



Magna Pavement Management

July 2025



Public Works Operations Provides the Following Services:

- Road inspections (3-year rotation)
- Data management
- Mill and overlays of asphalt surface (2")
- Repairs
 - Potholes
 - Crack sealing
 - Mastic patch
 - Asphalt patch
- Micropave (contracted)
- Slurry seals (contracted)

Pavement Preservation



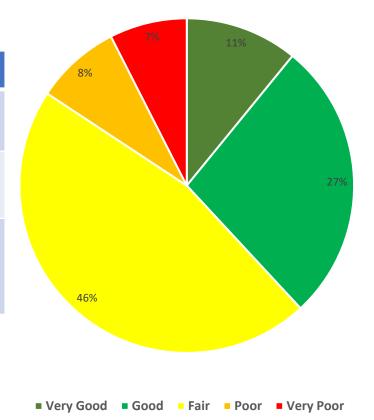




Magna Pavement Condition

	Very Good	Good	Fair	Poor	Very Poor	Total
Condition	11%	27%	46%	8%	7%	100%
Centerline Miles	9.49	24.82	41.20	7.83	6.30	89.66
Area Square Feet	1,578,247	3,944,509	6,693,808	1,193,034	1,085,343	14,494,941

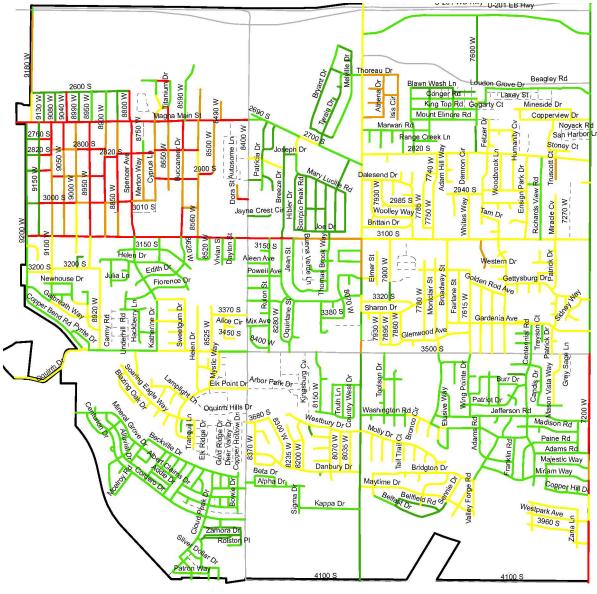
Average Road Segment OCI = 73.86



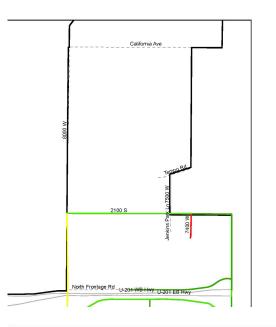
Magna Current Condition







Magna Current Condition



Category	Rating Range		
Very Good	94 - 100		
—— Good	76 - 93		
—— Fair	64 - 75		
—— Poor	41 - 63		
Very Poor	0 - 40		





Budget Forecast Assumptions:

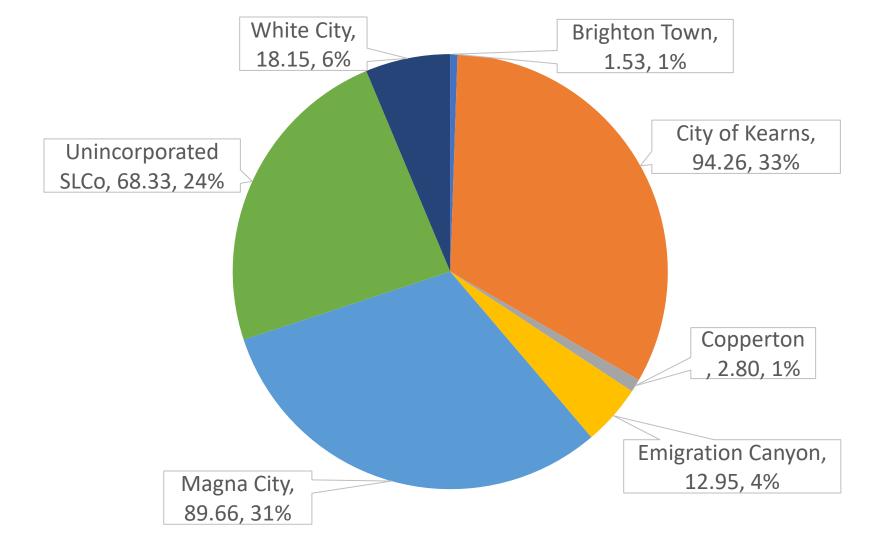
- Does not consider concrete improvements, asphalt maintenance only.
- Class B&C road fund allocations to jurisdiction set at 2024 allocations plus 3% annual growth (avg. statewide from past 5-yrs)
- Linear deterioration rate of asphalt vs. 20-yr service life
- Construction inflation of 6.5%
- Engineering reconstruction projects available every
 3 years up to approximately ~200,000 300,000 SF.











