

Kent County's Pavement Preservation Program

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Kent County's Pavement Preservation Program

Process

- Primary focus of Asset Management Program
- Network level -- long-range surface conditions objectives
- Project level -- Five-Year Program investment and mileage targets
- Michigan's Transportation Asset Management Council (TAMC)
and MPO coordination

Results

- Surface condition rating – PASER
- Network conditions and forecasts

NCPP Appraisal

- Observations and recommendations
- “Extended Life” analysis



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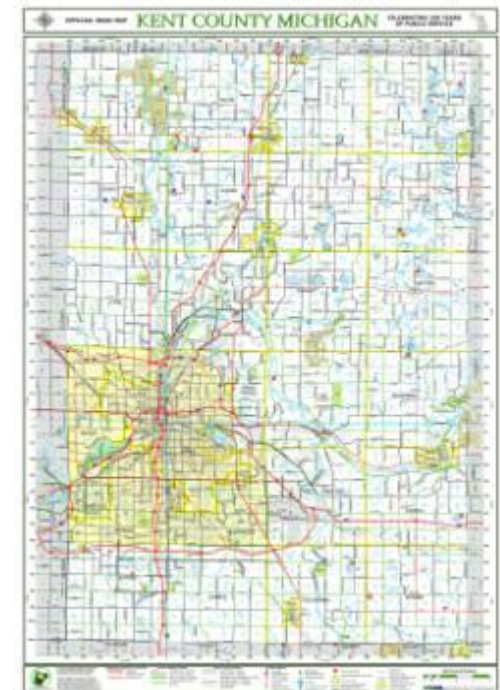
Kent County.....2nd largest county road network
Grand Rapids.....2nd largest urbanized area

County Roads..... 1,959 mi.

- Primary.....100% paved.....661 mi.
- Local.....75% paved.....1,298 mi.
- ❖ Townships cost share on Locals - 55%/45%

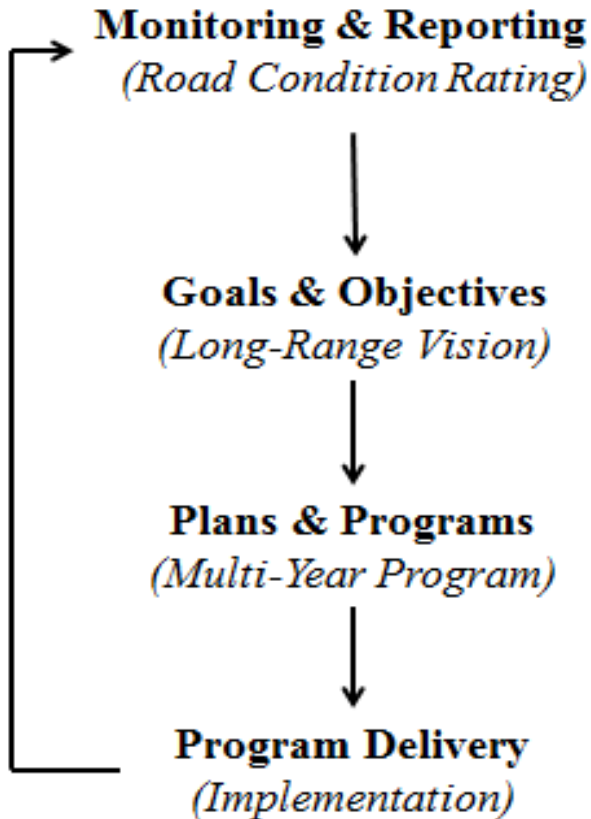
Construction

- Flexible..... 82.3%
- Rigid.....0.6%
- Composite.....1.6%
- Other.....15.7%



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Asset Management Process



Pavement Preservation Activities

- Conduct surface condition rating – PASER
 - Primary roads -- annual w/MPO (1996)
 - Local roads -- every 3 years
 - TAMC -- annual condition report (2004)
- Analyze improvement and investment scenarios
 - Network level assessment (% G-F-P)
 - Annual lane mile targets
- Update Five-Year Program
 - Pvm't Preservation investment levels
 - Schedule of major improvements
 - Budget inputs
- Document project completion
 - Update RoadSoft database
 - TAMC investment report



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PASER Condition Rating Categories

