

# Rocky Road: Berkeley Streets at Risk and Significantly Underfunded

## Overview

- Objectives
- Findings
- Recommendations
- Public Works response



## Objectives:

1. Are there sufficient resources for maintaining Berkeley's streets?
2. Are there clear policies and processes to guide street paving decisions?



## What we found:

1. Without significant additional funding, Berkeley streets will continue to deteriorate and deferred maintenance costs will increase.
2. The Streets Rehabilitation and Repair Policy is out-of-date and Public Works is not following it.



## Why we did this audit:

City	2017 PCI*	Condition
El Cerrito	84	Very Good
Emeryville	77	Good
Alameda	72	Good
San Francisco	70	Good
Richmond	62	Fair
Albany	59	At Risk
Berkeley	57	At Risk
Oakland	55	At Risk

\* Three-year moving average

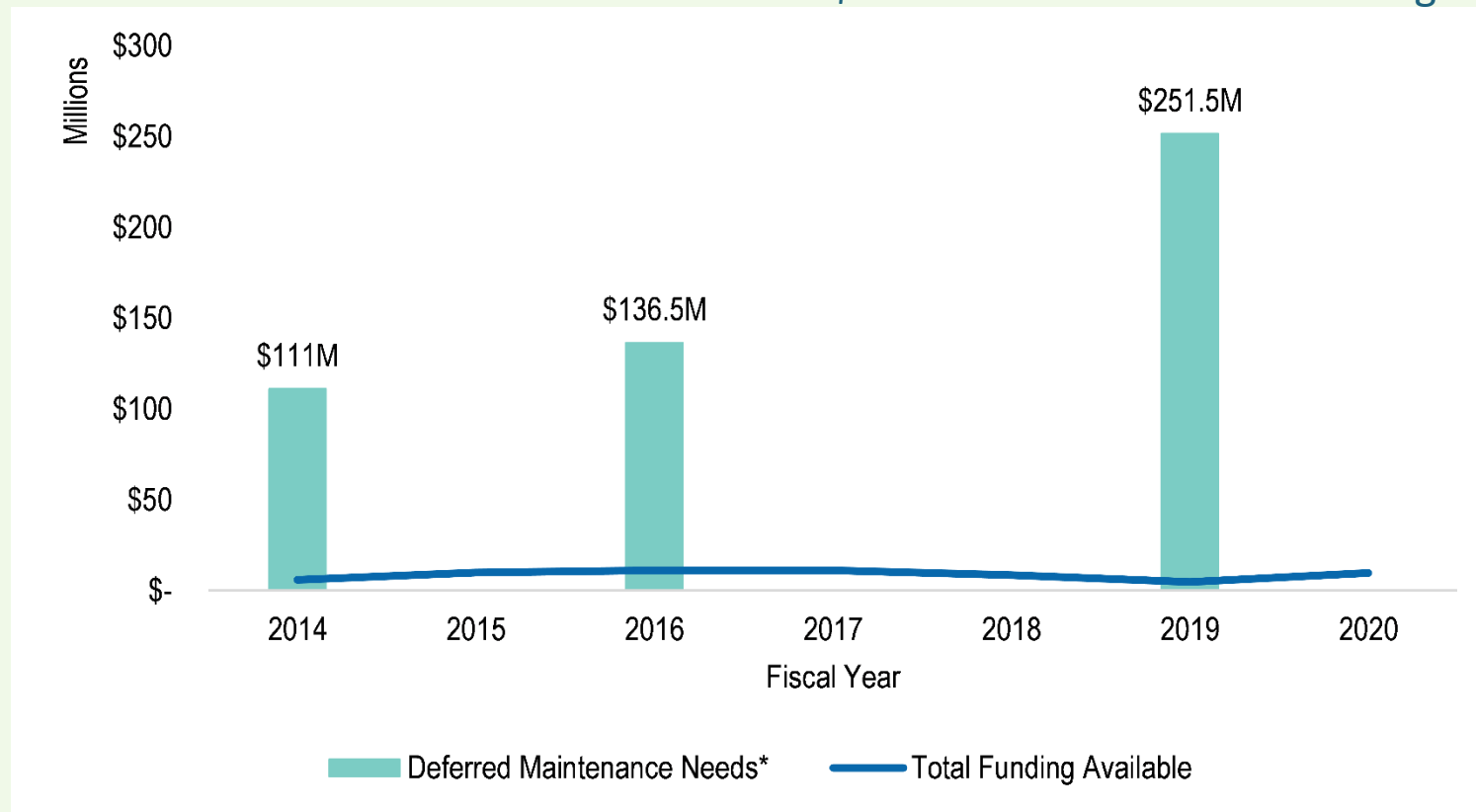
- Berkeley streets impact cars, buses, bicyclists, pedestrians, and people with disabilities
- Deferred maintenance needs of streets exceeded \$251 million in 2019
- Berkeley has the 15<sup>th</sup> worst Pavement Condition Index (PCI) out of 101 cities in the nine county jurisdiction covered by Metropolitan Transportation Commission
- The deterioration of pavement also has economic costs for users of the road



