A View into the Future of WV Highways

WVDOT: Roads to Prosperity
GIS-T 2018

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GeoDecisions
Geospatial Business Line of Gannett Fleming

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Topics / Discussions

• Introduction
• Project Background
• Technology Approach
• Live Demo
• What’s Next?
• Questions
Background – What is Roads to Prosperity

• Legislation Act Passed in 2017
• $2.1 Billion Bond Sales and Tax/Fee Program
• “Centerpiece to Economic Recovery for WV”

• Private Public Partnerships P3 – HB2721
• Design Build – HB2722
• GARVEE - HB2878
• Parkways SB1003
• Fees SB1006 (Gas tax, DMV fees, and vehicle sales tax)
Senate Joint Resolution 6

BY SENATORS CARMICHAEL (MR. PRESIDENT) AND PREZIOSO

(By Request of the Executive)

[Introduced February 23, 2017, Referred

to the Committee on Transportation and Infrastructure; and then to the Committee on the Judiciary]

Proposing an amendment to the Constitution of the State of West Virginia, amending article X thereof by adding thereto a new section, designated section twelve, relating to authorizing the Legislature to issue and sell state bonds not exceeding the aggregate amount of $1.6 billion to be used for improvement and construction of state roads; numbering and designating such proposed amendment; authorizing a special election on the ratification or rejection of the amendment to take place in 2017 to be set by the Governor; and providing a summarized statement of the purpose of such proposed amendment.

Resolved by the Legislature of West Virginia, two thirds of the members elected to each house agreeing thereto:

That the question of ratification or rejection of an amendment to the Constitution of the State of West Virginia be submitted to the voters of the state at a special election to be held at a date set by the Governor in 2017 and proclaimed in accordance with section three, article eleven, chapter three of the Code of West Virginia, which proposed amendment is that article X thereof be amended by adding thereto a new section, designated section twelve, to read as follows:

ARTICLE X. TAXATION AND FINANCE.


(a) The Legislature shall have power to authorize the issuing and selling of state bonds not exceeding in the aggregate $1.6 billion dollars. The proceeds of said bonds hereby authorized to be issued and sold over a four-year period in the following amounts:

1. July 1, 2018, an amount not to exceed $500 million;
2. July 1, 2019, an amount not to exceed $400 million;
3. July 1, 2020, an amount not to exceed $200 million; and
4. July 1, 2021, an amount not to exceed $200 million.

Any bonds not issued under the provisions of subdivisions (1) through (3), inclusive, of this subsection may be carried forward and issued in any subsequent year.

(b) The proceeds of the bonds shall be used and appropriated for the following purposes:

1. Matching available federal funds for highway construction in this state; and
2. General highway and secondary road construction or improvements in each of the fifty-five counties.

(c) When a bond issue as aforesaid is authorized, the Legislature shall at the same time provide for the collection of an annual state tax sufficient to pay as it may accrue the interest on such bonds.
Selection of Projects

- **Established Prioritization Methods**
  - STIP – 6 Year Plan
  - National Bridge Inspection Program
  - Pavement Management System
- **Geographical Equity**
  - All 55 Counties Included
- **WVDOH Transportation System**
  - All Inclusive – from the dirt roads to the expressways
  - 36,000 miles – 6th Largest State Transportation Network
  - 44th funded DOT
- **Broad spectrum**
  - From the secondary roads to the expressways including pavements, small bridges, larger bridges, slides, safety, drainage, ADA, etc.
# Roads to Prosperity Highway Program

