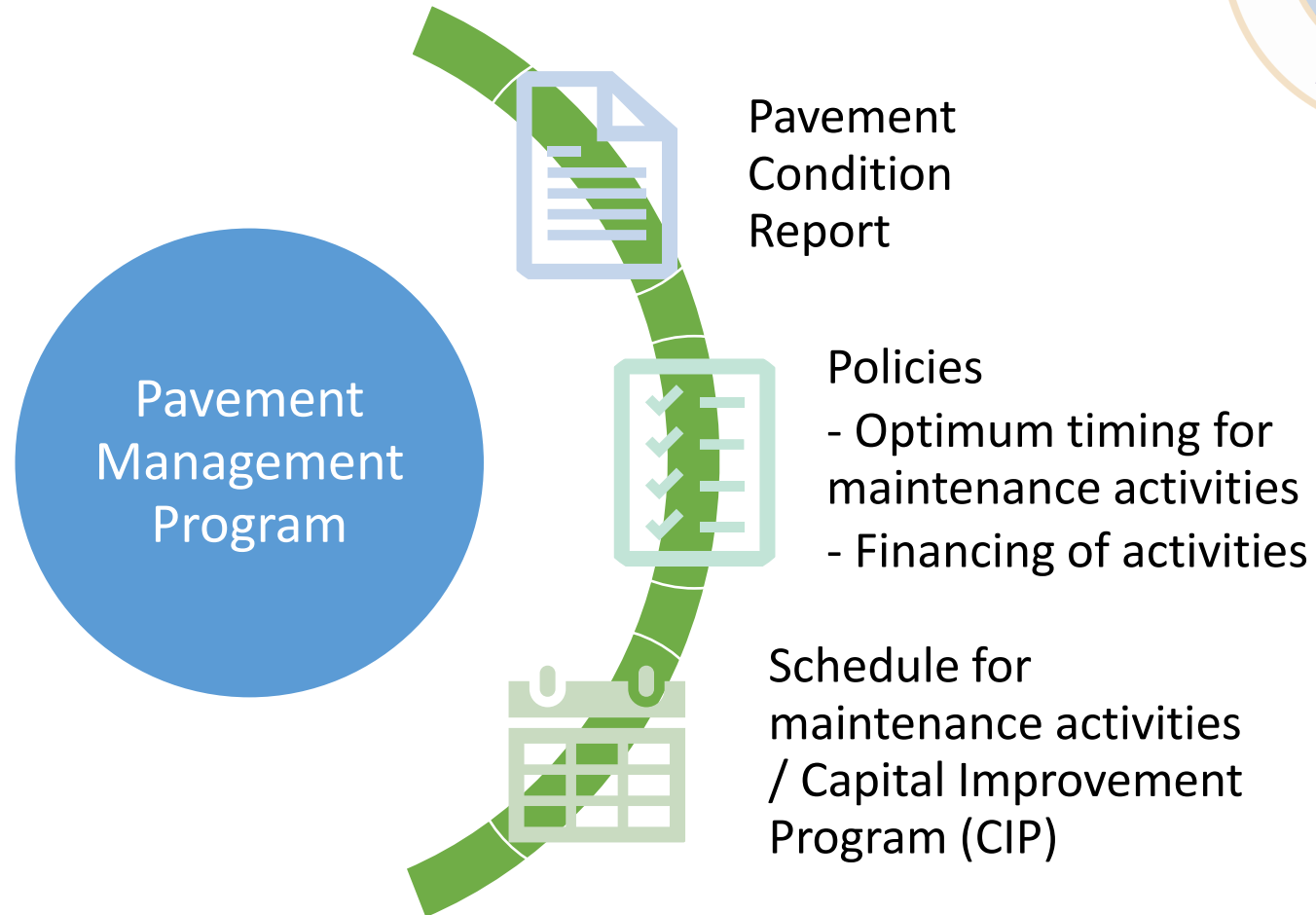



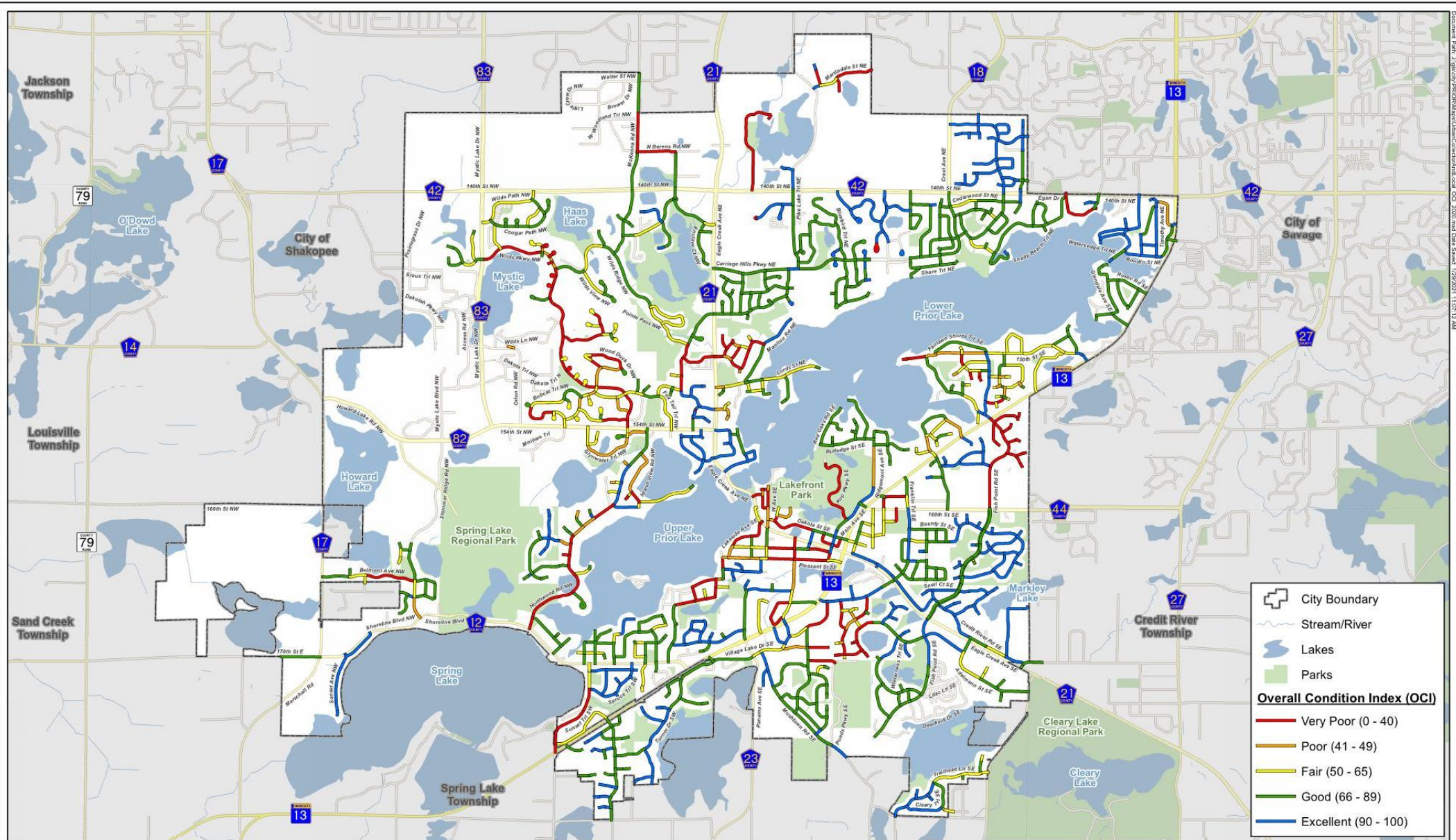
What is a Pavement Management Program?



- 
- City streets are rated every (3) years.
 - Pavement distresses (cracks, settlements, potholes) are logged for quantity and severity for each street segment.
 - The type, number and severity of distresses results in an Overall Condition Index (OCI) for each street segment.
 - New streets start with an OCI of 100; a completed failed street has an OCI of 0.

