IMPROVE Act
TSITE Summer Meeting
July 28, 2017

Steve Allen
Director
Strategic Transportation Investments Division
Outline

• IMPROVE Act
  – Region 1
  – Region 2
  – Region 3
  – Region 4

• 3-Year Program Project Development
  – 3-Year Bridge Program
  – Transit and Aviation Projects

• Project Development Process
  – IMPROVE Act Project Delivery
  – What’s Left After the 3-Year Program
  – STID Project Development
Introduction

https://www.youtube.com/watch?v=7_CKsmsUVAs
Introduction

- Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy
  - Tax Decreases
    - Sales Tax on Food
    - Franchise and Excise Tax
    - Hall Income Tax
  - Tax Increases
    - Vehicle Registration Fee
    - Electric Vehicle Registration Fee
    - Gas Tax
    - Diesel Tax
    - Compressed Natural Gas and Liquefied Gas
## IMPROVE Act

### IMPROVE Act Projects

<table>
<thead>
<tr>
<th>Region</th>
<th># of Projects</th>
<th># Backlog</th>
<th># New Start</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>275</td>
<td>48</td>
<td>216</td>
<td>$3,022,650,209</td>
</tr>
<tr>
<td>2</td>
<td>125</td>
<td>23</td>
<td>92</td>
<td>$1,687,227,862</td>
</tr>
<tr>
<td>3</td>
<td>280</td>
<td>32</td>
<td>242</td>
<td>$3,595,275,979</td>
</tr>
<tr>
<td>4</td>
<td>282</td>
<td>49</td>
<td>217</td>
<td>$2,179,562,046</td>
</tr>
<tr>
<td>Total</td>
<td>962</td>
<td>152</td>
<td>767*</td>
<td>$10,484,716,096</td>
</tr>
</tbody>
</table>

*115 are not bridge projects

### IMPROVE Act Costs

- **Region 1**: 29% ($3,022,650,209)
- **Region 2**: 29% ($1,687,227,862)
- **Region 3**: 29% ($3,595,275,979)
- **Region 4**: 13% ($2,179,562,046)

- **Total**: 34% ($10,484,716,096)**

*115 are not bridge projects*
IMPROVE Act Projects

• **Capital Project**
  – Welcome Center Renovations

• **Interstate Modernization**
  – Congestion, Safety, Reliability, Capacity

• **ITS Project**
  – Cameras, Overhead Signs, HELP Program, Maximize Efficiency

• **Bridges**
  – State and Local (for areas that can’t support routine maintenance)

• **Primary Trade Corridors**
  – Routes Critical for Moving Goods and Services

• **Economic Developments**
  – Improvement of Accessibility for Urban Growth

• **Safety**
  – Guardrail Additions, Signage, Rumble Strips, etc.
### Region 1

<table>
<thead>
<tr>
<th>Type of Project</th>
<th># of Projects</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Project</td>
<td>2</td>
<td>$6,750,000</td>
</tr>
<tr>
<td>Interstate Modernization</td>
<td>8</td>
<td>$559,757,158</td>
</tr>
<tr>
<td>ITS Project</td>
<td>10</td>
<td>$25,056,000</td>
</tr>
<tr>
<td>Bridges</td>
<td>192</td>
<td>$308,075,404</td>
</tr>
<tr>
<td>Primary Trade Corridors</td>
<td>8</td>
<td>$298,030,884</td>
</tr>
<tr>
<td>Economic Developments</td>
<td>50</td>
<td>$1,745,662,763</td>
</tr>
<tr>
<td>Safety</td>
<td>5</td>
<td>$79,318,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>275</strong></td>
<td><strong>$3,022,650,209</strong></td>
</tr>
</tbody>
</table>

**# of Projects**

- 1% Capital Project
- 3% Interstate Modernization
- 18% ITS Project
- 2% Bridges
- 3% Primary Trade Corridors
- 70% Economic Developments
- 3% Safety

**Cost of Projects**

- 70% Economic Developments
- 58% Bridges
- 18% Safety
- 3% Primary Trade Corridors
- 1% Interstate Modernization
- 10% ITS Project
- 0% Capital Project
### IMPROVE Act – Region 2

