Connect RVA 2045

Update

RRTPO Technical Advisory Committee Meeting
February 9, 2021

Presentation by:
Sulabh Aryal, AICP
Transportation Planning Manager
Task 2: Strategic Direction

**Task Objective:** Develop Vision and Goals for the LRTP. Also develop Objectives and performance measure within each goal which could measure the achievement towards the goal.
Vision
The transportation system in the Richmond Region will reliably and safely connect people, prioritize more equitable opportunities for all to thrive and live healthy lives, promote a strong economy, and respect environmental stewardship.

Guiding Principles

GP1 Create a safe system for all users committed to the proven strategies in planning, design, operations and maintenance as well as advances in technology to eliminate fatal and serious injury crashes.

GP2 Choice among all travel modes regionwide.

GP3 Expansion of regional bicycle and pedestrian networks to provide active travel alternatives to driving for better individual and community health.

GP4 A robust transit network which delivers comprehensive, effective, and convenient service, particularly in areas of greatest need and to key destinations.

GP5 Equity and inclusion in all transportation spending and planning decisions in the region with a focus on historically underrepresented and under-served communities.

GP6 Efficient movement of people and goods across the transportation network.

GP7 Alignment of transportation investment and planning with land use, community health, and environmental stewardship.

Goals & Objectives

A. Safety
- Improve the safety of the transportation system for all people.
- A2. Work to eliminate all serious injuries and fatalities resulting from vehicular accidents.

B. Environment/Land Use
- Reduce the negative impact the transportation system has on the natural and built environment.
- B1. Address roadways prone to flooding and consider climate impacts in transportation planning prioritization and funding decisions.
- B3. Reduce VMT (vehicle miles traveled) per capita.
- B4. Increase number and share of trips taken by shared and active transportation modes.
- B5. Tie land use planning to transportation investments through encouragement of walkable and transit-oriented communities.
- B6. Minimize impacts of transportation systems on natural resources and communities with a particular emphasis on Environmental Justice (EJ) populations.

C. Equity/Accessibility
- Improve equitable access through greater availability of mode choices that are affordable and efficient.
- C1. Reduce trip lengths for all people with a focus on Environmental Justice (EJ) populations.
- C2. Increase access to jobs and community services via transit, walking, and biking for all people with a focus on EJ populations.

D. Economic Development
- Improve connectivity and mobility for strong economic vitality.
- D1. Reduce peak period travel times.
- D2. Increase transportation investment which focuses on economic vitality.
- D3. Improve reliability and accessibility of travel to and within the regional activity centers.
- D4. Reduce freight bottlenecks.
- D5. Increase multimodal access to tourist destinations.

E. Mobility
- Increase travel efficiency and mode choices by maintaining the transportation system in a state of good repair.
- E1. Increase the percent of complete streets across the highway network to maximize use of available capacity.
- E2. Increase system efficiency through operational, transportation demand management (TDM), and technology-based solutions.
- E3. Improve system reliability across all modes.
Task 3: Planning

Task Objective:

• Convert multimodal transportation needs and deficiencies as established in Task 1 into logical transportation projects.
• Develop Project Inclusion Guidelines for ConnectRVA 2045
• Work with Project Champions to develop and screen the projects.
• Finalize the ‘Universe of Projects’ to be scored, ranked and prioritize in Task 4.
Task 3: Planning

Project Champions

• Transit– GRTC/RRTPO/Localities
• Park n Ride – Ride Finders/ RRTPO/Localities
• Active Transportation – Active Trans. Workgroup /RRTPO
• Rail – DRPT
• Airport Related - CRAC
• Freight/Intermodal/RMT- RRTPO/VDOT/Richmond/VPA
• System Resiliency – RRTPO
• Highway
  • Ashland and Hanover County – Ashland/Hanover
  • Chesterfield County – Chesterfield
  • Henrico County – Henrico
  • Richmond City - Richmond
  • Goochland County – Goochland
  • Powhatan County – Powhatan
  • Multi-Jurisdiction/Interstate/Freeway- VDOT/RRTPO
  • Bridge – VDOT
  • Downtown Expressway - RMTA
Task 4: Programming

Task Objective:

- Development of project scoring, ranking and prioritization methodology based on established project performance measures.
  - Performance based measures—data driven
- Acquire Revenue Projections from VDOT and DRPT.
- Develop the Constrained List of Projects
### ConnectRVA 2045

