VMTP 2025 Needs Assessment
Draft White Paper on Methodology

What are the Transportation Needs to Support these Industries & Workforces?

Draft – July 2015
PART 1. INTRODUCTION AND BACKGROUND

A. Introduction
Through new legislation, the Virginia General Assembly has directed the Commonwealth Transportation Board (CTB) to coordinate the development of a Statewide Transportation Needs Assessment via the Office of Intermodal Planning and Investment (OIPI), as part of the development of the Statewide Transportation Plan (VTrans2040), as follows:

State Code - 33.2-353
“The Board shall, with the assistance of the Office of Intermodal Planning and Investment, conduct a comprehensive review of statewide transportation needs in a Statewide Transportation Plan setting forth assessment of capacity needs for all corridors of statewide significance, regional networks, and improvements to promote urban development areas...The assessment shall consider all modes of transportation.”

OIPI is leading the effort to develop and implement the Statewide Transportation Needs Assessment process as part of the VTrans Multimodal Transportation Plan (VMTP). The VMTP, along with the VTrans Vision Plan make up the overall statewide Transportation Plan, VTrans2040. One of the key purposes of the Needs Assessment is to serve as a screen for projects applying for consideration under the House Bill 2 (2014) (HB2) prioritization process. All projects submitted for the HB2 process must pass through an initial screening process. This initial screening process is a critical component because it links the planning and programming processes to ensure the overarching transportation goals of the CTB are advanced. If a project does not meet the capacity and operations needs or the safety needs under the Transportation Needs Assessment of VTrans2040, it cannot move forward in the HB2 process. The Transportation Needs Assessment will assess the State’s transportation needs at three scales, listed below, and will include a statewide assessment of safety needs:

- Corridor of Statewide Significance (COSS) - Interregional travel market
- Regional Networks - Intraregional travel market
- Urban Development Areas (UDA) Local activity center market

For projects to advance under the district grant program (as defined in § 33.2-371), they must meet a need on:

- A Corridor of Statewide Significance
- A Regional Network
- An Urban Development Area
- A Statewide Safety Need

For projects to advance under the high priority projects program (as defined in § 33.2-370), they must meet a need on:

- A Corridor of Statewide Significance
- A Regional Network
HB2 requires that every project clearly state if the proposed investment best fits a capacity need on one of the three established geographic scales and which scale it fits, or if it best meets a statewide safety need. This geographic designation will determine which transportation needs apply to the proposal. As VTrans2040 is still under development, the categories of needs are outlined below at a high level and are subject to change.

The Transportation Needs Assessment is on a rapid schedule, with draft Transportation Needs being completed by the end of July, 2015 to support the HB2 implementation process which will start in August, 2015.
PART 2. CORRIDORS OF STATEWIDE SIGNIFICANCE

The VTrans2035 plan, as adopted by the Commonwealth Transportation Board (via resolution dated December 17, 2009), designated 11 CoSS and a twelfth Corridor has since been added (via CTB resolution dated May 18, 2011). The designation and study of these multimodal corridors is a responsibility of the Commonwealth Transportation Board per the code of Virginia section §33.2-353. The official definition of a CoSS is:

“An integrated, multimodal network of transportation facilities that connect major centers of activity within and through the Commonwealth and promote the movement of people and goods essential to the economic prosperity of the state.”

To be considered a CoSS, a corridor must meet all four criteria pertaining to:

1. Multimodal – must involve multiple modes of travel or must be an extended freight corridor.
2. Connectivity – must connect regions, states, and/or major activity centers.
3. High Volume – must involve a high volume of travel.
4. Function – must provide a unique statewide function and/or address statewide goals.

A. Geographic Definition

CoSS are those facilities and services which comprise the multimodal network connecting major centers of activity (RNs and UDAs) and accommodate inter-city travel between these centers as well as inter-state traffic. Due to the nature of such long distance travel, the primary considerations for the assessment of needs within CoSS are mobility and safety. Accessibility within RNs and UDAs will be captured in their respective needs assessments.

The geographic definition of each CoSS is based on specific multimodal facilities and services as outlined in the table below. The Commonwealth has identified each CoSS based on a primary facility (generally an Interstate or U.S. Highway Route) and comprised of the major facilities/services (typically within approximately five miles of the primary highway) that provide multiple modes and redundant routes connecting major centers of activity.

The CoSS geography overlaps with the RN and UDA geographies only where needs on these facilities/services address needs for through-traffic and inter-city travel. For analysis purposes, each CoSS is divided into discrete segments which are identified by points where major transportation facilities enter or exit a corridor, areas affected by similar types of transportation issues, and locations where geometric or socio-economic conditions changed substantially; this is reflected in the table and map below as well.
It is important to note that while only those facilities included in the table are being analyzed, OIPI will consider projects that can clearly demonstrate their impact to the needs identified on these facilities as eligible needs for screening through this process.

