Presentation Outline

• Project Background
• Understanding the Corridor
• MP CVP Visioning Workshop
• Re-Envisioning the Corridor
• Planning Level Cost Estimates
• Areas of Further Study
Project Background
Project Team

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Why Martinsburg Pike?

- Identified in the HEPMPO Long-Range Transportation Plan (LRTP) as a high crash rate corridor
- Included in the LRTP fiscally constrained project list for intersection improvements along Martinsburg Pike
- High priority corridor for bicycle improvements included the HEPMPO Regional Bicycle Plan
- West Virginia enacted “Complete Streets Act” as part of State Code (4A)
- Corridor supports WVDOT West Virginia Corridor Management Handbook (2013)
- Ideal selection to apply HEPMPO “Complete Streets” Policy (2018)
- New developments already happening along the corridor
What are “Complete Streets”

• A comprehensive, integrated approach to designing, constructing, and operating roads, streets, and adjacent rights-of-way in a way that supports safe and convenient travel along and across streets for all users

• The benefits include:
  • Improves safety for all users;
  • Expands quality transportation choices for non-drivers, persons with disabilities, and different modes of transportation;
  • Provides better bike, pedestrian, and transit connections to employment, education, residential, recreation, retail centers and public facilities;
  • Promotes healthy lifestyles and recreational opportunities; and creates more livable communities
Martinsburg Pike CVP Study Goals

- Improve accessibility to downtown, businesses, residential neighborhoods, Shepherd University and adjacent amenities
- Improve vehicle, pedestrian and bicycle safety
- Enhance economic development along the corridor
Current Status

• Eligible for New Grants under BIL
• Corridor part of proposed Road Annexation by Shepherdstown
Understanding the Corridor
Corridor Selection Criteria & Stakeholders

**Safety Concerns**
Identified in the HEPMPO LRTP as a high crash rate corridor

**In Previous Plans**
Included in the LRTP fiscally constrained project list for intersection improvements. Identified in Shepherdstown’s Comprehensive Plan for bicycle/pedestrian improvements.

**Multimodal Opportunity**
High priority for bicycle improvements & included in the HEPMPO Regional Bicycle Plan. Study Area identified by the Jefferson County Comprehensive Plan for the expansion of transit service as well as pedestrian/bike facilities.

**New Policies**
Ideal road section to apply the HEPMPO “Complete Streets” Policy

**Changing Area**
New developments are underway & planned along the corridor

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**Stakeholders**

- **MP CVP Stakeholders Group**
- **Shepherdstown Agencies**
- **Community Advocates**
- **Local Businesses**
- **Jefferson County Agencies**
- **Regional Transit**
- **State and Regional Transportation**

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Martinsburg Pike CVP
Shepherdstown, WV-Study Area Limits

- Located in the Shepherdstown Urban Growth Boundary
- University activities
- Residential and University housing at Maddox Farms
- South area experiencing high residential growth, new professional development center and library
- Bicycle connections to C&O Canal
Martinsburg Pike Corridor Limits

¾ Mile Corridor Length w/ 60-75 feet of Right-of-Way
Travel Demand


- 2002: 11,503
- 2005: 9,050
- 2008: 11,053
- 2011: 10,529
- 2014: 13,254
- 2017: 9,272

WVDOT AADT Yearly Trends (2002 - 2017)

WVDOT-Vehicle by Hour of Day

- Hours 1 to 24
- Traffic Volume from 0 to 1,200

WVDOT AADT = 9,000-13,000
Trucks = 4.5%

HEPMPO Travel Model Forecast
Growth = 27%
from 2015-2045
Corridor Traffic Congestion

- Free flow speed 53mph
- Congestion Sources:
  - Turns to/from University Drive
  - Backup from N. Duke Street Stop Sign
  - Lights at Maddex Square and Potomac Farms Road
Safety – Injury Crash Locations

<table>
<thead>
<tr>
<th>Crash Type</th>
<th>Percentage of All Non-Injury Crashes</th>
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<tbody>
<tr>
<td>Rear End</td>
<td>40%</td>
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<tr>
<td>Angle (Front-to-Side) Same Direction</td>
<td>7%</td>
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<tr>
<td>Angle (Front-to-Side) Opposite Direction</td>
<td>20%</td>
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<tr>
<td>Sideswipe, Opposite Direction</td>
<td>20%</td>
</tr>
<tr>
<td>Right Angle</td>
<td>7%</td>
</tr>
<tr>
<td>Angle (Direction Not Specified)</td>
<td>14%</td>
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</tbody>
</table>
Active Transportation