# Finding 1

The City has not invested more recurring funding in street paving, even as PCI remains low and deferred maintenance costs increase.

Deferred Maintenance Has Grown to Over \$250 Million as Annual Funding Remains Insufficient



\*Represents the budget required based on the “needs” of the system and assumes all pavements are treated at their optimum timing.

Source: City of Berkeley Capital Budgets and Pavement Management Certifications

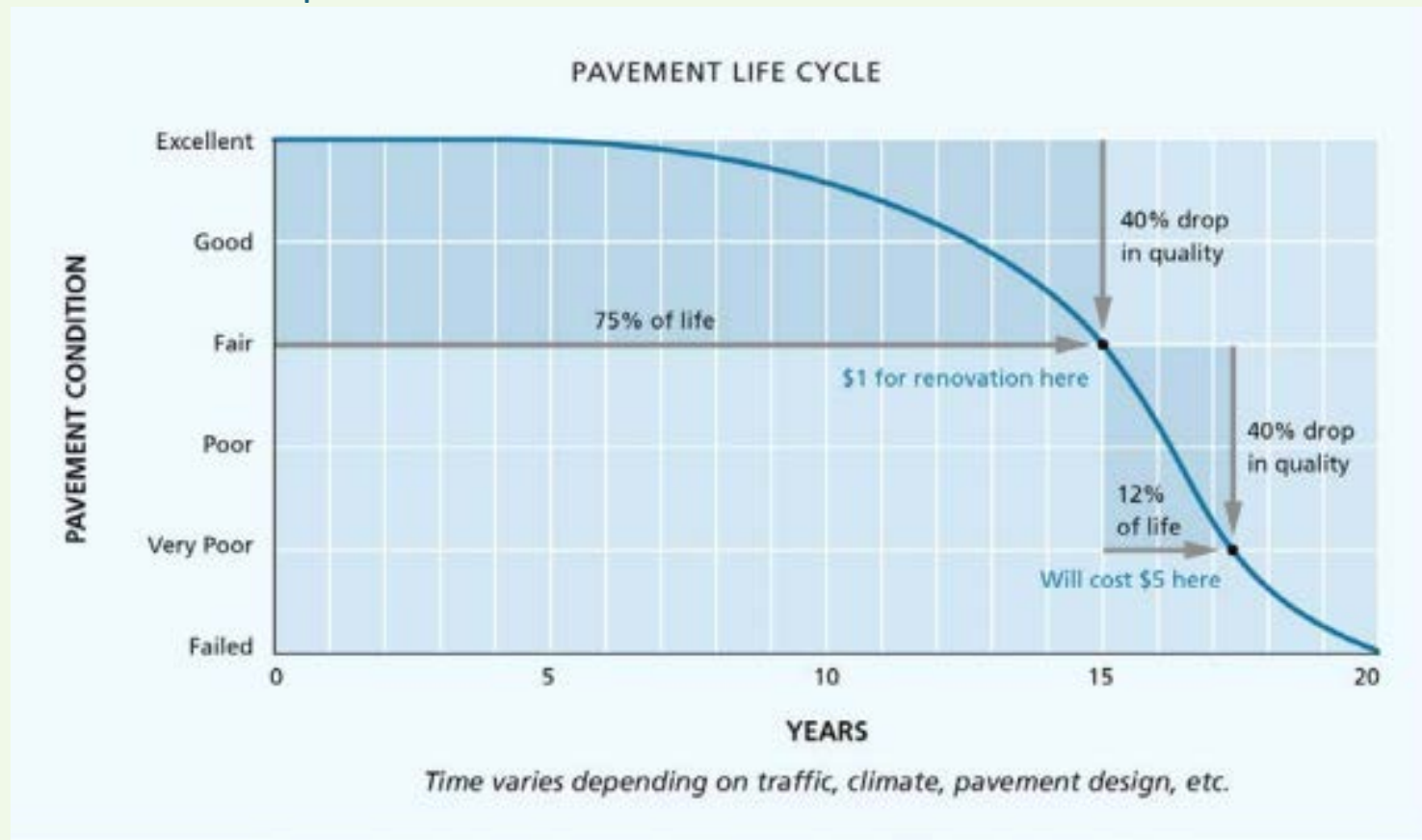
Note: Deferred Maintenance needs calculation was not available for all years.



