Pavement Management Plan

City Council

April 9, 2024

Pavement Management Plan Purpose

- 2023 Pavement Condition
- Pavement Maintenance and Rehabilitation Strategies
- Street Selection Process & Inclusion of Equity
- Historic Program Funding
- Current Funding Needs
- Current Challenges & Program Implementation
- Feasibility of In-House Paving

The City of SAN DIEGO

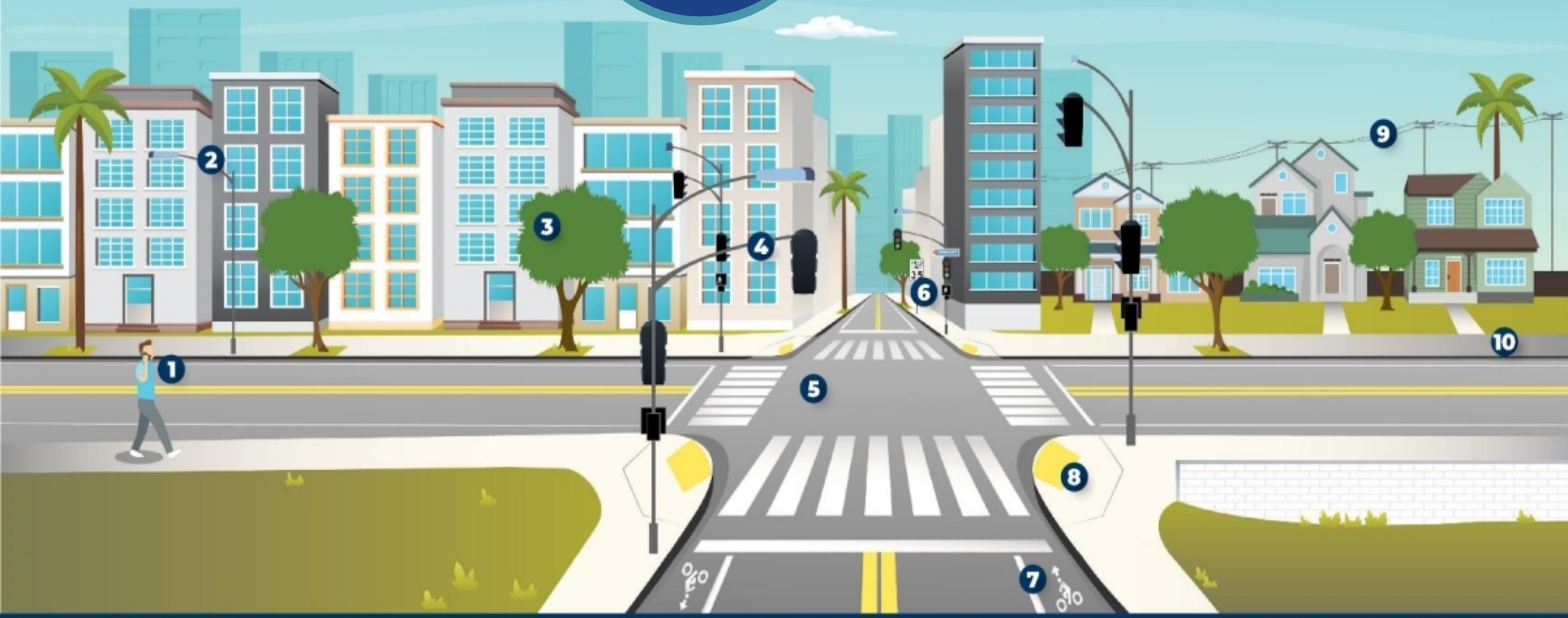
SAN DIEGO AT WORK

33%

Get It Done Requests Citywide in FY23

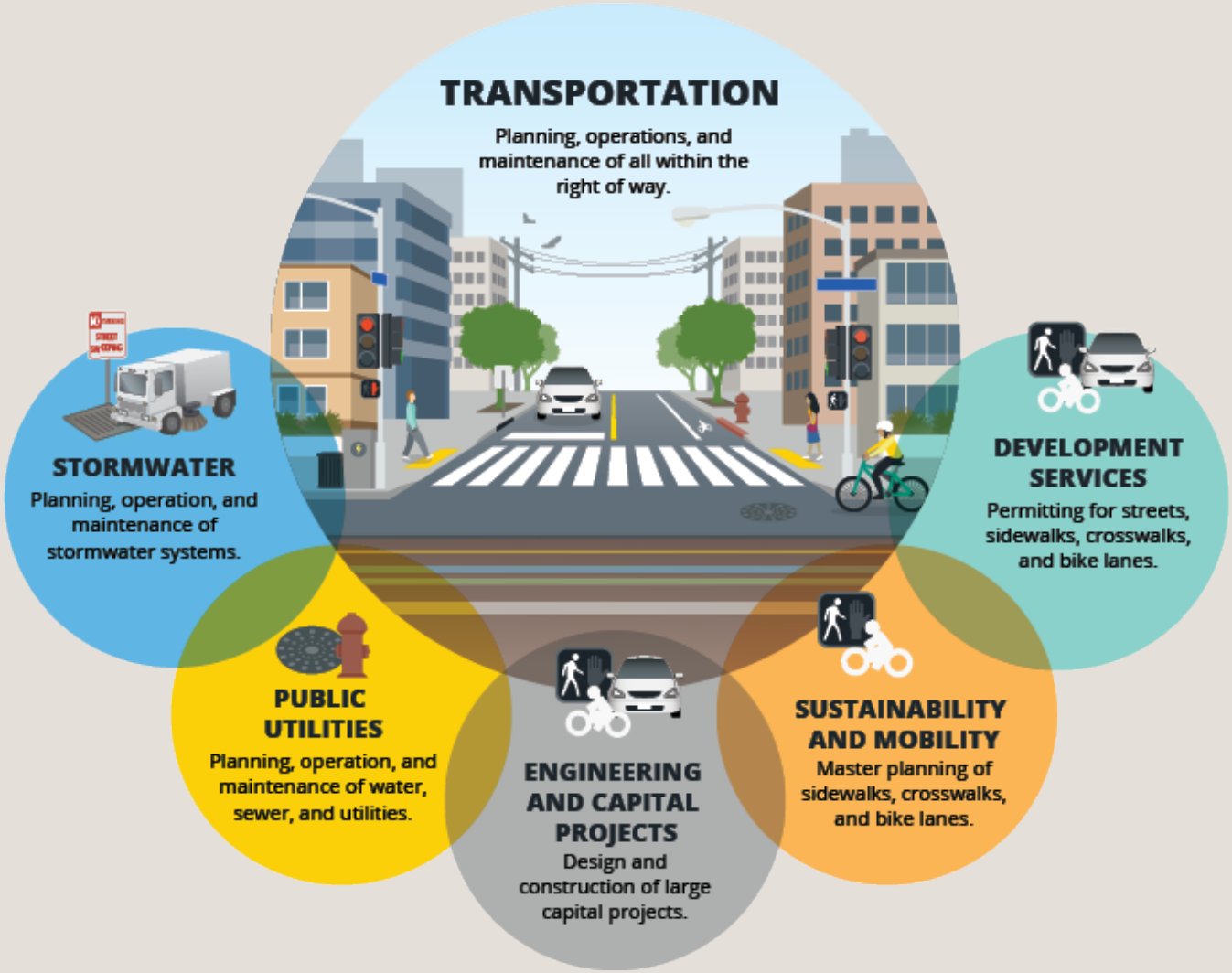
In FY23:

- 9 Pothole Repair Teams addressed +50,000 pothole repairs
- 2 Mill and Pave Teams performed 4.4 miles of mill and pave
- 4 Trench Repair Teams completed 819 trench repairs and 50,000 square feet of mill and paves



1. **10,000** Calls to Dispatch
2. **60,000** Street and Park Lights
3. **250,000** Trees Along City Streets
4. **1,650** Traffic Signals
5. **6,600** Lane Miles of Streets/Pavement
6. **50,000** Street Signs
7. **1,117** Miles of Bike Lanes
8. **50,000** Curb Ramps
9. **1,100** Miles of Overhead Lines Remaining to Underground
10. **4,550** Miles of Sidewalks

Pavement Management Within the City of San Diego



