



Milpitas City Council Transportation Subcommittee

Item 5a: Citywide Pavement Condition Report

February 14, 2024

City of Milpitas

455 E. Calaveras Blvd., Milpitas, CA 95035



www.milpitas.gov



408-586-3000

Agenda



- **Background**
- **Current Pavement Condition**
- **Pavement Maintenance Strategy**
- **Budget Scenarios / Summary**
- **Questions**

Background



- **Metropolitan Transportation Commission (MTC) is the regional transportation authority over the nine Bay Area county region.**
- **MTC is responsible for overseeing the Bay Area's transportation network, including transportation planning, financing, coordination, and management.**
- **MTC manages their Pavement Management Program (PMP) that local agencies can be certified through to qualify for regional discretionary funds.**
- **Agencies typically look for certification/recertification every other year.**
- **The City has historically participated in MTC's PMP and received a pavement condition report, aka the Pavement Management Technical Assistance Program (PTAP) report.**

Pavement Management Technical Assistant Program (PTAP – 24)



➤ The PTAP process includes:

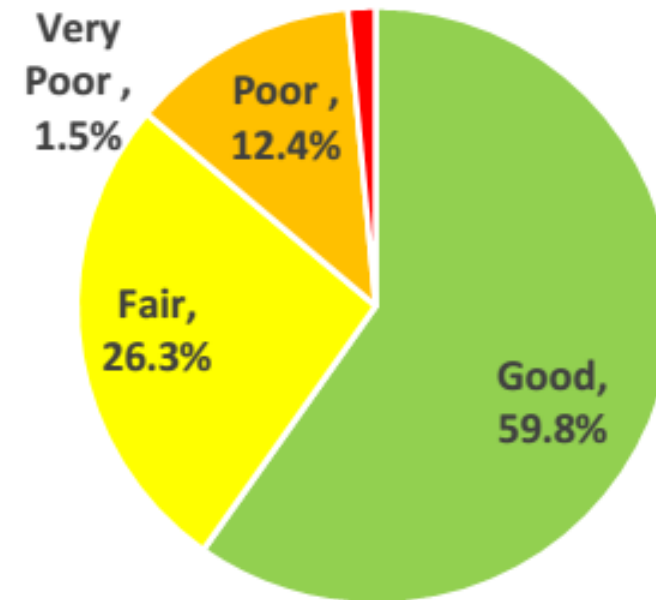
- Quality Management Report outlining pavement condition assessment procedures.
- Budget Options Report with various funding scenarios, current PCI, future projected PCI.
- Five-year plan / recommendation tailored to the individual local agency.
- PMP certification to qualify the local agency to apply for regional funding opportunities.

