Recommendations

December 17, 2008

Draft Pending Commission Review and Public Comment
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  El Paso
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Context of 2030 Study

- Population growth, policy issues, high public and policy interest
- Urgent need for current, independent, authoritative statewide needs assessment superseding all prior estimates
- Volunteer committee – experienced, respected stakeholders guiding independent research
- Public hearings - solicit citizen input
- Funding available, even with new sources, will not be adequate to address all identified transportation needs
2030 Committee Scope

- Comprehensive update on the mobility and maintenance needs of Texas
  - Maintenance: pavements and bridges
  - Mobility: urban and rural
- Overview other transportation needs, especially potential for Texas’ relying increasingly on non-highway modes
Key Questions

- Infrastructure goals?
- Level of investment needed from all sources?
  - Infrastructure (bridges, pavements)
  - Mobility and safety (urban, rural)
- Effects of alternative investment levels?
- Strategic relationships with other modes? (public transportation, freight rail, intercity passenger rail, ports and waterways, airports)
Committee Goals

• Preserve and enhance the value of the state’s enormous investment in transportation infrastructure
• Preserve and enhance urban and rural mobility and their value to the economic competitiveness of Texas
• Enhance the safety of Texas’ traveling public
• Initiate a discussion on strategic rebalancing of transportation investments to anticipate future capacity restraints and mobility needs
Committee Recommendations - Pavements

• Preserve asset value of all pavements - maintain 90% “Good” or better pavement condition goal

• Establish statewide system to forecast pavement maintenance and priorities

Investment needed = $89 Billion Total
$4.0 Billion Annually
90% “Good” or Better Goal
Total and Annual Needs

M&R Needs ($ Billion)

Analysis Year

Committee Recommendations - Bridges

• Replace on-system structurally deficient and sub-standard for load only bridges by 2012
• Replace remaining structurally deficient, sub-standard for load only, and functionally obsolete bridges by 2030
• Increase inspection and maintenance activities
  • Maintain safety
  • Extend life

Investment needed = \frac{\$36 \text{ Billion Total}}{\$1.6 \text{ Billion Annually}}
## Bridge Replacement, Maintenance and Inspection Costs (Billions 2008 $)

<table>
<thead>
<tr>
<th>Bridge Type</th>
<th>Replacement</th>
<th>Maintenance</th>
<th>Inspection</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-System</td>
<td>$19.9</td>
<td>$1.1</td>
<td>$0.6</td>
<td>$21.6</td>
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<tr>
<td>Off-System</td>
<td>$7.8</td>
<td>*</td>
<td>$0.3</td>
<td>$8.1</td>
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<tr>
<td>Mobility</td>
<td>**</td>
<td>$0.1</td>
<td>$0.2</td>
<td>$0.3</td>
</tr>
<tr>
<td>Special &amp; Large</td>
<td>$6.1</td>
<td>***</td>
<td>***</td>
<td>$6.1</td>
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<tr>
<td><strong>Total Costs</strong></td>
<td>$33.8</td>
<td>$1.2</td>
<td>$1.1</td>
<td>$36.1</td>
</tr>
</tbody>
</table>

* Funded by cities and counties
** New bridges built as a result of mobility needs
*** Special and large bridge maintenance costs included in on-system category
Committee Recommendations – Urban Mobility

- Prevent worsening congestion; do not allow Texas’ urban mobility to decline below the average of peer cities
- Broaden ability of urban regions to raise revenue to increase mobility if locally desired without reducing state funding for mobility

Investment needed = $171 Billion Total
$7.8 Billion Annually
Mobility Scenario Comparisons

- **Reduce Congestion**
- **Prevent Worsening Congestion**
- **Maintain Economic Competitiveness**

**Inadequate Mobility Investment**

**RECOMMENDATION**

**MINIMUM**

**Current Funding Trend**

*Cost (billions of $2008)*

*Delay Hours per Commuter in 2030*
Mobility Scenario Comparisons

- **Recommendation**: Reduce Congestion
- **Minimum**: Maintain Economic Competitiveness
- **Inadequate Mobility Investment**: Current Funding Trend