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# Finding 1

Regular maintenance of roads is 5-10x cheaper than full rehabilitation of pavement.  
It is Much Cheaper to Maintain Streets than to Rehabilitate Failed Streets



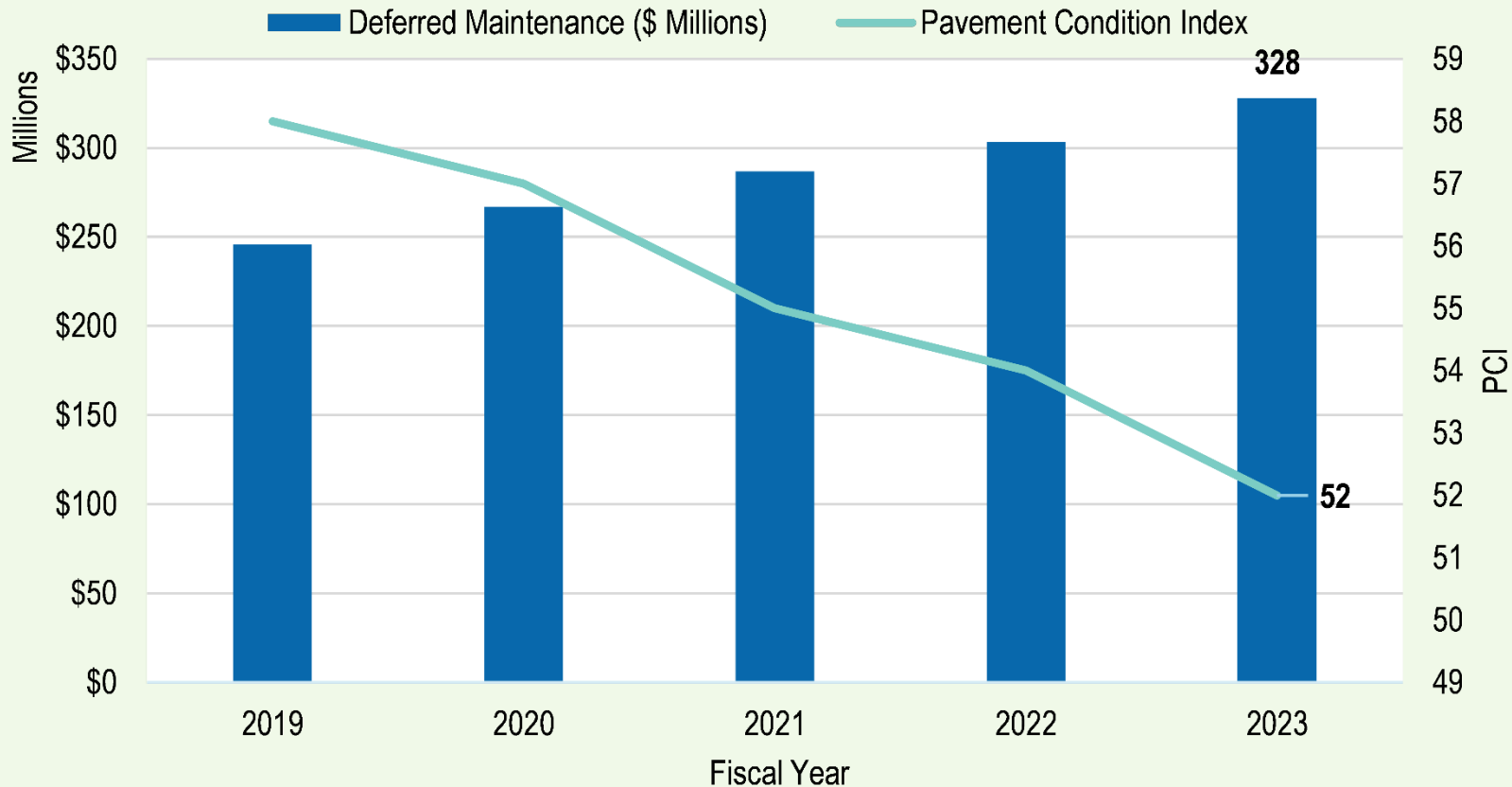
Source: Metropolitan Transportation Commission Pothole Report III 2018



