.

The fleet audit report noted two findings and twelve recommendations for the Public Works Department and its Equipment Management Division and Administrative & Fiscal Services Division to review, implement and report to Council. As of this report, there are updates to the status of ten of the twelve recommendations. The first set of seven recommendations were related to the underfunding of the Equipment Replacement Fund. One has been started and six have been partly implemented. The second set of five recommendations focused on Public Works having critical information available to inform management and decision making, and all five recommendations under this finding have been partly implemented.

These Audit Status Reports support the Strategic Plan Priority of advancing our goal to provide state-of-the-art, well-maintained infrastructure, amenities, and facilities. The attachment provides a detailed table of audit report recommendations, steps towards corrective action, and implementation progress updates. The next status report for the fleet and street paving audit are expected to be presented in Fall 2025.

#### BACKGROUND

Public Works' Engineering Division is responsible for capital projects to maintain over 216 centerline miles of streets in the City, while the Streets & Utilities Division handles day-to-day maintenance of those streets.

Public Works' Equipment Management Division manages the maintenance, purchase, and replacement of the City's 585 assets such as fleet vehicles, heavy duty trucks and large equipment, including public safety, fire, and alternative fuel vehicles and equipment.

The Administrative and Fiscal Services Division is responsible for the Department's budget and fiscal oversight and analytical support for routine and special projects in all Public Works operating divisions.

#### ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

Public Works Equipment Maintenance always endeavors to procure electric vehicles or the most fuel-efficient vehicles and equipment that are suitable for the required tasks. Equipment Maintenance also researches the feasibility and availability of fully electric vehicles and hybrid-electric powertrains to support the City's transition away from fossil fuels towards an all-electric fleet.

Enhanced streets provide significant benefits for all users and are a key focus of Public Works' Engineering Division. By improving infrastructure, we encourage more sustainable modes of transportation, such as bicycling and walking, which in turn help reduce greenhouse gas emissions and contribute to healthier, more vibrant communities. Additionally, these projects often incorporate green infrastructure elements, such as permeable pavement and bioswales, designed to filter pollutants and manage stormwater. This ensures that runoff is cleaner and better managed before it enters the Bay, helping to protect our waterways and support long-term environmental sustainability. Through these improvements, we prioritize the safety, accessibility, and

ecological health of our urban spaces.

POSSIBLE FUTURE ACTION

Public Works will continue to address the remaining two partly implemented recommendations in the street paving audit and the twelve started and partly implemented recommendations in the fleet audit.

FISCAL IMPACTS OF POSSIBLE FUTURE ACTION

In the mid-Biennial Budget update a new rate model for Equipment Maintenance will be proposed to include the cost of fleet electrification. It is estimated that the additional costs to convert the planned replacement vehicles to all electric in the next five years \$9,000,000. For the corresponding infrastructure required to support this conversion, the installation of chargers will cost the an estimated \$6,500,000.

In the biannual budget adoption for FY 2023 and FY 2024, Council approved a funding guideline to approve an \$8,000,000 annual increase to street paving funding in future fiscal years (plus annual CPI adjustments). This funding is intended to raise paving funding to levels sufficient to maintain current pavement condition. Significant additional funding would be needed to be allocated over several years to raise the pavement condition index (PCI) to 70-75 or “Good” status.

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Attachments:

1. Fleet Audit Findings and Recommendations Response Report
2. Street Audit Findings and Recommendations Response Report

Audit Title: Fleet Replacement Fund Short Millions				
Issue Date: June 2, 2021				
Finding	Recommendation	Department	Previous status update	Current status update
The Replacement Fund is underfunded by millions of dollars.	1.1 Calculate the dollar value of the City's replacement needs. Use results from the recent rate study to adjust departments' replacement fees to cover their share of the costs associated with vehicle replacement, including customization and personnel.	Public Works	Partly Implemented	<u>Partly Implemented:</u> Public Works is updating the replacement costs in AssetWorks, the new fleet management software, to accurately reflect current amortization values. The ongoing amortization charges, which will include upfitting expenses, are passed on to the end user departments. Additional charges are still being calculated which include personnel and electric vehicle charging infrastructure. Billing for and collecting for these additional charges will be presented to the Budget Office and City Departments as part of the next mid-biennial budget update in 2025.
The Replacement Fund is underfunded by millions of dollars.	1.2 Conduct an analysis of the City's current fleet and determine the optimal fleet size to provide services efficiently and effectively. This analysis should include fleet units identified as reserve, backup, and "pool" vehicles. The outcome of the analysis should be a plan to achieve and provide funding for the optimal fleet size.	Public Works	Started	<u>Started:</u> City Council approved a contract for Mercury Associates to conduct the fleet assessment study on November 21, 2023. The contract was executed in February 2024. Mercury delivered a draft fleet assessment in September 2024 and anticipates it to be finalized in November 2024. The assessment recommends the City conduct a right-sizing and right-typing study of the fleet. Public Works has begun this process by drafting a questionnaire for staff best suited to assess each vehicle's use.

