



Public Works Road Maintenance

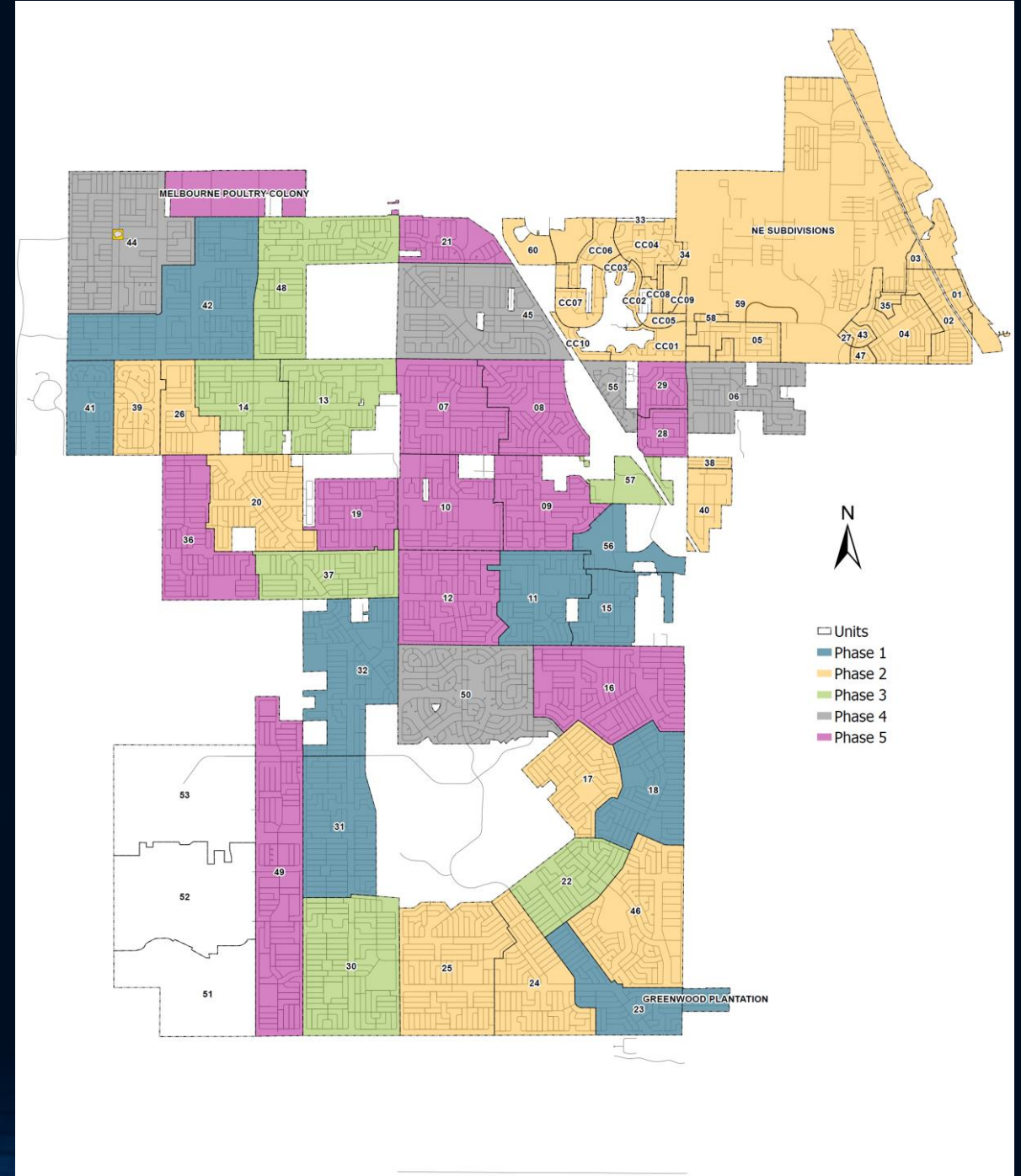
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JULY 16, 2020

OVERVIEW

- **Road Bond Paving Program**
- **Pavement Management**
- **Rejuvenation**
- **Pavement Preservation - Toolbox**
- **Pavement Matrix Plan**