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# Finding 1

Pavement Condition Index Will Decline and Deferred Maintenance Costs Will Increase at Current Funding Levels



At the current level of funding, streets will continue to deteriorate and the backlog of maintenance will continue to grow.

Source: Pavement Engineering Inc. Report September 2018

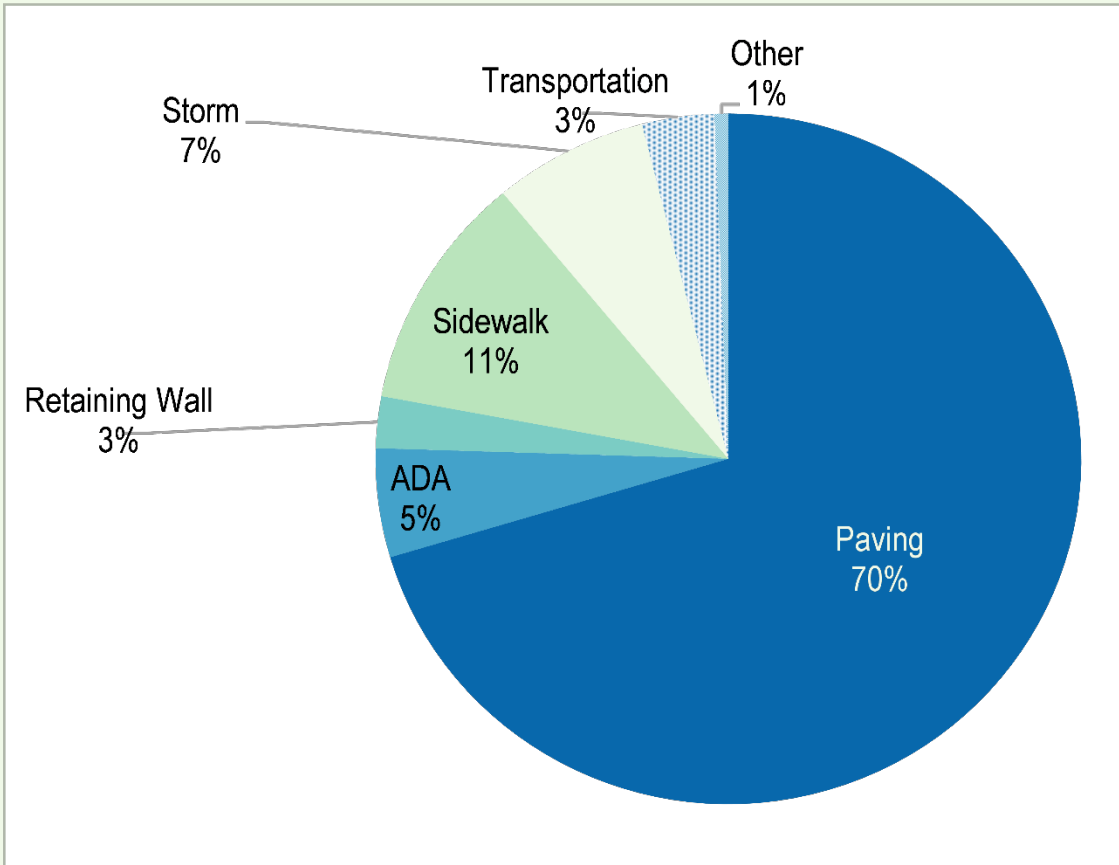
Note: Deferred maintenance represents the budget required based on the “needs” of the pavement system. It assumes all pavements are treated at their optimum timing and does not include the costs to conduct Complete Streets projects.



