Transportation Funding

Presentation to the
PA Chapter
American Planning Association
Dennis Lebo
Gannett Fleming

October 18, 2011

Presentation Overview

1. Introduction/Purpose
2. Current Funding for Highways & Transit
3. Needs Analysis
4. Recommendations
Introduction/Purpose

1. Transportation critical to mobility, economy, quality of life
2. Increasing volatility and uncertainty
   • Revenues
   • Maintenance & Operations
3. Purpose
   • Quantify the impact of the problem
   • Offer findings & recommendations
4. Update from Transportation Funding & Reform Commission
Current Funding for Highways & Transit

- Uncertainty of Act 44
  - Federal decision on I-80 tolling
  - Loss of $472 million
- Impact of current economic conditions
- Long-term viability of current funding sources
Federal Funding FFY 2009

• Highways
  – $1.41 billion
  – $1 billion from ARRA (American Recovery and Reinvestment Act)

• Transit
  – $381 million
  – $347 million from ARRA

Federal Funding Issues

1. Long-term solvency of Highway Trust Fund
   • 3 transfers from General Fund over past 3 years
   • Federal gas tax last increased in 1993

2. Reauthorization of SAFETEA-LU
   • 8 short-term extensions to March 2012
Federal Aid Highways - Obligations (all programs)
FFY 1999-2009

- FFY 1999-2009 Motor License Fund Revenues
  - Turnpike: $500 million (14%)
  - Liquid Fuels Tax: $2,234 million (61%)
  - Licenses and Fees: $897 million (25%)
  - Other: $10 million (0.3%)

- Total: $3.6 billion
Pennsylvania Statewide
Gasoline Consumption
1982-2008

Pennsylvania Statewide
Inflation Indices
1987-2009
Pennsylvania Highway Revenue Projections 2008-30

Year

Billions
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

- Act 44 (with tolling)
- Act 44 (w/out tolling)
- Federal
- Other
- Licenses and Fees
- Liquid Fuels Tax Revenue

Pennsylvania State Transportation Advisory Committee

State Transit Funding Structure

<table>
<thead>
<tr>
<th>Sources</th>
<th>Turnpike</th>
<th>Sales &amp; Use Tax</th>
<th>Lottery</th>
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<tbody>
<tr>
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<th>Eligible Uses</th>
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<tbody>
<tr>
<td>Fixed Amount for Operating Balance for Asset Improvement, Capital Improvement, and New Initiatives</td>
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<td>4.4% of Total Tax Revenue Dedicated to Transit</td>
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<td>16.77% to Capital</td>
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Transportation Funding
Public Transportation Trust Fund (PTTF)

Pennsylvania: Transit Funding Projections
FY 2009-17

Funding & Reform Commission Recommendation

Act 44 with I-80 Tolling

Act 44 without I-80 Tolling
Needs Analysis

Highway Needs

- Pavements
- Bridges
- Congestion
- Safety
- Capacity
Pennsylvania Interstate Pavement Age

- Concrete
- Composite
- Bituminous

Pennsylvania Interstate Trends 1995-2009

- Interstate
- Other National Highway System
- Non-NHS > 2,000 ADT
- Non-NHS < 2,000 ADT

Year

- 1995
- 1996
- 1997
- 1998
- 1999
- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009

IRI Rating

- 50
- 100
- 150
- 200
- 250
- 300
- 350
- 400

Pennsylvania State Transportation Advisory Committee

Transportation Funding
PennDOT’s Proposed Bridge Program
Funding vs. SD Results

Pennsylvania State Transportation Advisory Committee

Base Funding Need: $1.6B annually
Loss of Funding if I-80 not tolled
Inflation (5% annual)
TOTAL % SD Deck

Model: based on 500 bridges/year 2010 to 2020; avg. 300 bridges/yr. 2021 to 2030

Percent Growth in Congestion Indicators
2006-2030

VMT  Truck VMT  Vehicle Hours of Delay

28%  47%  49%

Total Bridge Funding (billions)

Total Funding Need (typ.)