City Street Network

- 2nd largest street network in California
- >6,600 lane miles of street
  - Prime
  - Major
  - Collector
  - Local
  - Residential
  - Unimproved Streets and Alleys

6%	PRIME
15%	MAJOR STREET
12%	COLLECTOR
5%	LOCAL STREET
52%	RESIDENTIAL
10%	OTHER

% = Road Classification Percentage within City's Road Network. Other roadway types part of the City's network not shown include: Bike Paths, Unpaved roads and walkways

Unimproved Streets and Alleys

- Improvement unfunded; maintained to passable conditions
- Costly to improve – require upgrades other than paving (e.g. drainage, sidewalks, etc.)
- Per Mile Costs
  - Overlay: $1.7M
  - Unimproved Road (Unpaved): $22M

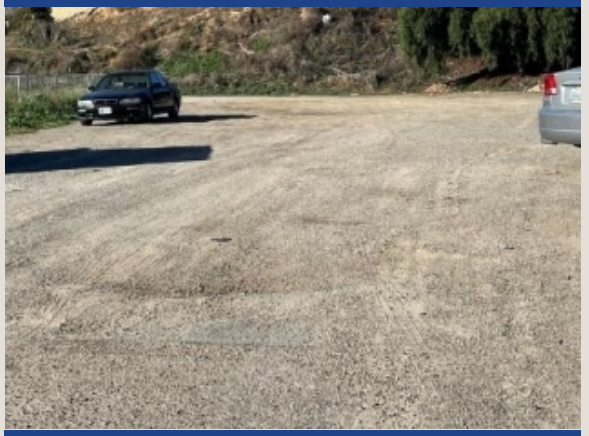
62 Miles of Unimproved Alleys & Streets

45 Paved Miles

Unimproved Street

Unimproved Alley

17 Unpaved Miles



Unimproved Street

Unimproved Alley

Inclusion of Equity in Street Prioritization

- New FY24 Equitable Community Investment Factor
- Equity in Assets factor used to address disparities in infrastructure
- Equity factor prioritizes streets within the same classification