GOOD



PASER = 10, 9, 8

Routine
Maintenance

FAIR



PASER = 7, 6, 5

Preventive
Maintenance

POOR



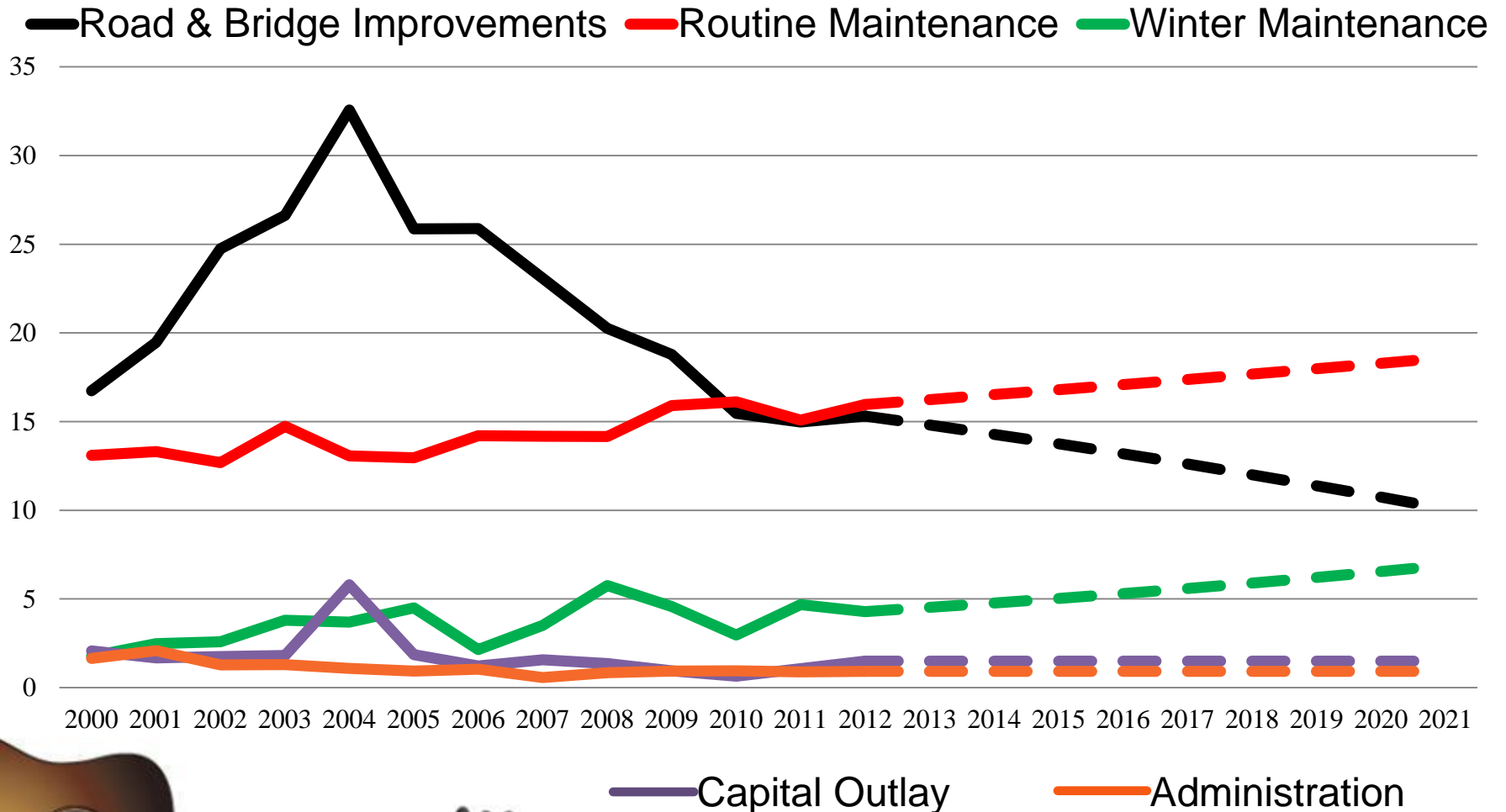
PASER = 4, 3, 2, 1

Rehabilitation &
Reconstruction



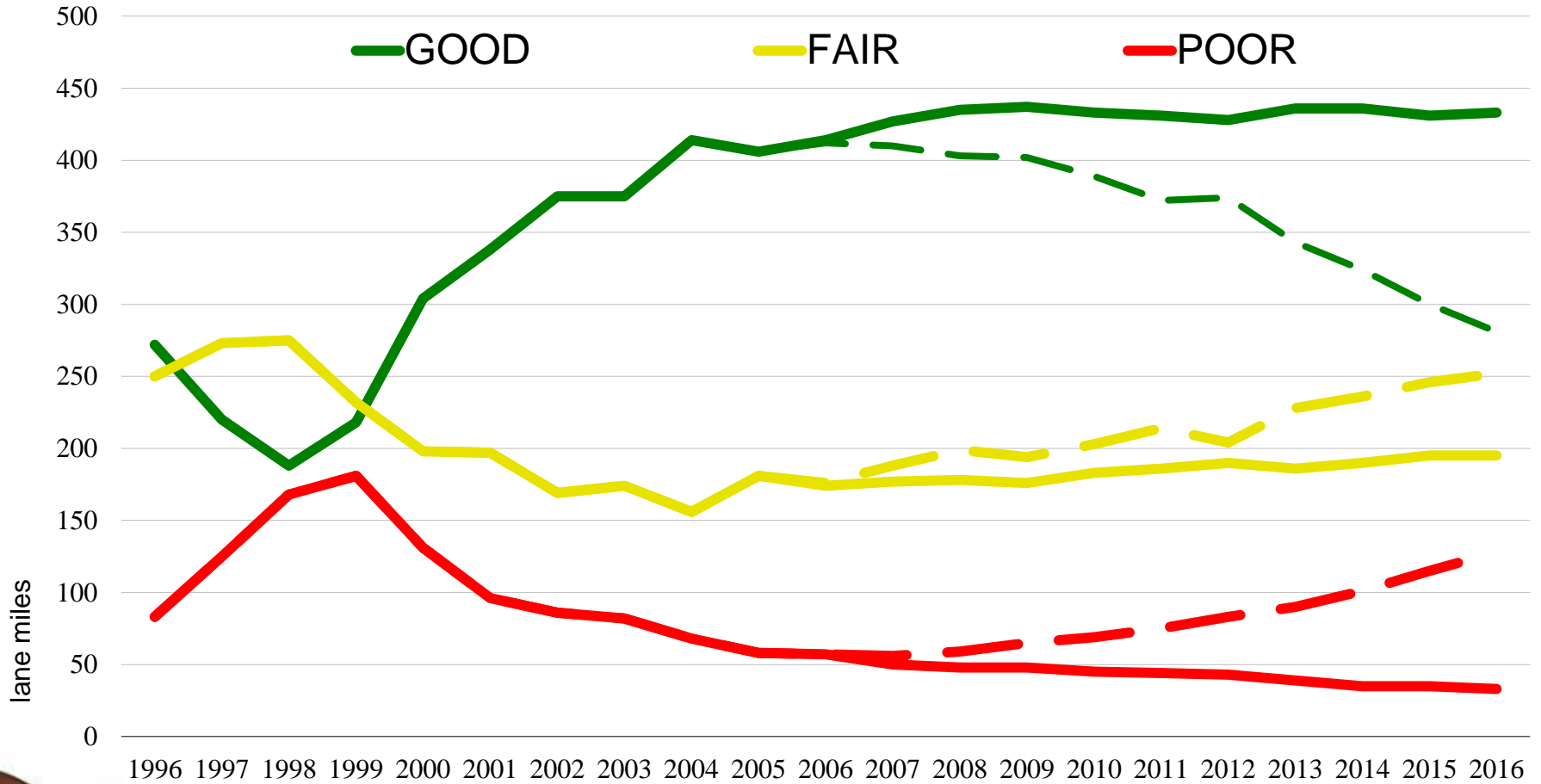
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Expenditure Trends and Projections 2000 - 2020



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Primary Road Network Conditions 1996 - 2016



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NCPP Observations & Commendations

Champion for Preservation

- ✓ Strong support from Commissioners and Division Directors

Dedicated Funding

- ✓ Budget line item for Pavement Preservation
- ✓ Driven by long-range system condition goals and five-year improvement program investment targets