<table>
<thead>
<tr>
<th>Corridors of Statewide Significance</th>
<th>Corridor Components</th>
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</thead>
<tbody>
<tr>
<td><strong>A - Coastal Corridor</strong></td>
<td></td>
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<tr>
<td>Segment A1</td>
<td>Route 17, Port of Virginia, Norfolk Southern Heartland Corridor, Norfolk Southern Coal Corridor, CSX National Gateway Corridor, CSX Coal Corridor, Amtrak, Norfolk International Airport, Newport News/Williamsburg International Airport</td>
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<tr>
<td>Segment A2</td>
<td>Route 17, Rappahannock River</td>
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<tr>
<td>Segment A3</td>
<td>Route 17</td>
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<td><strong>B - Crescent Corridor</strong></td>
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<tr>
<td>Segment B1</td>
<td>I-81, Route 11, I-381, Norfolk Southern Crescent Corridor, Short Line Railroads</td>
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<td>Segment B2</td>
<td>I-81, Route 11, I-581, Norfolk Southern Crescent Corridor, Short Line Railroads, Roanoke Regional Airport</td>
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<td>Segment B3</td>
<td>I-81, Route 11, Norfolk Southern Crescent Corridor</td>
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<td>Segment B4</td>
<td>I-81, Route 11, Norfolk Southern Crescent Corridor</td>
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<tr>
<td>Segment B5</td>
<td>I-81, Route 11, Virginia Inland Port, Norfolk Southern Crescent Corridor, Short Line Railroads, Shenandoah Valley Regional Airport</td>
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<td><strong>C - East-West Corridor</strong></td>
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<tr>
<td>Segment C1</td>
<td>I-64, Route 60, Amtrak, CSX Coal Corridor</td>
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<tr>
<td>Segment C2</td>
<td>I-64, Route 11, Amtrak, Norfolk Southern Coal Corridor</td>
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<tr>
<td>Segment C3</td>
<td>I-64, Route 250, Route 60, Charlottesville-Albemarle Airport, Amtrak, Norfolk Southern Coal Corridor</td>
</tr>
<tr>
<td>Segment C4</td>
<td>I-64, Route 250, Route 60, Port of Richmond, James River, Amtrak, CSX Coal Corridor, Norfolk Southern Coal Corridor, Richmond International Airport</td>
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<td>Segment C5</td>
<td>I-64, Route 60, I-664, I-564, I-264, I-464, Port of Virginia, York River, James River, CSX Coal Corridor, Norfolk Southern Coal Corridor, Amtrak, Norfolk International Airport, Newport News/Williamsburg International Airport</td>
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<td><strong>D - Eastern Shore Corridor</strong></td>
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<tr>
<td>Segment D1</td>
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<tr>
<td>Segment</td>
<td>Description</td>
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<tr>
<td>D2</td>
<td>Route 13, Bay Coast Railroad and Barge</td>
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<td><strong>E - Heartland Corridor</strong></td>
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<tr>
<td>E1</td>
<td>Route 460, Coalfields Expressway, Norfolk Southern Heartland Corridor</td>
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<td><strong>F - North Carolina to West Virginia Corridor</strong></td>
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<tr>
<td>F1</td>
<td>Route 220, Norfolk Southern</td>
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<tr>
<td>F2</td>
<td>Route 220, Norfolk Southern, Roanoke Regional Airport</td>
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<td>Route 220</td>
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<td><strong>G - North – South Corridor</strong></td>
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<tr>
<td>G1</td>
<td>Route 234, Prince William County Parkway</td>
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<tr>
<td>G2</td>
<td>Routes 234 and 659, Bi-County Parkway, Northstar Boulevard, Washington Dulles International Airport</td>
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<td><strong>H - Northern Virginia Corridor</strong></td>
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<td>H1</td>
<td>I-66, Routes 50 and 55, Virginia Inland Port, Norfolk Southern Crescent Corridor</td>
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<tr>
<td><strong>I - Heartland Corridor</strong></td>
<td></td>
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<tr>
<td>I1</td>
<td>Routes 29, Norfolk Southern Crescent Corridor, Amtrak, Lynchburg Regional Airport</td>
</tr>
<tr>
<td>I2</td>
<td>Route 29, Norfolk Southern Crescent Corridor, Amtrak Charlottesville Albemarle Airport</td>
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<td>I3</td>
<td>Routes 29 and 28, Norfolk Southern Crescent Corridor, Amtrak</td>
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<tr>
<td>I4</td>
<td>Routes 29, 50 and 28, WMATA Orange Line, Virginia Railway Express, Amtrak, Washington Dulles International Airport</td>
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<td><strong>J - Southside Corridor</strong></td>
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<td>Description</td>
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<tr>
<td>J1</td>
<td>Route 58, CSX National Gateway</td>
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<tr>
<td>J2</td>
<td>Route 58</td>
</tr>
<tr>
<td>J3</td>
<td>Route 58, Port of Virginia, CSX National Gateway, Norfolk International Airport, Newport News/Williamsburg International Airport</td>
</tr>
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**K - Washington to North Carolina Corridor**

<table>
<thead>
<tr>
<th>Segment K1</th>
<th>I-95, I-85, Routes 1 and 301, CSX National Gateway Corridor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment K2</td>
<td>I-95, I-195, I-295, Routes 1 and 301, Port of Richmond, James River, CSX National Gateway Corridor, Amtrak, Richmond International Airport</td>
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<tr>
<td>Segment K3</td>
<td>I-95, I-395, I-495, Route 1, WMATA Blue and Yellow Lines, Virginia Railway Express, Port of Alexandria, CSX National Gateway Corridor, Amtrak, Ronald Reagan Washington National Airport</td>
</tr>
</tbody>
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**L - Western Mountain Corridor**

<table>
<thead>
<tr>
<th>Segment L1</th>
<th>I-77, Route 52</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment L2</td>
<td>I-77, Routes 52 and 11</td>
</tr>
</tbody>
</table>

*Figure 2 Table: CoSS Segments and Components*
B. Needs Assessment Methodology

The CoSS needs assessment included data-driven analysis and stakeholder feedback to develop quantitative and qualitative performance measures to identify needs on the corridors. Corridor and segment profiles in each report provide a snapshot of demand and travel patterns for various modes of passenger and freight travel. These profiles provide segment specific context to the subsequent analysis of needs. The needs for the CoSS are grouped into four categories: redundancy and mode choice, safety, congestion, and reliability. Data for each category of need is provided for each segment followed by a Summary of Needs which synthesizes the data analysis with feedback from local and state agencies in order to identify needs along the segment.

- **Redundancy and Mode Choice.** Analysis of available options compared to observed demand. Redundancy and mode choice evaluates the availability of comparable alternative routes and modes to the primary highway facility for major origin-destination pairs. Needs are identified for inter-city routes which have significant demand but have limited to no redundancy and mode choice or alternative facilities are overcapacity.

- **Safety.** VDOT data is used for Probability for Safety Improvements (PSI) scoring, which is consistent with the VMTP Safety Needs Assessment data, to identify the greatest roadway safety needs in each district, focusing on a maximum of 100 roadway segments and 100 intersections per district. The measure inherently screens for the most severe issues in each district. For each segment of the CoSS a few of the highest severity locations are highlighted for added emphasis in the Summary of Needs.

- **Congestion.** Person hours of delay and freight ton-hours of delay are calculated based on the traffic and freight volume and actual speed compared to the speed limit.

- **Reliability.** Highway reliability index measures the variability in travel time for weekday peak period, all-day weekday, and weekend. Amtrak reliability is measured based on average departure delay and compared to the state average.

PART 3. REGIONAL NETWORKS

The Regional Network Needs Assessment focuses on intra-regional travel. The essential question of the Regional Networks analysis is: *How does each region need to prepare for its future economic needs?* The approach to the statewide multimodal transportation plan therefore assigns great importance to the economic drivers in each region and future trends in economic development in determining the intra-regional transportation needs. This approach looks at each region distinctly in terms of the existing economic profile, the existing transportation profile, and the future desired economy of the region. The transportation needs are defined by examining how to bridge the gap between the existing conditions and the desired future economy. This assessment relies on an understanding of economic-transportation linkages that was supported by current research on trends in economic development.
The resulting approach does not rely on traditional transportation evaluation measures, but instead focuses on strategies to attract and retain the future workforce and support the goods movement needs of Virginia businesses as directed by the VTrans2040 Vision.

A. 2025 NEEDS DEVELOPMENT PROCESS
The Regional Network 2025 Needs were developed based on a six-step process as shown in Figure 4. Each step is described in brief in the paragraphs that follow. Throughout the process of developing the Needs Assessment, stakeholders were engaged to provide data, refine the study team’s state and national data sets, and provide critical insights about each region essential to understanding existing conditions and future needs.