Pavement Maintenance and Repair Types

PAVEMENT CONDITION INDEX (PCI)

Good	Satisfactory	Fair	Poor	Very Poor	Serious	Failed
100 - 85	84 - 70	69 - 55	54 - 40	39 - 25	24 - 10	< 10

$ $$$ $$$$$

$ = REPAIR COST

2023 Pavement Condition Assessment

Condition	Good	Satisfactory	Fair	Poor	Very Poor	Serious	Failed
Range	100 – 85	84 – 70	69 – 55	54 – 40	39 – 25	24 – 10	< 10

71 2016

63 2023

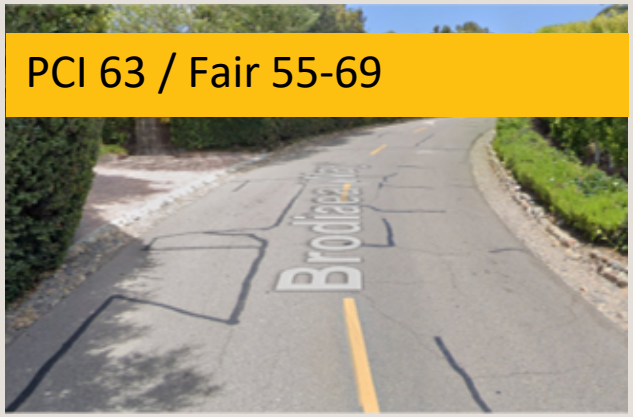
*Municipalities typically state a goal of a PCI of 70 or greater