<p>The Replacement Fund is underfunded by millions of dollars.</p>	<p>1.3</p>	<p>Work with the City Manager’s Office to adjust the funding model of the Equipment Replacement Fund or adopt a new one to ensure appropriate funding for timely fleet replacement, such as annually transferring money from the General Fund based on an assessment of the City’s overall fleet needs and priorities. Expand the current vehicle and equipment replacement policy to ensure transparency of key provisions of the new or updated model.</p>	<p>Public Works</p>	<p>Started</p>	<p><u>Partly Implemented:</u> Public Works updated its fund rate models based on FY 23 actuals and will update again for presentation of the new rates for adoption during the next mid-biennial budget adjustment in 2025. Public Works leadership and representatives from other departments will work with Mercury Associates to finalize an Equipment Replacement Policy which will address new to fleet purchases, and clearly identify a process for keeping vehicles for a limited time after replacement or for motor pool usage. Anticipated draft completion is December 2024 with a recommendation to have the policy become an Administrative Regulation with adoption in the spring of 2025.</p>
<p>The Replacement Fund is underfunded by millions of dollars.</p>	<p>1.4</p>	<p>Revise the vehicle and equipment replacement policy to include that Public Works should regularly assess the personnel expenditures related to vehicle and equipment replacement and ensure that they are appropriate and proportional to their duties.</p>	<p>Public Works</p>	<p>Started</p>	<p><u>Partly Implemented:</u> Public Works leadership and department representatives will work with Mercury Associates to finalize an Equipment Replacement Policy which will address new-to-fleet purchases, and clearly identify a process for keeping vehicles for a limited time after replacement or for motor pool usage. Anticipated draft completion is December 2024 with a recommendation to have the policy become an Administrative Regulation with adoption in the Spring of 2025. Personnel expenditures that are currently being allocated to the Equipment Replacement Fund will be evaluated annually as part of the budget update process.</p>

<p>The Replacement Fund is underfunded by millions of dollars.</p>	<p>1.5</p>	<p>Revise the vehicle and equipment replacement policy to prevent replacing unfunded vehicles by ensuring that contributed funds are available for the purchase.</p>	<p>Public Works</p>	<p>Started</p>	<p><u>Partly Implemented:</u> Public Works leadership and department representatives will work with Mercury Associates to finalize an Equipment Replacement Policy which will include provisions to prevent replacing unfunded vehicles by ensuring that contributed funds are available for the purchase. Anticipated draft completion is December 2024 with a recommendation to have the policy become an Administrative Regulation with adoption in the spring of 2025.</p>
<p>The Replacement Fund is underfunded by millions of dollars.</p>	<p>1.6</p>	<p>Develop an AR that clarifies PW's responsibilities to manage the fleet and maintain fleet replacement funding. Include the following provisions: Provide an analysis of the impact on fleet replacement and overall costs when the City considers reallocating replacement funds or stopping payments into the Fund. Provide documented justification when deciding to use the ERF for non-replacement needs. The decision must be supported with a documented cost analysis from Public Works showing potential impact of insufficient funds on fleet replacement. See Audit report for full recommendation.</p>	<p>Public Works</p>	<p>Started</p>	<p><u>Partly Implemented:</u> Public Works leadership and department representatives will work with Mercury Associates to finalize an Equipment Replacement Policy which will address the recommended provisions. Anticipated draft completion is December 2024 with a recommendation to have the policy become an Administrative Regulation with adoption in the spring of 2025. Additional meetings will be scheduled with Budget office to ensure passage of an updated rate model as part of the budget process.</p>

