



Cathedral City

Pavement Management Program (PMP) Review

Presented By

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Pavement Management Program

What is a PMP?

- * Widely implemented industry tool that evaluates the pavement conditions and is used to program maintenance and/or rehabilitation of local streets and roads.



Pavement Management Program

Purpose

- * To maintain Cathedral City's investment in its street network in the best condition possible given the available funding
- * Answers 4 main questions
 1. What streets does the City own/maintain?
 2. What condition are they in?
 3. What repairs are needed & when?
 4. How much funding is needed to maintain or improve streets?



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Street Inventory

	Centerline Mileage	# of Sections	Pavement Area (sf)	% Pavement Area	Weighted Average PCI 2023
Arterial	14.8	107	6,262,492	17.5%	62
Collector	23.3	140	7,351,140	20.7%	57
Residential/Local	118.9	1149	21,954,212	61.8%	67
Grand Total	157.0	1396	35,529,524	100.0%	64



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Pavement Condition Categories

Condition Category	Pavement Condition		PCI
I	Good		100
II/III	Fair (non-load)	Fair (load-related)	70
IV	Poor		50
V	Very Poor		25
			0

64

City-wide Average PCI = 64

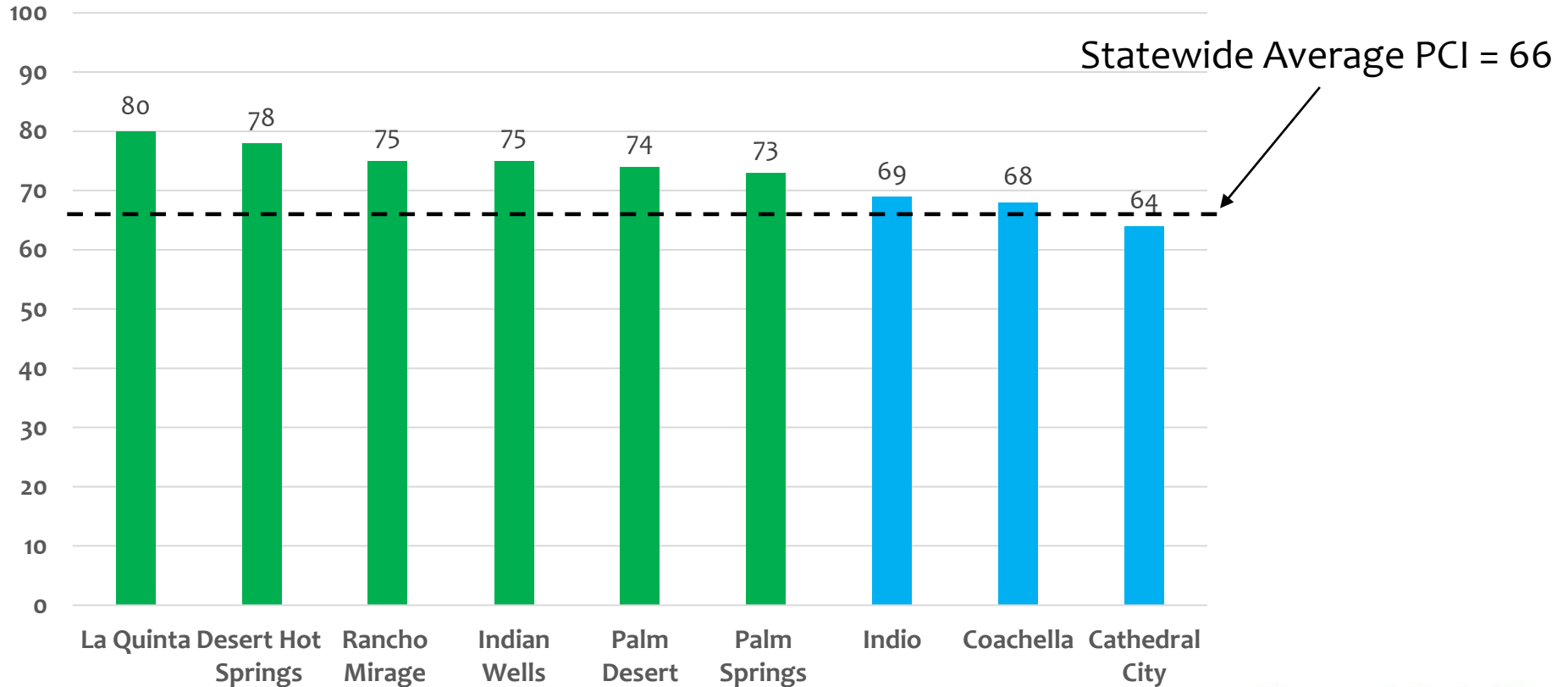


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Coachella Valley PCI Breakdown