GSLMSD Road Miles (July 2025)





Treatment Type	Minimum (yrs)	Average (yrs)	Maximum (yrs)	
Thin (< 2.5-inch) Hot-Mix Asphalt (HMA) Overlay	2	8	12	
Thick (≥ 2.5-inch) HMA Overlay	6	10	17	
Single Chip Seal	1	6	12	
Double Chip Seal	4	9	15	
Thin (< 2.5-inch) Mill and Fill	4	8	20	
Thick (≥ 2.5-inch) Mill and Fill	6	10	17	
Cold-In-Place HMA Recycling	5	10	20	
Crack Sealing	2	<mark>3</mark>	10	
Microsurfacing	4	<mark>6</mark>	10	

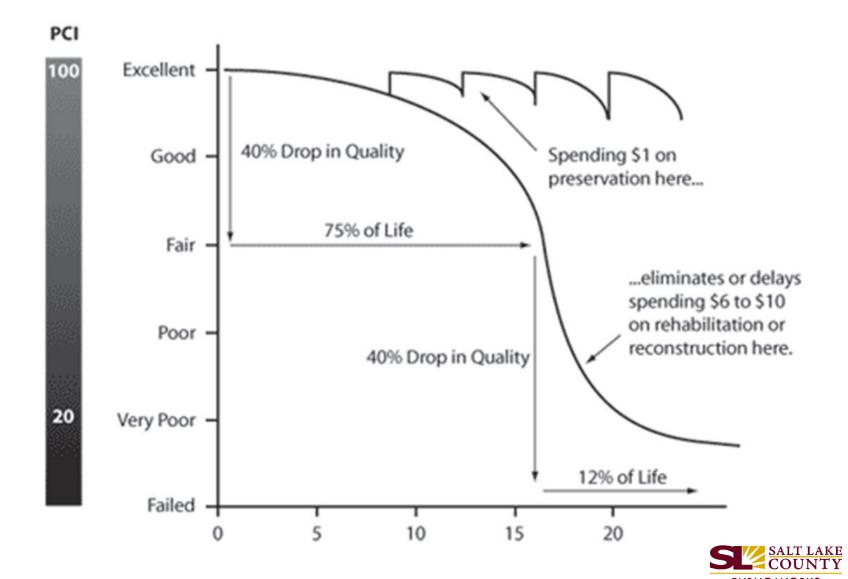
Source: Federal Highway Administration. (2017). *Pavement performance measures and forecasting and the effects of maintenance and rehabilitation strategy on treatment effectiveness (Revised)* (FHWA-HRT-17-095). U.S. Department of Transportation.

https://www.fhwa.dot.gov/publications/research/infrastructure/pavements/ltpp/17095/003.cfm