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# Finding 1

## Not All Construction Costs Spent on Paving



Source: Auditor analysis

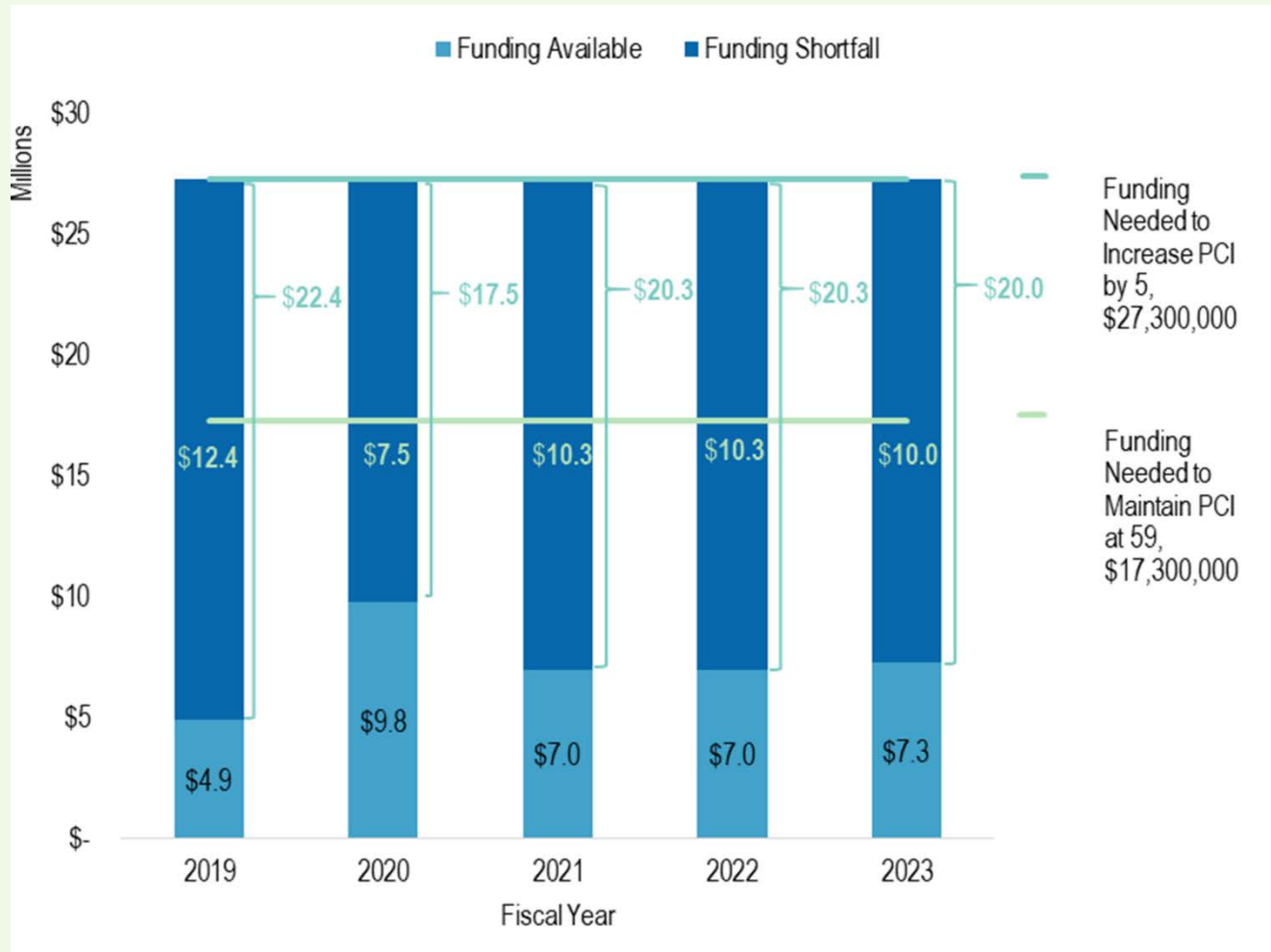
- Streets funding is spent on more than just paving
- 15-20% of project funds are spent on personnel and consultants
- 70% of construction budget is spent on pavement; remaining 30% spent on additional street improvements
- No additional funds were allocated to implement the Complete Streets Policy