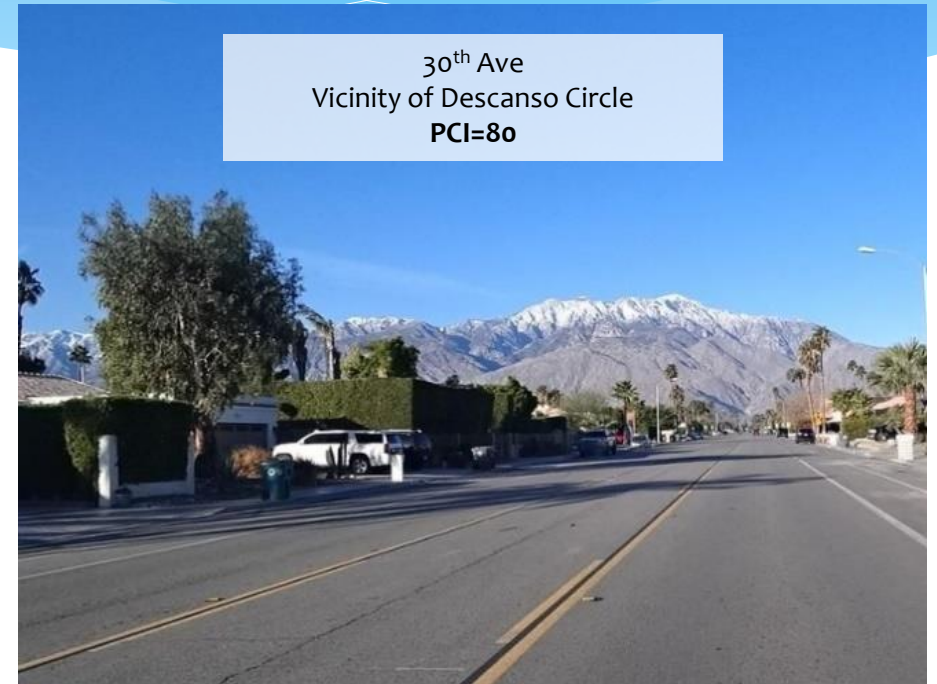


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Good Pavement Condition

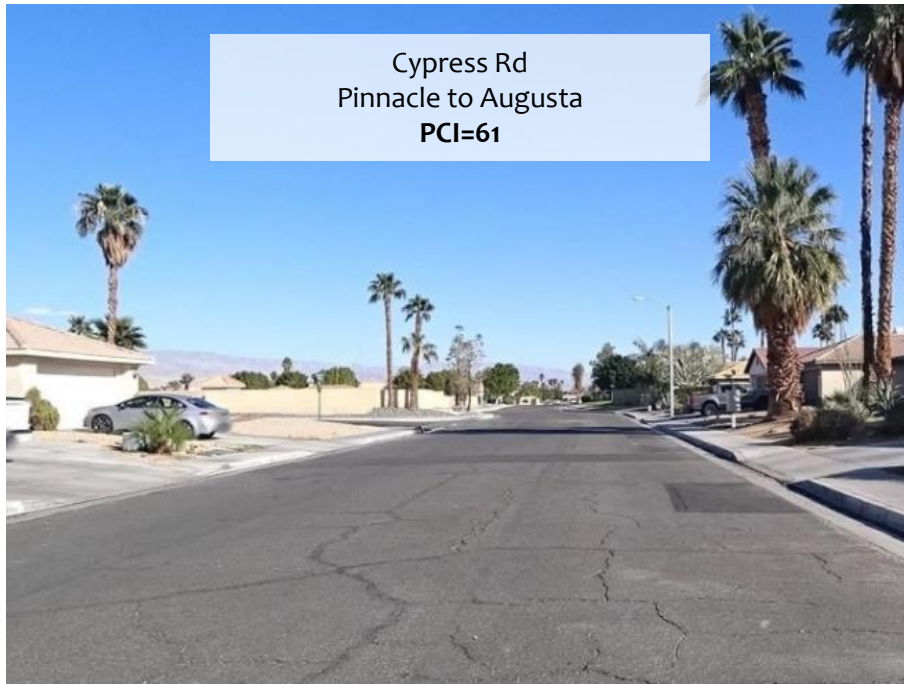


Pavement Condition		PCI
Good		100
Fair (non-load)	Fair (load-related)	70
Poor		50
Very Poor		25
		0



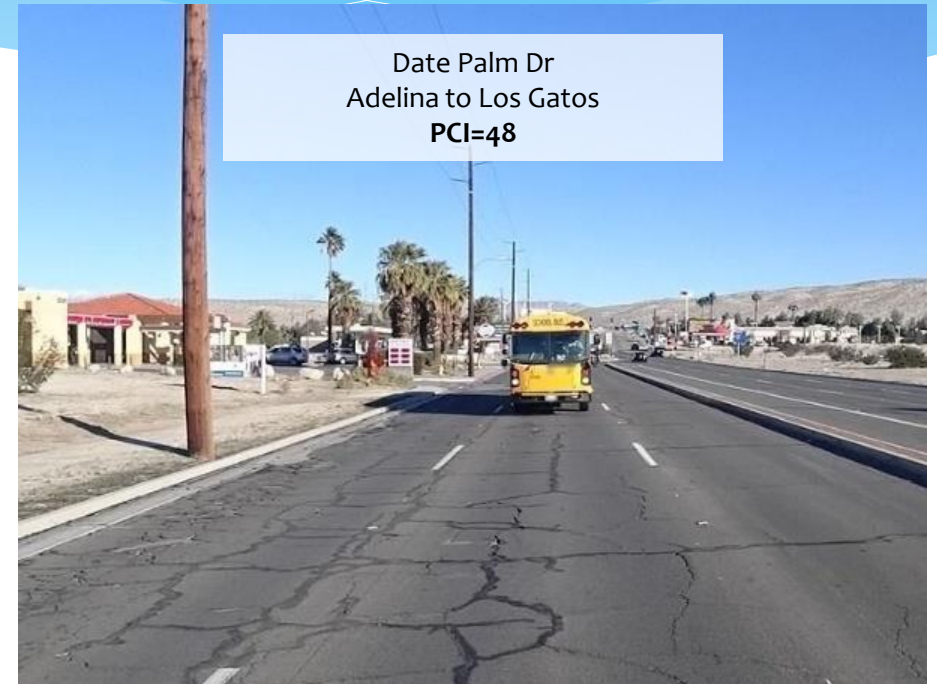
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Fair and Poor Pavement Conditions



Cypress Rd
Pinnacle to Augusta
PCI=61

Pavement Condition		PCI
Good		100
Fair (non-load)	Fair (load-related)	70
Poor		50
Very Poor		25
		0



Date Palm Dr
Adelina to Los Gatos
PCI=48



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Poor and Very Poor Conditions

