2030 Committee Meeting
August 21, 2008

TxDOT 30-Year Pavement Needs Assessment

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2030 Pavement Needs Assessment

1. What type of treatment and how often?
   - Existing State mileage;
   - Mobility Study added mileage.
2. Treatment costs
3. Analysis software status
4. Draft Pavement Needs Report Outline
5. 2030 Committee Q&A

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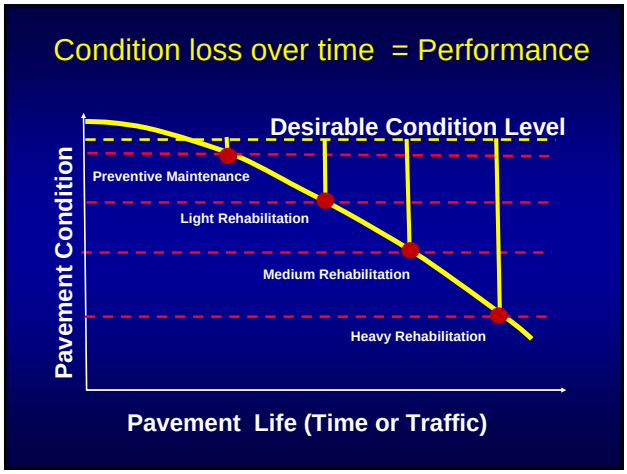
1. Do Nothing


2. Preventive Maintenance


MACK
3. Light Rehabilitation


4. Medium Rehabilitation


5. Heavy Rehab / Reconstruction


Condition loss over time = Performance
Desirable Condition Level
Preventive Maintenance
Light Rehabilitation
Medium Rehabilitation
Heavy Rehabilitation
Pavement Condition
Pavement Life (Time or Traffic)

2030 Pavement Needs Assessment

- Establish criteria that will trigger a given treatment level.
- Use PMIS data to develop performance trends by District.
- Predict future pavement condition.
- Identify treatments based on predicted Condition and trigger values.

Maintenance vs. Rehabilitation

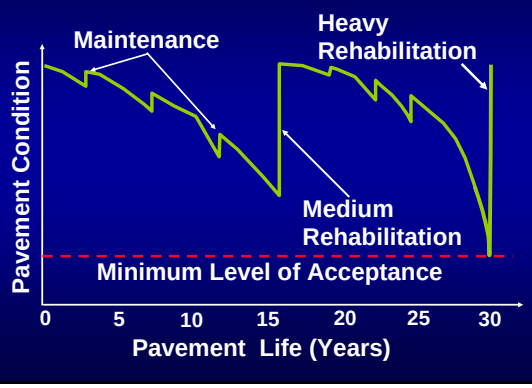


Table showing Example Treatment Costs Calcs.

District	Route	Lane-miles	Treatment	Trtmt Cost	Summary
Paris	IH 30	140.0	Nothing	$0	$0
Paris	IH 30	40.0	PM	$20,000	$8,000,000
Paris	IH 30	20.0	Light Rb	$80,000	$16,000,000
Paris	IH 30	20.0	Medium Rb	$200,000	$4,000,000
Paris	IH 30	20.0	Heavy Rb	$400,000	$8,000,000
		240.0			**Total Need = $36,000,000**

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   - Existing State mileage;
   - **Mobility Study added mileage.**
2. Analysis of Funding Scenarios
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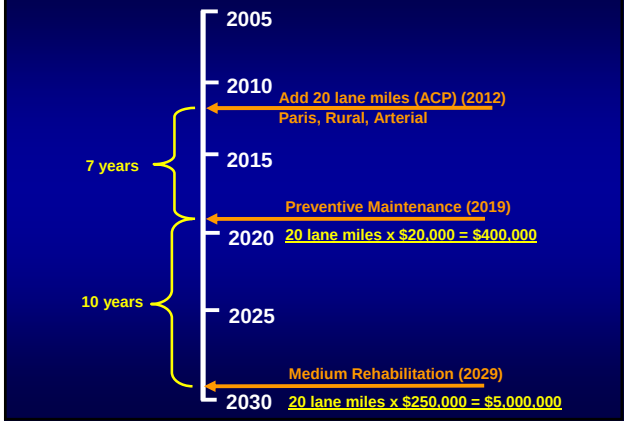
Added Lane Miles from the TTI Mobility Study

TxDOT District	Rural or Urban	Functional Class	Lane-miles (Year xxxx)
1	Rural	1-Highway	20
1	Rural	2-Arterial	100
1	Small Urban	16-Arterial	15
2	Urban	12-Freeway	200
2	Urban	14-Arterial	350
2	Rural	2-Arterial	20
3	Large Urban	14-Arterial	40
4	Large Urban	11-Interstate	15
4	Large Urban	16-Arterial	50
4	Rural	2-Arterial	30
etc			
etc			
etc			

2030 Pavement Needs Assessment

- Determine whether ACP or PCC pavement;
- Determine how to distribute added mileage by year.
- Apply treatments to added mileage based on a treatment cycle (inventory approach).
- Treatment cycle would depend on ACP or PCC, rural / urban, functional class and other factors.

Example Treatment Cycle for ACP / Rural / Arterial



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3. [illegible]
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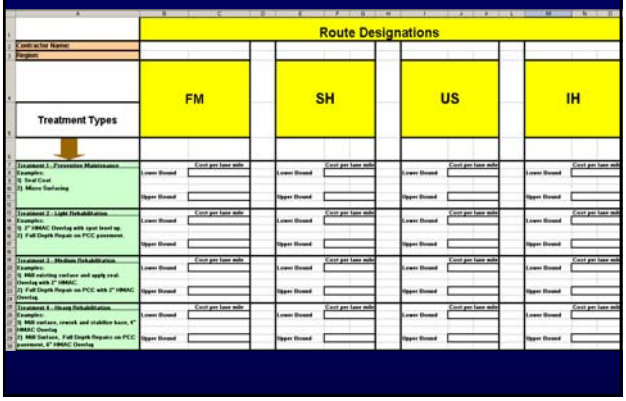
All costs associated with building the pavement?