Current PCI Condition

➤ **Current Overall Network PCI = 71**

Table 3 and Figure 2 – Percent Network Area by Functional Class and Condition

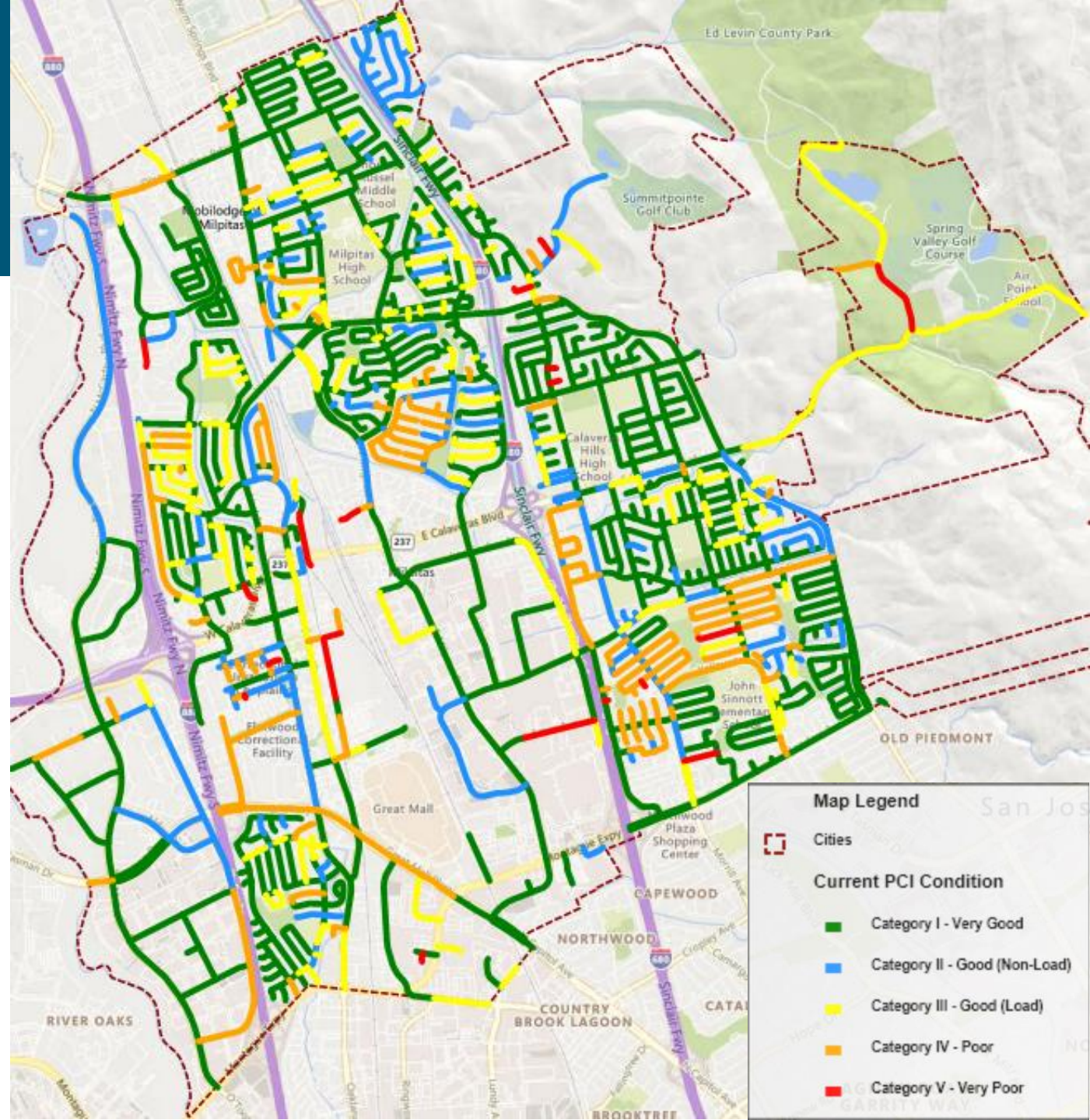
Condition Class	PCI Range	Arterial	Collector	Residential	Total
Good (I)	70-100	17.9%	15.3%	26.6%	59.8%
Fair (II/III)	50-70	7.9%	5.3%	13.1%	26.3%
Poor (IV)	25-50	3.1%	3.1%	6.2%	12.4%
Very Poor (V)	0-25	0.0%	0.4%	1.1%	1.5%
Totals		28.9%	24.1%	47.0%	