## Project List - Authorized and Candidate

<table>
<thead>
<tr>
<th>Program (Wave)</th>
<th>Project Description</th>
<th>Estimated Cost</th>
<th>Program/Wave</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Paving projects on 2 lane WV and US Routes (Accelerated Construction with Federal Aid Funding)</td>
<td>$23,223,000</td>
<td>A</td>
</tr>
<tr>
<td>B</td>
<td>Paving, sidewalks, and other roadway improvements to local service roads (Pay-as-you-go with DOT/State, Gas Tax, and Privilege Tax Revenues)</td>
<td>$17,375,000</td>
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<tr>
<td>C</td>
<td>Bridge replacements and interchange reconstruction (GARVEE 1)</td>
<td>$640,000</td>
<td>B</td>
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<tr>
<td>D</td>
<td>Bridge replacements and other roadway improvements (GARVEE 2)</td>
<td>$510,000</td>
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<tr>
<td>E</td>
<td>General Obligation Bonds</td>
<td>$520,000</td>
<td>D</td>
</tr>
<tr>
<td>F</td>
<td>Turnpike bridge projects</td>
<td>$1,200,000</td>
<td>D</td>
</tr>
<tr>
<td>G</td>
<td>Candidate Projects</td>
<td>$526,000</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Project has been authorized for construction</td>
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<table>
<thead>
<tr>
<th>County</th>
<th>District</th>
<th>Project</th>
<th>Work</th>
<th>Estimated Cost</th>
<th>Program/Wave</th>
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<tbody>
<tr>
<td>Berkeley</td>
<td>5</td>
<td>HARMON SPRINGS ROAD</td>
<td>Purchase order paving</td>
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<td>GILES MILL ROAD</td>
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<td>BAILIE QUARRY ROAD</td>
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<td>Berkeley</td>
<td>5</td>
<td>APPLE HARVEST ROAD - SLINGER</td>
<td>REPAIRS: 2&quot; OVERLAY, DITCHING/SHOULDER, TREE CUTOFF, CULVERTS</td>
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<tr>
<td>Berkeley</td>
<td>5</td>
<td>TOYOTA FLAKE</td>
<td>SLIDE REPAIR, DITCHING, GUARDRAIL REPAIR, OVERLAY</td>
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<td>SIERRA COUNTRY ROAD</td>
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<tr>
<td>Berkeley</td>
<td>5</td>
<td>J HUFF HUFF RING</td>
<td>Major Rehab</td>
<td>$243,262</td>
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<tr>
<td>Berkeley</td>
<td>5</td>
<td>ROCK CREST DRIVE</td>
<td>Major Rehab</td>
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<td>5</td>
<td>RR S 52 WIDENING</td>
<td>Widen S 52 from 181 US to WV 52/US 11 US (Unwood Road)</td>
<td>$23,500,000</td>
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<td>5</td>
<td>L 11 WIDENING</td>
<td>Widen L 11 MP 8 to 12</td>
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<td>HOPOSVILLE H 53 RING</td>
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<td>MIDDOWAY BRIDGE</td>
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<td>5</td>
<td>LADY VEGA</td>
<td>Widen side of LADY VEGA</td>
<td>$9,000,000</td>
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<td>Berkeley</td>
<td>5</td>
<td>HOPS WIDENING</td>
<td>Reconstr and Rehab</td>
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<td>Boone</td>
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<td>TURTLE CREEK</td>
<td>Replace</td>
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<td>Boone</td>
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<td>WHITEWATER CREEK RIVER (Lynn Branch)/Missouri Fork</td>
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<tr>
<td>Boone</td>
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<td>BIG PINNACLE BRIDGE</td>
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<td>LILY GROVE ROAD</td>
<td>OVERLAY</td>
<td>$235,205</td>
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<tr>
<td>Boone</td>
<td>1</td>
<td>LILY GROVE ROAD</td>
<td>OVERLAY</td>
<td>$235,205</td>
<td>B</td>
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</tbody>
</table>
Technology Approach

- SQL Server Data Store
  - ETL Migrations from Legacy DB2 and Mainframe Systems
- Angular front end
- Custom Web AppBuilder Template and Widgets
- Portal for ArcGIS
- Non Data Access Layer – only Feature Services
Welcome to the Governor's new Roads to Prosperity initiative website. This initiative is aimed to recharage the maintenance and replacement of roads and bridges in WV. This site contains information on 600+ identified projects that use five different funding streams and bond programs. The information includes what projects are being planned, how they're progressing, and the completed project costs and other details.

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Demo
What’s Next?

- Live Data Streams from Legacy Systems for Projects
- Direct Link to R&H Services
- More Advanced Map and Data Analysis and Charting
- Possible Migration of STIP Viewer to this WAB Template
- Admin Tools and Secure Data Analytics
- Tie to Auditor Site for Transactions
- ???
Roads to Prosperity
Highway Program

Centerpiece of Economic Recovery for West Virginia


For all West Virginians
All 55 Counties
Over 500 Projects
Questions? Thank You!

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