Treatment Performance





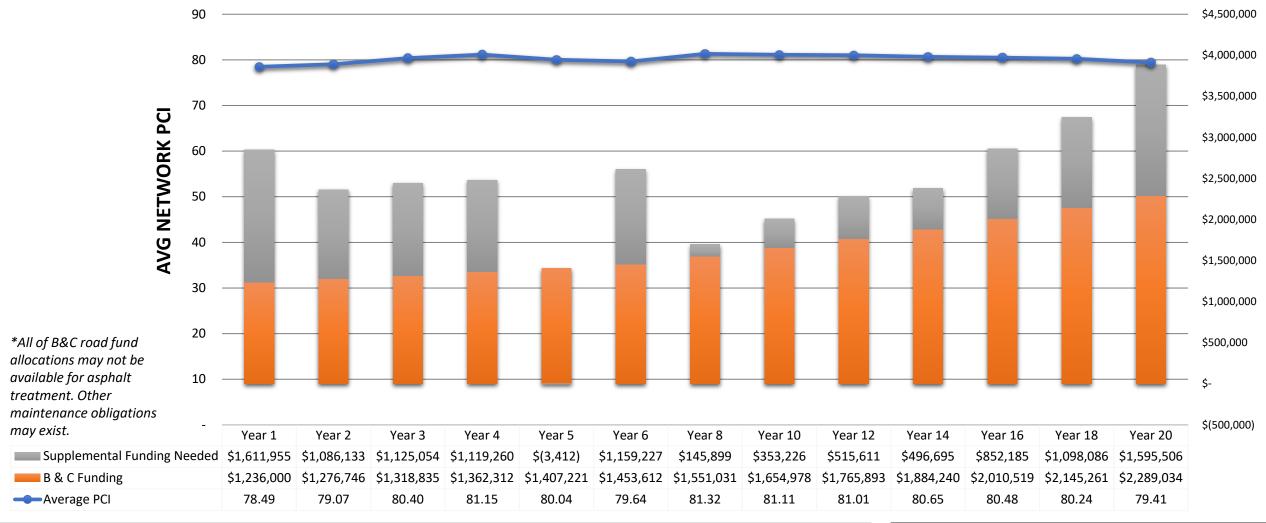


Pavement Preservation





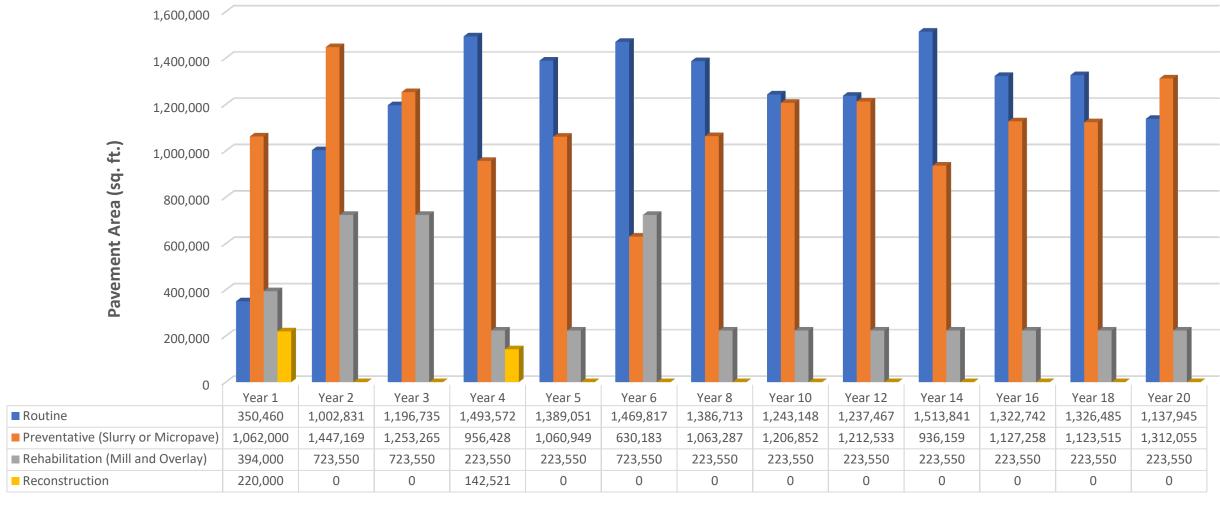
Average PCI vs Budget





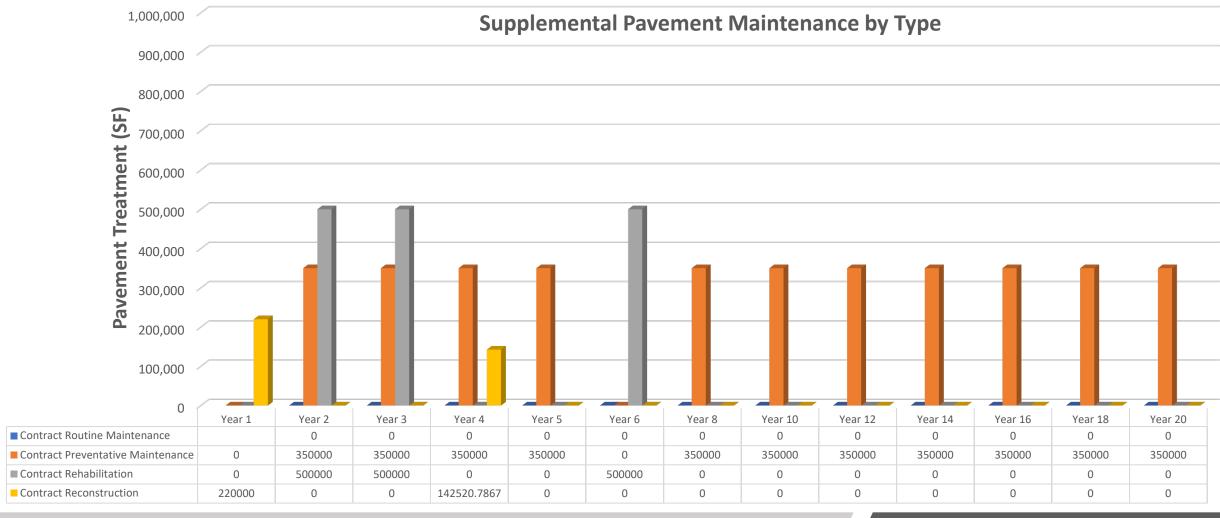


Pavement Treatment Area by Type(sq. ft.)













- Supplemental mill & overlay until network achieves PCI or "good" condition in first 5 to 6 years, then is maintained through remaining 20-year period within Operations current level of service (for overlays)
- Equilibrium of "good" condition achieved with 1/5th of road network receiving maintenance each year
- Supplemental preventative maintenance suggested beyond Operations current level of service by approximately 20%





Interactive Web Map:

- Provide current pavement condition index (composite of 3-year data)
- Show planned Operations performed/managed:
 - Mill and Overlays (Red)
 - Micropave (Purple)
 - Slurry Seals (Blue)
- Includes recommended capital projects for MSD Engineering
 - Proposed (Orange)
 - Known funded capital projects (Green)

Link: Operations Pavement Management Plan





QUESTIONS?