1. Defining Needs Analysis Areas
2. Assessing Current Economic Profile
3. Identifying Desired Future Economic Profile
4. Assessing Transportation Conditions
5. Incorporating Economic-Transportation Linkages
6. Developing Transportation Needs Assessment

![Figure 4: Regional Network Needs Development Approach](image)

Step One: Defining Needs Analysis Areas
Regional Networks refer to the major economic regions of the Commonwealth and are based on the designated Metropolitan Planning Organization (MPO) areas in Virginia. MPOs are regions greater than 50,000 in urban area population and are considered the primary centers of Virginia’s regional economies. The 15 current and former MPO areas in the Commonwealth are included in the VMTP 2025 Regional Network Needs Assessment as shown in Figure 5. The initial needs analysis area for each region was defined as the MPO boundary, with the stipulation that if an MPO boundary includes only a portion of a county, the entire county will be included in the needs analysis area. Furthermore, where there is a clear link in a transportation need that supports the regional economy but is outside of the initial analysis area, it may be included for consideration in the regional Needs Assessment.

During the outreach process with each region, areas of unique economic importance were discussed and were considered in the Regional Network Needs Assessment where appropriate. If, for example, there is a particular employment center that is located outside the needs analysis area but is important to the regional economy; or, if a key corridor is located outside the needs analysis area but supports commuters or goods movement that are important to the regional economy, they may be included in
the Needs Assessment for that region. Each individual regional profile document will provide additional details on areas that were considered in the Needs Assessment.

The Regional Network includes all transportation infrastructure and facilities inside the regional jurisdiction boundaries. Outside those boundaries, only those facilities associated with a Regional Network Need that extends beyond the regional analysis area is considered part of the Regional Network.

The map in Figure 6 shows the Regional Network Initial Needs Analysis Areas as well as the geographies of the other two travel markets in the VMTP, Corridors of Statewide Significance (CoSS) and Urban Development Areas (UDAs).

**Figure 5 Regional Networks – Initial Needs Analysis Areas**

<table>
<thead>
<tr>
<th>Regional Network</th>
<th>Jurisdictions Included in Baseline Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol Area</td>
<td>City of Bristol, City of Abingdon, Washington County</td>
</tr>
<tr>
<td>Central Virginia Area</td>
<td>Amherst, Bedford and Campbell Counties, City of Lynchburg</td>
</tr>
<tr>
<td>Charlottesville-Albemarle Area</td>
<td>City of Charlottesville, Albemarle County</td>
</tr>
<tr>
<td>Danville Area</td>
<td>City of Danville, Pittsylvania County</td>
</tr>
<tr>
<td>Fredericksburg Area</td>
<td>Stafford County, City of Fredericksburg, Spotsylvania County</td>
</tr>
<tr>
<td>Hampton Roads Area</td>
<td>Isle of Wight, Gloucester, and James-City Counties; Cities of Norfolk, Hampton, Newport News, Virginia Beach, Chesapeake and Suffolk</td>
</tr>
<tr>
<td>Harrisonburg-Rockingham Area</td>
<td>City of Harrisonburg and Rockingham County</td>
</tr>
<tr>
<td>Kingsport Area</td>
<td>Scott County</td>
</tr>
<tr>
<td>New River Valley Area</td>
<td>City of Radford, Montgomery County and Pulaski County</td>
</tr>
<tr>
<td>Northern Virginia</td>
<td>Arlington, Fairfax, Loudoun and Prince William Counties; Cities of Alexandria, Fairfax, Falls Church, Manassas and Manassas Park</td>
</tr>
<tr>
<td>Richmond Area</td>
<td>Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, and Powhatan Counties; City of Richmond</td>
</tr>
<tr>
<td>Roanoke Area</td>
<td>City of Roanoke, City of Salem, Roanoke County, Botetourt County</td>
</tr>
<tr>
<td>Staunton-Waynesboro-Augusta Area</td>
<td>Augusta County, City of Staunton and City of Waynesboro</td>
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<tr>
<td>Tri-Cities Area</td>
<td>Chesterfield, Dinwiddie and Prince George Counties; Cities of Colonial Heights, Hopewell and Petersburg</td>
</tr>
<tr>
<td>Win-Fred Area</td>
<td>Frederick County and City of Winchester</td>
</tr>
</tbody>
</table>
Step Two: Assessing Current Economic Profile

In order to understand the workforce and goods movement needs in our metropolitan regions, the Needs Assessment includes an economic profile with essential information about the population, workers, and employers in the region. The arrangement of the jobs geographically, and particularly in terms of key activity centers, is also part of the economic profile to provide a spatial component that relates land use, economics and transportation.

The study team used available data from state and national sources, as well as input from each region’s stakeholders, to identify an overall current economic profile for the region. The components of the current economic profiles layer together demographic and economic characteristics of the region. The Regional Profiles incorporate the following baseline data for each region:

- Demographic Characteristics
- Top Industries by Employment, Output and Location Quotient
- Top Employers
- Activity Centers, their characteristics and travel markets (defined by existing centers of employment and modified by input from stakeholders in each region)

Step Three: Identifying Desired Future Economic Profile

For each region, a future economic profile was developed reflecting anticipated growth industries and targeted growth areas of the region. The study team provided 2025 forecasts of employment and output, and these were discussed with each region relative to existing economic development plans such as any Comprehensive Economic Development Strategy (CEDS) adopted for the region, or other
local or regional economic plans. The future economic profile consists of the 2025 forecasts of growth in employment and output by industry, as well as regionally-provided information on initiatives and existing or future activity centers targeted for job growth.

Step Four: Assessing Transportation Conditions

The profile of transportation conditions in each region provides an understanding of existing facilities and services and their performance in serving the region’s travel needs. The transportation conditions illustrate both constraints and opportunities to serving each region’s future economic needs. The transportation profiles build upon baseline information about each region’s roadway and transit networks, airports, ports and freight networks, and are assembled from US, state and regional data sources. They address the following characteristics:

• Commuting Patterns and Modes
  o Based on census data on commute times, jurisdictional commuting patterns, commute modes, and commute origins of workers in regional activity centers

• Multimodal Accessibility to Jobs
  o Based on a census block-group-level accessibility measurement tool that measures auto access to jobs, transit access to jobs, and walk access to jobs

• Freight Accessibility
  o Based on network travel times to the nearest highway interchange, freight airport and freight distribution centers for census block groups

• Highway Network Reliability
  o Based on the buffer index which measures 90th percentile travel times (i.e. worst times occurring approximately 1 in every 10 days) in comparison to median peak period travel times for weekday commute times and peak weekend times using highway system travel time observations (INRIX data)

• Highway Network Bottlenecks
  o Based on measures of speed and delay using highway system travel time observations (INRIX data)

• Freight Networks and Commodity Flows
  o Using TranSearch data on freight destinations, commodities traveling in and out of each region, and freight mode split.
Step Five: Incorporating Economic-Transportation Linkages

The linkages between economics and transportation form the cornerstone of the Regional Network Needs Assessment. The research on economic development trends pointed to the importance of workforce attraction/availability and the emergence of placemaking as both a workforce attraction and economic development strategy. Additional economic-transportation linkages were derived by distinguishing between three major types of industry clusters that relate to workforce, goods movement, and transportation needs in some distinctive ways. These clusters are freight-based, knowledge-dependent, and local-serving. Section 2 of this chapter describes in more detail the research on economic development trends and the industry cluster approach that shaped the Needs Assessment.