- > Pavement material costs;
- > Mobilization of equipment and labor;
- > Traffic Control;
- > Environmental protection;
- > Widen culverts and add Safety Treatments;
- > Reshape slopes and related earthwork;
- > Other costs……

AGC Pavement Treatment Cost Spreadsheet



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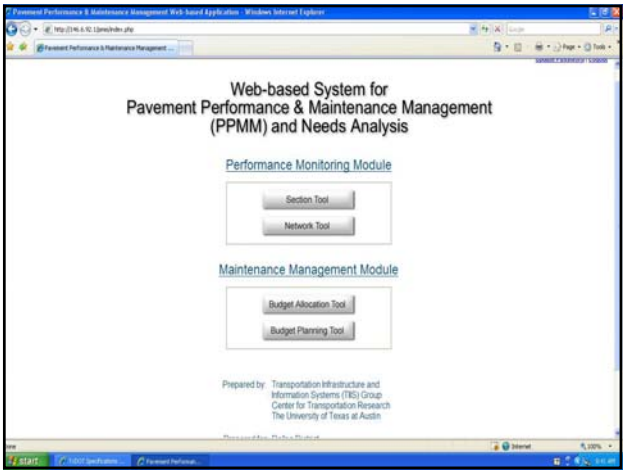
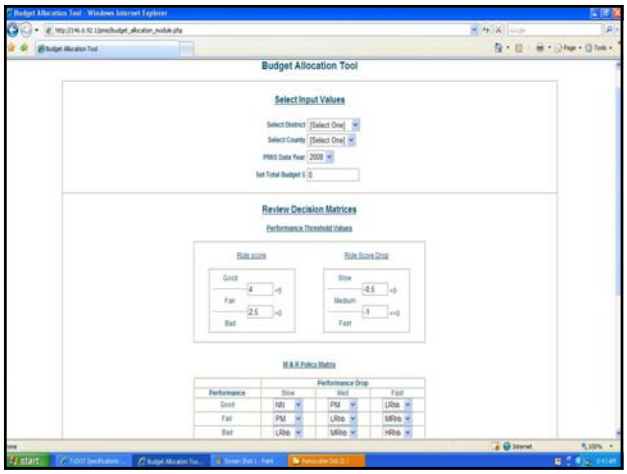
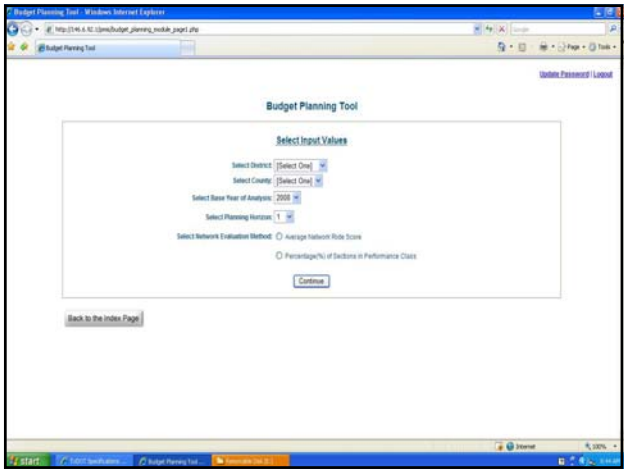
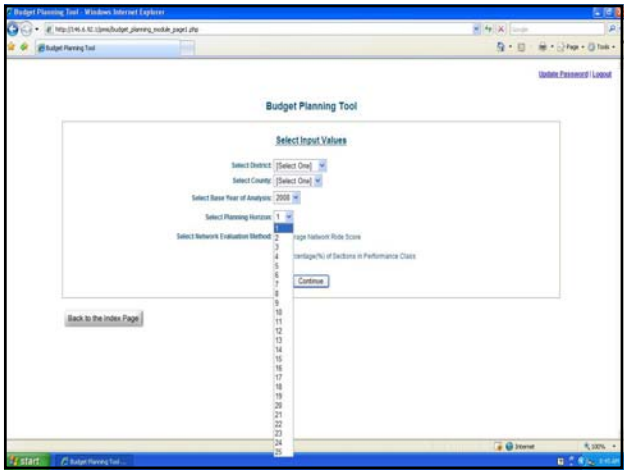



Budget Allocation Tool
Select Input Values
Review Decision Matrices
Performance Threshold Values
Ride score
Ride Score Drop
M & R Policy Matrix


Budget Planning Tool
Select Input Values
Continue
Back to the Index Page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2030 Pavement Needs Assessment

Draft Outline for Pavement Needs Estimate Report

1. Introduction and Statement of Objectives
2. Overview of TxDOT Pavement System
3. Pavement Condition Evaluation Methods
4. Pavement Treatment Levels and Triggers
   - Existing TxDOT Pavement System
   - Mobility Study – Added Mileage
5. Pavement Treatment costs

2030 Pavement Needs Assessment

Draft Outline for Pavement Needs Estimate Report

6. Determining Pavement Treatment Needs
   - Existing TxDOT Pavement System
   - Mobility Study – Added Mileage
7. Impact of different System Goals on Needs
8. Impact of limited funding on System Condition
9. Summary of 2030 Pavement Needs
10. Conclusions and Recommendations

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Thank you!