COMMONWEALTH *of* VIRGINIA
Office of the
SECRETARY *of* TRANSPORTATION

VTrans – Mid-term Needs and Next Steps

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Joint Annual Planning and Programming/MPO Quarterly Coordination Meeting

March 11, 2020

Presentation Today

- 2019 Mid-term Needs
  - CTB Action
  - Methods to Access
- Considerations for SMART SCALE
- Tiering of Mid-term Needs
- Considerations for Future Updates of Mid-term Needs

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2019 Mid-term Needs

VTrans Mid-term Needs | CTB Action

- The CTB resolved that for the purposes of SMART SCALE, identified UDA Needs shall also be considered RN Needs if RN Congestion Needs are 20 miles or fewer.

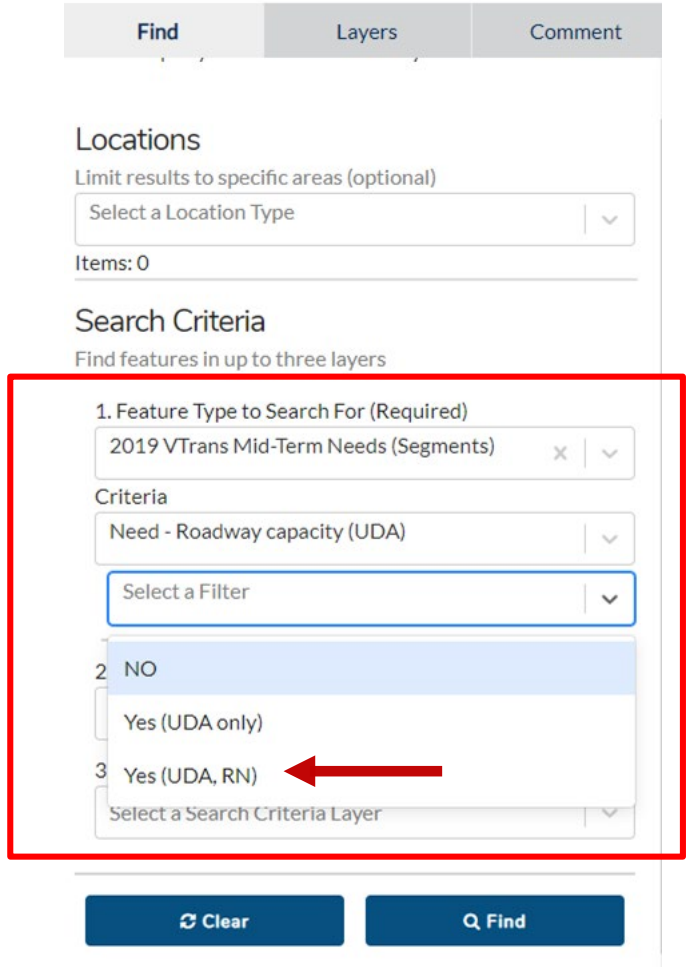
- For the 2019 Update of the VTrans Mid-Term Needs, this applies to the following Regional Networks:

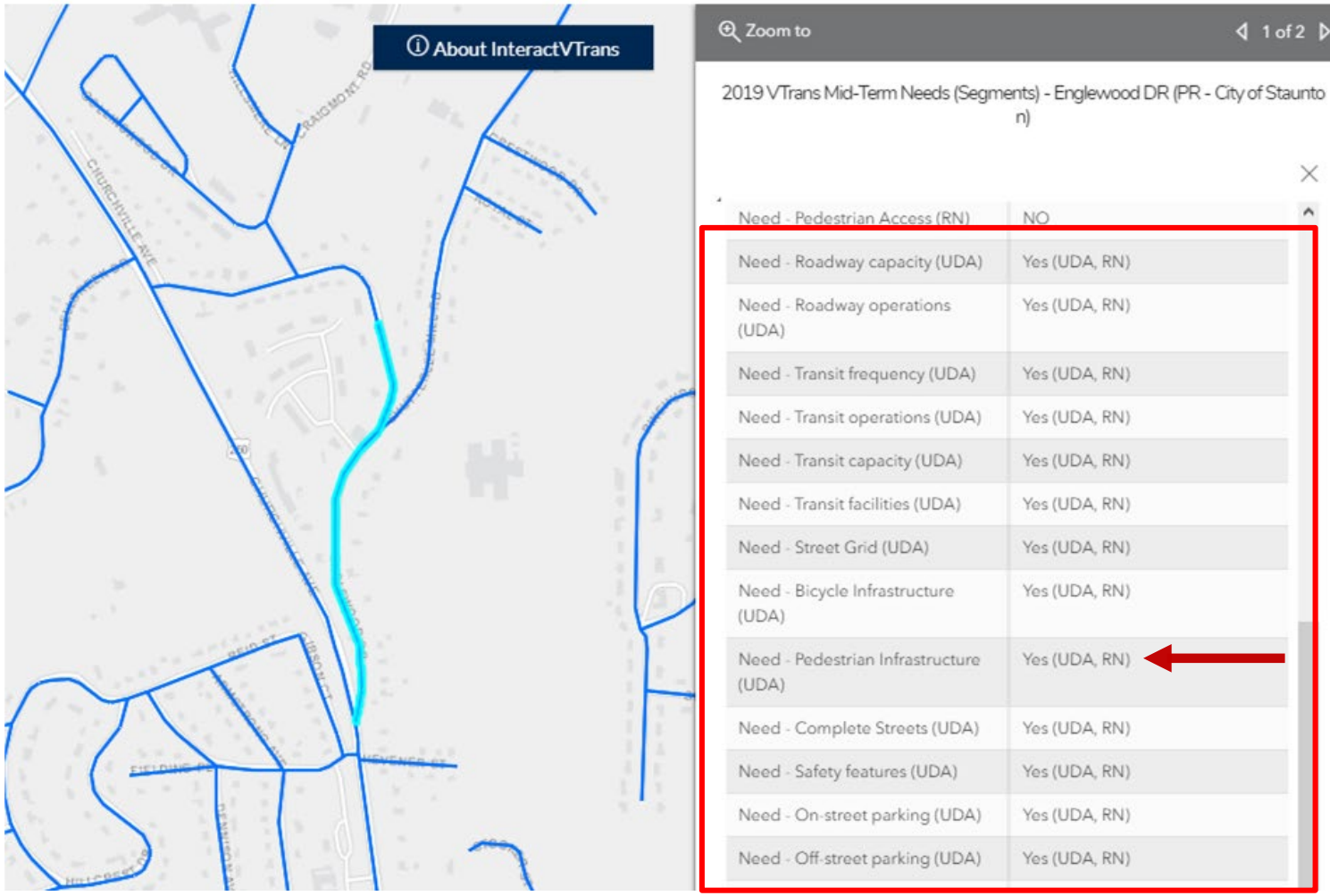
  - Bristol Region
  - Charlottesville Region
  - Danville Region
  - Harrisonburg Region
  - Kingsport Region
  - New River Valley Region
  - Staunton-Augusta-Waynesboro Region
  - Winchester Region

Note: VTrans Travel Markets determine funding eligibility (HPP or DGP) and eligible applicants (Regional Entities, Locality, Transit Agency) per the SMART SCALE policy guide

VTrans Mid-term Needs | CTB Action

- InteractVTrans changes for RN-eligible UDA Needs:





VTrans Mid-term Needs | CTB Action

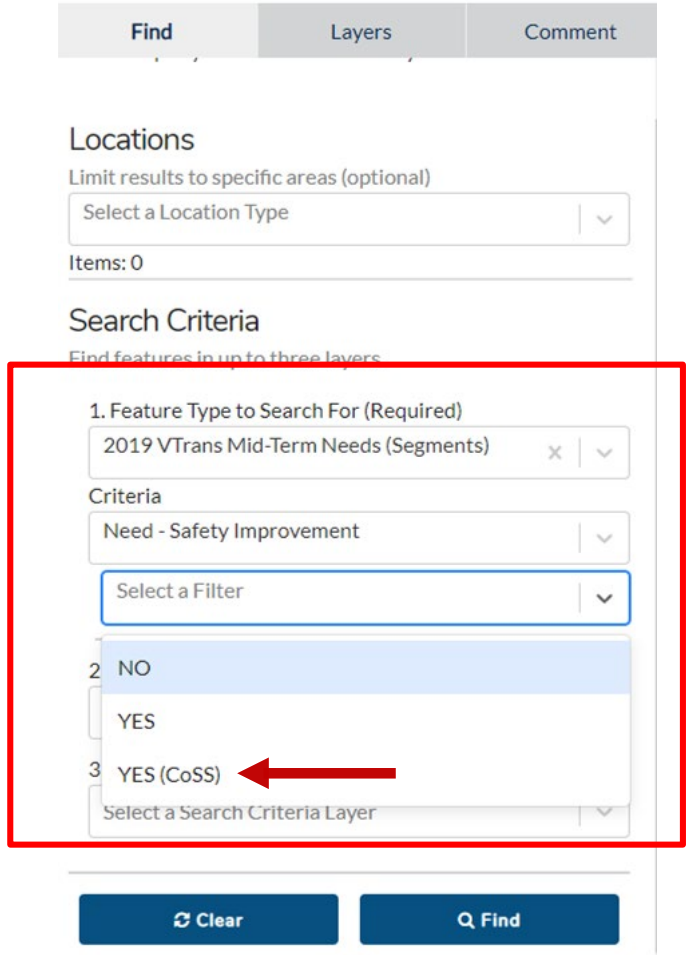
- The CTB resolved that for SMART SCALE, the identified Safety Needs on CoSS roadways shall also be considered CoSS Need

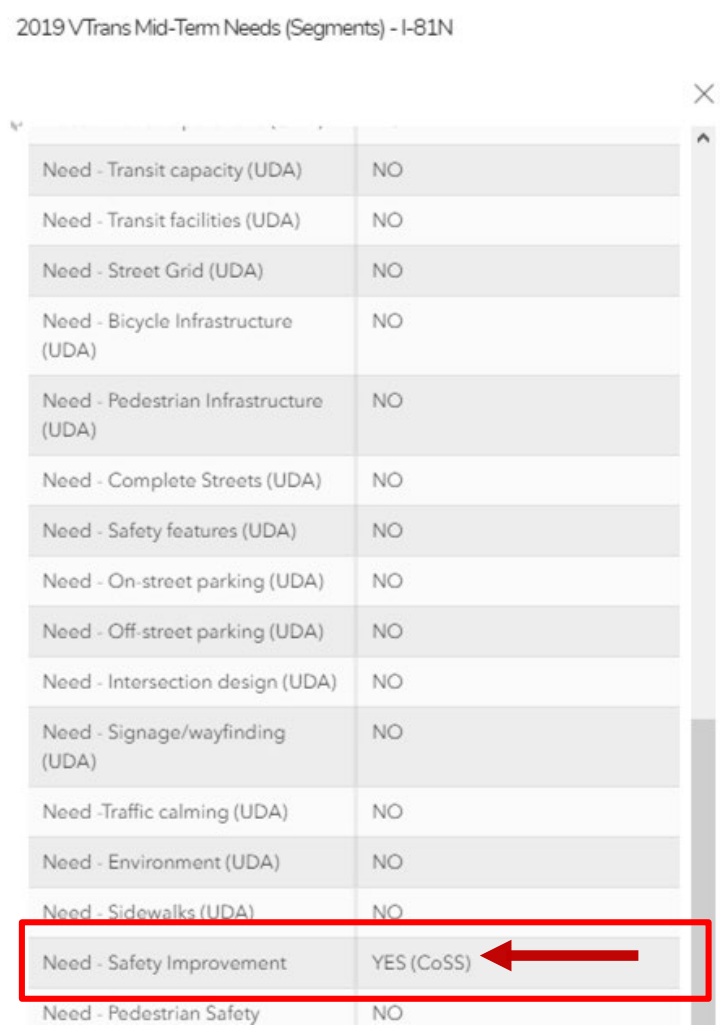
- Similar to Round 3, localities can submit safety studies to get project funding applications screened in for the Safety travel market.

Note: VTrans Travel Markets determine funding eligibility (HPP or DGP) and eligible applicants (Regional Entities, Locality, Transit Agency) per the SMART SCALE policy guide

VTrans Mid-term Needs | CTB Action

- InteractVTrans changes for CoSS-eligible Safety Needs:





Mid-Term Needs | Methods to Access Needs

	PRINT-READY DOCUMENTS	INTERACTVTRANS	DATABASE – ARCMAP PACKAGE
OPTION	Executive Summary and maps showing Mid-term Needs Methodology Report	InteractVTrans • Find / download Needs by geography • Overlay additional layers, such as crashes • **Locate where multiple Needs exist on a Segment** • Identify Segment and Node IDs for use in Smart Portal	Download
TARGET AUDIENCE	• Policy makers, MPO and PDC Directors, Administrators, etc.	• Planners and engineers	• Power users / analysts with access to ArcGIS and a need to query and customize information

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SMART SCALE CONSIDERATIONS

Mid-Term Needs | SMART SCALE Considerations

SMART SCALE Screening:

Eligibility	Is the proposed project a capacity or operational improvement for highway, transit, bicycle, pedestrian, or transportation demand management? Is the applicant an eligible entity?
Readiness	Does the proposed project meet required level of planning and supporting documentation needed for projects to be considered and evaluated for SMART SCALE funding?
VTrans Needs	Is the proposed project or strategy consistent with the assessment of capacity needs for Corridors of Statewide Significance, Regional Networks, Urban Development Areas, and Safety undertaken in VTrans?

MID-TERM NEEDS | SMART SCALE CONSIDERATIONS

InteractVTRANS | VIRGINIA'S TRANSPORTATION PLAN at your fingertips

SEGMENT IDs RANGE: 100,001-355,503

NODE IDs RANGE: 400,001-404,670

SMART PORTAL

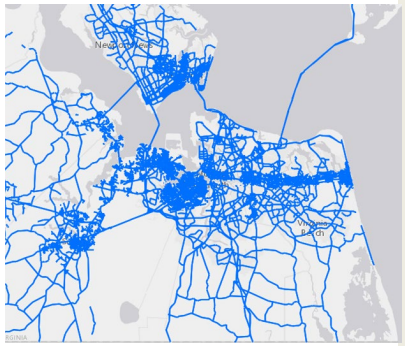
1. View and search for locations with Needs
2. Identify context for a proposed improvement by identifying presence of transit, rail, and other features
3. Select locations that have multiple overlapping Needs

1. With established Need and location, initiate funding application

MID-TERM NEEDS | CONVERSION FOR SMART PORTAL - SEGMENTS

InteractVTRANS | VIRGINIA'S TRANSPORTATION PLAN *at your fingertips*

SMART PORTAL



VTrans Mid-Term Needs (Segments)

- Congestion (CoSS, RN)
- Reliability (CoSS, RN)
- Capacity Preservation (CoSS, RN)
- TDM (CoSS, RN)
- Transit Access for Equity Emphasis Areas (RN)
- Bicycle and Pedestrian Access (RN)
- UDA multiple categories (RN, UDA)
- Safety Improvement (CoSS, Safety)
- Pedestrian Safety Improvement (Safety)