2021 OCI Map





Urban Collector and Local Overall Condition Index (OCI) - 2020

Pavement Management Program
City of Prior Lake, Minnesota




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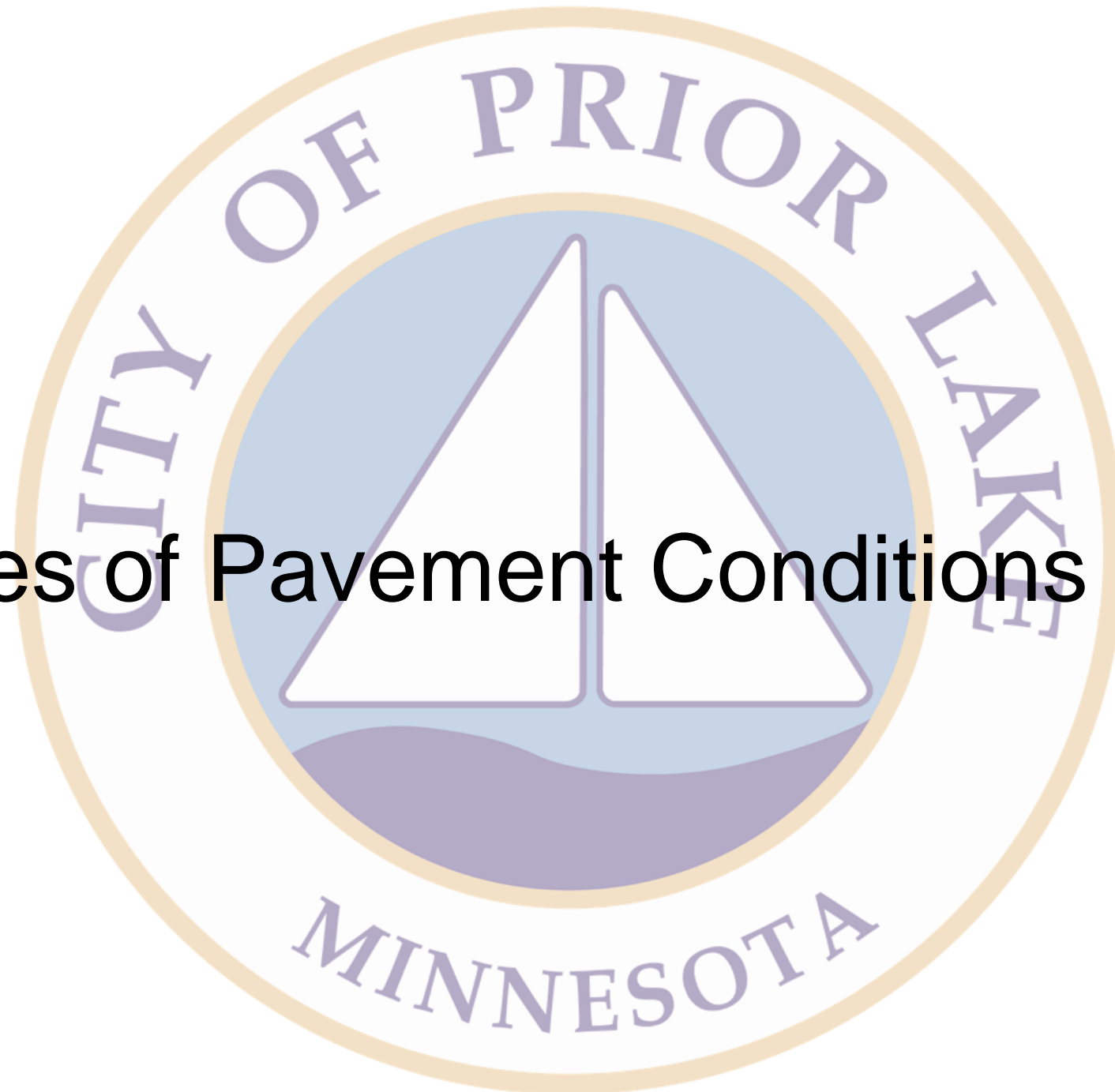
Current Pavement Conditions

Current OCI

Condition Category	OCI Range	Percentage of Urban Local	Miles of Urban Local	Percentage of Urban Collector	Miles of Urban Collector
Excellent	90 - 100	27%	24 mi.	17%	3 mi.
Good	66 - 89	42%	38 mi.	51%	9 mi.
Fair	50 - 65	14%	13 mi.	9%	2 mi.
Poor	41 - 49	4%	4 mi.	3%	1 mi.
Very Poor	0 - 40	13%	12 mi.	20%	4 mi.

- 
- The current Prior Lake overall street network average OCI is 71.
 - The target street network average OCI is between 70 and 75. This is consistent with industry standards and other metro communities.