Current PCI Condition

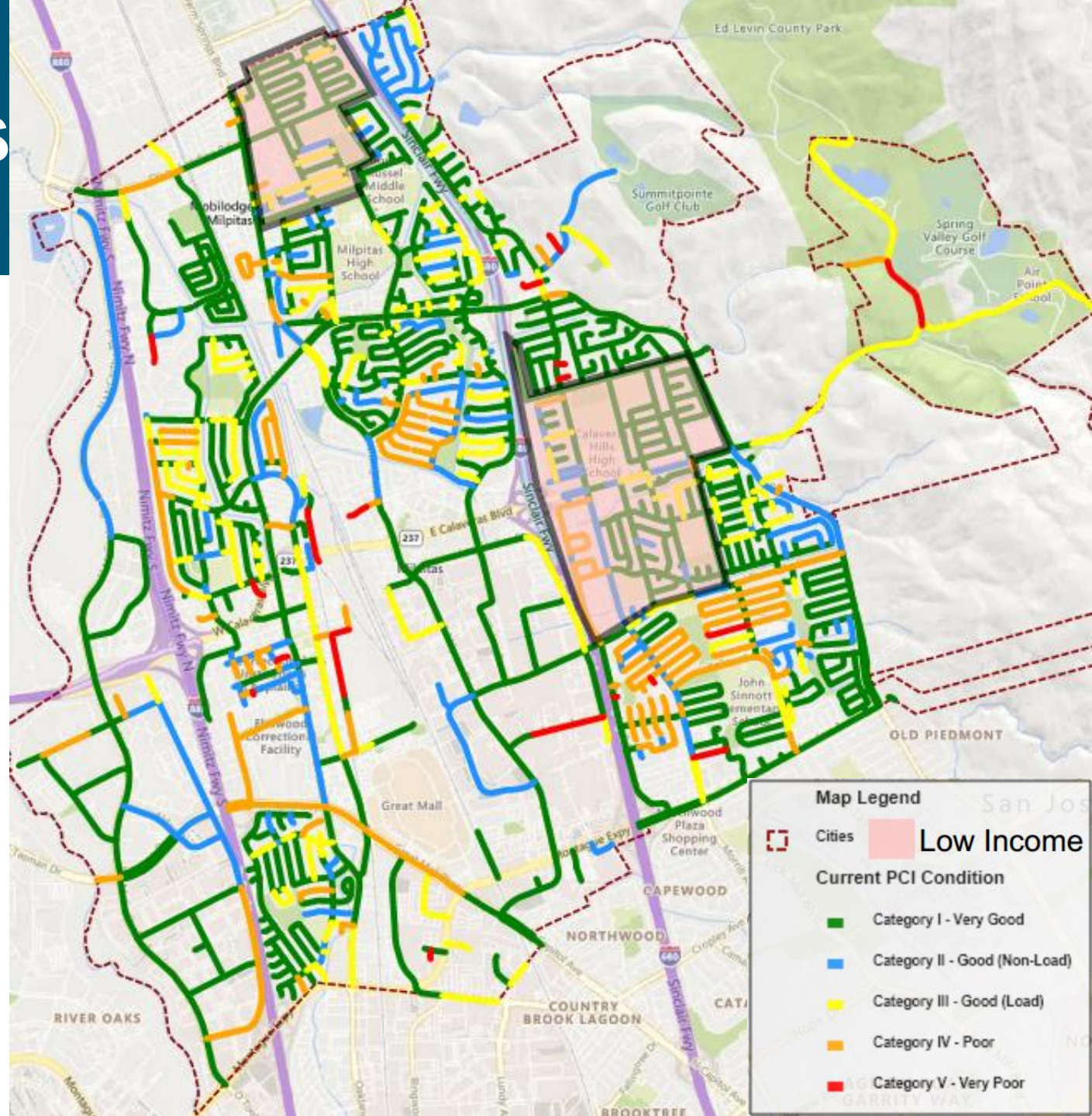
► Pavement Condition Definitions

1. Good (100-70)
2. Fair (Non-Load) (70-50)
3. Fair (Load) (70-50)
4. Poor (50-25)
5. Very Poor (25-0)



Current PCI Condition Lower Income Census Tracts

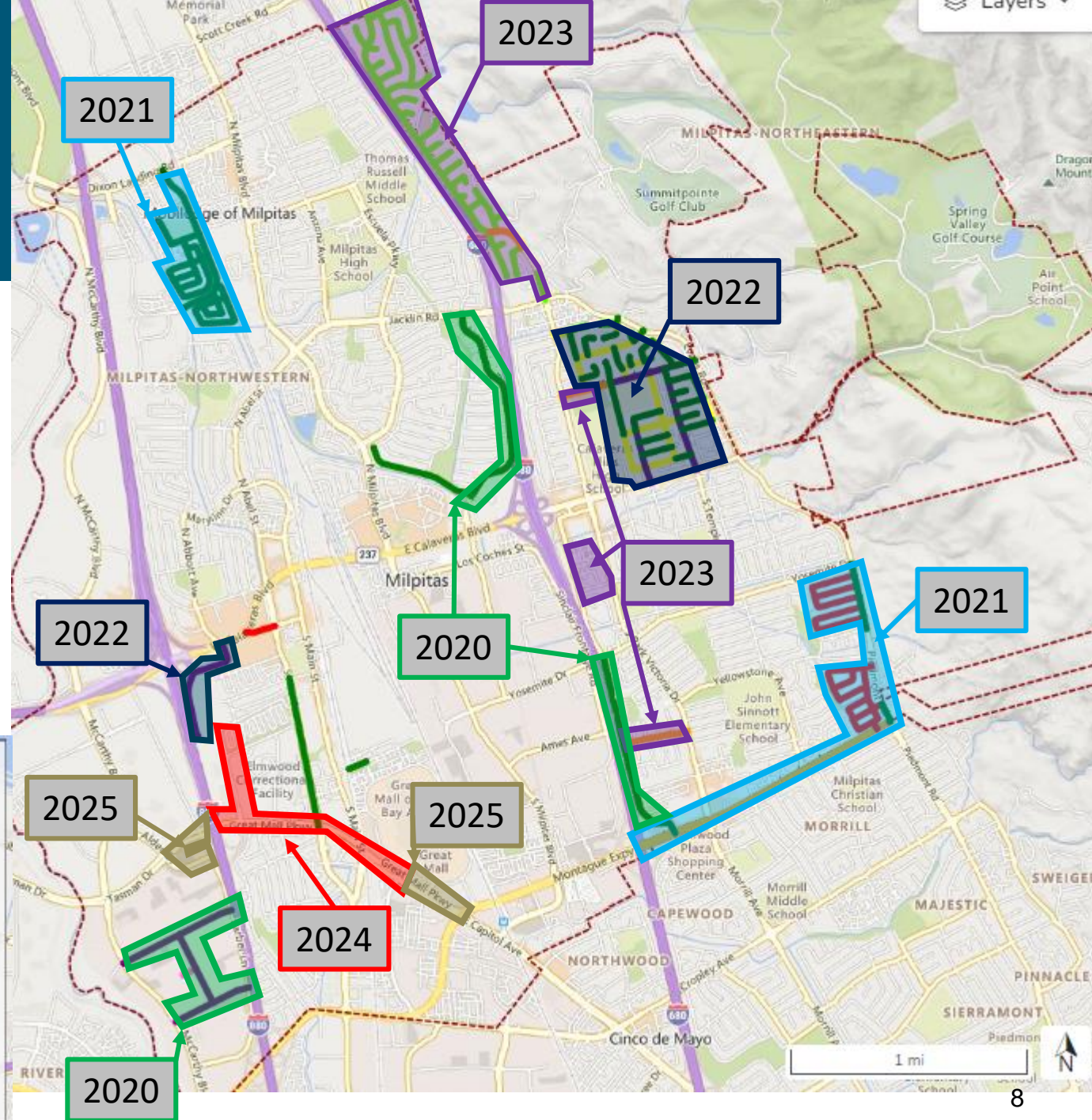
- AB 1550 & SB 535 guide Climate Investments in the State
- Bills prioritize investments in lower income communities
- 3 census tracts in Milpitas meet AB 1550 low-income definition
- Factor in decision making process for investments



Past Resurfacing Projects

Project Locations

- 2025 (Construction Summer 2025)
- 2024 (Construction Summer 2024)
- 2023
- 2022
- 2021
- 2020