The study team and stakeholders considered questions such as the following in order to explore and capture the economic-transportation linkages as they occur distinctly in each region.
- What type of transportation access is needed by different types of activity centers?
- How critical are Millennial workers to the future economy? Other key demographic groups?
- What regional workforce attraction/retention factors are key at work and also home locations?
- How will activity centers change over time, and how will that affect accessibility needs?
- Where are emerging activity centers located, and what economic clusters will be focused there?
- Looking at the activity centers:
  - Where are mode choice and walkability important?
  - Where is freight access important?
  - Where is auto access important?
  - What are the travel patterns of existing workers?

Step Six: Developing the Transportation Needs Assessment
The final step in the Regional Network Needs Assessment is a synthesis of all the preceding steps and information. Both the economic and transportation profiles were considered in the development of each region’s needs. This process was iterative in nature – the data informed insights about transportation needs, stakeholders suggested and/or affirmed transportation needs based on the Regional Network framework, and stakeholder input was validated with the regional profile data to develop a suitable representation of each region’s needs for the statewide plan. For example, the study team and stakeholders looked at the economic needs in comparison to the transportation conditions based on questions such as:
- Do the knowledge- and local-based activity centers have transit access?
- Do the freight- and local-based activity centers have appropriate highway access for freight?
- Are key commuting routes served by transit?
- Are key commuting and/or freight routes affected by bottlenecks?
- Are there reliability issues for commuters and/or freight?
- Are there conflicts between freight transportation and local travel needs?
- Are there barriers to active transportation modes that reduce their viability where they otherwise might be attractive/effective? (Active transportation encompasses all non-motorized transportation.)
- The types of intra-regional transportation needs were simplified into five categories, as shown in Figure 8. The Study Team developed a map and a list of needs for each region using these categories. Safety, state of good repair, and other unique needs are also featured on an occasional basis where they are intrinsic to specific intra-regional capacity/operational needs. The needs list includes a brief statement of the economic and transportation profile attributes that are the basis for each Regional Network need, as shown in Figure 9.
The Route 58/I-264 Corridor is an important artery for the movement of commuters and connects multiple regional activity centers with knowledge based workforces. This corridor lacks transit access, bike access, transportation demand management programs, and has lower network connectivity. The I-264 corridor itself is a barrier to north-south movements.

This corridor serves multiple knowledge-based and local-serving activity centers. Several are targeted future growth areas with plans for higher density, mixed-use development that can improve transportation efficiency through walk, bike and transit access.

The issues along this corridor include lack of connectivity for north-south movements, which puts pressure on the east-west routes and particularly the I-264 crossings and interchanges; and lack of mode choice for peak period trips and to avoid high traffic levels associated with beach access.

Figure 8: Types of Regional Network Transportation Needs. Source: Michael Baker International

Figure 9: Example of Regional Network Needs Detail. Source: Michael Baker International
B. Economic Factors Shaping Regional Transportation Needs

To understand and apply the linkages between transportation and the economy in the VMTP 2025 Regional Network Needs Analysis, the Study Team crafted an analytical framework to help relate economic characteristics to transportation at a regional level. The Study Team also used unique research prepared by the Southeastern Institute of Research (SIR) that captures emerging trends in economic development and these trends’ implications for transportation.

Analytical Framework for Linking Economics and Transportation

The Regional Network Needs Assessment seeks to link economics and transportation in a way that is meaningful and appropriate for a statewide plan but, at the same time, can reflect each region’s dynamics and priorities. The study team developed a framework that is broad enough to be applicable to statewide analysis, while providing a meaningful way to characterize the economic dynamics within each region. As with any set of generalizations, the framework has shortcomings and risks oversimplification. The Study Team was mindful of these pitfalls and attempted to use the best of the framework without over-simplifying the unique characteristics of each region.

The primary feature of the framework is a focus on core economic clusters as a basis for linking economy and transportation. Each economic cluster has the potential to be different in terms of land use, commuting patterns, and other aspects of regional accessibility that are essential to attracting and retaining these businesses and their workforce. These different characteristics and each region’s mix of economic clusters combine to create unique needs, opportunities and constraints related to accessibility. The three industry clusters are:

- Knowledge-Based – those industries that tend to rely on skilled labor and serve a broader market than Virginia
- Local Serving – generally those industries that serve the local population
- Freight-Based – those industries for which the majority of industry output is dependent on freight transportation (also referred to as freight dependent)

Under this approach, a region with greater emphasis on manufacturing or warehousing (within the freight-based cluster) will have a greater focus on freight intermodal needs than a region with stronger knowledge-based service industries, where passenger intermodal needs would be a greater concern. Similarly, different clusters are concerned with different kinds of accessibility – both for employees and the businesses with which they interact. Figure 10 provides an illustration of the differences between these clusters.

In reality, there is more complexity to each cluster and there is definitely overlap between them as well. The Local Serving cluster in many ways is a hybrid of the other two – it has worker as well as customer accessibility concerns similar to the knowledge-based sector, but it also has goods movement concerns that resemble many of the freight-based industries. In general, this cluster tends to grow in proportion to the regional population. The local-serving businesses are an important part of ensuring that the
lifestyle and livability characteristics of a region (for example, entertainment, education and health care) are adequate to attract and retain workers and businesses. However, in some regions, the government or education employment might also in effect be an ‘export’ industry, such as a University town or military base, in which case the local serving cluster would have even more in common with the knowledge-based cluster. Figure 11 provides the sorting of 2-digit North American Industry Classification System (NAICS) code industry classifications into the three industry clusters. This sorting is unique to Virginia in that data on the export vs local component of the sectors and their interdependence with other industries were considered in determining the classification of 2-digit industries into the three groupings.

Figure 10: Illustration of the Three Industry Clusters in the VMTP Regional Network Analytical Framework

- Knowledge-Based
  - Mixed-use development
  - Walking between destinations
  - Traditional peak commute times
  - Airport access

- Local Serving
  - Different peak commute times
  - Customer traffic
  - Trip-chaining destinations
  - Truck deliveries

- Freight Dependent
  - Shift hours
  - Truck origins and destinations
  - Rail, port and/or airport access
  - Remote locations
Economic Development Trends Research

Study Team partner Southeastern Institute of Research (SIR) conducted three phases of research on economic development trends that provided input to the regional network Needs Assessment. This research had the following objectives:

- Identifying key trends shaping the future of Virginia
- Understanding how the economic development industry views location decisions and the role of transportation and mobility
- Understanding how the business community views location decisions and the role of transportation and mobility

To fulfill these objectives, the research effort entailed the following:

1. Secondary Research – SIR identified, assessed and inventoried current studies, reports, whitepapers and articles on site selection practices and placemaking.
2. Qualitative Research – SIR conducted 40 in-depth interviews with leaders in site selection and economic development from across Virginia and the United States.