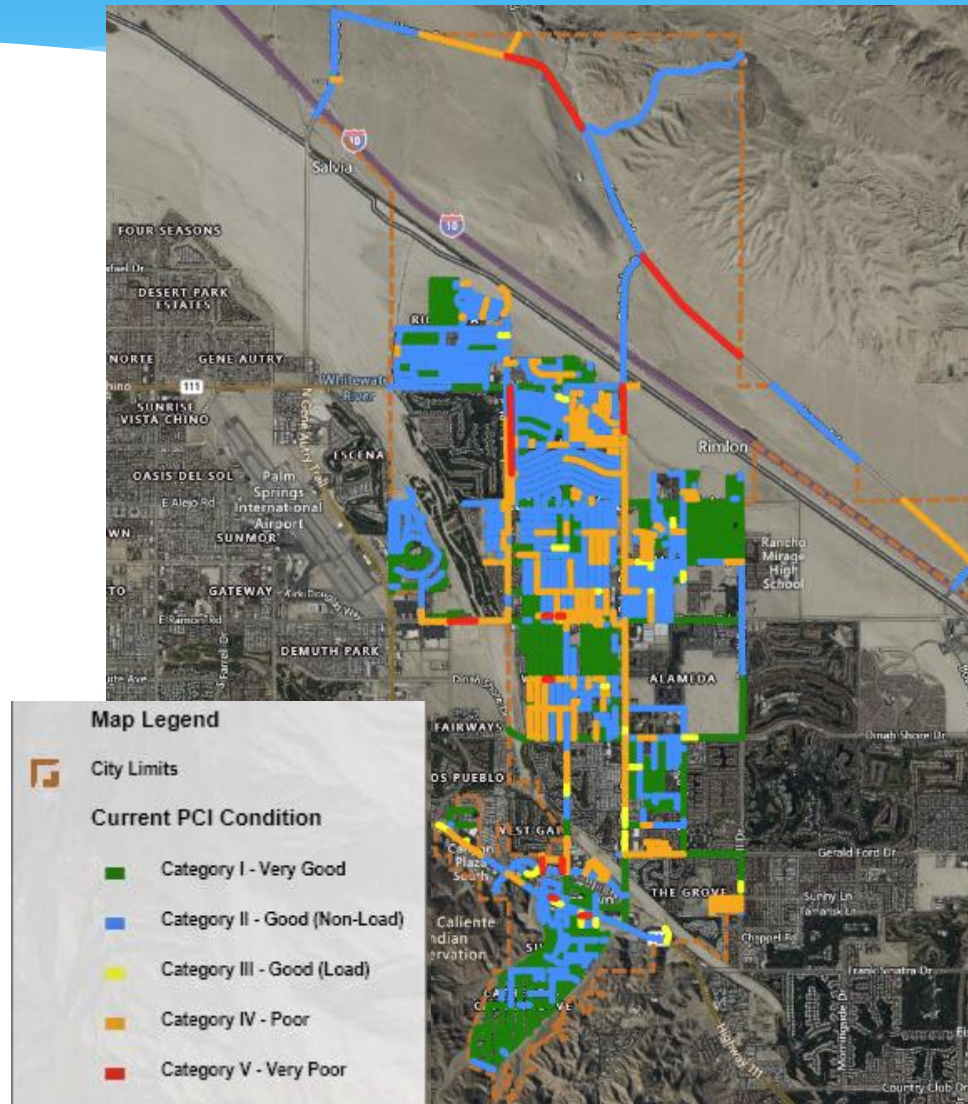


Pavement Condition		PCI
Good		100
Fair (non-load)	Fair (load-related)	70
Poor		50
Very Poor		25
		0