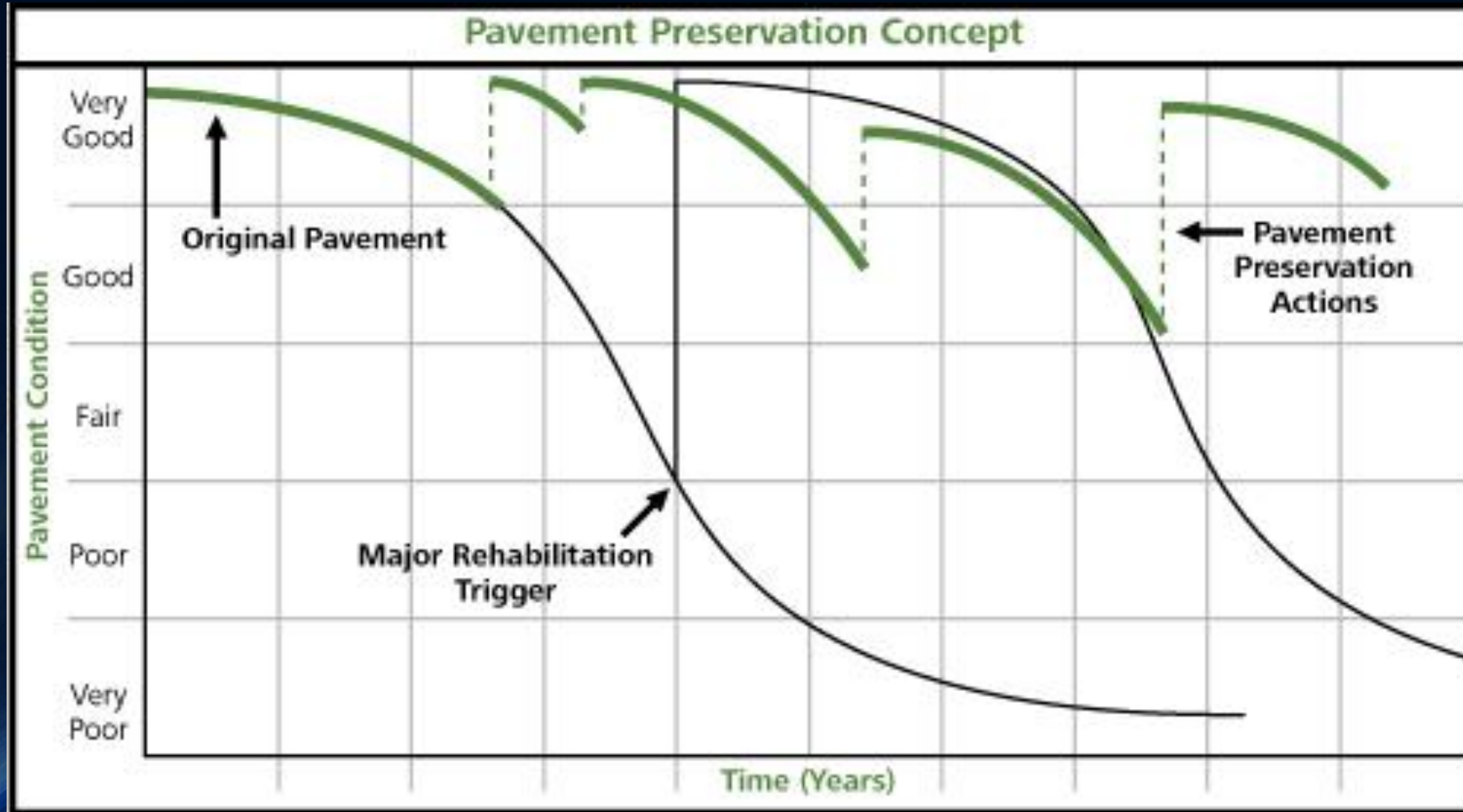
Five Year Road Bond Paving

	Road Miles
Year 1	143
Year 2	190
Year 3	140
Year 4	138
Year 5	180
Total Miles	791