<p>The Replacement Fund is underfunded by millions of dollars.</p>	<p>1.7</p>	<p>To help secure the funding needed for transitioning to electric vehicles by 2030, work with the City Manager’s Office to develop a budgetary plan to purchase electric vehicles. The plan should align with the City’s fleet electrification goals and take into consideration the current economic downturn, funding availability, available infrastructure, and electric vehicle availability.</p>	<p>Public Works</p>	<p>Started</p>	<p><u>Partly Implemented:</u>                  The Electrical Mobility Coordinator oversaw the grant submission to support fleet electrification. Berkeley was not awarded the grant as it primarily went to counties. The Electric Mobility Coordinator together with AVA Energy and Frontier Energy completed an assessment which provides a plan for charging infrastructure, vehicle transition, and costs. The Division and a variety of fleet users continue to meet with EV manufacturers to discuss purchase options. EV charging infrastructure is currently proposed to be funded by the Equipment Replacement Fund with reimbursement to the fund from an updated rate model. PW anticipates using state rebates through CORE and HVIP programs. Current estimated infrastructure expenses to upgrade charging infrastructure at City Facilities is \$6.5 million with \$9 million for EV purchases.</p>
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<p>Public Works lacks information on vehicle and equipment replacement for decision making.</p>	<p>2.1</p>	<p>Conduct a needs assessment of vehicles overdue for replacement and create a plan that documents a timeline and cost for replacement. Report the findings to City Council.</p>	<p>Public Works</p>	<p>Started</p>	<p><u>Partly Implemented:</u>                  Funding for replacement of backlog vehicle purchases was included in the FY 25 and FY 26 budgets along with scheduled replacements for those years. Additionally, as part of the annual appropriation ordinance process, funding was requested to ensure continued funding for vehicle replacement. As part of the work Mercury Associates is doing on behalf of the Equipment Maintenance Division, the Equipment Replacement Policy will outline replacement timelines and requirements. The Fleet Electrification Assessment from AVA Energy and Frontier Energy provides a Transition Calculator that outlines the expenses and timelines. The Fleet Electrification Assessment and the transition calculator were finalized in October 2024.</p>
<p>Public Works lacks information on vehicle and equipment replacement for decision making.</p>	<p>2.2</p>	<p>Update the vehicle and equipment replacement policy to include criteria for prioritizing fleet replacement. The policy should include a requirement to communicate a delay in replacement of their fleet to affected departments. In Administrative Regulation described in recommendation 1.6, specify that the vehicle and equipment replacement policy should include such criteria.</p>	<p>Public Works</p>	<p>Started</p>	<p><u>Partly Implemented:</u>                  Public Works leadership and department representatives will work with Mercury Associates to finalize an Equipment Replacement Policy which will include language supportive of the recommendation. The final Policy will be reviewed by the City Manager’s Office. Anticipated draft completion is December 2024 with a recommendation to have the policy become an Administrative Regulation with adoption in the spring of 2025.</p>

Public Works lacks information on vehicle and equipment replacement for decision making.	2.3	Work with the vendor of the new fleet management system to configure it to address the data issues identified in this report, including: - Tracking Replacement Funds collected and leftover funds by department; - Zeroing out the balance after a vehicle is replaced; - Adjusting the replacement date and reporting the rationale if a replacement is deferred; and - Displaying any information needed to prioritize replacements based on specified criteria.	Public Works	Started	<u>Partly Implemented:</u> Public Works AssetWorks fleet management software launched in spring 2024. Reporting on vehicle replacement will be more thorough as the vehicle usage and maintenance costs will be more readily available. All vehicles that have been replaced have zeroed out the amortization balance. Mercury Associates will provide additional recommendations on the rationale for replacement that will be included in the replacement policy.
Public Works lacks information on vehicle and equipment replacement for decision making.	2.4	Clean and update the vehicle and equipment database before migrating it to the new fleet management system to ensure accuracy and data integrity.	Public Works	Started	<u>Partly Implemented:</u> Public Works AssetWorks fleet management software launched in spring 2024. Fleet team is still running the two systems, AssetWorks and FUNDS side by side until the new system is fully operational. Multiple physical inventories have been taken during 2024 to ensure accuracy of the vehicle and equipment data in AssetWorks, which is anticipated to be finalized by the end of 2024.
Public Works lacks information on vehicle and equipment replacement for decision making.	2.5	Update the vehicle and equipment replacement policy or develop a separate policy to require staff manage the City's data appropriately to ensure accurate complete information to support management decisions.	Public Works	Started	<u>Partly Implemented:</u> Public Works leadership and department representatives will work with Mercury Associates to finalize an Equipment Replacement Policy which will include language supportive of the recommendation. Anticipated draft completion is December 2024 with a recommendation to have the policy become an Administrative Regulation with adoption in the spring of 2025.