Delay Hours per Commuter in 2030

Cost (billions of $2008)

- $250
- $200
- $150
- $100
- $50
- $0
Scenario Implementation and Congestion Costs

<table>
<thead>
<tr>
<th>Cost (billions 2008$)</th>
<th>Current Funding Trend</th>
<th>Maintain Economic Competitiveness</th>
<th>Prevent Worsening Congestion</th>
<th>Reduce Congestion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$70</td>
<td>$124</td>
<td>$171</td>
<td>$213</td>
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<tr>
<td></td>
<td>$515</td>
<td>$295</td>
<td>$220</td>
<td>$160</td>
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</tbody>
</table>

- Congestion Cost
- Scenario Implementation Cost
Benefits and Costs of Urban Scenario Investments in 2030 (Billions 2008 $)

- Current Funding Trend: $70
- Maintain Economic Competitiveness: $124
- Prevent Worsening Congestion: $171
- Reduce Congestion: $213
- Investment Required: $237
- Benefits from Investments: $823
- Prevent Worsening Congestion: $1,114
- Reduce Congestion: $1,372
Committee Recommendations – Rural Mobility and Safety

- Complete Texas Trunk System
  - Facilitate rural competitiveness
  - Safety
- Prioritize additional road capacity for highest immediate economic impact

Investment needed = \frac{$17 \text{ Billion Total}}{$0.8 \text{ Billion Annually}$}
Benefits and Costs of Rural Scenario Investments in 2030 (Billions 2008 $)

Investment Required
Benefits from Investments

- **Congestion and Safety:** $6.5
- **Congestion and Safety + Partial Connectivity:** $40.3
- **Congestion and Safety + Full Connectivity:** $75.0
- **Congestion and Safety + Full Connectivity:** $91.4
## Total Investment Needed (2008 $)

<table>
<thead>
<tr>
<th>Category</th>
<th>2009 - 2030</th>
<th>Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavements</td>
<td>$89 Billion</td>
<td>$4.0 Billion</td>
</tr>
<tr>
<td>Bridges</td>
<td>$36 Billion</td>
<td>$1.6 Billion</td>
</tr>
<tr>
<td>Urban Mobility</td>
<td>$171 Billion</td>
<td>$7.8 Billion</td>
</tr>
<tr>
<td>Rural Mobility/Safety</td>
<td>$17 Billion</td>
<td>$0.8 Billion</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$313 Billion</strong></td>
<td><strong>$14.2 Billion</strong></td>
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</tbody>
</table>
## Total and State Investment Needed (Billions 2008 $)

<table>
<thead>
<tr>
<th></th>
<th>Needs 2009 - 2030</th>
<th>Annual Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>State Investment</td>
</tr>
<tr>
<td>Pavements</td>
<td>$ 89</td>
<td>$ 89</td>
</tr>
<tr>
<td>Bridges</td>
<td>$ 36</td>
<td>$ 36</td>
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<tr>
<td>Urban Mobility</td>
<td>$ 171*</td>
<td>$ 106</td>
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<tr>
<td>Rural Mobility/Safety</td>
<td>$ 17</td>
<td>$ 17</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$ 313</strong></td>
<td><strong>$248</strong></td>
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</tbody>
</table>

* Historically about 2/3 of Urban Mobility has been State responsibility, 1/3 local
Other Transportation Modes for 2030

The state’s role warrants further study beyond current scope of the 2030 Committee
Public Transportation

• Perform a comprehensive examination of federal, state and local partnerships to meet regional needs through coordination of funding and services
Freight Rail

- Maintain prudent regulatory policy
- Continue TxDOT initiatives
- Continue analysis of public/private potential
Intercity Passenger Rail

• Conduct comprehensive examination of conventional and high-speed rail alternatives
  – Committee of representative stakeholders
  – Recommendations in 2010
Ports and Waterways

- Monitor adequacy of federal and state funding to meet security requirements
- Monitor federal and state funding to provide adequate connecting transportation infrastructure to ensure a significant contribution to Texas’ economic competitiveness
Airports

- Monitor adequacy of federal and state funding to ensure a significant contribution to economic competitiveness
QUESTIONS?