Pavement Management

Pavement Condition vs Time



Pavement Management

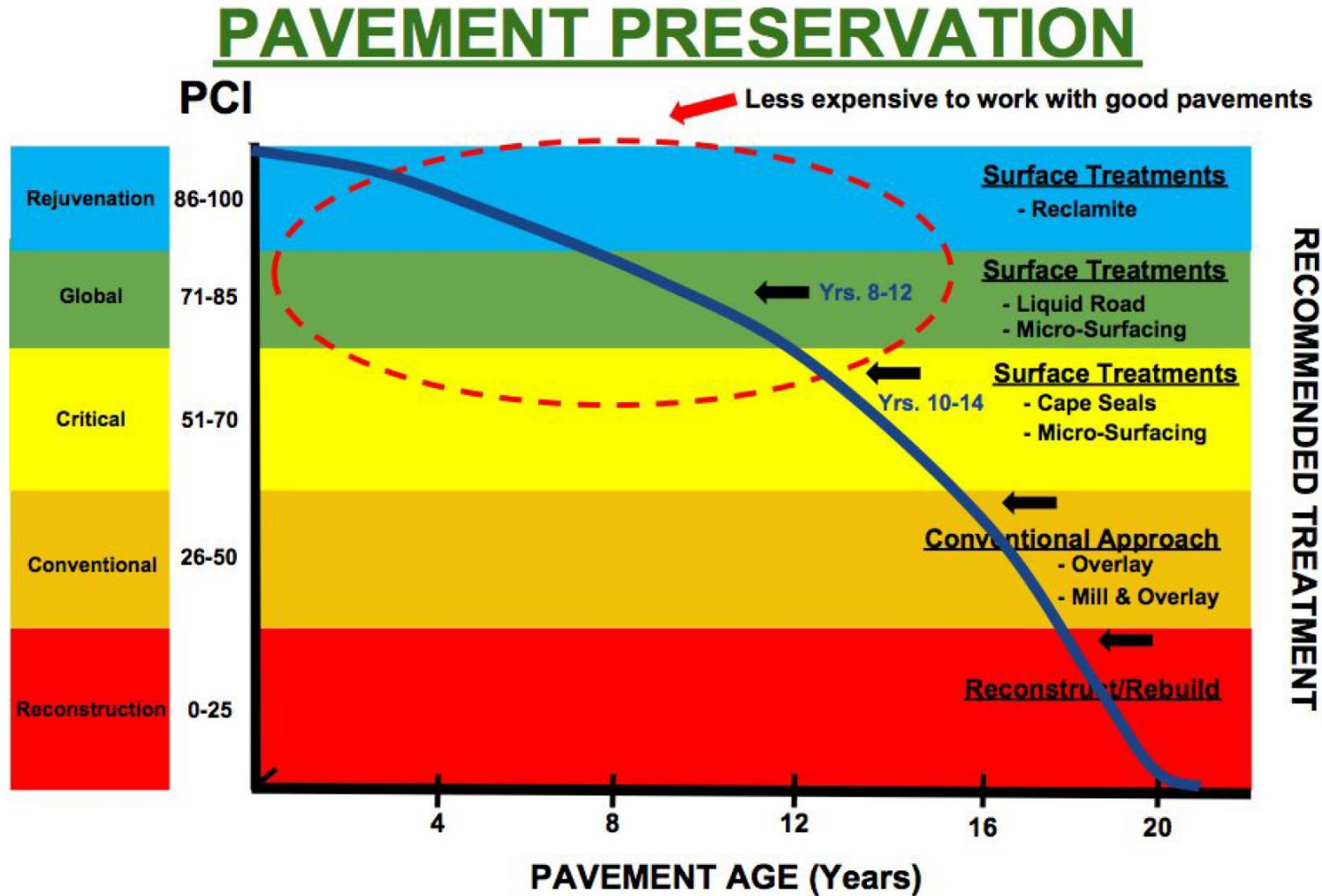


Figure 2-1 Pavement Preservation

What is Rejuvenation?

Asphalt Rejuvenation...

- replaces oils lost due to oxidation
- revitalizes the asphalt binder
- restores flexibility
- seals the pavement against contaminants
- extends the useful life of asphalt



Pavement Preservation – Toolbox

<u>Type of Repair</u>	<u>Years</u>	<u>\$/mile@20'</u>	<u>\$/SY</u>
1. Reconstruction	20	\$645,000	\$55
2. Full Depth Reclamation	20	\$528,000	\$45
3. Milling and Paving	15-20	\$223,000	\$19
4. Thin Lift Overlay	10-15	\$165,000	\$14
5. Micro Surfacing	5	\$47,000	\$4
<u>Maintenance</u>			
• Rejuvenation	3-5	\$12,000	\$1

Pavement Matrix Plan

Year 1 (143 miles) Year 2 (190 miles) Year 3 (140 miles) Year 4 (138 miles) Year 5 (180 miles) Total = 791 miles	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	Year 2035	Year 2036	Year 2037	Year 2038	Year 2039
Rejuvenation Twice 3 years	8mi \$1.14	143mi \$1.7	190mi \$2.3	140mi \$1.6	138mi \$1.6 143mi \$1.7	180mi \$2.1 199mi \$2.3	140mi \$1.6	138mi \$1.6	180mi \$2.1								36mi \$0.4	50mi \$0.6	35mi \$0.4	35mi \$0.4 36mi \$0.4
Preservation Micro-surface 5 years										143mi \$6.7	190mi \$8.9	140mi \$6.5	138mi \$6.5	180mi \$8.5						
Thin overlay 25% Streets														36mi \$5.9	48mi \$7.9	35mi \$5.7	35mi \$5.7	45mi \$7.4		
Mill and Pave 25% Streets																		36mi \$8.0	48mi \$10.7	35mi \$7.8
Full Depth Reclamation 2% Streets										16mi \$8.4										
Full Reconstruction 2% Streets																				16mi \$12.2
Total per year	\$0.14	\$1.7	\$2.3	\$1.6	\$3.3	\$4.4	\$1.6	\$1.6	\$2.1	\$15.1	\$8.9	\$6.5	\$6.5	\$14.4	\$7.9	\$5.7	\$6.1	\$16.0	\$11.1	\$20.8
Average 10 Years	\$3.4										\$10.4									
Average 20 Years	\$6.9 (millions)																			

Questions?

THANK YOU FOR YOUR TIME.