# Finding 1

An Estimated Additional \$10 Million Needed per Year to Maintain Pavement Condition Index



According to 2018 budget analysis by Pavement Engineering Inc.:

- \$17.3 million annual investment is needed to maintain PCI
- \$27.3 million annual investment is needed to increase PCI by 5

Source: Auditor analysis of data from City of Berkeley Capital Budgets FY 2014-2020 and Pavement Engineering Inc. Report, September 2018

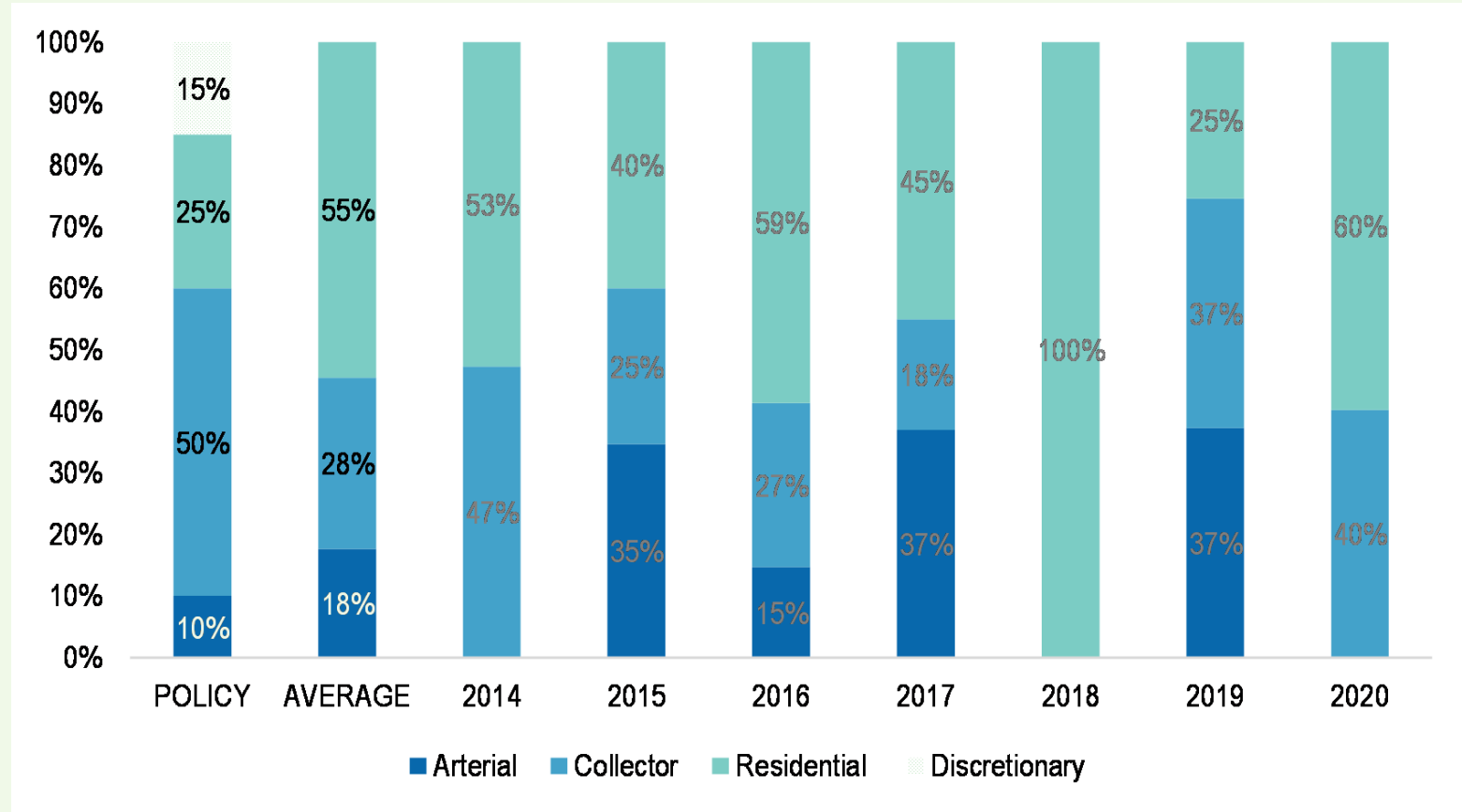


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## Finding 2

- The Streets Rehabilitation and Repair Policy has not been updated since 2009
- The City has not allocated funding in accordance with the policy
- Additional Council decisions that impact how streets are funded should be incorporated into the policy

Figure 11. A Majority of Funds Spent on Residential Streets, Not Aligned with Policy