PCI CALCULATION

2016	2023
OCI = 60% PCI + 40% RCI	100% PCI

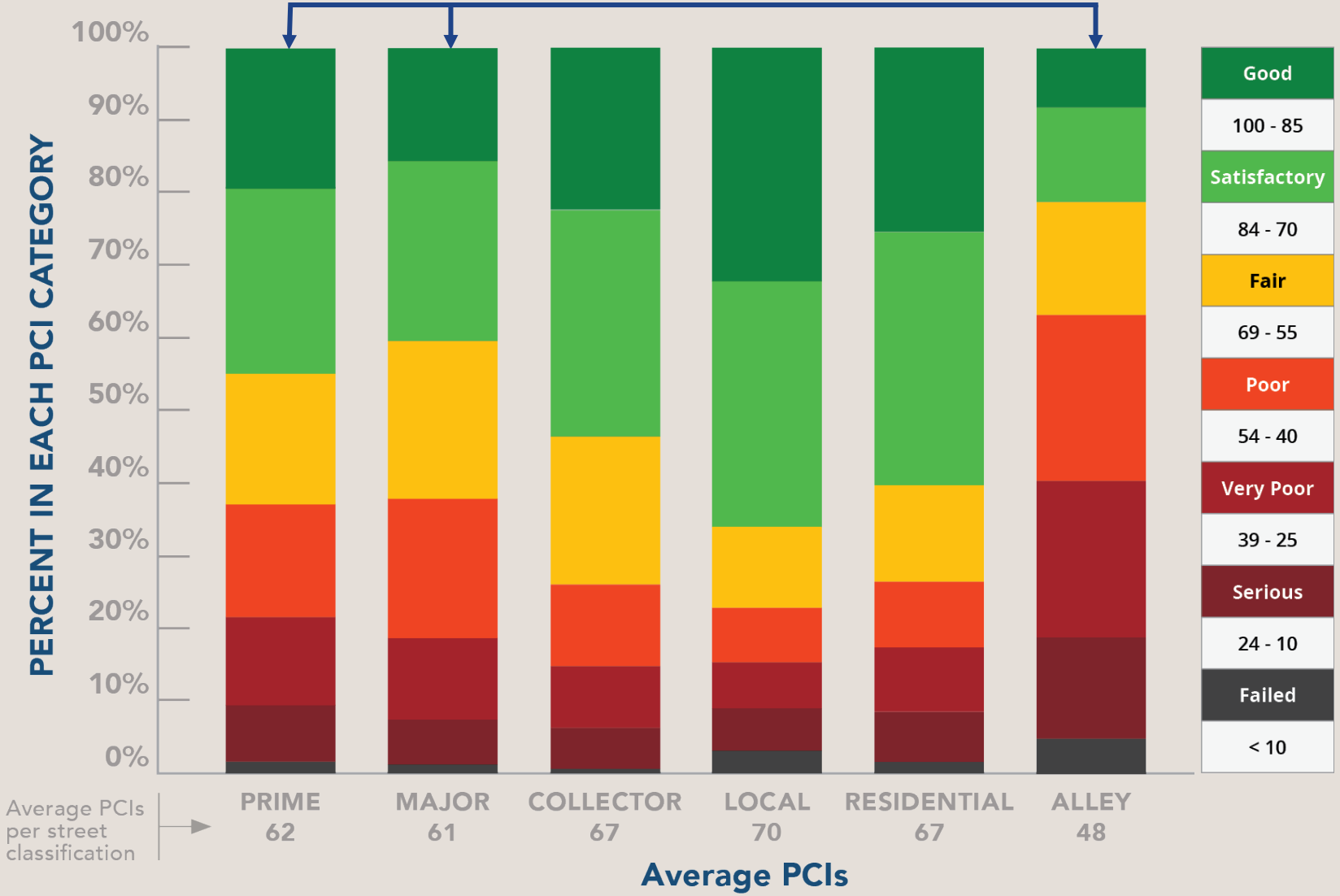
PCI 63 / Fair 55-69

PCI 63 / Fair 55-69

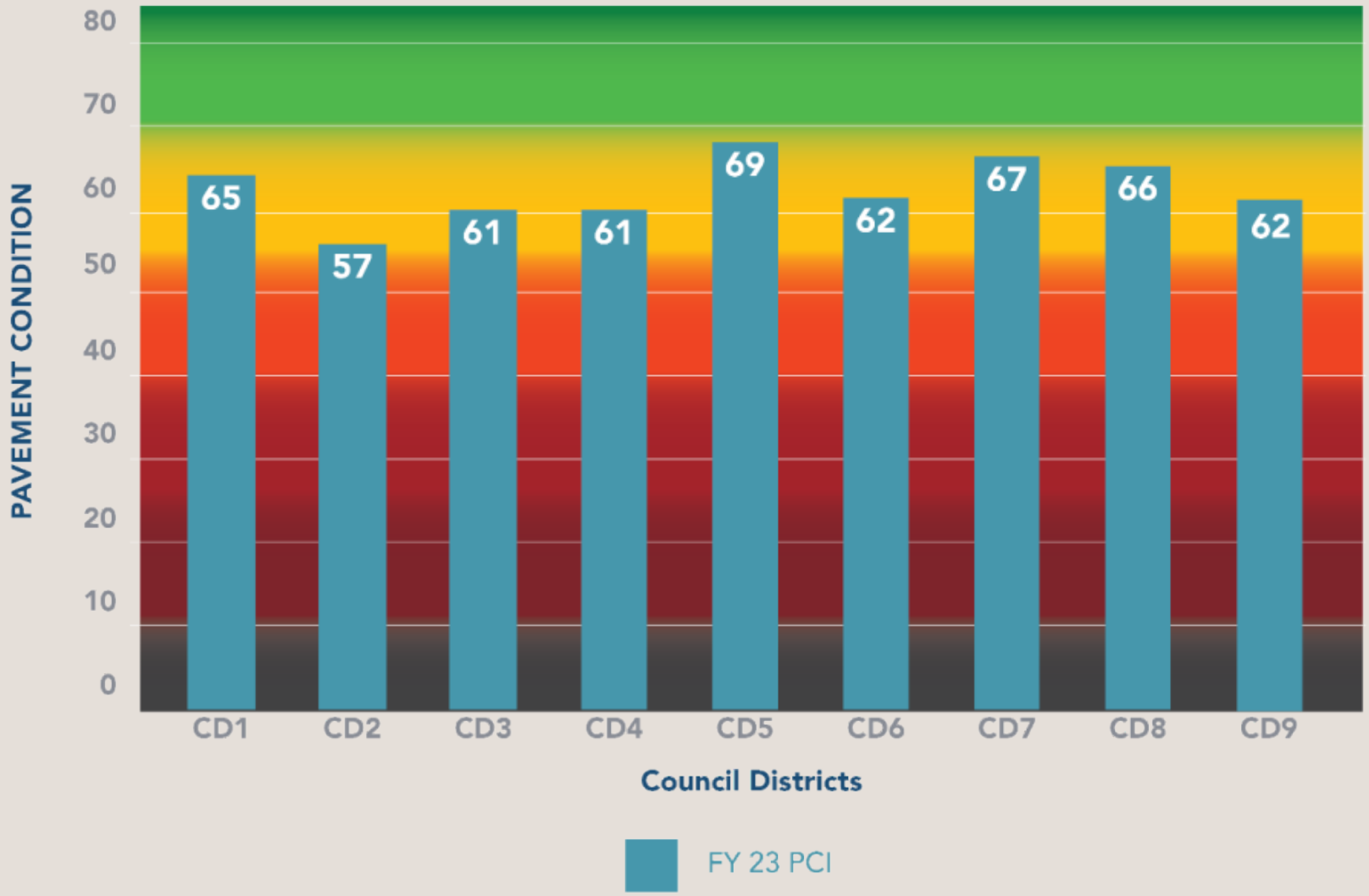


Current Roadway Conditions

Classifications with largest % ranked “Poor” or lower; requires highest investment