Placemaking in Economic Development – The New Paradigm
The first phase of SIR’s research revealed that a new paradigm is emerging in economic development. The traditional model for economic development focused on recruiting and attracting employers through site-based opportunities. While this model gave attention to a region’s workforce, quality of life, and other factors, the idea was to create jobs first and attract workers second. The new paradigm focuses on attracting and retaining the workforce first, through community attractiveness that increasingly is known as placemaking. The new paradigm is summarized in Figure 12. (Note that the SIR report Placemaking, Transportation and Economic Development: A Review of Secondary Research and Key Trends is incorporated by reference and provides all detailed references discussed in the paragraphs that follow.)

![Figure 12: New Paradigm for Economic Development. Source: Southeastern Institute of Research](image-url)
Create a Great Place
The research refers to a Project for Public Spaces article “What Makes a Successful Place?” that identifies four key qualities of successful places:

1. They are accessible
2. People are engaged in activities there
3. The space is comfortable and has a good image
4. It is a sociable place

Placemaking, in turn, can be defined as, “A multi-faceted approach to the planning, design, and management of localities, regions, and public spaces. Placemaking capitalizes on a local community’s assets, inspiration, and potential, with the intention of creating locations that promote people’s health, happiness, and well-being.”

People Will Come
Communities that have a focus on placemaking are achieving their desired result, with both younger and older workers (and in some cases, also retirees) seeking out places that achieve their values for livability. A generational lens is helpful to understanding these livability values. Specifically:

- Millennials desire to live in urban, rather than suburban, environments, particularly in light of their overall tendency to delay household formation (i.e., marriage and children)
  - An analysis published by City Observatory finds that young, highly educated Americans are increasingly moving to the close-in neighborhoods of the nation’s large metropolitan areas.
  - Survey data highlighted in a Wall Street Journal article shows that 88% of Millennials want to be in an urban setting.
- Millennials do not rely on a car as their sole means of transportation.
  - A study conducted by the American Public Transportation Association found that communities that attract Millennials have a multitude of transportation choices.
  - Millennial research published by Michigan Future showed that 82% of respondents would prefer to commute to work by foot, bike, or public transportation.
- Boomers want to age in place
- Despite their age difference, Boomers and Millennials share some commonalities in what they want in a community. Chief among these common interests is the desire for more and better non-car transportation options.
  - Majorities of both groups say there are not enough transportation alternatives where they live (59% of Millennials and 58% of Boomers).
  - Both generations feel that affordable and convenient transportation alternatives to the car are at least somewhat important when deciding where to live and work (81% of Millennials and 77% of Boomers as reported in the Investing in Place report).
**Jobs Will Follow**

As the quantitative research described later in this section shows, employers increasingly seek a location that already has the workforce they need. Communities, in turn, are learning that making investments that attract workers does bear fruit in terms of jobs and economic growth. The *Chasing the Past* report presents a framework entitled the “New Economy” where the key strategy is focused on attracting and retaining talent, not companies. One of the most important elements of the New Economy is the idea that talented knowledge workers create jobs two ways: employers follow the talented, and talented entrepreneurs create new businesses.

Communities that understand these linkages also have an advantage in the coming battle for workers. SIR’s analysis shows that from 2012 to 2022, the core of the workforce aged 25-54 will grow by only 1.9%, which falls short of the overall 5.5% increase in the labor force and could fall substantially short of anticipated economic growth. Only the pool of older workers, aged 55+ is anticipated to grow at a faster rate – 28.8% in this time period. The older workers are an important part of the talent pool, offering both wealth and entrepreneurial skills. Communities that have existing target worker groups will want to strategically retain them to avoid losses in the battle for workers. If communities want to grow by increasing the supply of younger workers, they will have to attract them from elsewhere. The competition will be fierce.

**The Community Thrives**

Economic success is a key outcome of the new paradigm, as evidenced in cities such as Denver, CO and Minneapolis, MN that are early adopters of this approach. There are success stories in smaller cities, too, including Chattanooga, TN and Asheville, NC. Placemaking can be linked to job creation, but it also brings a host of positive economic effects that are linked to transportation. Walkability and proximity to transit in particular have been shown to help areas perform better economically.

- Walkability is associated with increased office, residential, and retail rents, retail revenues, and for-sale residential values according to the Walk this Way report.
- Commercial real estate located in more walkable sites commands higher property values and is associated with a higher net operating income according to an academic paper.
- A report published by the American Public Transportation Association and the National Association of Realtors found that households in transit sheds had more resilient property values and lower average transportation costs that the region as a whole.

**Views from Economic Development Professionals**

The qualitative research that SIR conducted entailed a ‘deep dive’ with economic development professionals to understand successes, failures, emerging trends, and current issues in business attraction. Figure 13 presents a sampling of direct quotes that capture the insights relevant to VTrans. In summary, economic development professionals strongly supported the emerging paradigm of placemaking and the rising need to attract employers via an existing, talented pool of workers.
“COMPANIES EXPANDING OR RELOCATING KNOW THAT 85 PERCENT OR MORE OF THEIR WORKERS WILL COME FROM THE POPULATION ALREADY IN PLACE.” - SITE SELECTION CONSULTANT

“LOCATION DECISIONS TODAY START— AND END—WITH, ‘DO THEY HAVE THE PEOPLE WE WANT?’” - SITE SELECTION CONSULTANT

“THE PIPELINE OF WORKERS IS THE ULTIMATE DRIVING FORCE OF ALL RELOCATION DECISIONS TODAY.” - SITE SELECTION CONSULTANT

“IF A COMMUNITY OR REGION DOESN’T HAVE CAPACITY OR ASSETS IN PLACE— THINGS LIKE ROADS AND BUILDINGS— THEN IT WON’T EVEN GET INTO THE INITIAL CONSIDERATION SET.” - SITE SELECTION CONSULTANT

“WE KNOW WE ARE TEN YEARS BEHIND OTHER MARKETS OUR SIZE WHEN IT COMES TO TRANSIT, ESPECIALLY LIGHT RAIL. IT’S HOLDING US BACK, FOR SURE.” - ECONOMIC DEVELOPMENT LEADER

Figure 13: Sample Quotes from Qualitative Research on Economic Development Trends. Source: SIR

Business Community Views on Location Decisions
The quantitative survey of business location specialists provides additional insight into the drivers of site selection. It also enables inferences about different attitudes and preferences along industry lines or other respondent characteristics. The survey respondents spanned a broad range of company sizes and types, with 53% reporting revenue of over $10 million, 68% with fewer than 5,000 employees, and 64% with facilities in more than one state. Over two-thirds of respondents are partially or primarily responsible for their company’s site selection.