NODE IDs RANGE:

100,001-355,503

Corridors of Statewide Significance
Segments: Congestion, Reliability, Capacity Preservation, TDM, Safety (CoSS)

Regional Networks
Segments: Congestion, Reliability, Capacity Preservation, TDM, Transit Equity, Bicycle & Pedestrian Access, various UDA Needs (UDA, RN)

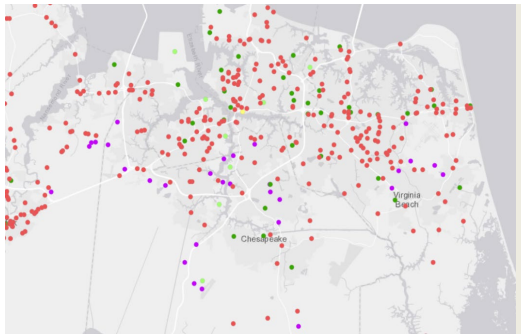
Urban Development Areas
- Segments: various UDA Needs (UDA Only)

Safety
Segments: Safety *(non-CoSS)*, Pedestrian Safety Improvement

MID-TERM NEEDS | CONVERSION FOR SMART PORTAL - NODES

InteractVTRANS | VIRGINIA'S TRANSPORTATION PLAN *at your fingertips*

SMART PORTAL



VTrans Mid-Term Needs (Nodes)

- Rail On-time Performance (CoSS)
- Transit Access (RN)
- Safety Improvement (CoSS, Safety)
- Industrial and Economic Development Areas (RN, UDA)

NODE IDs RANGE:

400,001-404,670

Corridors of Statewide Significance
- Nodes: Rail, Safety (CoSS)

Regional Networks
- Nodes: IEDA (UDA, RN), Transit Access

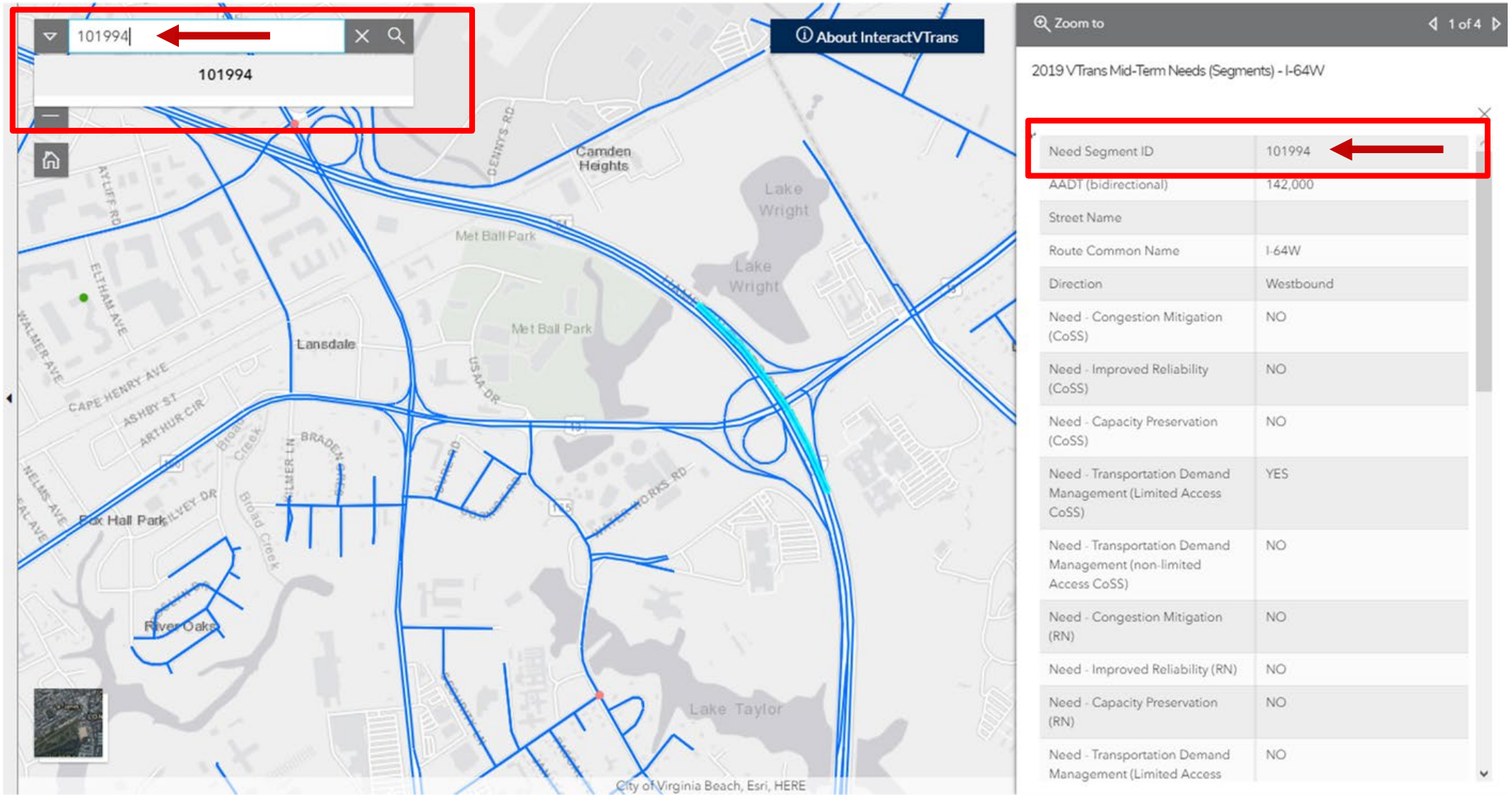
Urban Development Areas
- Nodes: IEDA (UDA only)

Safety
- Nodes: Safety *(non-CoSS)*

Need Node ID	400757
Node Name	Montview
Node Type	Activity Center (Freight Dependent)
Need for Rail On-Time Performance (CoSS)	NO
Need for Transit Access (RN)	YES
Need for Safety Improvement	NO
Need for Improved Access to Industrial and Economic Development Area with Readiness Status 3 or higher	NO