- University high generator of bike/ped activity
- Sidewalks planned w/ new developments
- New bike path along Potomac Farms Road complete
- Additional trails/paths needs to fill gaps
Future Land Use - Zoning / New Developments
EPTA Transit Service

Shepherd Circulator

Future Route 21: VA Medical Center and Shepherdstown

- Six School Bus Stops along Corridor + 2 additional stops at Maddex Farms and University Heights area
MP CVP Visioning Workshop
Stakeholder Participation

**Treasures**
- What makes this a special place in the community to live, work, and play?

**Challenges**
- What are the challenges?
- What needs improvement?

**Vision**
- What is the desired vision for the Martinsburg Pike corridor?
Visioning Workshop

• 2-day visioning workshop held in March at Shepherdstown Firehall
  • Visualization through 3D sketching tools
  • **Build consensus** to arrive at a shared vision for the corridor

• Goal of identifying preferred road improvements by type and location

• Complete Streets – Strategy Toolbox

![Complete Streets Strategy Toolbox](image)
Traffic Speed Impacts

• Driving speed is directly proportionate to severity of crash injuries
• Speed was a contributing factor in ½ of crashes
• Road design critical to desired speed along with traffic calming elements
2-Day Visioning Workshop

• Day-1: Walking Tour followed by discussions and testing ideas
• Day-2: Review alternatives, discuss preferences, refine and prioritize
Visualization Process
Re-Envisioning the Corridor
Plan Details by Block – West to East - 1
Plan Details by Block – West to East - 2
Plan Details by Block – West to East - 3
Multimodal Path Improvements / Median Options

* Measurements are for informational purposes. Perspective view is not scalable.
Access to Shepherdstown Fire Department

• Alternative Entrance to Align w/ Maddex Drive
Signage Along the Corridor
Signage - continued
Planning Level Cost Estimates
# Planning Level Cost Estimate (2021$)

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost Estimate (Low)</th>
<th>Cost Estimate (High)</th>
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<tr>
<td><strong>Design Improvements</strong></td>
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<tr>
<td>Signing &amp; Pavement Marking</td>
<td>$27,000</td>
<td>$37,000</td>
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<tr>
<td>Roundabout (Includes Signing &amp; Pavement Marking)</td>
<td>$1,500,000</td>
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<tr>
<td>Median Island &amp; Widening</td>
<td>$2,125,000</td>
<td>$2,605,000</td>
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<tr>
<td>Traffic Signal (Includes Signing &amp; Pavement Marking)</td>
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<td>$250,000</td>
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<td>Multi-Use Trail</td>
<td>$486,000</td>
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<td>Sidewalk</td>
<td>$317,000</td>
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<td>Fire Station Flashing Warning Beacon</td>
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<td><strong>Design Improvements Total</strong></td>
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<td><strong>Project Items</strong></td>
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<td>Equipment Package</td>
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<td>Construction Surveying</td>
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<td>CPM Schedule</td>
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<td>Unforeseen Water Pollution Control</td>
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<td><strong>Project Items Total</strong></td>
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<td><strong>Percentage Items</strong></td>
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<td>Mobilization (4%)</td>
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<td>Maintenance &amp; Protection of Traffic (10%)</td>
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<td>Contingencies (25%)</td>
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<td>Inspection (12%)</td>
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<tr>
<td>Engineering (25%)</td>
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<td><strong>Percentage Items Total</strong></td>
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<td><strong>Project Total</strong></td>
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## Grant Opportunities & Funding Programs

- Transportation Alternatives (TA)
- Recreational Trails Fund
- American Jobs Plan
- Surface Transportation Block Grant Rebuilding American (STGB)
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Appalachian Regional Commission (ARC)
- Federal Lands Access Program (FLAP)
Areas of Further Study
Areas of Further Study

• Multipurpose Trail Connections
  • C&O Canal
  • New library and Developments
  • Potomac Farms Dr to Morgan’s Grove Park
  • Shepherdstown Path to WV480 / Alt 45

• Traffic Signal Studies
  • University Drive / Maclaine Way

• Corridor Speed Limit
  • Shepherdstown Road Annexation

• Links & New Roadways
Thank You for Participating!

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