<table>
<thead>
<tr>
<th>Type of Project</th>
<th># of Projects</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Project</td>
<td>1</td>
<td>$3,750,000</td>
</tr>
<tr>
<td>Interstate Modernization</td>
<td>8</td>
<td>$455,282,639</td>
</tr>
<tr>
<td>ITS Project</td>
<td>1</td>
<td>$2,800,000</td>
</tr>
<tr>
<td>Bridges</td>
<td>79</td>
<td>$120,506,181</td>
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<tr>
<td>Primary Trade Corridors</td>
<td>14</td>
<td>$739,900,000</td>
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<tr>
<td>Economic Developments</td>
<td>18</td>
<td>$338,389,042</td>
</tr>
<tr>
<td>Safety</td>
<td>4</td>
<td>$26,600,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125</strong></td>
<td><strong>$1,687,227,862</strong></td>
</tr>
</tbody>
</table>

#### Cost of Projects
- Capital Project: 63%
- Interstate Modernization: 7%
- ITS Project: 14%
- Bridges: 11%
- Primary Trade Corridors: 1%
- Economic Developments: 20%
- Safety: 2%

#### # of Projects
- Capital Project: 3%
- Interstate Modernization: 1%
- ITS Project: 1%
- Bridges: 7%
- Primary Trade Corridors: 14%
- Economic Developments: 11%
- Safety: 1%
## IMPROVE Act – Region 3

<table>
<thead>
<tr>
<th>Type of Project</th>
<th># of Projects</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Project</td>
<td>4</td>
<td>$25,500,000</td>
</tr>
<tr>
<td>Interstate Modernization</td>
<td>22</td>
<td>$1,514,206,598</td>
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<tr>
<td>ITS Project</td>
<td>1</td>
<td>$4,000,000</td>
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<tr>
<td>Bridges</td>
<td>197</td>
<td>$424,524,432</td>
</tr>
<tr>
<td>Primary Trade Corridors</td>
<td>5</td>
<td>$154,700,000</td>
</tr>
<tr>
<td>Economic Developments</td>
<td>42</td>
<td>$1,443,607,949</td>
</tr>
<tr>
<td>Safety</td>
<td>9</td>
<td>$28,937,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>280</td>
<td><strong>$3,595,475,979</strong></td>
</tr>
</tbody>
</table>

**# of Projects**

- Capital Project: 70%
- Interstate Modernization: 15%
- ITS Project: 8%
- Bridges: 2%
- Primary Trade Corridors: 0%
- Economic Developments: 3%
- Safety: 2%

**Cost of Projects**

- Capital Project: 40%
- Interstate Modernization: 42%
- ITS Project: 4%
- Bridges: 12%
- Primary Trade Corridors: 1%
- Economic Developments: 1%
- Safety: 0%
## IMPROVE Act – Region 4

<table>
<thead>
<tr>
<th>Type of Project</th>
<th># of Projects</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Project</td>
<td>2</td>
<td>$6,750,000</td>
</tr>
<tr>
<td>Interstate Modernization</td>
<td>18</td>
<td>$891,368,608</td>
</tr>
<tr>
<td>ITS Project</td>
<td>3</td>
<td>$14,600,000</td>
</tr>
<tr>
<td>Bridges</td>
<td>220</td>
<td>$198,093,452</td>
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<tr>
<td>Primary Trade Corridors</td>
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<td>$387,243,000</td>
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<tr>
<td>Economic Developments</td>
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<td>$679,646,986</td>
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<tr>
<td>Safety</td>
<td>1</td>
<td>$1,860,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>282</strong></td>
<td><strong>$2,179,562,046</strong></td>
</tr>
</tbody>
</table>

### % of Total

- Capital Project: 31%
- Interstate Modernization: 41%
- ITS Project: 18%
- Bridges: 9%
- Primary Trade Corridors: 1%
- Economic Developments: 0%
- Safety: 0%

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**Map Image:**

- Map showing locations of projects.

**Diagram:**

- Pie chart showing distribution of project types.

**Logos:**

- TN Department of Transportation
- TSDOT
- Tsite

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**Page Number:** 10
IMPROVE Act
to
Project Development
### 3-Year Program FY 2018-20

<table>
<thead>
<tr>
<th>Year Funded</th>
<th>Total # of Projects</th>
<th>PE</th>
<th>CN</th>
<th>RW</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2018</td>
<td>59</td>
<td>38</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>FY 2019</td>
<td>19</td>
<td>0</td>
<td>13</td>
<td>6</td>
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<tr>
<td>FY 2020</td>
<td>24</td>
<td>0</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>38</td>
<td>47</td>
<td>17</td>
</tr>
</tbody>
</table>