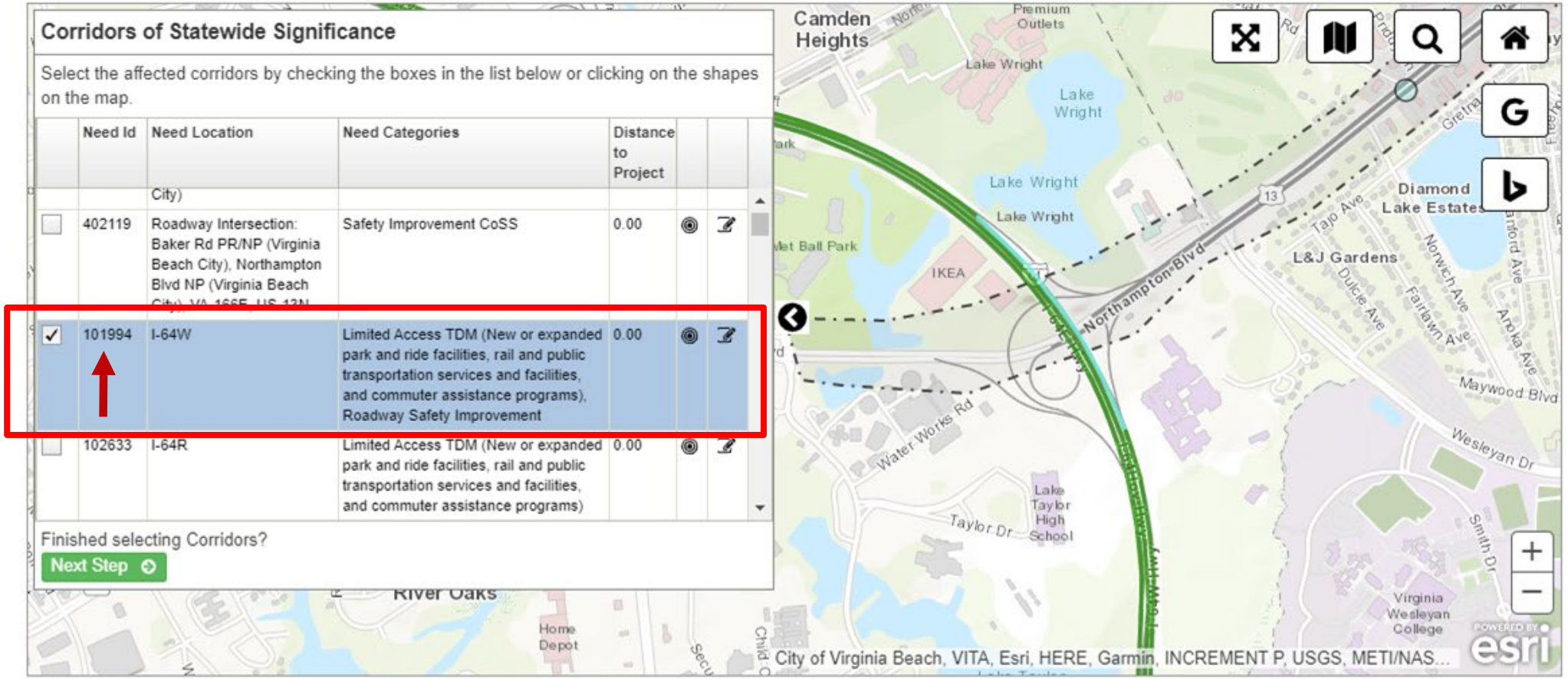
Example of how Node-related Needs are depicted on InteractVTrans

MID-TERM NEEDS | NEED ID INTEROPERABILITY



MID-TERM NEEDS | NEED ID INTEROPERABILITY

Use the mapping tool below to locate your project area(s).



MID-TERM NEEDS | SMART SCALE CONSIDERATIONS

- Be sure to select not only a segment or node (location) but also include the Need in project justification

Corridors of Statewide Significance

Need Id	Need Location	Need Categories	Justification
103603	I-64E	Congestion, Limited Access TDM (New or expanded park and ride facilities, rail and public transportation services and facilities, and commuter assistance programs)	Project will improve Congestion by extending accel/decel lanes at Exit 199

Regional Network

Need Id	Need Location	Need Categories	Justification
100424	FR-157N: N Military Hwy	Bicycle Access, Pedestrian Access, Non-limited Access TDM (New or expanded public transit services and facilities, rail and public transit services and facilities, bicycle and pedestrian facilities, commuter assistance programs, and emerging technologies such as travel apps and shared-mobility)	Includes pedestrian accomodations, crosswalk and ped signals, at intersection with off-ramp at exit 199.

Urban Development

Need Id	Need Location	Need Categories	Justification
No Urban Development needs included.			

Safety

Need Id	Need Location	Need Categories	Justification
138271	US-13N: N Military Hwy	Pedestrian Safety Improvement	Includes pedestrian accommodations, crosswalks and pedestrian signals, that will improve safety at this location.

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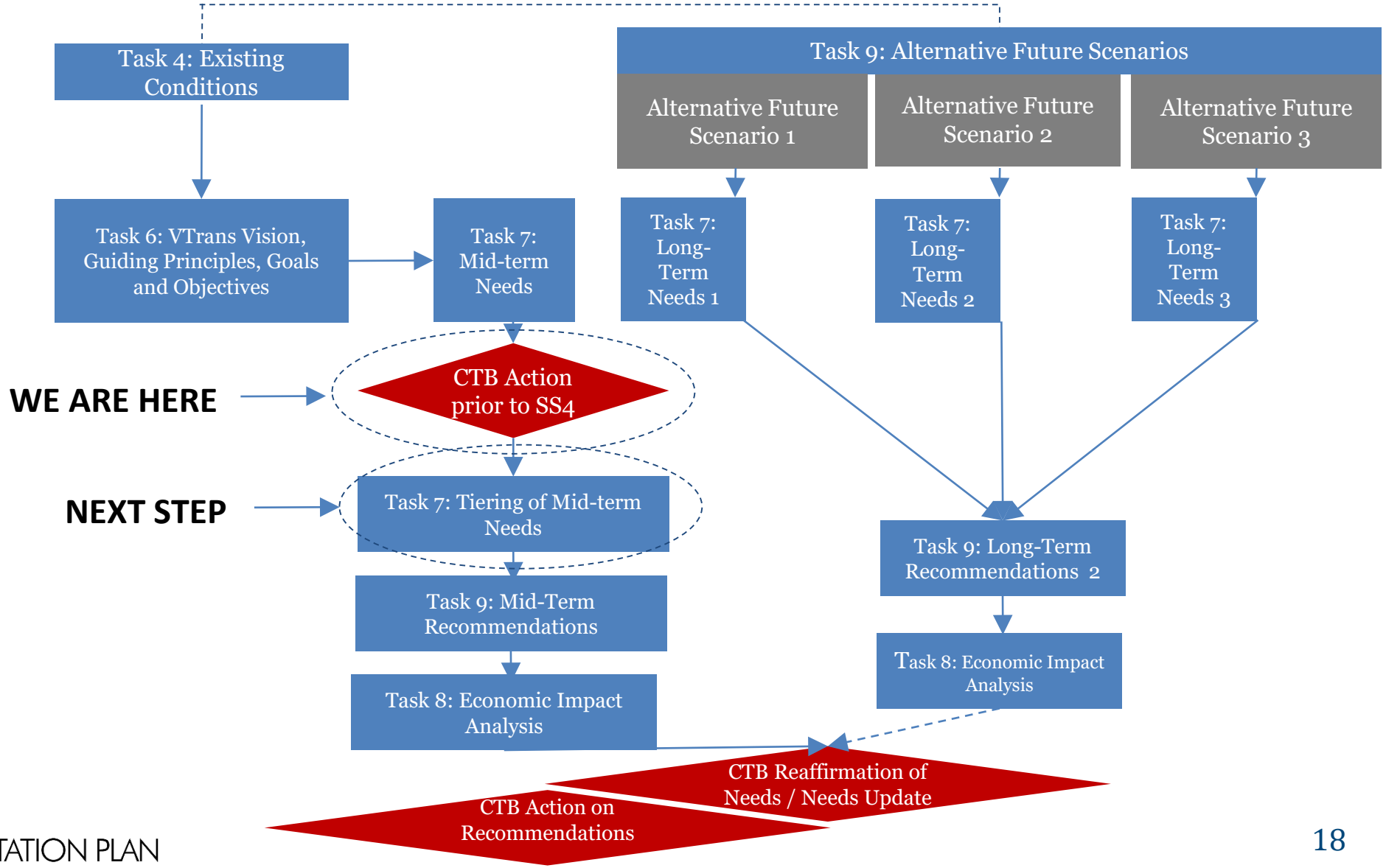
TIERING OF MID-TERM NEEDS

VTrans Workflow



Notes:

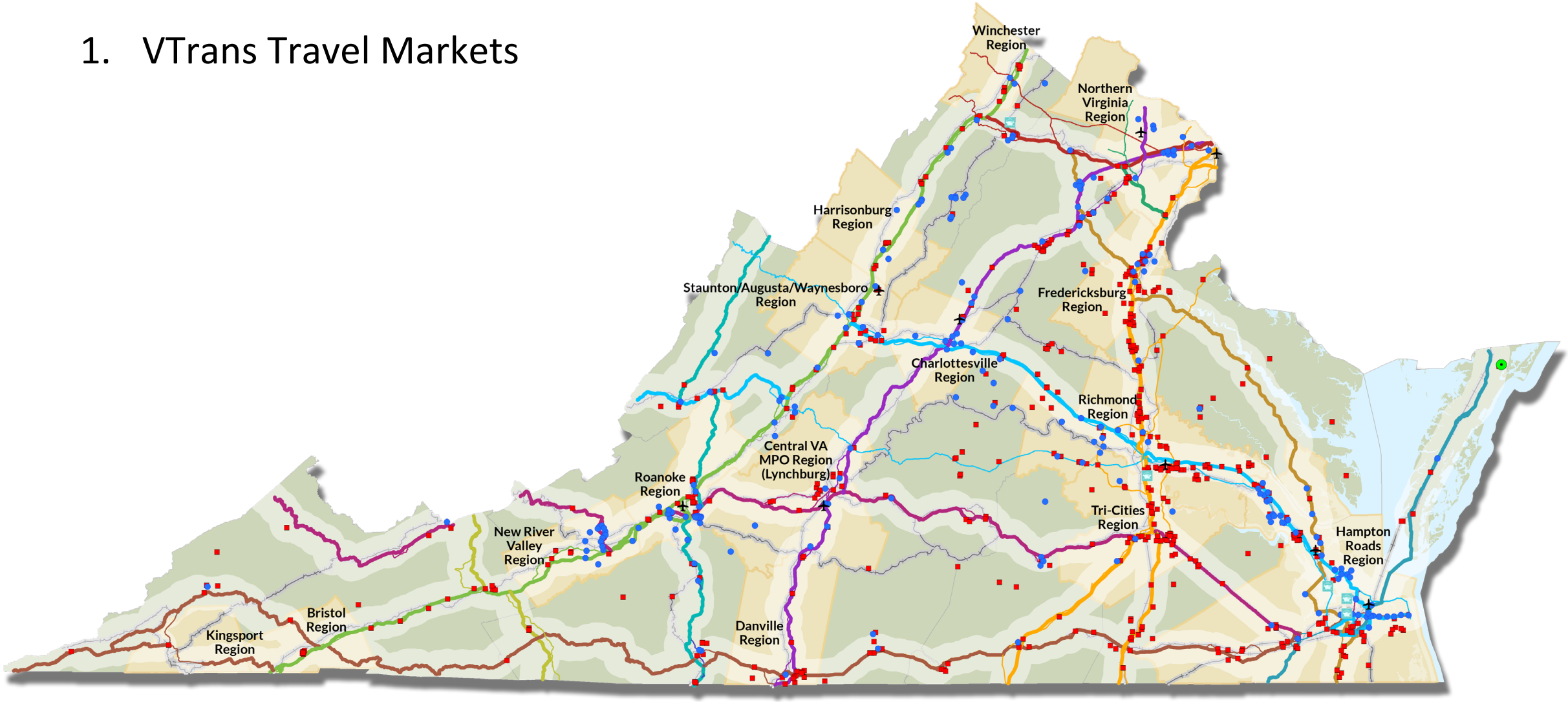
- Please refer to the VTrans Scope of Services for detailed descriptions of the depicted Tasks.
- Only tasks on the project critical path are shown.

Tiering of VTrans Needs | Intent and Purpose

1. Differentiate critical needs from less-pressing needs
   - Provide more nuance, as opposed to a binary selection
2. Inform planning decisions for capacity and safety related investments
3. Provide opportunities to improve coordination among different program areas
   - Allow for a more comprehensive overview of the VTrans Mid-term Needs by including existing and planned activities
4. Ensure that prioritization is transparent, replicable, and reple