Demonstrated Success

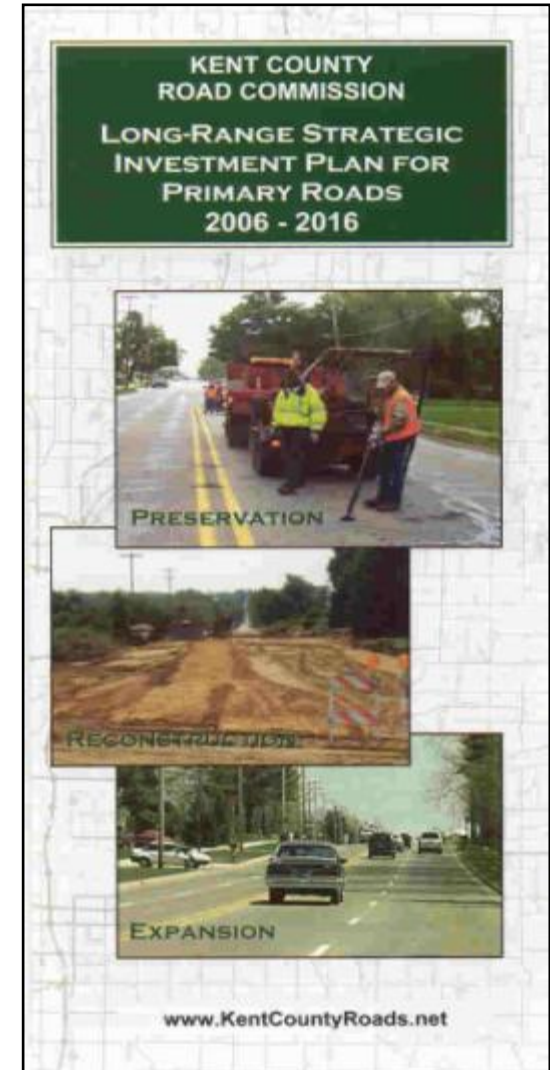
- ✓ Network conditions routinely monitored
- ✓ Improved performance over 15 years

Commitment to quality Materials and Workmanship

- ✓ Multi-county chip-seal program

Positive Public Relations and Stakeholder Buy-In

- ✓ Outreach to local officials, key stakeholders, and media
- ✓ Training for public officials through Michigan LTAP



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NCPP Recommendations

Budgeting

- ✓ Protect annual funding levels for pavement preservation from fluctuations in the cost of winter maintenance

Optimize Preservation Strategy

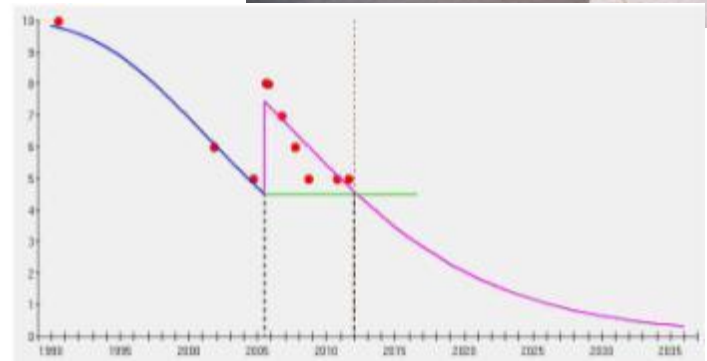
- ✓ Utilize PMS to greater extent to develop optimized preservation strategies

Federal Funding

- ✓ Work with MPO to establish a "General Program Area" for pavement preservation using the TIP amendment process to incorporate specific projects per year