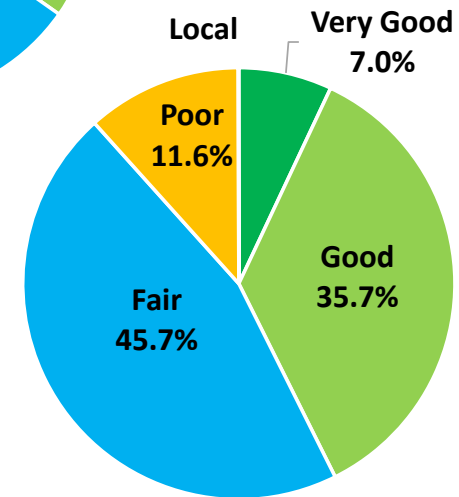
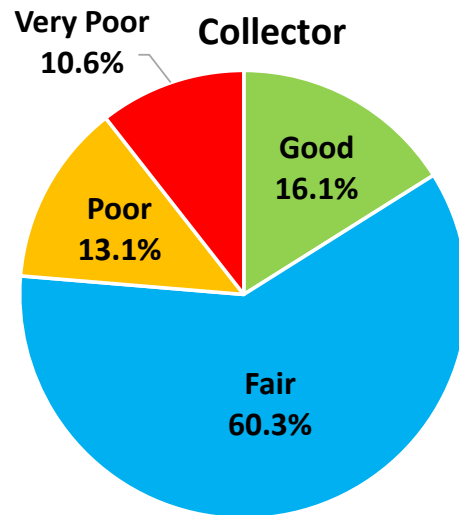
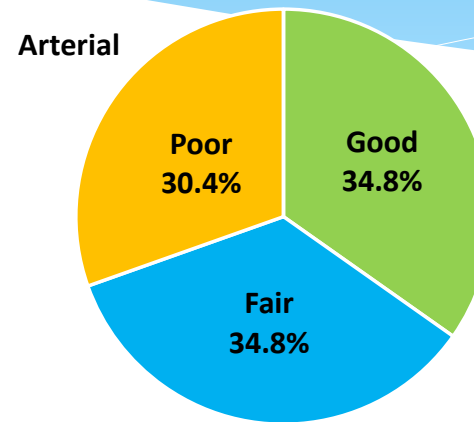
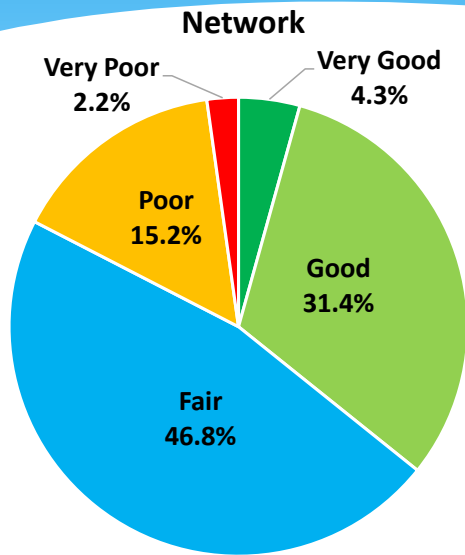
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Cathedral City PCI Map



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Cathedral City PCI Breakdown