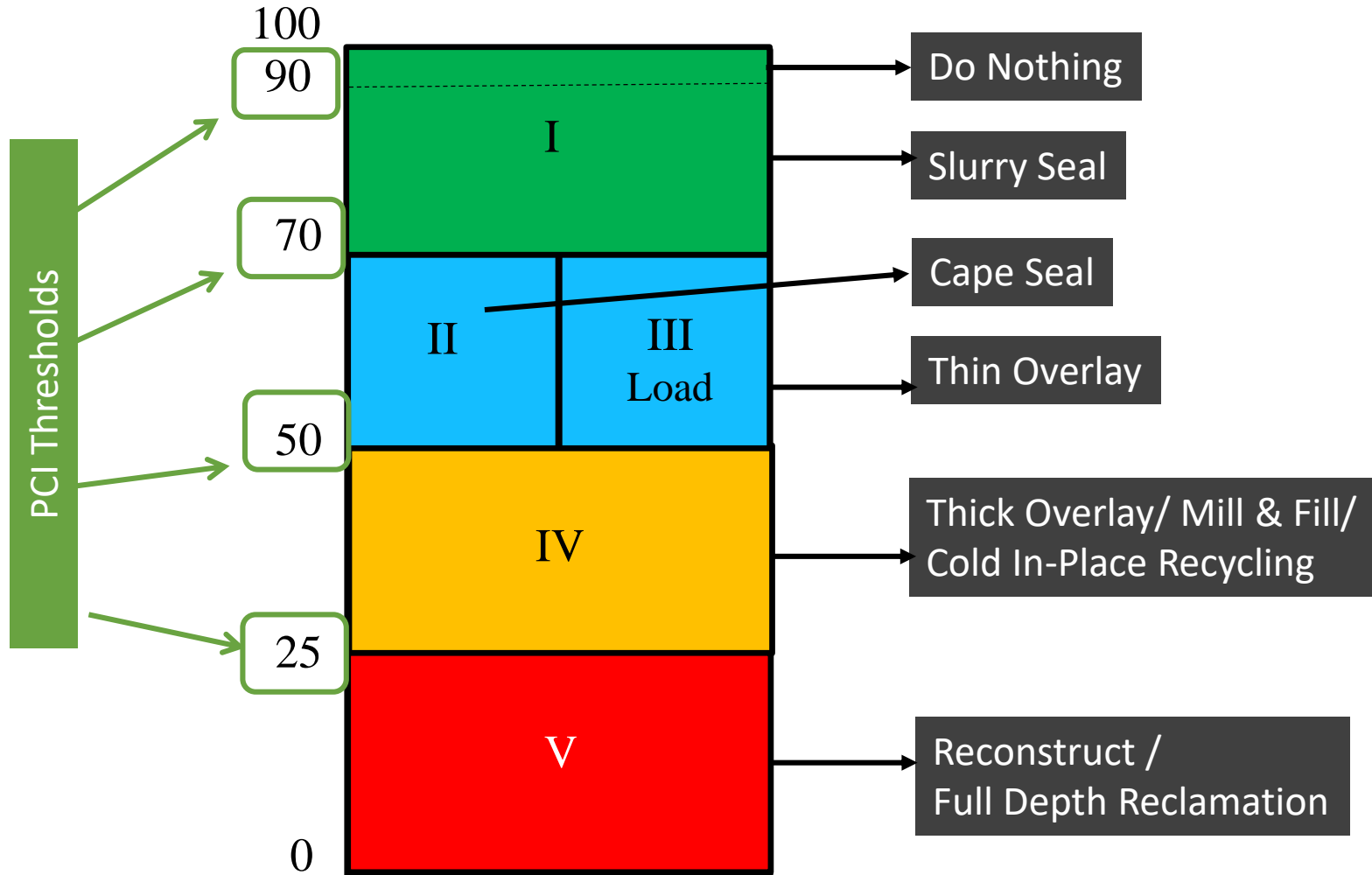


MTC's Pavement Management Strategy



- **The Pavement Management Strategy is designed to focus on streets that require a lower-cost preventative maintenance, such as slurry seals, microsurfacing, and crack sealing, to extend the functional life.**
- **This strategy is contrary to conventional wisdom of “worst-first”. However, this is a more cost-effective approach.**
- **The budget and treatment recommendations described in the PTAP report follow this “best-first” approach.**