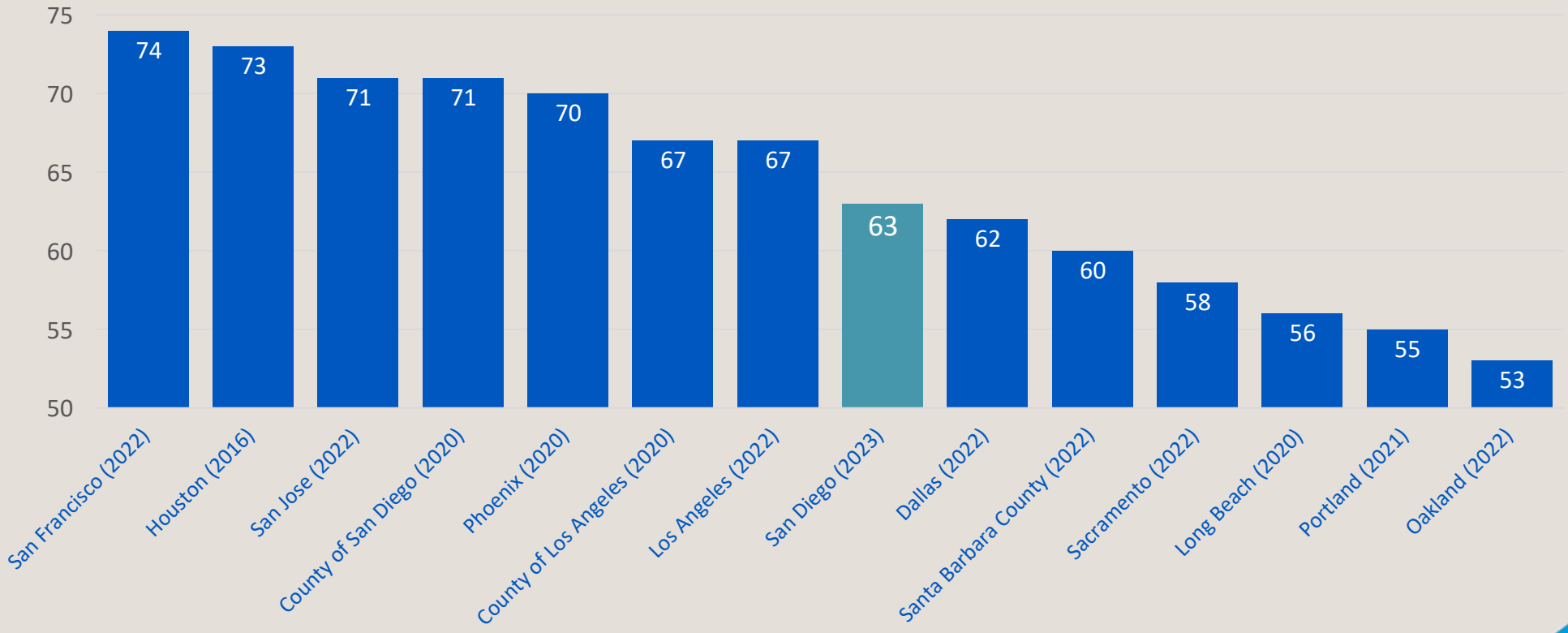
Council District Pavement Condition Comparison



All CDs fall within the "Fair" category

Street Condition Benchmarking

- Agencies with >70 PCI (San Francisco/San Jose)
  - Larger budget/mile than City of San Diego
  - Large, increasing investments