<table>
<thead>
<tr>
<th>Goals</th>
<th>Project Performance Measure</th>
<th>PM Weights</th>
<th>Goal Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>Crash Frequency</td>
<td>17.50%</td>
<td>25.00%</td>
</tr>
<tr>
<td></td>
<td>Crash Rate</td>
<td>7.50%</td>
<td></td>
</tr>
<tr>
<td>Mobility</td>
<td>Person Throughput</td>
<td>7.50%</td>
<td>15.00%</td>
</tr>
<tr>
<td></td>
<td>Person Hours of Delay</td>
<td>7.50%</td>
<td></td>
</tr>
<tr>
<td>Equity and Accessibility</td>
<td>Access to Jobs</td>
<td>7.50%</td>
<td>25.00%</td>
</tr>
<tr>
<td></td>
<td>Access to Jobs (EJ)</td>
<td>5.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Access to Destinations</td>
<td>7.50%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Access to Destinations (EJ)</td>
<td>5.00%</td>
<td></td>
</tr>
<tr>
<td>Economic Development</td>
<td>Job Growth*</td>
<td>7.50%</td>
<td>15.00%</td>
</tr>
<tr>
<td></td>
<td>Connection to Truck Intensive Areas</td>
<td>3.75%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Truck Throughput</td>
<td>3.75%</td>
<td></td>
</tr>
<tr>
<td>Environment/Land Use</td>
<td>Sensitive Features</td>
<td>5.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Air Pollution</td>
<td>5.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VMT per Capita</td>
<td>5.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Connection to Activity Center</td>
<td>5.00%</td>
<td></td>
</tr>
</tbody>
</table>
## Task 4: Programming

<table>
<thead>
<tr>
<th>LRTP Goals</th>
<th>Safety</th>
<th>Mobility</th>
<th>Equity and Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Performance Measure</td>
<td>Crash Frequency</td>
<td>Crash Rate</td>
<td>Person Throughput</td>
</tr>
<tr>
<td>Description</td>
<td></td>
<td>Person Hours of Delay</td>
<td>Access to Jobs (EJ)</td>
</tr>
<tr>
<td></td>
<td>Crash Frequency</td>
<td>Crash Rate</td>
<td>Person Throughput</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Person Hours of Delay</td>
<td>Access to Jobs (EJ)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase in Person Throughput</td>
<td>Increase in average job accessibility per person (Total EJ Population within EJ Area)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduction in Person Hours of Delay (Peak Period)</td>
<td>Increase in average job accessibility per person (Total EJ Population within EJ Area)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase in average job</td>
<td>Increase in average job accessibility per person (Total EJ Population within EJ Area)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>accessibility per person</td>
<td>Increase in average job accessibility per person (Total EJ Population within EJ Area)</td>
</tr>
<tr>
<td>Unit of Measurement</td>
<td>EPDO</td>
<td>EPDO/1 M VMT</td>
<td>Person Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jobs Per person</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jobs per Person</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Weighted Destinations per 1000 Persons</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Weighted Destinations per 1000 Persons</td>
</tr>
</tbody>
</table>

*Richmond Regional Transportation Planning Organization Supported by PIROVA*
## Task 4: Programming

<table>
<thead>
<tr>
<th>LRTP Goals</th>
<th>Economic Development</th>
<th>Environment/Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Performance Measure</strong></td>
<td><strong>Job Growth</strong>*</td>
<td><strong>Connection to Truck Intensive Areas</strong>*</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Increase in the decay weighted quantity of job growth adjacent to the project</td>
<td>Increase in the Truck Intensive units adjacent to the project from 2017 to 2045.</td>
</tr>
<tr>
<td><strong>Unit of Measurement</strong></td>
<td>Jobs</td>
<td>Truck Intensive Units</td>
</tr>
</tbody>
</table>

*Unsure about the meaning of the asterisk (*) in the header.*
Next Steps

• Finalize the **Universe of Project**.
• Score all the projects and establish a ranked and prioritized list.
• Finalize the Connect RVA 2045 **Constrained List** and the **Vision List** of projects.
• Develop a list of projects to be in the called as **Projects Consistent with ConnectRVA 2045**. This will include projects not included in the Universe of projects but do address one or more ConnectRVA 2045 goals.
• Targeted adoption of the Constrained Plan is by early Summer.
Connect RVA 2045

Website
www.connectrva2045.org

Contact Information

ConnectRVA2045@planrva.org

Chet Parsons
cparsons@planrva.org

Sulabh Aryal
saryal@planrva.org