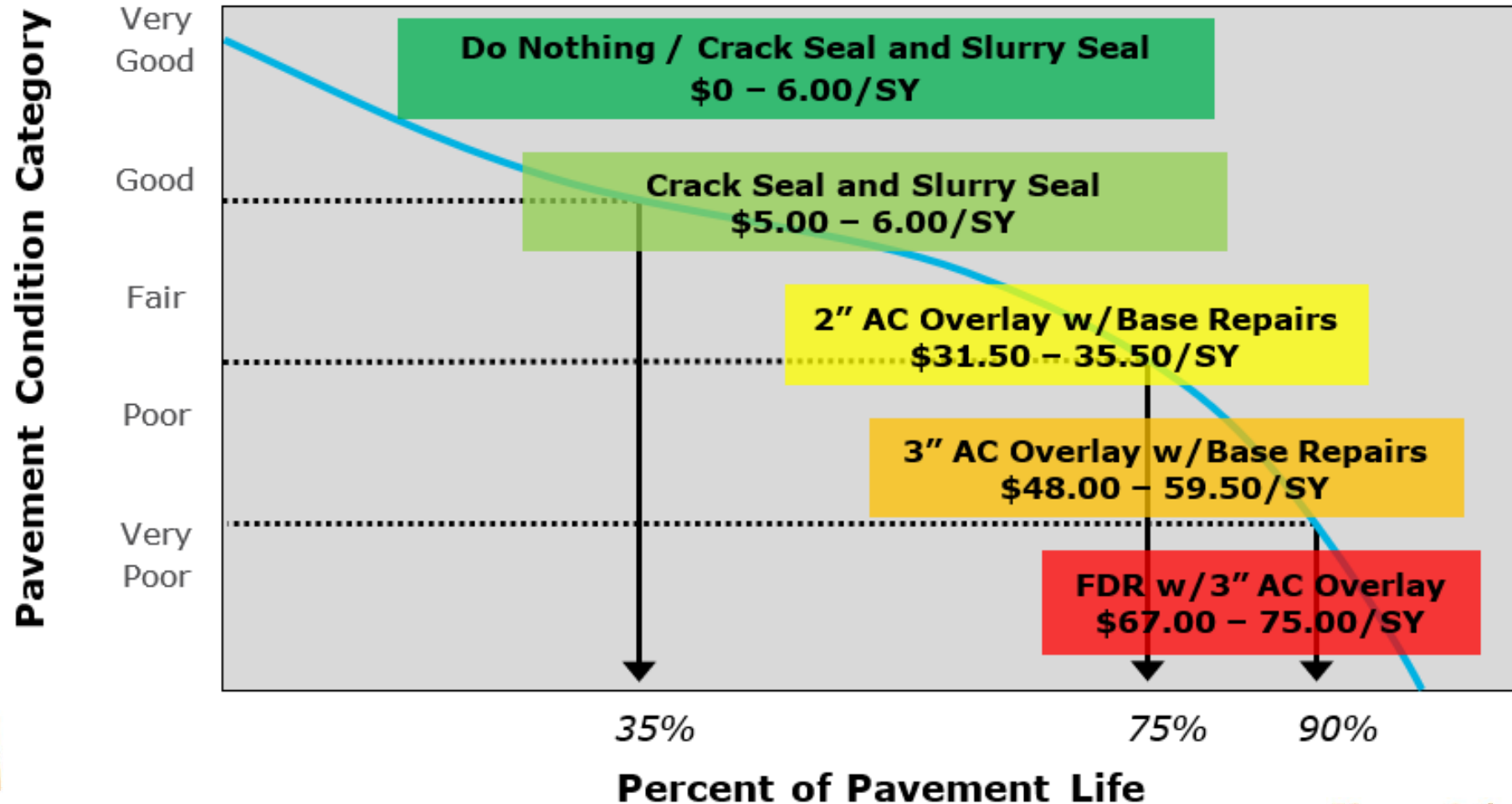


- Very Good: PCI 100-90
- Good: PCI 89-70
- Fair: PCI 69-50
- Poor: PCI 49-25
- Very Poor: PCI 24-0



Pavement Management Program

Ideal Pavement Treatment Strategies



Pavement Management Program

Cycle of Road Maintenance

- * Roadway maintenance base on 6-year cycle and 24-year life:
 - * Step 1: Reconstruct roadway (year 1)
 - * Step 2: Re-slurry roadway at year 6
 - * Step 3: Re-slurry roadway at year 12
 - * Step 4: Re-slurry roadway at year 18
 - * Step 5: Reconstruct roadway (year 24)



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Decisions

- * Based on:
 - * Roadway condition (PCI)
 - * Available funding (City's general fund/grant funding)
 - * Attention to roads recently reconstructed
 - * Get into the cycle of maintenance
 - * Maintain as best possible, roads that need reconstruction
 - * Until funding available for reconstruction



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Budget Needs

Fiscal Year	Current	23/24	24/25	25/26	26/27	27/28	Total
Budget Needs (\$M)	NA	\$ 53.5	\$ 1.4	\$ 2.1	\$ 0.1	\$ 0.4	\$ 57.5
Rehabilitation (\$M)	NA	\$ 48.9	\$ 1.0	\$ 1.7	\$ 0.0	\$ 0.4	\$ 52.0
Preventive Maintenance (\$M)	NA	\$ 4.6	\$ 0.4	\$ 0.4	\$ 0.1	\$ 0.0	\$ 5.5
Treated PCI	64	82	79	78	76	74	NA
Untreated PCI/Do Nothing	64	64	62	60	57	55	NA