MTC's Maintenance Philosophies

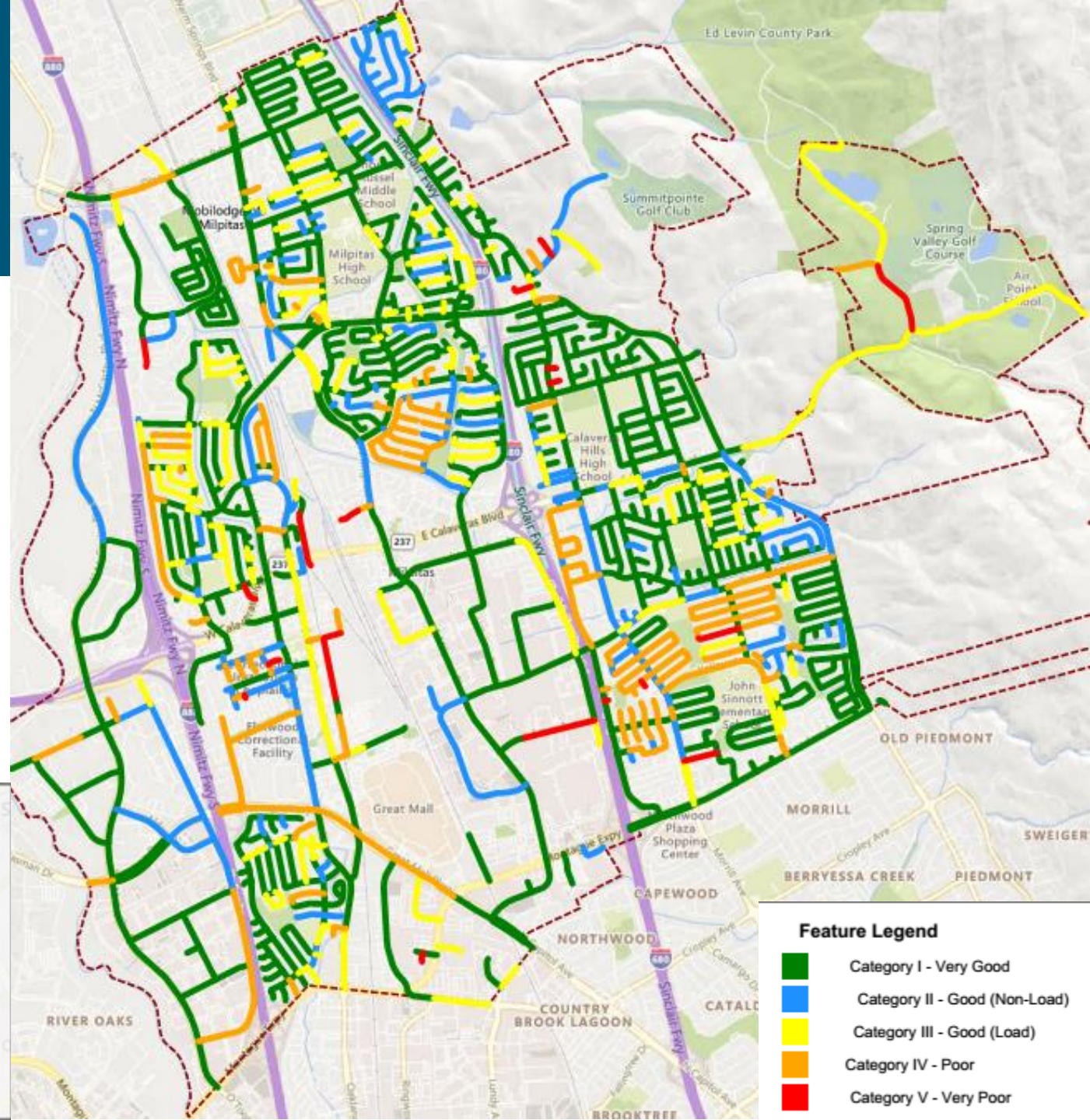
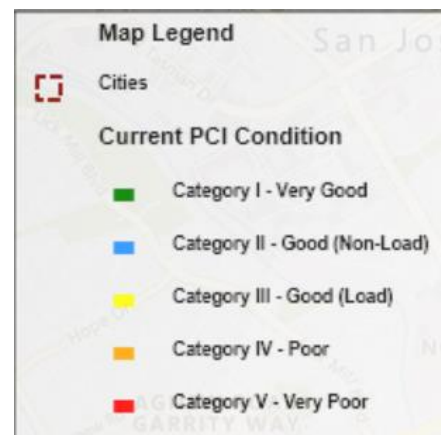


Maintenance Philosophies

Pavement Strategy

► Pavement Condition Treatments

- Good (100-70)
 - Slurry Seal, Crack Seal, Etc
- Fair (Non-Load) (70-50)
 - Cape Seal, Microsurfacing, Etc
- Fair (Load) (70-50)
 - Thin Overlay (<2")
- Poor (50-25)
 - Mill & Fill
 - Thick Overlay (>2")
- Very Poor (25-0)
 - Full Reconstruction



Budget Scenarios



Four Budget Scenarios

Table 6 – Scenario Summary

Scenario Name	5 Year Budget	2028 PCI (change)	2028 Deferred Maintenance	2028 % Good	2028 % Very Poor
1 – Unconstrained	\$95.6 million	84 (+13)	\$0	91.6%	0.0%
2 – Current Investment	\$22.5 million	71 (0)	\$57.8 million	66.4%	5.3%
3 – Increase PCI 5 points	\$40.0 million	76 (+5)	\$46.0 million	77.9%	5.3%
4 – Zero Funding	0	63 (-8)	\$83.9 million	47.2%	7.0%