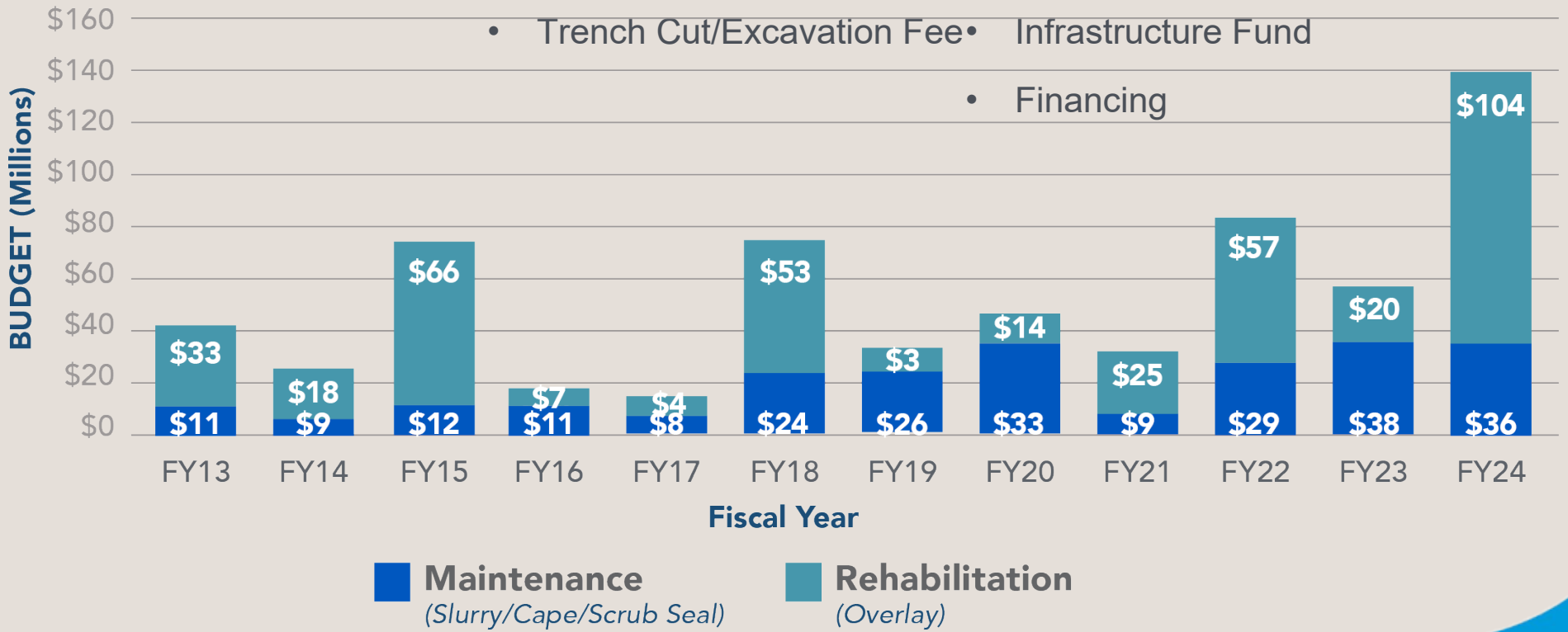


Pavement Management Funding History

Historic Average Annual Funding: $46M

Funding Sources:

- Gas Tax
- TransNet
- RMRA
- Trench Cut/Excavation Fee
- Infrastructure Fund
- Financing



Street Selection Approaches

Worst Streets First

Prioritizes streets in the worst condition that are perceived as the roads that need maintenance and rehabilitation the most

Most People Impacted (High ADT)

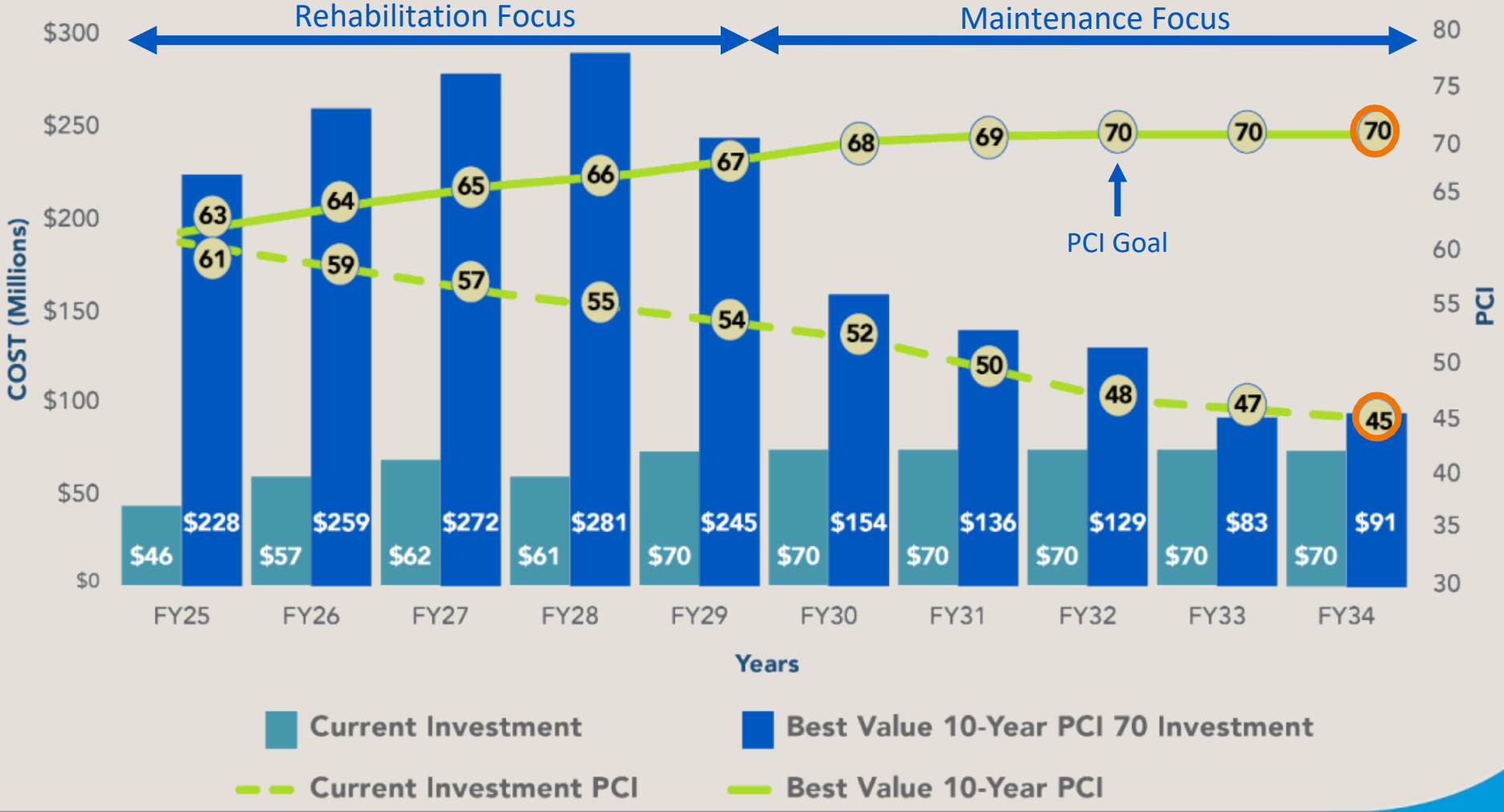
Prioritizes more frequently traveled roads