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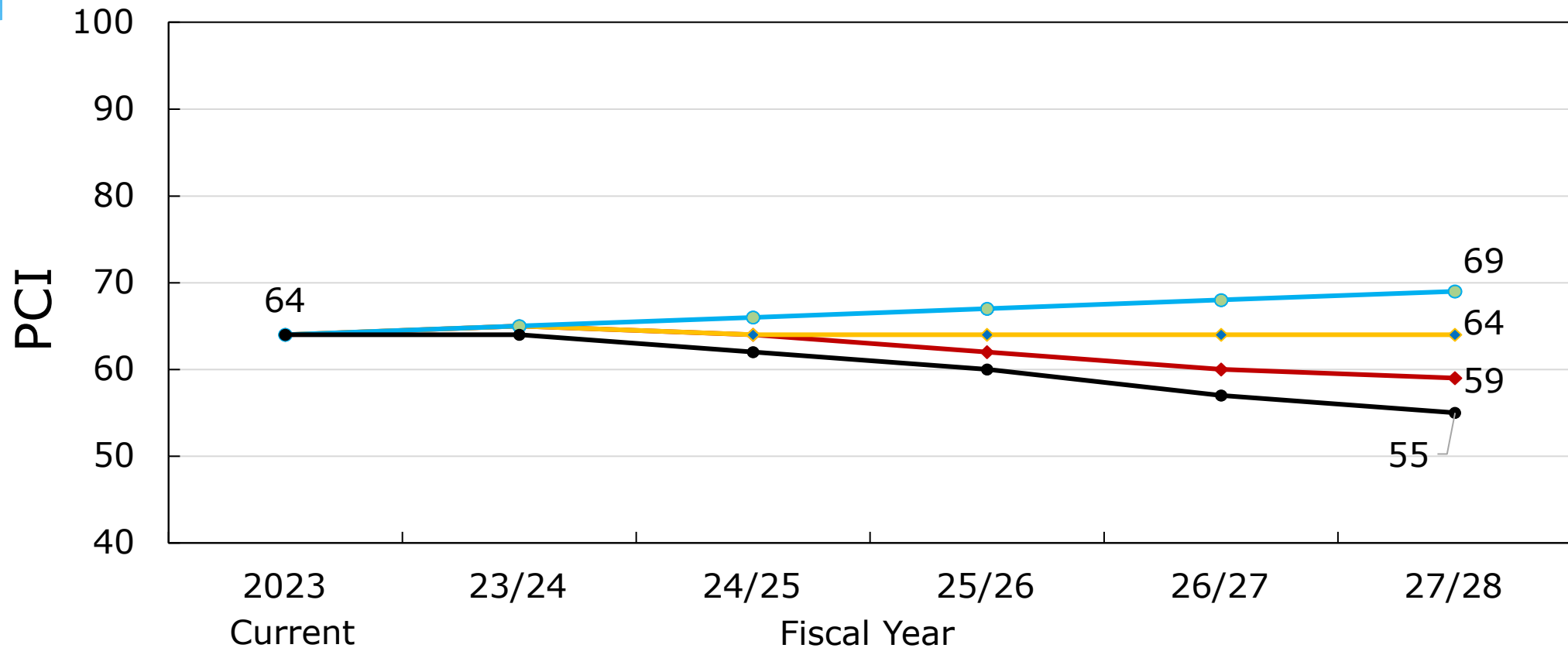
Budget Scenarios

- * **Scenario 1:** City's Existing Budget (\$2.0 Mil annually)
- * **Scenario 2:** Maintain PCI at 64 (\$2.0 Mil to \$11.9 Mil annually)
- * **Scenario 3:** Increase by 1 PCI point per year (\$2.0 Mil to \$15.1 Mil annually)
- * **Scenario 4:** Untreated (No Pavement Treatment)



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Scenario Comparison



—◆— S1: Existing Budget —◆— S2: Maintain PCI at 64 —●— S3: Improve PCI to 69 —●— S4: Untreated

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Magnitude of Scale of the Cost of Paving Projects

- * East Palm Canyon REAS project (East City Limits to Cathedral Canyon) = \$800 k
- * Landau remediation project (Ramon Road to Vista Chino) = \$5.0 mil
- * Date Palm Drive reconstruction (Vista Chino to 30th Avenue) = \$5.6 mil
- * Varner Road reconstruction (Palm Drive to Date Palm Drive) = \$27.0 mil



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Summary

- * Use the PMP and conduct pavement evaluation during the design phase to determine the most cost-effective solution
- * Leverage any utility projects to include paving
- * Determine how to increase paving budget by exploring impact fees
- * Leverage local funding as match for federal/state grant funds



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END



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