- Deferred Maintenance = \$ amount of maintenance and rehabilitation work that should have been completed to maintain the street in ‘Good’ condition, but had to be deferred due to funding deficiencies

Budget Scenarios



➤ Scenario 1 – Unconstrained

- Implementing the investment strategy recommended by MTC’s Pavement Maintenance Program needs module
- Eliminates the “deferred maintenance” backlog as quickly as possible
- Average Annual Budget = **\$19 million**

Table 7 – Summary of Results, Scenario 1 — Unconstrained Needs

	2024	2025	2026	2027	2028	Total
Budget Total	\$39,243,221	\$8,949,403	\$19,107,502	\$11,351,599	\$16,930,500	\$95,582,225
Rehabilitation budget	\$27,139,826	\$7,467,439	\$17,387,935	\$10,849,736	\$14,666,169	\$77,511,105
Preventative Maintenance budget	\$12,103,394	\$1,481,963	\$1,719,566	\$501,861	\$2,264,330	\$18,071,113
Deferred Maintenance	\$0	\$0	\$0	\$0	\$0	---
PCI	82	81	82	83	84	

Budget Scenarios



Scenario 2 – Current Investment Level

- Implementing the current investment strategy programmed into the CIP to maintain a 71 PCI
- Accumulates deferred maintenance
- Average Annual Budget = **\$4.5 million**

Table 8 – Summary of Results, Scenario 2 — Current Investment Level

	2024	2025	2026	2027	2028	Total
Budget Total	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000	\$22,500,000
Rehabilitation budget	\$3,967,014	\$4,609,448	\$3,595,642	\$3,599,509	\$3,596,380	\$19,367,993
Preventative Maintenance budget	\$532,415	\$729,563	\$903,438	\$897,400	\$903,433	\$3,966,250
Deferred Maintenance	\$35,995,855	\$38,535,982	\$42,071,252	\$47,187,416	\$57,798,826	---
PCI	73	73	72	72	71	

Budget Scenarios



➤ Scenario 3 – Increase PCI by 5

- Implements a funding scenario to increase the PCI by 5 points
- Accumulates deferred maintenance
- Average Annual Budget = **\$8 million**

Table 9 – Summary of Results, Scenario 3 – Increase PCI 5 points

	2024	2025	2026	2027	2028	Total
Budget Total	\$8,000,000	\$8,000,000	\$8,000,000	\$8,000,000	\$8,000,000	\$40,000,000
Rehabilitation budget	\$6,763,365	\$7,409,987	\$6,396,932	\$6,398,057	\$6,397,645	\$33,365,986
Preventative Maintenance budget	\$1,234,561	\$1,428,808	\$1,599,663	\$1,599,869	\$1,602,186	\$7,465,086
Deferred Maintenance	\$32,497,358	\$31,757,587	\$33,347,910	\$37,248,105	\$46,034,313	---
PCI	75	75	75	76	76	

Budget Recommendation



➤ Current Proposed Street Resurfacing Funding

	2016 Measure B	SB1 RMRA	VRF	CP4283*	Total Available
Proposed Budget	\$1.9M	\$2.0M	\$0.5M	\$0.3M	\$4.7M

- Street Resurfacing budget covers design, inspection, construction, and administration
- *ADA Curb Ramp upgrades (CP 4283) is funded by Gas Tax (\$220k) and TDA III (\$80k)

➤ Revenue vs Expenses

- Scenario 1 = \$4.7M - \$19M = (\$14.3M) Deficit
- **Scenario 2 = \$4.7M - \$4.5M = \$0.2M**
- Scenario 3 = \$4.7M - \$8.0M = (\$3.3M) Deficit

Preliminary 5-Year Plan

2024

- Great Mall Pkwy Phase 1
- Thompson St / Ct

2025

- Great Mall Pkwy Phase 2
- Tasman Dr & Alder Dr

2025/2026

- Dempsey Rd

Future Project Areas

- S Temple Dr Neighborhood
- N Park Victoria & Jacklin Rd
- N Abbott Ave Neighborhood



Questions?