TIERING OF VTRANS NEEDS | INITIAL THOUGHTS ON POTENTIAL CRITERIA

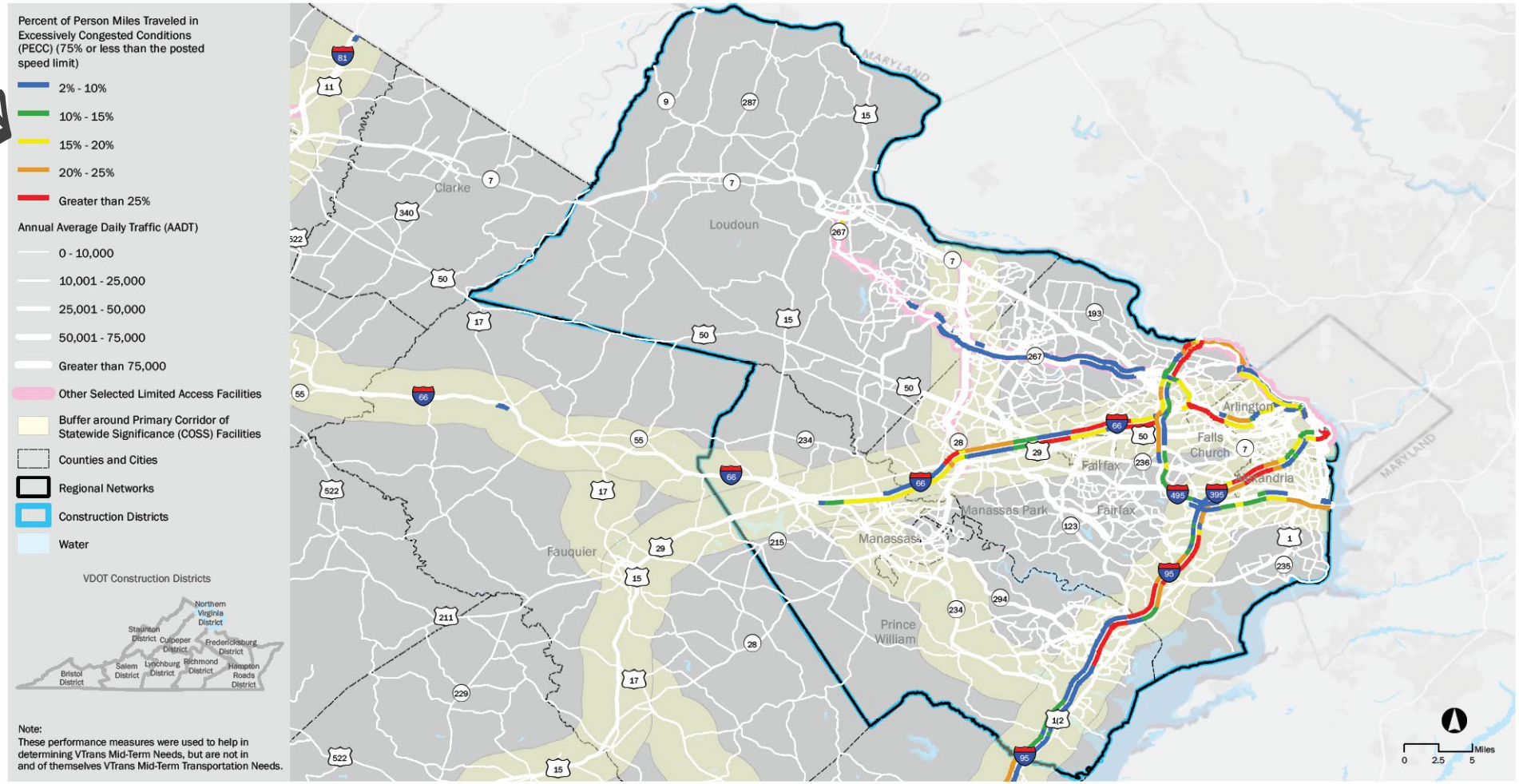
1. VTrans Travel Markets



TIERING OF VTRANS NEEDS | INITIAL THOUGHTS ON POTENTIAL CRITERIA

2. Variance within VTrans Mid-term Needs Performance Measures

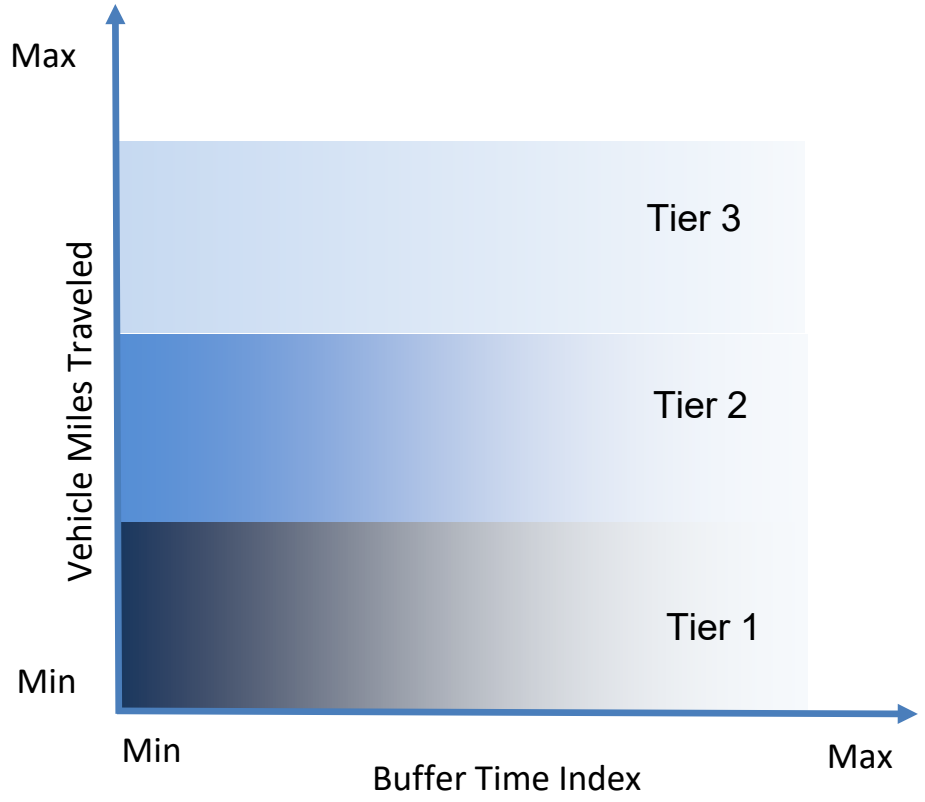
Reflect variance for each measure

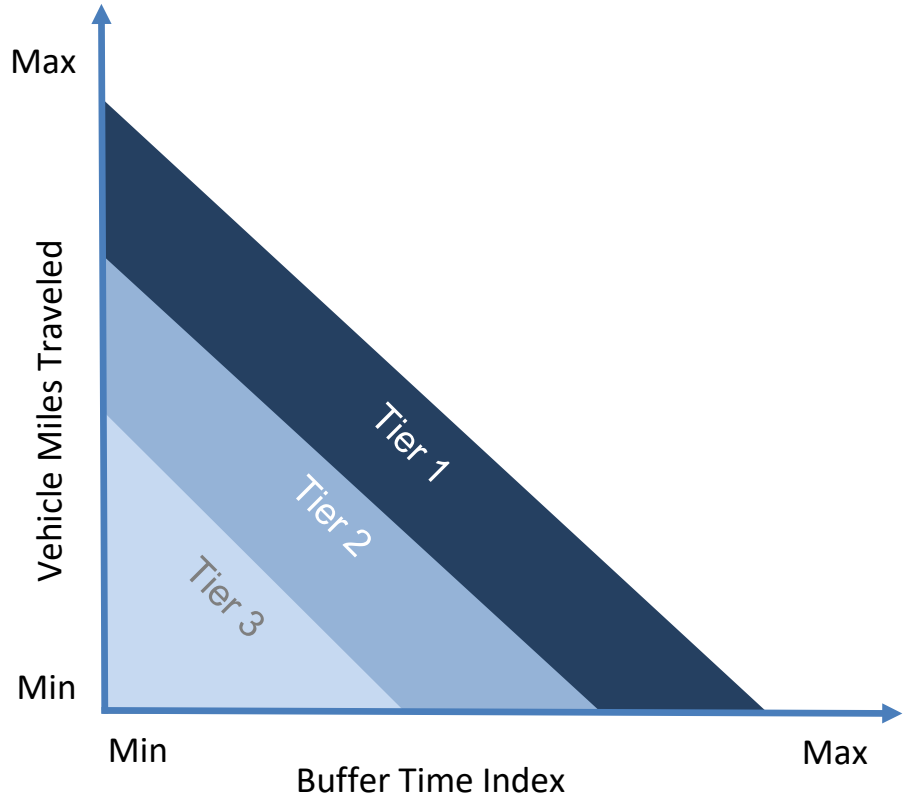


Source: Methodology Document for the Northern Virginia Construction District

TIERING OF VTRANS NEEDS | INITIAL THOUGHTS ON POTENTIAL CRITERIA

