



Transportation System Preservation
Technical Services Program

Pavement Preservation

Cost Effectiveness of PM Strategies

- Four PM strategies:
 - Thin (<2") Hot Mix Overlays
 - Micro-Surfacing
 - Chip Sealing
 - Crack Sealing
- Optimized with respect to treatment timing.
- Not directed towards materials.
- Performance Data from ODOT PMS database.



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Cost Effectiveness of PM strategies

- Thin HMA conclusions:
 - Optimal pavement condition to apply a thin-hot mix overlay was determined as a function of ODOT PCR
 - Average thin overlay project cost is about 40% of the cost of the average minor rehabilitation project, but lasts more than 70% of the time.



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Cost Effectiveness of PM strategies

- **Micro-Surfacing Conclusions:**
 - Optimal pavement condition to apply a micro-surfacing was determined as a function of ODOT PCR
 - Life extension of 8 to 9 years.
 - More cost-effective on Ohio's two lane system than divided system.



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Cost Effectiveness of PM strategies

- Chip and Seal Conclusions:
 - Optimal pavement condition to apply a chip and seal was determined as a function of ODOT PCR
 - Life extension of 7 years.



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Cost Effectiveness of PM strategies

- Crack Seal Conclusions:
 - Optimal pavement condition to crack seal was determined as a function of ODOT PCR
 - Life extension of >1 year.
 - Composite pavements more cost-effective than Flexible.
 - Rigid pavements not considered.



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THANK-YOU