Best Value

Prioritizes streets before treatment cost is deferred and prioritizes streets in better condition; lowest investment needed

Pavement Management Funding Need

- With current funding, PCI will continue to degrade pavement condition
- Total 10-year funding need is $1.9B; average annual funding need is $188M



Unimproved Streets and Alleys Prioritization Process

Number of People Impacted: Number of residents served by street/alleyway

Safety: Considers if road is in high flooding area

Access to Services: Evaluates if the road is limiting other services being provided (e.g. trash pickup, street sweeping, lack of sidewalks/walkability, fire & rescue access, etc.)

Equitable Community Investment: Evaluates the roadways proximity to Structurally Excluded Community such as CDBG eligible area, Promise Zone, or Community of Concern within the Climate Equity Index

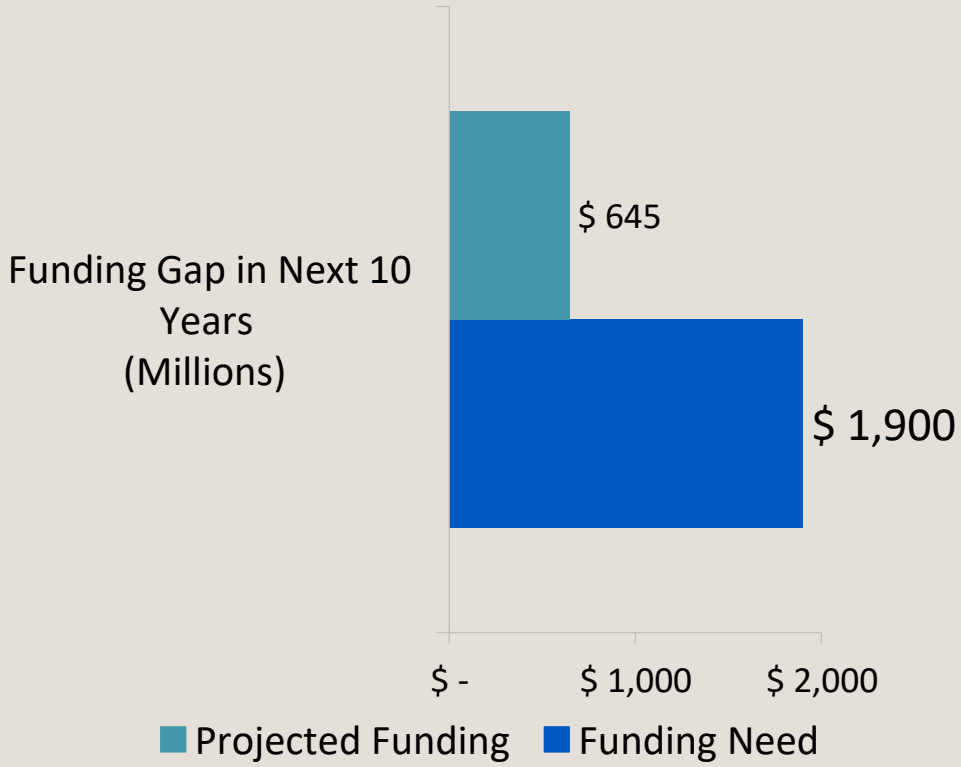
Unimproved Streets and Alleys Funding Need