This phase of research strongly supports the insight from the preceding phases that workers are a key driver of business location decisions. While site selections may start with location basics, once those ‘table stakes’ are met, the key for any location decision across all industry clusters is the availability of workers now and in the future. As noted by one respondent, “The economics will work themselves out, but if you do not have a skilled workforce and it is not a location that is conducive to recruiting a skilled workforce, the site does not work.”

Thus, the process of site selection today is actually site elimination. Site selection consultants identify a set of sites that meet the fundamental requirements of a potential location and then eliminate those that cannot deliver the desired workforce today or tomorrow. For regions, the workforce can be
‘delivered’ by retaining young workers who might otherwise outmigrate, attracting the mobile segment(s) of the workforce into the region, and/or retraining the existing workers in the region.

**Top Drivers of Business Location Decisions**
The survey asked several questions about the most important location factors and site selection attributes in order to determine patterns in the responses. Key findings are as follows:

- Three of four respondents identified workforce availability as either the single most important or second most important factor in site selection
- Current and future availability of the region’s workforce rated highest among site selection attributes (rated 4 or 5 out of 5 in importance by over 80% of respondents)
- Connectivity formed the second tier of important site attributes, with telecom system availability ranking slightly higher than the quality of the overall transportation system (rated 4 out 5 by 73% and 70% of respondents, respectively)
- Government/Community partnership and quality of life ranked in the next tier, with over 60% of respondents rating these attributes 4 or 5 out of 5 in importance
- Listed among specific location attributes, highway access was rated as important by 85% of respondents

**Transportation Factors in Business Location Decisions**
Respondents were asked about the importance of a variety of transportation factors in their site selection decisions. Highway accessibility rated the highest, followed by airport and public transit accessibility. Biking and walking were rated lower. Those respondents that were familiar with the importance of placemaking for community attractiveness gave all transportation factors a higher importance rating, however, with particularly substantial differences in the reported importance of major airport, public transit, and biking/walking availability.

As discussed at the beginning of this section, understanding the differentiation in importance of transportation factors to different industry clusters is key to the economic-transportation linkages in the VMTNP Regional Network Needs Assessment. The quantitative survey was designed to allow results to be analyzed by the same three industry clusters, and the results reveal appreciable differences in the rated importance of different transportation factors:

- After highway accessibility, which was rated highest by all sectors, inbound/outbound shipping costs were rated second by freight-dependent industries while accessibility to a major airport was rated second by knowledge-based industries
- Knowledge-based and local-serving industries rated Public Transit Services in the second tier of importance, while freight-dependent industries placed low importance on this factor
- Port accessibility was dramatically more important to freight-dependent industries than to the other sectors
- Generally speaking, the knowledge-based and local-serving sectors valued community-related transportation elements higher than freight-dependent industries, such as access to healthcare, recreational access, and mobility for older and physically challenged residents.
Figures 14 and 15 provide the survey responses to the key transportation questions, broken out by industry cluster.

Figure 14. Summary of Responses to SIR Survey Question #14 by Industry Cluster
Additional Insights from Quantitative Research

The survey research explored several attitudes and perceptions on the part of site selection experts. One of the key insights, noted above, is that those site selection professionals who already appreciate the importance of placemaking also place a higher value on location factors related to transportation and also quality of life. One could infer that the respondents who did not rate these factors as highly are expecting others, such as community leaders, to determine what is needed to attract the workforce to an area – their primary concern is that the workforce is there. A final important insight from the research is that the survey respondents displayed a low awareness of the battle for workers discussed under the first phase of research. This low awareness presented in a national pool of businesses suggests that Virginia planners may have a competitive tool available: Investing in making Virginia’s quality of life tops in the nation for younger workers will keep the Commonwealth’s 21st century economy moving.

Summary of Findings

Combining the framework for the Regional Network analysis and the findings of the economic development research yields a set of insights regarding economic-transportation linkages for the VMTP.
These insights help provide overall direction for the Regional Network analysis. They also enable each region to be viewed through a lens that considers how its unique economic and transportation characteristics translate to a set of needs that will attract and retain the 21st century workforce and support the goods movement needs of Virginia businesses.

**Applying the New Paradigm and Economic Development Trends to Regional Networks**

The most important and consistent findings of the economic development research point to two key trends that will be critical to achieving Virginia’s future desired economy:

- Workforce is key to attracting businesses
- Transportation investments that support placemaking will make regions more attractive to critical workforce segments, particularly the talented and entrepreneurial Millennials and Boomers

Each of these conclusions must be applied to Virginia’s metropolitan regions with an eye toward the industry mix, land use patterns, transportation conditions, and the values unique to each area. The analytical framework and outreach process of the Regional Network Needs Assessment is designed to produce a customized interpretation of these key conclusions. For example, regions that are stronger in manufacturing and/or warehousing will prioritize goods movement overall and particularly in their freight activity centers, but they likely will still find opportunities to invest in placemaking in regional downtowns and high-tech activity centers that have the potential to attract Millennial workers and/or entrepreneurial Boomers.

Taking the two conclusions together, another important insight is that the battle for workers is a compelling reason to consider region-wide strategies to attract Millennials and Boomers with two key items they seek: walkable places and modal choice. Prosperous regions of the future will offer walkable places and modal choice to Millennials and Boomers. These strategies will work differently in regions with different land use densities, residential development patterns, and amenities such as outdoor recreation. However, it is vital to the overall VTrans Vision and Goals that Virginia regions recognize this emerging trend and apply it suitably in their regions. In the Regional Network analysis, the Study Team has shared the research insights with each region, discussed how the trends are emerging now in each region, and worked with stakeholders to identify areas where these strategies can be applied in the Needs Assessment.

**Applying Detailed Research Findings in the Regional Network Approach**

The detailed research findings provide important insights into the different values placed on types of transportation need by the three industry clusters. The Study Team held exercises to explore these differences in values and priorities with the Multimodal Advisory Committee and Freight Transportation Technical Advisory Committee and with stakeholder groups in many of the metropolitan regions as well. These discussions provided a general sense of the variations in importance placed on different transportation needs, and they provided insight into the economic-transportation linkages in the VMTP. For example, there was strong agreement that the knowledge sector industries place more value on multimodal transportation and public transit in particular because of their relationship to Millennials and, in many cases, their more urban or downtown locations. At the same time, the discussions about
how local serving and freight-based clusters might need public transit for customers and/or workers were also helpful and insightful for the Regional Network Needs Assessment.