Audit Title: Rocky Road: Berkeley Streets at Risk and Significantly Underfunded					
Issue Date: November 19, 2020					
Finding	Recommendation		Department	Previous status update	Current status update
Without significant additional funding, Berkeley streets will continue to deteriorate and deferred maintenance costs will increase.	1.1	Annually, conduct a budget analysis, based on the deferred maintenance needs at that point in time, to determine what level of funding is necessary to achieve the desired goals of the Street Rehabilitation Program. Report findings to City Council. This information will be helpful during updates to the Five-Year Street Rehabilitation Plan and during the budgeting process.	Public Works	Partly Implemented	<u>Partly Implemented:</u> The City conducts budget analysis of deferred maintenance needs through the citywide paving condition survey funded by a grant from the Metropolitan Transportation Commission (MTC), which occurs every two years. The City reports these findings biannually to the City Council through the Five-Year Paving Plan adoption and the CIP Budget Development process. The City has not yet met the requirement for an annual analysis and reporting. Public Works plans to engage a consultant to inventory deferred maintenance needs and estimate associated costs for the years between the PCI survey.

<p>Without significant additional funding, Berkeley streets will continue to deteriorate and deferred maintenance costs will increase.</p>	<p>1.2</p>	<p>Identify funding sources to achieve and maintain the goals of the Street Rehabilitation Program.</p>	<p>Public Works</p>	<p>Partly Implemented</p>	<p><u>Partly Implemented:</u>                  The City has a baseline annual paving budget of \$7 million, with an additional \$8 million commitment (adjusted for inflation) secured in 2022. The remaining years in the 5-year plan are expected to receive \$8 million annually, adjusted for inflation. Revenue from Zero Waste rates (estimated at \$1–2 million annually) will help address pavement wear caused by refuse vehicles, and stormwater funds will cover half of green infrastructure costs. Additionally, a one-time \$3.95 million from Measure T1 Phase 2 is allocated for FY 2025–2026. Measure FF, as approved by voters in November 2024, may provide approximately \$15 million annually for 14 years in funding for: (from the ballot language) "street, sidewalk, and pedestrian path repair, repaving and reconstruction, safety improvements, and environmental infrastructure." Achieving an average Pavement Condition Index (PCI) of 70 requires an estimated \$42 million annually over the next 12 years.</p>
<p>The Streets Rehabilitation and Repair Policy is out-of-date and Public Works is not following it.</p>	<p>2.1</p>	<p>Update the Street Rehabilitation and Repair Policy annually and define who is responsible for ensuring the Policy is updated, as stated in the Policy.</p>	<p>Public Works</p>	<p>Implemented</p>	<p><u>Implemented:</u>                  Public Works Commission approved a Street Rehabilitation and Repair Policy March, 2021, which was received and revised after consideration at the FITES Commission in May 2021, and ultimately adopted by City Council on January 25, 2022. The Policy and Five Year Paving Plan were considered and adopted on the same Council agenda. The Street and Maintenance Policy shall be adopted by City Council at a minimum interval of 5 years, after review by the Transportation and Infrastructure Commission.</p>

<p>The Streets Rehabilitation and Repair Policy is out-of-date and Public Works is not following it.</p>	<p>2.2</p>	<p>When updating the Street Rehabilitation and Repair Policy, incorporate equity to align with Vision 2050 and clearly define how it will be applied to the street maintenance and rehabilitation planning process.</p>	<p>Public Works</p>	<p>Implemented</p>	<p><u>Implemented:</u> The updated Street Rehabilitation and Repair Policy was adopted with clear language placing Equity as an objective. The updated Policy can be viewed here: <a href="https://berkeleyca.gov/sites/default/files/2022-04/Street%20Maintenance%20and%20Rehabilitation%20Policy_01_25_2022.pdf">https://berkeleyca.gov/sites/default/files/2022-04/Street%20Maintenance%20and%20Rehabilitation%20Policy_01_25_2022.pdf</a>.</p>
<p>The Streets Rehabilitation and Repair Policy is out-of-date and Public Works is not following it.</p>	<p>2.3</p>	<p>Define goals and performance measures to guide the Street Rehabilitation and Repair Policy and Street Rehabilitation Program that align with other plans and policies relevant to street paving (e.g., Complete Streets Policy, Vision 2050, etc.). Regularly report to Council on performance measures.</p>	<p>Public Works</p>	<p>Implemented</p>	<p><u>Implemented:</u> Performance Metrics are included as a major part of the adopted Specific Policy. Key areas: 1) The goal is to get to standard PCI of 70 for roadways: Arterials, Collectors, Bus Routes, Bikeway Network, and Equity Zone. 2) Funding should be prioritized with Equity in mind 3) Performance metrics reporting will be included with the biannual Paving Plan review. The updated policy can be viewed here: <a href="https://berkeleyca.gov/sites/default/files/2022-04/Street%20Maintenance%20and%20Rehabilitation%20Policy_01_25_2022.pdf">https://berkeleyca.gov/sites/default/files/2022-04/Street%20Maintenance%20and%20Rehabilitation%20Policy_01_25_2022.pdf</a>.</p>