**SHRP2 Interstate 64 Corridor Plan**

Shenandoah Piedmont area Collaborative Effort (SPaCE)

Project Introduction and Overview

November 18, 2016

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**Project Study Area**

- I-64 from mile marker 87 to mile marker 118 (Charlottesville to Staunton)
- US-250 from the I-81 Interchange to the Charlottesville US250/29 Bypass
- CSX Buckingham Branch, Amtrak from Charlottesville to Staunton

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**Project Funding**

- Grant funding provided by Federal Highway Administration (SHRP2 Solutions Program)
- $100,000 in federal funds
- CA-MPO $70,000
- SAW-MPO $30,000
- CA-MPO providing project management and oversight

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**Strategic Highway Research Program (SHRP2)**

- Authorized under SAFETEA-LU
- Funds innovation research and pilot projects that address state and local challenges
- Improving the way transportation plan, operate, maintain and ensure safety on Americas roadways
Corridor Planning Toolkit
- The Decision Guide streamlines the transportation process by systematically building in collaboration. It was developed using examples of successful practice and with input from all partners in transportation decision making.
- The Decision Guide was developed from 23 in-depth, detailed case studies (Including the CA-MPO 2040 LRTP TCAPP Process)

Scope
1. Open a dialog with interests in the I64 Corridor
2. Build an understanding of the issues through collaborative discussions and by engaging the experts
3. Use transportation performance measure to identify deficiencies in the corridor
4. Identify ways to improve collaboration and communication on issues of governance, maintenance and project identification
5. Document lessons learned and produce a final document that outlines deficiencies and concept level solutions
Project Activities

- Multi-agency and jurisdiction working group
- Joint MPO meetings (SAW-MPO CA-MPO)
- Data collection
- Needs assessment
- Draft MOU’s
- Draft Corridor Study Results and Lessons Learned

Working Group Meetings

Meeting 1 (Nov)
- Scope and problem statement
- Project Goals and process
- Public Open House Dec 12

Meeting 2 (Jan)
- Goals
- Public Safety
- Joint MPO Meeting

Meeting 3 (Mar)
- Evaluation Criteria
- Economic Development/Accessibility
- Joint MPO Meeting

Meeting 4 (May)
- Identify hotspots
- Economic Development/Accessibility

Meeting 5 (Jul)
- Congestion and traffic
- Environmental
- Review problem areas
- Joint MPO Meeting

Meeting 6 (Aug)
- Lessons learned
- Recommendation of problem areas & next steps
- Public Open House

Preliminary Data

- Highway performance related measures
  - AADT
  - Truck Traffic
  - Crashes
- Demographics
  - Commuting patterns
  - Incomes

Existing Projects

Existing LRTB, BLBP, and SMART SCALE Projects
Crashes

- Eastbound I-64 sees delays as crews clean up crash. The Daily Progress staff reports. Nov 14, 2016. Accident is about a mile east of the Route 20 interchange.
- Crashes clog I-64 eastbound. The Daily Progress staff reports. Nov 7, 2016. At least four crashes reported eastbound around Ivy in the last hour.
- Both lanes of eastbound I-64 now open at crash scene near Ivy exit. The Daily Progress staff reports. Nov 2, 2016. Traffic is beginning to move smoother through the site.
- Eastbound I-64 crash is cleared and traffic slowly getting back to normal. The Daily Progress staff reports. Oct 25, 2016. Crash is in the left lane. Traffic is crawling through the site.
- Crash cleared, traffic getting back to normal on eastbound I-64 near Ivy. The Daily Progress staff reports. Oct 18, 2016. Third crash on the interstate in just over 24 hours.
- I-64 crash injures 3, ties up traffic. The Daily Progress staff reports. Oct 17, 2016. State police said at least one of the injured had serious injuries, but no further information on their conditions was available Monday evening.
- I-64 traffic crash cleared at Ivy, all traffic lanes open. The Daily Progress staff reports. Oct 10, 2016. A crash on Interstate 64 involving a camper-style vehicle closed westbound lanes of the highway closed at mile marker 114 near the Ivy exit.

Analyzing Crashes: 2011-2016

- 3,140 total crashes
- Rear end collisions are the most prevalent
- 30 fatalities
- Average number of crashes per year is 523
- Average of 1.5 crashes per day
- 25% occur during peak afternoon commute times
- Fridays have slightly higher number
### Crash Type

<table>
<thead>
<tr>
<th>Collision Type</th>
<th>Number</th>
<th>Fatality</th>
<th>Serious Injury</th>
<th>Serious or Fatal % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear End Collision</td>
<td>1023</td>
<td>3</td>
<td>31</td>
<td>3%</td>
</tr>
<tr>
<td>Fixed Object Off Road</td>
<td>687</td>
<td>6</td>
<td>44</td>
<td>7%</td>
</tr>
<tr>
<td>Angle</td>
<td>535</td>
<td>8</td>
<td>27</td>
<td>7%</td>
</tr>
<tr>
<td>Deer or Other Animal</td>
<td>466</td>
<td>0</td>
<td>2</td>
<td>.5%</td>
</tr>
<tr>
<td>Sideswipe (Either Direction)</td>
<td>222</td>
<td>2</td>
<td>6</td>
<td>4%</td>
</tr>
<tr>
<td>Non-Collision</td>
<td>72</td>
<td>2</td>
<td>17</td>
<td>26%</td>
</tr>
<tr>
<td>Head On</td>
<td>54</td>
<td>3</td>
<td>10</td>
<td>24%</td>
</tr>
<tr>
<td>Other</td>
<td>36</td>
<td>1</td>
<td>3</td>
<td>11%</td>
</tr>
<tr>
<td>Fixed Object In Road</td>
<td>19</td>
<td>1</td>
<td>0</td>
<td>5%</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>18</td>
<td>3</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>Backed Into</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>3140</td>
<td>29</td>
<td>146</td>
<td></td>
</tr>
</tbody>
</table>

### Severity Heat Map: 2011-2016

Assigned numeric value to Crash Severity:
- 1 = Property Damage Only
- 2 = Non-Visible Injury
- 3 = Visible Injury
- 4 = Ambulatory Injury
- 5 = Fatal Injury

Darker red indicates clustering of more severe crashes (3, 4, & 5).