3. Number of facility or service users (e.g. vehicle or person miles traveled, volume)



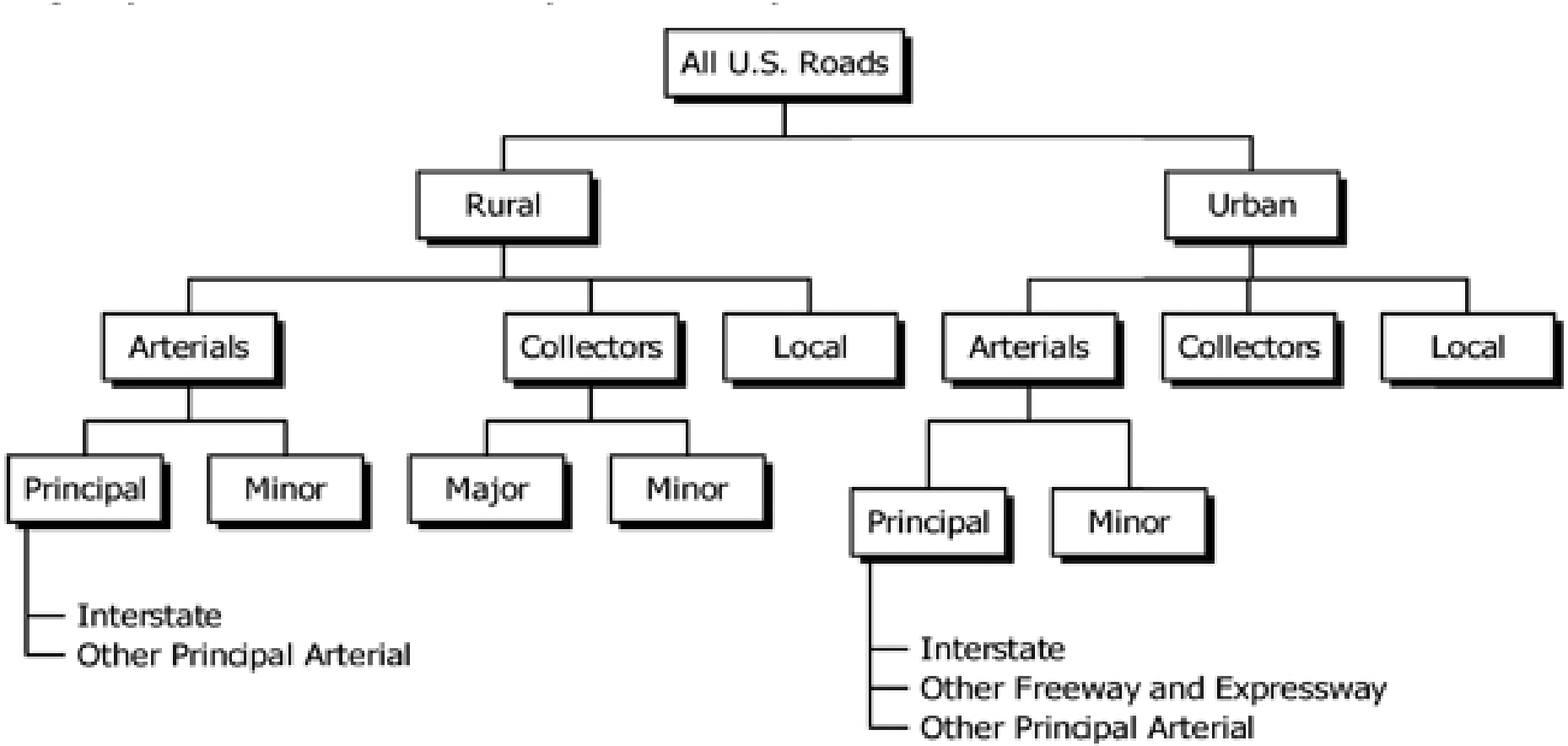


4. Planned, anticipated, or committed State of Good investments

Source: Bristol Herald Courier

TIERING OF VTRANS NEEDS | INITIAL THOUGHTS ON POTENTIAL CRITERIA

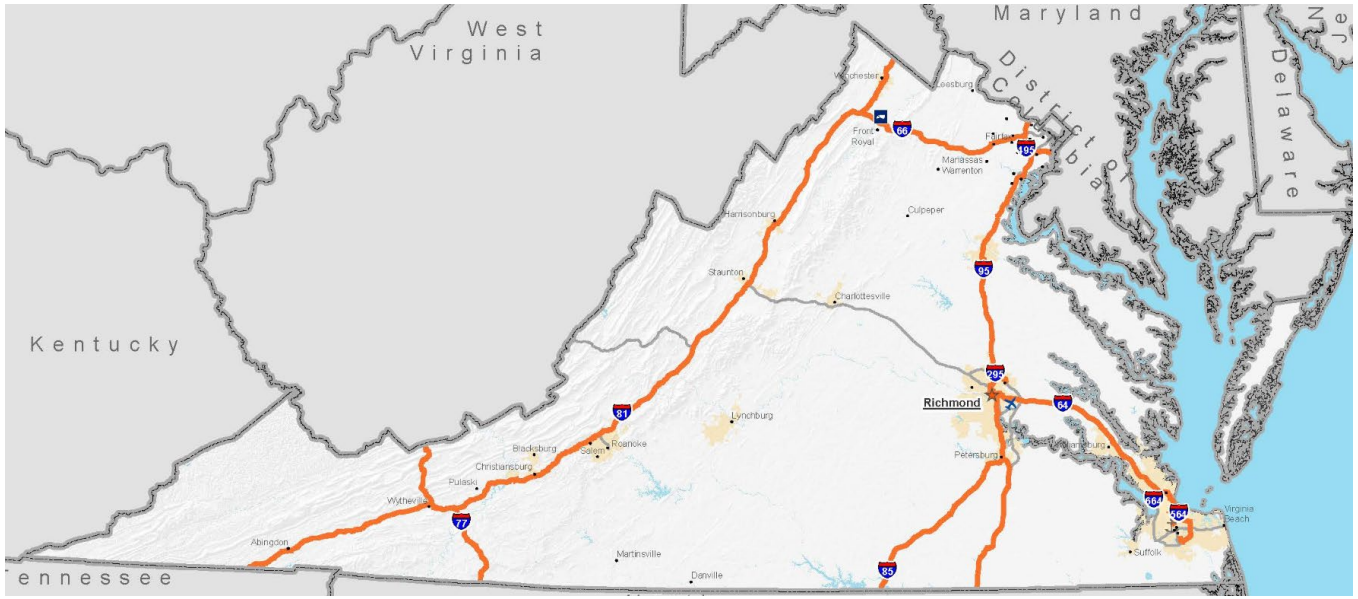
5. Existing roadway functional classification system, railroad classes, transit route types (circulator, distributor)



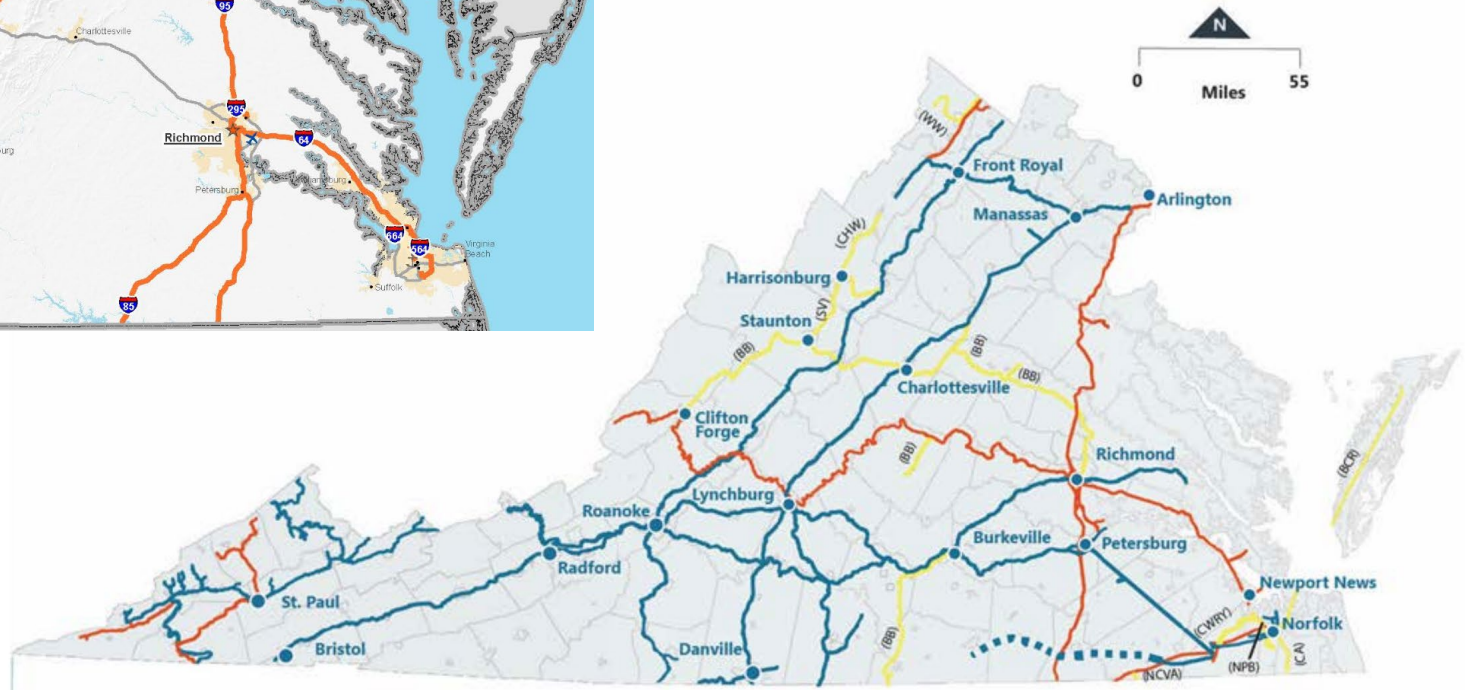
Source: FHWA Functional Classification Guidelines