The quantitative survey results, supported by the other phases of research and stakeholder input, yield a broad set of correlations between transportation needs and the industry clusters as shown in Figure 16. These correlations are presented strictly as high, medium and low to convey the breadth of conditions that may occur in different industries within a given cluster and in different regional conditions. The table is useful as an overall guideline for relating the economic conditions and future desired economy of each region to the most important types of transportation needs. The correlations shaped many of the questions in the needs analysis as described in the Approach section, such as focusing on whether knowledge-based activity centers are walkable places, whether freight-dependent activity centers have strong access to freight transportation facilities, and whether local-serving activity centers have a choice of modes.

<table>
<thead>
<tr>
<th>Economic and Transportation Correlation Table</th>
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<tbody>
<tr>
<td>Local Sector</td>
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<tr>
<td><strong>Highway Access</strong></td>
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<tr>
<td><strong>Passenger Reliability</strong></td>
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<td><strong>Bottleneck Relief</strong></td>
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<td><strong>Freight Reliability</strong></td>
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<td><strong>Freight Accessibility</strong></td>
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<td><strong>Network Connectivity</strong></td>
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<td><strong>Transportation Demand Management</strong></td>
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<td><strong>Modal Choice</strong></td>
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<td><strong>Transit Access</strong></td>
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<td><strong>Active Transportation Options</strong></td>
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<td><strong>Walkable Places</strong></td>
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Figure 16: Economic and Transportation Correlation. Source: Summary correlations based on national research and survey of national Industry Site Selection Professionals conducted by OIPI Consultant Team.

In keeping with these findings, the Regional Network Needs Assessment links economic strategies with transportation needs through findings such as the following:

- Congested corridors that serve freight-based activity centers are the focus of “corridor reliability” needs in order to remove bottlenecks and improve travel time reliability for freight.
Multimodal network connectivity is identified as a need in areas where knowledge and local-serving activity centers have physical barriers (water, railroads, highways) that hinder the opportunities for replacing car trips with walking or bicycling.

In several regions, knowledge-based activity centers are the focus of “Walkable/Bikeable Places” needs, in keeping with the high value the knowledge industry cluster places on walkable places.

Modal choice is identified as a need for knowledge and local-serving commuters in both corridors and activity centers that lack transit access to jobs.

Freight-based activity centers that lack highway accessibility are the focus of network connectivity recommendations in several regions.

PART 4. URBAN DEVELOPMENT AREAS

In 2007, the General Assembly in §15.2-2223.1 established Urban Development Areas (UDAs) as a mechanism to assist with the coordination of transportation and land use planning, to encourage infill development, and to help reduce public costs related to the provision of services by focusing development in areas with existing infrastructure. In 2010, the legislation was amended to establish density and design criteria for UDAs and to improve the coordination between transportation and land use. In 2012, it was amended again to make the designation of UDAs voluntary across all localities and to include a more flexible definition.

A UDA is defined as:

(1) areas designated by a locality that may be sufficient to meet projected residential and commercial growth in the locality for an ensuing period of at least 10 but not more than 20 years;

(2) where an urban development area in a county includes planned or existing rail transit, the planning horizon may be for an ensuing period of at least 10 but not more than 40 years;

(2) areas that may be appropriate for development at a density on the developable acreage of at least four single-family residences, six townhouses, or 12 apartments, condominium units or cooperative units per acres and an authorized floor area ratio of at least 0.4 per acre for commercial development, or any proportional combination thereof, or any other combination or arrangement that is adopted by a locality in meeting the intent of the UDA code section.; and,

(4) areas that incorporate principles of traditional neighborhood design (TND).

Designated UDAs should also have boundaries which are identified in the locality’s comprehensive plan and are shown on future land use maps contained in such plans. The code also states that any incentives, financial or other, for development of these UDAs should be described in such plans as well.

Based on research conducted by OIPI and VDOT, there are 108 UDAs designated in local comprehensive plans per § 15.2-2223.1, with others tentatively identified pending confirmation with the localities (as of July 22, 2015). Ongoing research supporting the VTrans Multimodal Transportation Plan is refining this list and is also adding locally designated growth areas that reference the Code of Virginia §15.2-2223.1 but are not named a UDA in the locality comprehensive plan. The VMTP is confirming local transportation needs and associated strategies that will promote these areas - both within their boundaries as well as transportation systems outside the boundaries that support access.
A. Needs Assessment Approach

The UDA needs assessment is locally driven at the individual UDA level, supported by local planning information and socioeconomic data to help organize and communicate needs to stakeholders and the public. This approach relies on local input through an online needs form.

Online Needs Form

For designated UDAs and other locally designated growth areas (also referred to as UDA-like places), 2025 needs are identified in the VMTP through the online needs form. The overall VMTP approach for UDAs and the online form was introduced to local and regional planners through a webinar on April 8th. The online form link along with a frequently asked questions document was forwarded to county, city, and town administrators, managers, planners, and engineers on April 20th.

The online form has questions about multimodal transportation needs required to promote development within UDAs and other locally designated growth areas. These needs will be presented for each UDA (or groups of UDAs, depending on the locality response to the online form) within the VMTP Needs Assessment. The form also has questions about planning and development status for UDAs and other locally designated growth areas. OIPI and the VMTP consulting team are working directly with localities, MPOs, and PDCs to ensure maximum participation through use of the online form. In addition, the VMTP consulting team is collecting new UDA boundary information, in order to update mapping as well as the geographies eligible for screening through the HB2 process.

It is important to note that while OIPI is collecting information about the needs of both UDA and other locally designated growth areas, the only areas being included in the VMTP needs assessment, which serves as the first screen for projects submitted for HB2 funding, are (1) those areas officially designated as UDAs in a locality comprehensive plan, and (2) those locally designated growth areas that have an explicit reference to their adherence to the Code of Virginia §15.2-2223.1 in the comprehensive plan by October 1, 2015.

UDA Profiles

The input received through the online form regarding transportation needs in designated UDAs will be summarized by individual location. Needs are identified as high, medium, low, or N/A across 17 transportation need categories separately within the UDA boundary and outside the UDA boundary. Identified needs inside and outside of UDAs are important as HB2 references promoting UDAs, but is not specific on if the candidate project must intersect the UDA boundaries. Below is a working draft of the format of the UDA profiles that will be developed for each UDA (note if a locality filled out the survey for multiple UDAs, the will be represented in one profile).
These locally defined needs, along with location characteristics, comprehensive plan status with specific plan language references, development status, job accessibility and workers availability data, and socioeconomic data will be summarized within a profile for each designated UDA. An initial set of profiles will be developed for the VMTP Needs Assessment in June and July based on the current list of designated UDAs. As the list of designated UDAs or UDA-like areas that reference the Code of Virginia §15.2-2223.1 in the comprehensive plan increase, more profiles will be developed in August through October. The profiles are intended to directly inform the HB2 screening to be conducted following the October 1, 2015 deadline for project application submissions.

The profiles will be linked to a master list of designated UDAs that will be included in the Transportation Needs Assessment. Similarly, on the OIPI website, an updated online mapping application will include boundaries for all designated UDAs, including links to each profile.