Examples of Pavement Conditions



Northwood Road

- Current OCI – 28



Duluth Avenue

- Current OCI – 28



**Dunkirk Ave
(Intersection at Pershing St)**

- Current OCI – 35



Wilds Drive

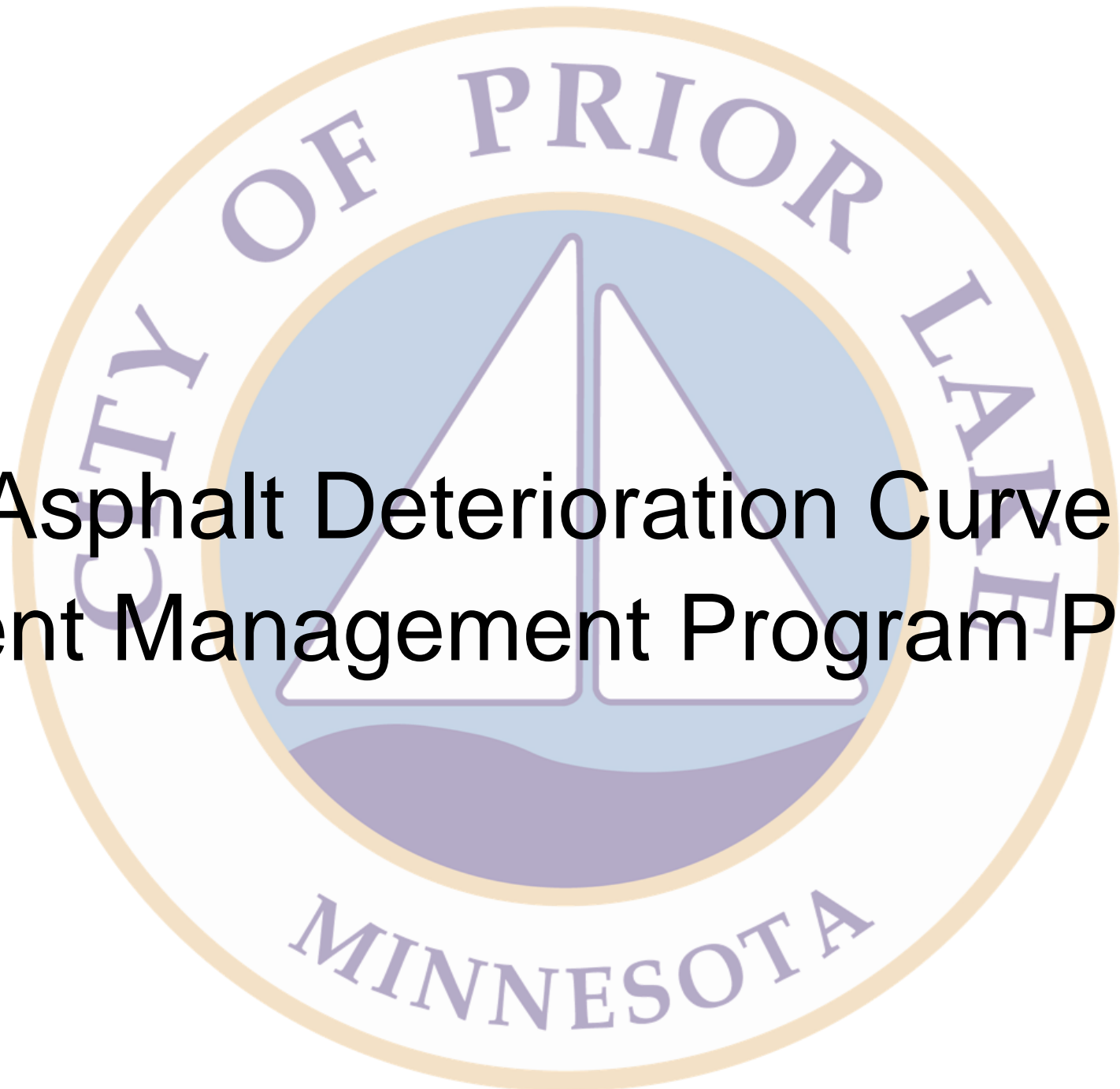
- Current OCI – 51



Willow Lane

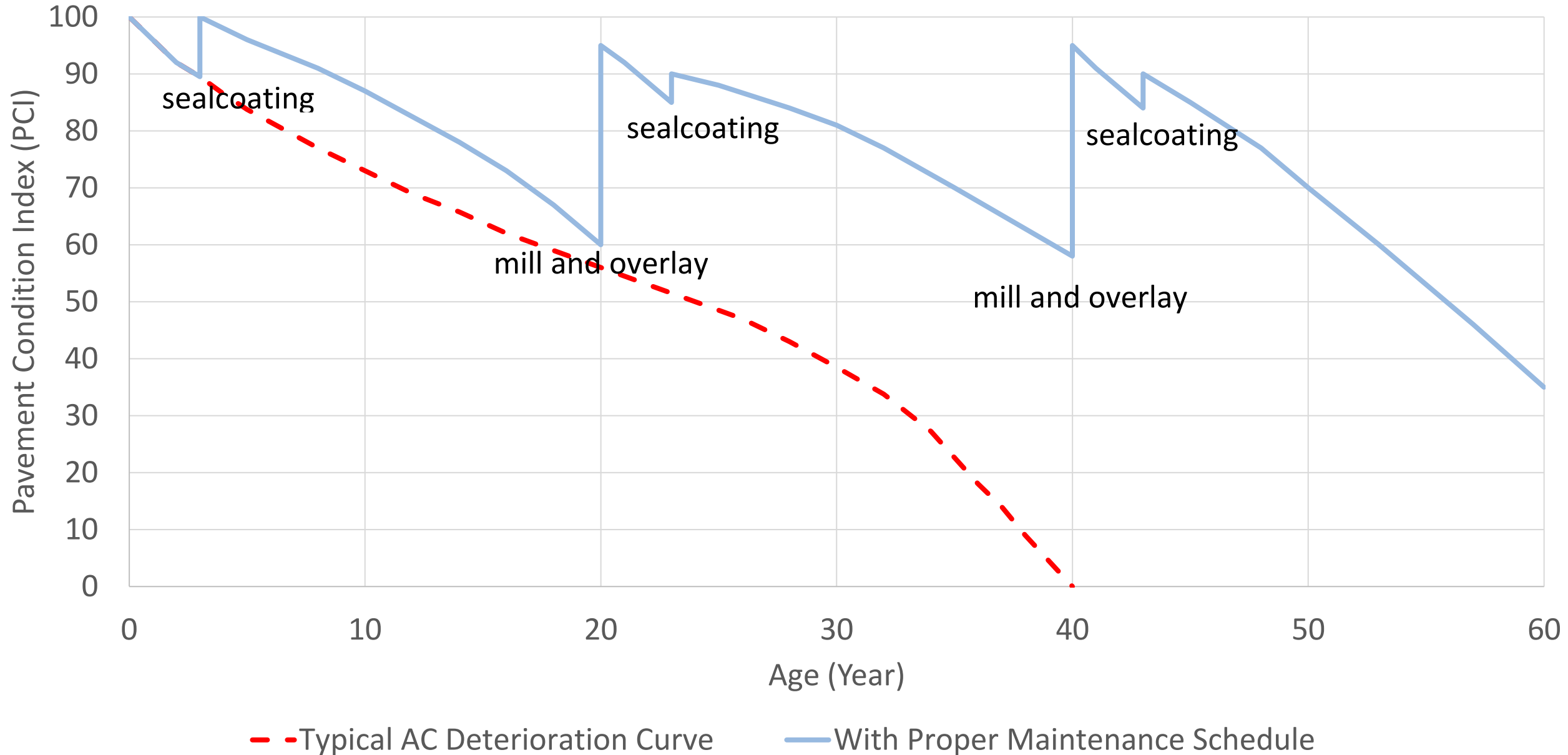
- Current OCI – 79





Typical Asphalt Deterioration Curve and Pavement Management Program Protocol

Asphalt Pavement Deterioration Curve with and without Proper Maintenance Schedule



- The goal of a pavement management program is the investment of funds for maintenance activities at appropriate points in the pavement life cycle to extend the overall pavement life to 40 – 60 years before full reconstruction is required.
- Pavement management activities include crack sealing, chip seals, and mill/overlays at target OCI points in the pavement life cycle.

Pavement Management Program Maintenance Protocol

Type of Activity	OCI Range	Impact / Improvement
Reclamation / Reconstruction	0 – 40	100 OCI
Mill and Overlay	50 – 65	90 OCI
Seal Coating	First 3 years (90 – 100)	10%

Budget Scenarios



-
- At current funding levels, the city's overall network average is projected to fall to a 55 OCI.
 - The projected 20-year funding need to maintain a target overall network average OCI between 70 and 75 is \$95M; approximately \$5M per year.
 - The estimated cost to recover from an overall network average 55 OCI in 20 years is between \$150M and \$200M.

Current Average Annual Funding

Type of Activity	Budget
Reconstruction	\$2 mil
Mill and Overlay	\$750,000
Seal Coating	\$225,000

Ending OCI = 55 OCI

Budget Scenario

20-Year Budget Scenario	Ending OCI	20-Year Total Costs
(\$3 mil to \$5 mil at year 2025 and maintain that budget)	71	\$95 mil

Budget C: \$3M to \$5M at year 2025