### Crash Severity

<table>
<thead>
<tr>
<th>Severity</th>
<th>Number</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Damage Only</td>
<td>2152</td>
<td>69%</td>
</tr>
<tr>
<td>Non-Visible Injury</td>
<td>257</td>
<td>8%</td>
</tr>
<tr>
<td>Visible Injury</td>
<td>548</td>
<td>17%</td>
</tr>
<tr>
<td>Ambulatory Injury</td>
<td>154</td>
<td>5%</td>
</tr>
<tr>
<td>Fatal Injury</td>
<td>29</td>
<td>1%</td>
</tr>
</tbody>
</table>

### Fatal Crashes: 2011-2016

- 29 Crashes that resulted in 30 Deaths
- 3 involved adverse weather conditions
- 4 crashes involved with 3-axle or more vehicle
- 6 Crashes were known to have impaired (drinking) motorists
- Majority occurred in morning & afternoon commute times
Crash Counts Per Year

Crash Counts Per Year: 2011-2016

Crash Rates Per One Hundred Million Miles: 2011-2016

Crash Rates Per One Hundred Million Miles: 2011-2016
Deer Crash Heat Map: 2011-2016

Streetlight: Waynesboro to Cville Peak AM

398 Total Deer Crashes
40 Other Animals Crashes
Community Profile: Population Change

<table>
<thead>
<tr>
<th>Geography</th>
<th>2015 Pop</th>
<th>2010-15 Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia</td>
<td>8,882,993</td>
<td>4.8%</td>
</tr>
<tr>
<td>C-A</td>
<td>153,261</td>
<td>7.6%</td>
</tr>
<tr>
<td>Charlottesville</td>
<td>48,210</td>
<td>10.9%</td>
</tr>
<tr>
<td>Albemarle</td>
<td>105,051</td>
<td>6.1%</td>
</tr>
<tr>
<td>SAW</td>
<td>121,218</td>
<td>2.3%</td>
</tr>
<tr>
<td>Staunton</td>
<td>24,542</td>
<td>3.4%</td>
</tr>
<tr>
<td>Augusta</td>
<td>74,881</td>
<td>1.5%</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>21,795</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Community Profile: Age

*Charlottesville-Albemarle has a large cohort of college students that are cut off on this chart.*
Community Profile: Age

Community Profile: Race and Ethnicity

- Both regions are more White than the state as a whole, with the Valley being significantly more White

Community Profile: Income

- Median household income in Charlottesville is significantly higher than in the Valley
- The income spread is similar in both communities across most income brackets.
- Major difference is presence of about 10,000 additional households earning $100,000 or more in Charlottesville/Albemarle
Community Profile: Poverty & Employment

**General Economic Indicators**

<table>
<thead>
<tr>
<th>Geography</th>
<th>Median Household Income</th>
<th>Poverty Rate</th>
<th>Non-student Poverty Rate</th>
<th>Unemployment Rate (BLS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlottesville Metro Area</td>
<td>$59,189</td>
<td>15.2%</td>
<td>10.2%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Charlottesville</td>
<td>$47,218</td>
<td>27.5%</td>
<td>15.1%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Albemarle</td>
<td>$67,958</td>
<td>9.7%</td>
<td>8.4%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Staunton-Waynesboro Metro Area</td>
<td>$49,262</td>
<td>13.2%</td>
<td>13.2%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Staunton</td>
<td>$39,982</td>
<td>18.2%</td>
<td>17.8%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Augusta</td>
<td>$54,018</td>
<td>9.3%</td>
<td>9.4%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>$45,499</td>
<td>20.7%</td>
<td>20.8%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Community Profile: Educational Attainment

- The contrast in educational attainment is more dramatic than the contrast in income

Community Profile: Housing

- The dominant form of housing in both regions is single-family detached. Charlottesville has more multi-family.

- The contrast in educational attainment is more dramatic than the contrast in income
Community Profile: Housing

- **Home Values**
  - Under $150K
  - $150-250K
  - $250-400K
  - Over $400K

<table>
<thead>
<tr>
<th>Home Value</th>
<th>Charlottesville-Albemarle</th>
<th>Staunton-Augusta-Waynesboro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $150K</td>
<td>2,000</td>
<td>4,000</td>
</tr>
<tr>
<td>$150-250K</td>
<td>12,000</td>
<td>20,000</td>
</tr>
<tr>
<td>$250-400K</td>
<td>14,000</td>
<td>16,000</td>
</tr>
<tr>
<td>Over $400K</td>
<td>14,000</td>
<td>12,000</td>
</tr>
</tbody>
</table>

Community Profile: Migration

- County-to-county migration numbers are unreliable for any single year, but it looks like Staunton/Augusta/Waynesboro has a net gain of about 200-300 people a year from the Charlottesville/Albemarle area.

- Staunton/Augusta/Waynesboro loses young adults, gains families and older migrants.

- Charlottesville/Albemarle has huge in-migration of young adults, loses them in their 30's and 40's, has small gains among older age groups.

QUESTIONS

Thomas Jefferson Planning District Commission

401 East Water Street
Charlottesville, VA 22902

Wood Hudson
Senior Planner

Resources: http://campo.tjpdc.org