**UDA Needs Summary**

UDA characteristics are diverse across the Commonwealth. A generalized statement of UDA transportation needs across different types of UDAs (based on similar size, location, socioeconomic characteristics) will be presented as part of the stakeholder outreach conducted for the VMTP Needs Assessment.
Assessment. In the case of localities that do not respond through the online needs form, these broader needs are intended to cover the definition of needs, and the HB2 screening process for these locations.

5. SAFETY NEEDS ASSESSMENT

The VMTP will include a statewide map of high crash locations for roadways, focusing on areas with the highest numbers and rates of severe crashes. The map will also identify locations of bicycle and pedestrian fatalities. This information will be supplemented with rail and modal conflict information as available from agencies such as the Federal Railroad Administration and DMV, but will not necessarily be location-specific; rather this information will be reported as statewide trends. This analysis will provide a combination of location-specific needs for vehicle crashes and other fatalities and statewide areas of concern for other types of safety needs.

6. NEEDS SCREENING PROCESS

The draft VMTP Transportation Needs Assessment will be completed by the end of July 2015, which will allow it to be used for screening projects nominated under the HB2 process. A process for screening HB2-nominated projects against Needs is being developed by the Office of Intermodal Planning and Investment. This screening will occur on a rolling basis, with review of projects beginning in Mid-August after completion of the Needs Assessment.

Projects will first be screened by an external team of experts that helped develop the methodology for and conduct the Needs Assessment. Their recommendations for a project’s ability to meet a need will then be reviewed by an internal team of state agency representatives from the transportation agencies, with the possible inclusion of other agencies that have helped develop the needs assessment methodology through their contributions on the Multimodal Advisory Committee.

From Mid-August to October 1st, the external and internal teams will meet on average two days a week to screen projects as they are submitted. At the end of each week, the recommended projects will be passed to the HB2 team for scoring. From October 1st to October 23rd, the external team will meet daily to screen projects, and the internal team will meet daily to review the recommendations from the external team’s review the day before. At the end of each day, those projects screened in will be handed to the HB2 team for scoring.

Those project applications that are screened out will be returned to the applicant with justification for the decision. The VMTP Needs Assessment team will work with those submitting entities to adapt, where possible, project submissions to be eligible for the following year’s screening. The goal of the Needs Screen process of the Transportation Needs Assessment is to have a flexible process that will allow a variety of different project solutions to be eligible for meeting any identified Transportation Need in a region, and not to presuppose any one particular project or project type for meeting a particular Transportation Need.
Project Submission

- Projects submitted through online tool developed by HB2 team
- Incomplete applications disregarded
- All submissions are sorted by geographic focus (CoSS, RN, UDA)

External Review

Rolling basis and 12 day intensive review post October 1

- Three teams responsible for generating VTrans2040 Needs assessment review project submissions
- Three teams, consisting of 3 persons each with representation from CoSS team, UDA team, and RN Team, review applications as a group. Meet approx. 2 days per week from Mid-August until October 1, then daily from October 1 to 22.
- Make recommendations on adherence to Needs Assessments, document reasoning for decision.
- All submissions are sorted by geographic focus (CoSS, RN, UDA)

Internal Review Committee

Rolling basis and 12 day intensive review post October 1

- Internal review committee reviews all external team recommendations
- Committee to consist potentially of Multimodal Working Group (MMWG) members and Multimodal Advisory Committee (MAC) members.
- Meet approx. 1 day per week from Mid-August until October 1, then daily from October 2 to 23.
- 3 Sub teams - one for each geography to allow for deep level of familiarity with needs for the geography
- Deliver final decisions to HB2 team and only score projects that meet VTrans2040 needs.

Figure 17- Process for Screening Recommended by the Office of Intermodal Planning and Investment:
6. FUTURE RECOMMENDATIONS

After the initial phase of the VMTP Transportation Needs Assessment has been completed in July 2015, a further phase, after July, will focus on Recommendations for future transportation investments. The Recommendations will include a much broader range of project types and needs than just those eligible for HB2 funding, and will include recommendations for safety and maintenance, as well as capacity enhancement projects.

This series of potential Recommendations will be described for identified Needs in the Transportation Needs Assessment to give guidance when comparing potential nominated projects to identified Needs. For example, in the hypothetical situation where travel time reliability has been identified as a potential Need to support freight-dependent industries, the final portion of the Needs Assessment will propose potential Recommendations for the region or corridor that would help address this Need, such as developing parallel networks, expanding alternate travel modes or Travel Demand Management (TDM) strategies, depending on the context of the reliability issues. The potential Recommendations will be broad concepts rather than ‘point A to point B’ type project proposals. The Recommendations will be completed after the August 1st deadline for the final Transportation Needs but will be available for screening nominated projects against the Needs Assessment before the October 1st nomination deadline.

The Recommendations for VMTP will also be developed in close coordination with each MPO’s adopted Constrained Long Range Plan (CLRP), and will draw from projects and priorities proposed in the CLRPs to develop a comprehensive set of recommendations for future transportation investments for the Commonwealth. While not technically part of the Transportation Needs Assessment, the Recommendations will form a critical part of the overall VMTP and will round out the specific Needs developed for each region into a targeted and strategic list of recommended investments for 2025, intended to provide guidance to the Commonwealth in the coming years on key transportation priorities for 2025.

7. INPUT PROCESS

Within the defined schedule for the VMTP Transportation Needs Assessment dictated by the HB2 screening process, a robust outreach schedule with each region will be conducted in close coordination with the study process above. The outreach process includes an in-person work session with each MPO and regional staff to ensure that each regional profile includes specifically tailored information and desires from each region. The outreach schedule and general time frames are as follows:

- Workshop 1 – Baseline Regional Profile (April)
- Workshop 2 – Baseline and Future Regional Profile (Late April/Early May)
- Regional Forum – Desired Economic Regional Profile, Corridor of Statewide Significance Draft Conditions, Urban Development Areas Draft Profiles (May)
- Workshop 3 – Needs/Gap Analysis (June)
- Regional Forum – Draft Needs for CoSS, Regional Networks, and UDAs (July)
- Workshop 4 – Recommendations (August)
The workshops will be conducted primarily through the 15 MPOs, but the intention is to meet with any staff-level planners and providers who desire to be included in the input. Each region through its MPO will decide on the staff-level stakeholders to engage in this process. In many regions, the MPO Technical Advisory Committee (TAC) might be the best stakeholder group for engagement in this process, but in some cases a smaller group that represents the MPO, PDC, VDOT and transit providers may be more feasible. In all cases, the OIPI study team will work with each region to ensure maximum flexibility to accommodate their scheduling needs within the parameters of the project milestones and the firm deadline required by the HB2 process schedule.

For Further Information

Further information will be made available on the OIPI website at www.VTrans.org. In addition, questions can be directed to:

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