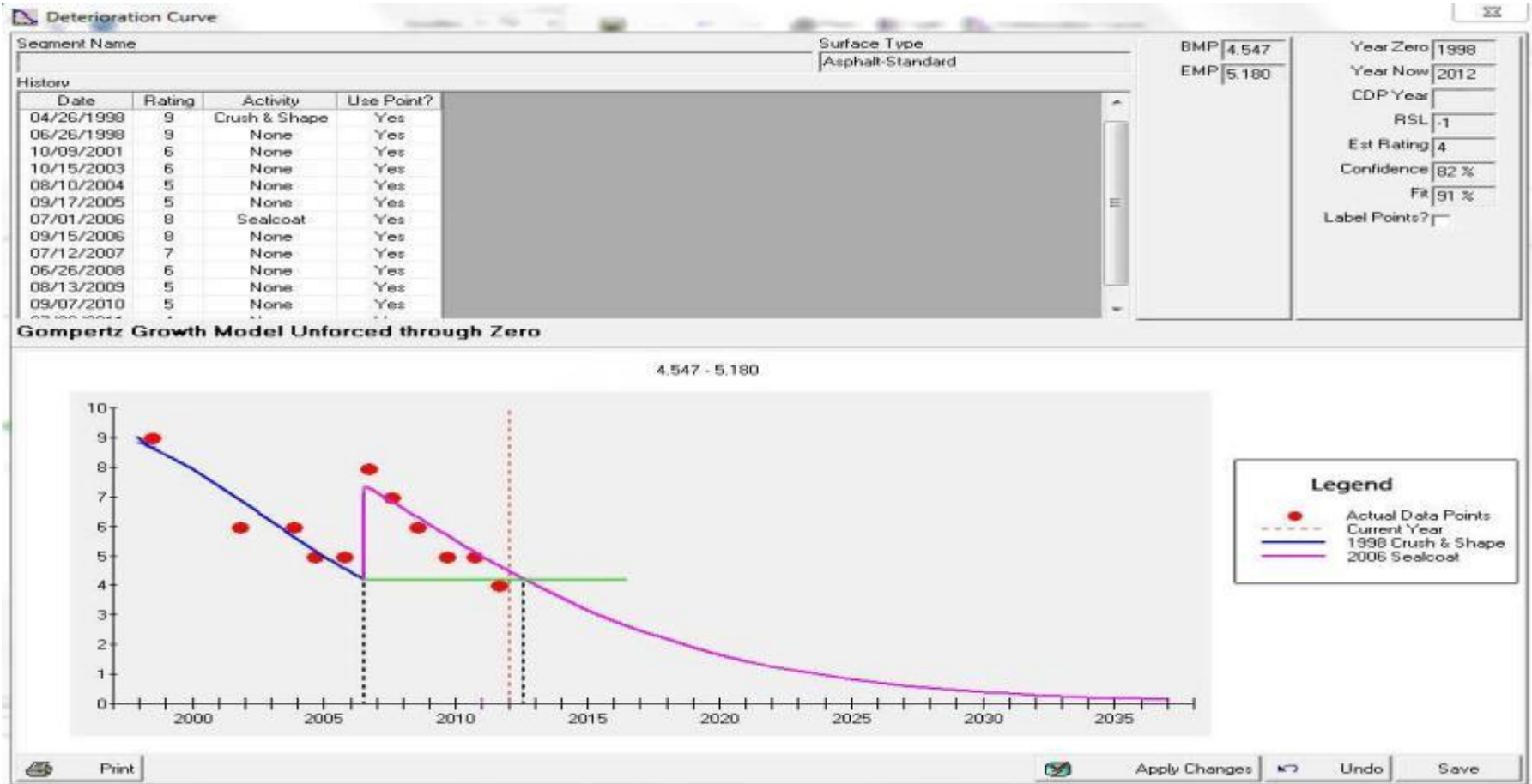
Pavement Life Extensions

- ✓ Establish formal procedures for tracking actual life extensions of pavement preservation treatments



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Extended Life - Sealcoat Treatments



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Extended Life of Sealcoat Treatments

Road Name	Year Applied	Extended Life (years)
Alden Nash Ave SE	2004	5
Edgerton Ave NE	2005	10.5
Freeport Ave SE	2006	8.5
Knapp St NE	2006	9
Larsen Ave NE	2006	9
Northland Dr NE	2005	5.5
Old Belding Rd NE	2005	4
Pettis Ave NE	2004	6.5
Rooksby St NE	2007	8.5
Wabasis Ave NE	2006	3.5
Whitneyville Ave SE	2006	4.5
Whitneyville Rd SE	2003	4.5
3 Mile Rd NE	2006	9
10 Mile Rd NE	2006	6
17 Mile Rd NE	2003	7
68th St SE	2005	6
92nd St SE	2005	7.5
Average Years of Extended Life		6.7

Unit Cost / Avg. Extended Life
 =
 Cost per Year of Extended Life

Example:

\$3,989/lane mile / 6.7 years
 =
 \$595 per year of Extended Life



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