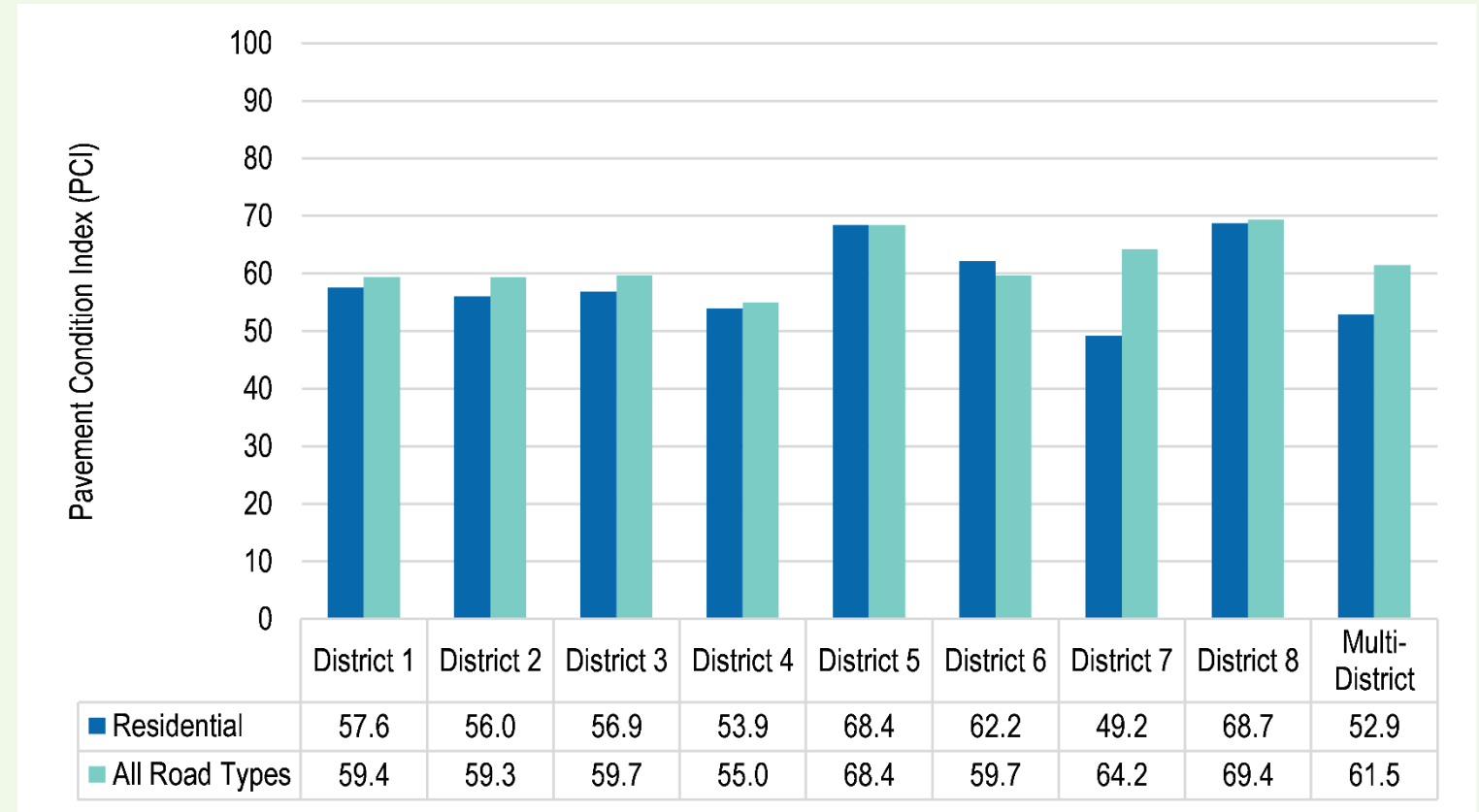
Source: Auditor analysis



## Finding 2

- Equity is not defined in the policy
- Using equity as criteria to prioritize projects may be most appropriate in the long-term planning of street paving
- Berkeley has voiced its commitment to improving infrastructure and doing so in an equitable way through Vision 2050

Average Pavement Condition Index by Street Segment, by District



Source: Auditor analysis of StreetSaver data

Note: Multi-district street segments are segments in more than one district.



# Finding 2

## Performance-Based Planning and Programming Framework



- The policy is not guided by clear goals or performance measures
- There is room to increase transparency and ensure the best use of limited funds
- Performance-Based Planning and Programming integrates performance management concepts

Source: US Department of Transportation Performance Based Planning and Programming Guidebook, 2013



## Recommendations

We recommend that the Public Works Department:

1. Annually, conduct an analysis to determine how much money is needed to address the goals of the Streets Rehabilitation Program and identify funding sources to meet those goals.
2. Update the Street Rehabilitation and Repair Policy annually and include goals and performance measures, and a clear definition of equity to align with Vision 2050.



# Management Response

City Management agreed to our findings, conclusions, and recommendations.



*We would like to thank the Public Works  
Department for their cooperation with this audit.*



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