Loss of Funding if I-80 not tolled
### Transportation Funding

#### Pennsylvania State Transportation Advisory Committee

**Annual Estimated Traffic-Related Fatalities 1999-2029**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1,454</td>
</tr>
<tr>
<td>2001</td>
<td>1,444</td>
</tr>
<tr>
<td>2004</td>
<td>1,434</td>
</tr>
<tr>
<td>2009</td>
<td>1,424</td>
</tr>
<tr>
<td>2014</td>
<td>1,414</td>
</tr>
<tr>
<td>2019</td>
<td>1,404</td>
</tr>
<tr>
<td>2024</td>
<td>1,394</td>
</tr>
<tr>
<td>2029</td>
<td>1,384</td>
</tr>
</tbody>
</table>

- **Current Trend** - 2 per year reduction
- **Targeting High Crash Locations** - 18 per year reduction
- **Systemwide Infrastructure Safety Improvements ($75M)** - 38 per year reduction

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### Capacity

**ILLUSTRATIVE CORE PENNSYLVANIA TRANSPORTATION SYSTEM HIGHWAYS**

Legend:
- Interstates
- Major Arterials
- County MI
- County Secondary
- Rural

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**Pennsylvania State Transportation Advisory Committee**

**Transportation Funding**
Pennsylvania Highway and Bridge Projections, 2010-30

Total Revenues & Unmet Needs

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenue</th>
<th>Projected Unmet Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>$2.576</td>
<td></td>
</tr>
<tr>
<td>2011-12</td>
<td>$4.693</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>$6.545</td>
<td></td>
</tr>
</tbody>
</table>

Local System Needs

- Highways
- Bridges
- Traffic Signals
Pennsylvania Traffic Signal Locations 2008

- 23% on Intersecting Local/Local Roadways, 3,180
- 50% on Intersecting State/Local Roadways, 6,766
- 27% on Intersecting State Roadways, 3,764

Local Highways & Bridges Unmet Needs (millions)

<table>
<thead>
<tr>
<th></th>
<th>FY 2010-11</th>
<th>FY 2019-20</th>
<th>FY 2029-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway &amp; Bridge</td>
<td>$250</td>
<td>$388</td>
<td>$632</td>
</tr>
<tr>
<td>Traffic Signals</td>
<td>$182</td>
<td>$282</td>
<td>$460</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$432</strong></td>
<td><strong>$670</strong></td>
<td><strong>$1,092</strong></td>
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</table>
Transit Operating Expense, Income and Shortfall
Classes 1-4 Systems

Expenses @ 5.6% Growth (TFRC)
System Revenue & Total Funding

Fiscal Year

Transit Capital Needs and Funding
(does not include System Expansion)
Classes 1-4 Systems

Needs (per TFRC approach)
Available Funding (excludes Stimulus)
Projected Unmet Transit Funding Needs
(in millions)

<table>
<thead>
<tr>
<th>Program</th>
<th>FY 2010-11</th>
<th>FY 2019-20</th>
<th>FY 2029-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Assistance</td>
<td>$ - - 2</td>
<td>$752</td>
<td>$2,214</td>
</tr>
<tr>
<td>Capital Assistance/ System Expansion</td>
<td>$484</td>
<td>$631</td>
<td>$849</td>
</tr>
<tr>
<td>Totals</td>
<td>$484*</td>
<td>$1,383</td>
<td>$3,063</td>
</tr>
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</table>

* The level of operating shortfall for FY 2010-11 is uncertain at this time.
## Combined Unmet Needs

<table>
<thead>
<tr>
<th></th>
<th>2010 Need</th>
<th>2020 Need</th>
<th>2030 Need</th>
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<td>Highway &amp; Bridge</td>
<td>$2,576</td>
<td>$4,693</td>
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<tr>
<td>Public Transportation</td>
<td>$484</td>
<td>$1,383</td>
<td>$3,063</td>
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<tr>
<td>Local Government</td>
<td>$432</td>
<td>$670</td>
<td>$1,092</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$3,492</strong></td>
<td><strong>$6,746</strong></td>
<td><strong>$10,700</strong></td>
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### Recommendations
Recommendations – Near-Term Need

- Generate new revenue to stabilize Pennsylvania’s transportation system
  - $472 million funding gap
  - Begin a phased, long-term strategy

Recommendations – Longer-Term Need

- Establish a new transportation funding framework to ensure sustainable mobility
- Predictable and sustainable
- Major elements:
  - More direct User Pay system – VMT Fee
  - Tolling Options
  - Public-Private Partnerships
  - Strategic Borrowing
  - Local Option Taxes