TIERING OF VTRANS NEEDS | INITIAL THOUGHTS ON POTENTIAL CRITERIA

6. Designated facilities on the Freight Network for Virginia



Virginia's Freight Highway Network



Virginia's Freight Rail Network

CONSIDERATIONS FOR FUTURE UPDATES OF MID-TERM NEEDS

VTrans Mid-term Needs | Considerations for Future Updates

- Continued work on refinement to VTrans Mid-term Needs Identification Methodology
  - More than 16 different opportunities recorded from feedback at workshops, from state agencies, and others
  - OIPI plans to explore options for improvements prior to the next Needs update

VTrans Mid-term Needs | Considerations for Future Updates

- Continued work on refinements to VTrans Mid-term Needs Identification Methodology
  - Seasonal Variations
  - Non-recurring Events
  - Construction Zones and Activities
  - Committed Improvements

Source: VDOT Flickr

VTrans Mid-term Needs | Considerations for Future Updates

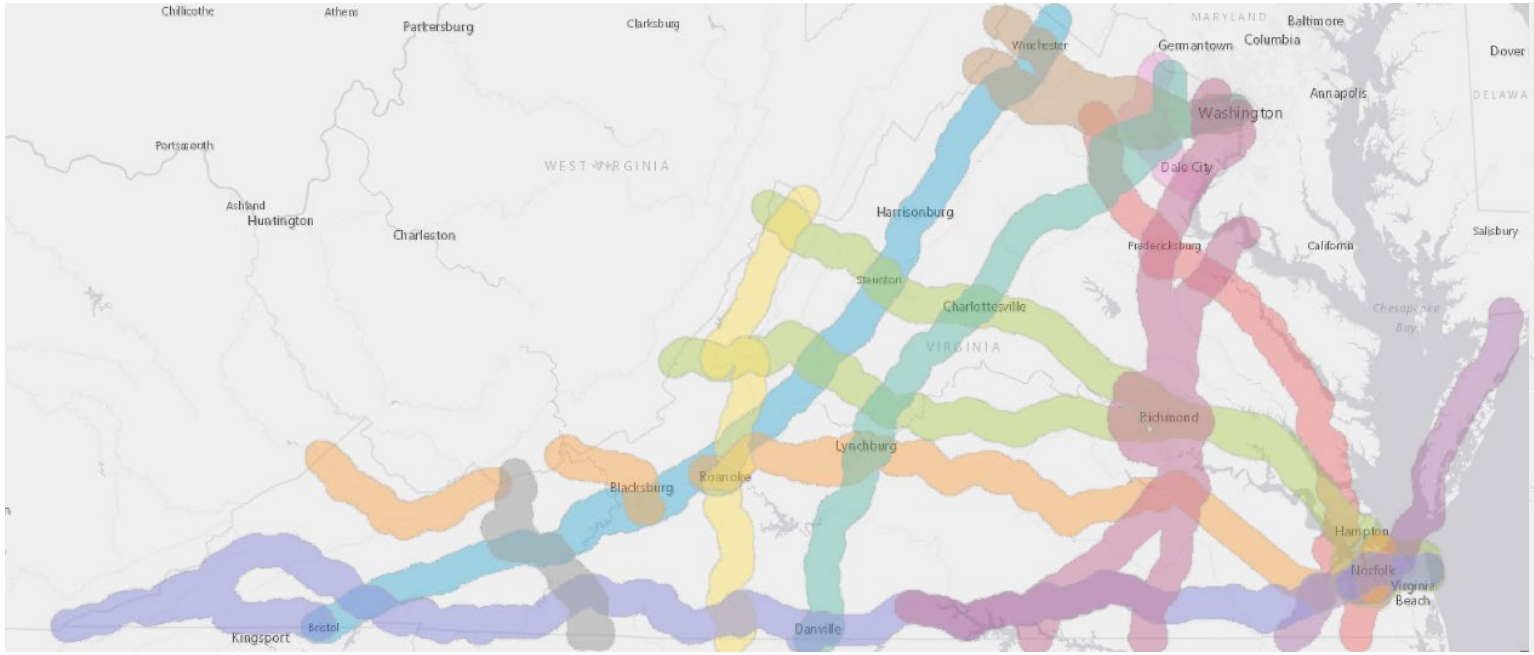
- Continued work on refinement to VTrans Mid-term Needs Identification Methodology
  - Transit and Rail Ridership
  - Transit and Rail Quality of Current Service Offered
    - Travel time reliability
    - Trip chaining - accessibility Needs
    - Quality of services offered (frequency, service standards, etc)

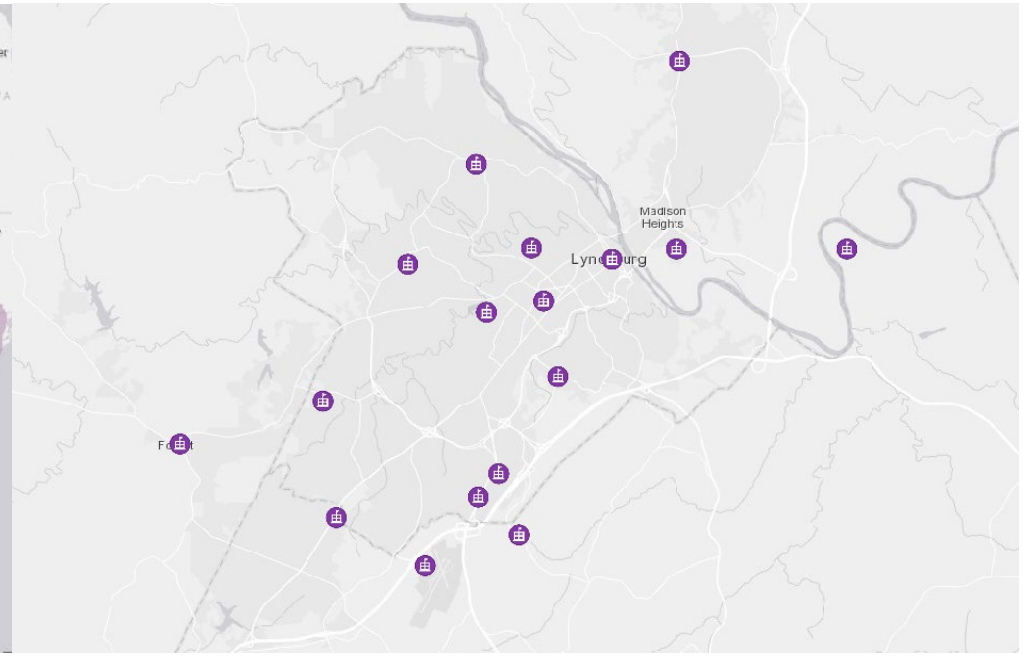
Source: VDOT

Source: City of Suffolk

VTrans Mid-term Needs | Considerations for Future Updates

- Evaluation of Criteria used for designation of Corridors of Statewide Significance
  - Requests in 2019 along Rt 288 in Chesterfield, and Rt 360 in Hanover
- Data-driven methods to identify Regional Network Activity Centers





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QUESTIONS/DISCUSSION

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