- 38 new starts (FY 2018)
  - 32 in STID
    - 4 Safety
    - 8 Rural Access
    - 9 Interstate
    - 9 Urban Growth
    - 2 Trade
  - 6 in ITS
### 3-Year Bridge Program FY 2018-20

<table>
<thead>
<tr>
<th>Region</th>
<th># of Projects</th>
<th># Funded in FY 2018</th>
<th># Funded in FY 2019</th>
<th># Funded in FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36</td>
<td>30</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>26</td>
<td>24</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>40</td>
<td>29</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>41</td>
<td>32</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>115</td>
<td>16</td>
<td>12</td>
</tr>
</tbody>
</table>

- **115 new starts** (FY 2018)

- **Bridge Program**
  - State-aid
  - 163 on-system (state) — $669,305,893
  - 526 off-system (local) — $391,107,576
3-Year Program Guidance

• 5 Funding Phases for “Committed Projects”
  – Preliminary Engineering (PE) or “New Starts”
    • Only applicable to Year 1
    • NEPA no build is considered complete
  – Right of Way (ROW)
  – Construction
  – Stage Construction
  – Paving

• 2 Project Phases
  – Location Studies
  – Environmental Studies
3-Year Program FY 2018-20

- Transit Projects
  - Federal Transit Administration Formula Program and State Matching Funds
    - Rural and Urban Transit Assistance Program
    - Student Intern Program
  - Metropolitan Transportation Planning Program
  - Federal Highway Administration Funds
  - Flexed to Federal Transit Administration
  - State Funded Program
    - Urban Transit Operating Assistance
    - Swipe and Ride Program for State Employees
    - Regional Commuter Transportation Assistance
  - Competitive Multimodal Program
3-Year Program FY 2018-20

• Aviation Projects
  – Air Carrier Airports (Chattanooga, Knoxville, Memphis, Nashville, Tri-Cities)
  – Statewide Programs: Pavement Management, Pavement Markings
  – General Aviation Airport Projects: Airport Planning, Engineering, Construction, Preservation
  – General Aviation Airport Projects: Airport Safety and Security
Project Development Process
New Starts Funded for PE in FY 2018

• Technical Study
  – Preliminary purpose and need
  – Traffic forecast and operational analysis
  – Safety analysis (crash rates, crash diagrams, CMF comparisons)
  – Environmental and land use considerations
  – Preliminary conceptual design using GEOPAK
  – Cost estimates

• Purpose
  – To provide direction for NEPA document
  – To provide guidance for survey and preliminary design to begin
New Starts Funded for PE in FY 2018

• Conceptual Studies
  – Determine what is actually needed
  – I-24 (from I-40 to I-440)
  – S.R. 386 (from I-65 to U.S. 31E)
  – Scoping to identify deficiencies, congestion, and safety issues
  – Determine whether projects need technical studies
    • Could recommend a widening or an IAR project
IMPROVE Act Project Delivery

- High Expectations for Project Delivery
- Must Eliminate Re-Work/Re-Design
- Must Coordinate with Operations
- High Expectations for Streamlined Construction
- We are the Model Agency for Project Delivery!
What’s Left After the 3-Year Program?

<table>
<thead>
<tr>
<th>Type of Project</th>
<th># of Projects</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Project</td>
<td>9</td>
<td>$42,750,000</td>
</tr>
<tr>
<td>Interstate Modernization</td>
<td>35</td>
<td>$1,586,189,215</td>
</tr>
<tr>
<td>ITS Project</td>
<td>9</td>
<td>$30,925,000</td>
</tr>
<tr>
<td>Bridges</td>
<td>545 +143</td>
<td>$1,050,999,469</td>
</tr>
<tr>
<td>Primary Trade Corridors</td>
<td>14</td>
<td>$852,093,000</td>
</tr>
<tr>
<td>Economic Developments</td>
<td>93</td>
<td>$2,537,098,112</td>
</tr>
<tr>
<td>Safety</td>
<td>15</td>
<td>$67,767,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>863</strong></td>
<td><strong>$6,167,821,796</strong></td>
</tr>
</tbody>
</table>

* Still have 102 new start projects (excluding bridges)
STID Project Development

• Economic and Community Development (ECD) and State Industrial Access (SIA)
  – Provides funding and technical assistance for highway access to new and expanding industries across the state

• Safety Program
  – Road Safety Audits (RSA’s)
  – Prepare safety projects in-house saves $1,000,000
Thank You!

Questions & Comments
Contact Information

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E-mail: Steve.Allen@tn.gov