- Prioritize improving the 17 miles of unpaved streets and alleys throughout the City
- Average street and alley segment is 0.1 miles

Scenario	FY25 Investment	Costs Through FY29	Total Cost*	Years to Complete
0.1 Miles/Year	$2.2M	$11.4M	$10.9B	170
0.2 Miles/Year	$4.3M	$22.9M	$1.12B	85
0.3 Miles/Year	$6.5M	$34.3M	$928M	57
0.4 Miles/Year	$8.6M	$45.7M	$716M	43
0.5 Miles/Year	$10.8M	$57.2M	$617M	34

*Total costs assuming 3% annual inflation

Funding Gap Summary



Funding Gap

- 10 year Funding Gap is LARGE
  - $1.2B for paving
  - $46M for unimproved streets
  - $1.25B total

Funding Options

- Create new funding source

Implementation Considerations

Beyond identifying a dedicated funding source, other considerations include:

- Scaling up City forces

- Limited paving contractors in the region

- Shortages in paving materials

In House Paving Cost Assessment – Recommendations

- Hire 2 new mill and pave teams to do 20 miles of overlay (9% less than contractors)

- Establish new Operations Yard for Street Division

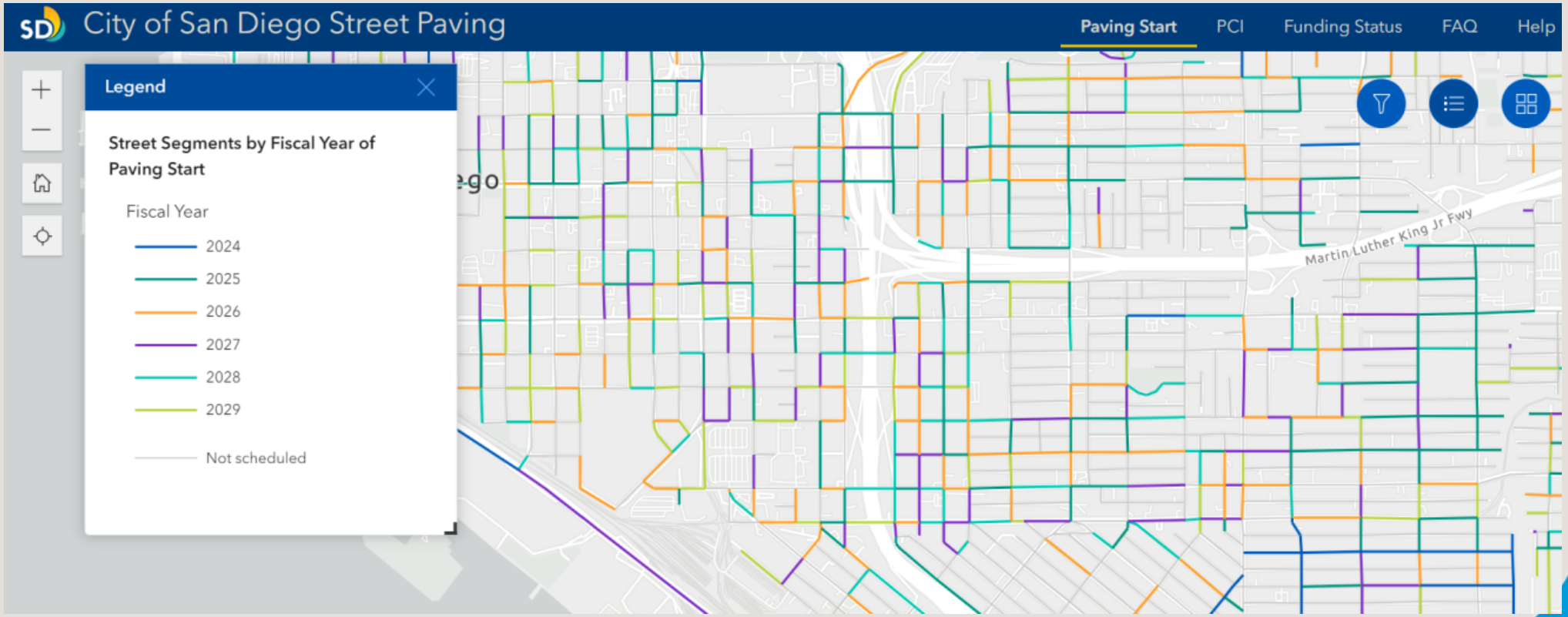
- Purchase specialized equipment; increase staffing for Fleet Operations Division

- Procure asphalt plant (optional)

5 Year Paving Plan & Streets SD Update

- Displayed on https://streets.sandiego.gov/

- Updated annually once funding is known



Thank You

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https://www.sandiego.gov/transportation/programs/pavement-management-plan