**Access and Use Constraints**

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**About the VTrans Mid-Term Needs**

Please refer to the [VTrans Mid-Term Needs and Priorities](https://vtrans.org/mid-term-planning/mid-term-needs-and-priorities) page for details

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| **Field Name** | **Metadata** |
| Segment ID | Unique ID |
| Street Name | Full Street Name |
| Route Common Name | VDOT Common Route Name |
| Direction | Direction |
| Corridor of Statewide Significance | Indicates whether the segment is assigned to a Corridor of Statewide Significance. |
| Corridor of Statewide Significance - Primary Facility | Indicates whether the segment is assigned as a primary facility roadway segment on a Corridor of Statewide Significance. |
| CoSS Name | Indicates the name of the Corridor of Statewide Significance for which the segment is associated. |
| Need - Congestion Mitigation (CoSS) | Background:   Virginia's Corridors of Statewide Significance (CoSS) network was analyzed using two Performance Measures for Congestion to establish CoSS Needs for Congestion Mitigation. The CoSS component facilities include a primary facility (generally an Interstate or US Highway Route) and major facilities/services, typically within approximately five miles of the primary highway, that provide multiple modes and parallel routes connecting major centers of activity along the corridor.     Two measures were used to identify Needs. The first measure, Percent of Person Miles Traveled in Excessively Congested Conditions (PECC), identifies segments where a percent of total vehicles travel at speeds significantly slower than the posted speed. This measure was applied to limited access facilities on the CoSS. The analysis year was 2018, and relied on INRIX data provided through the Regional Integrated Transportation Information System (RITIS). The period of analysis was 6am to 8pm on weekdays and weekends. For more information see the VTrans Methodology Reports at http://vtrans.org/mid-term-planning/mid-term-needs.  The second measure, Travel Time Index (TTI), identifies segments by the intensity of congestion. This measure was applied to non-limited access facilities on the CoSS. The analysis year was 2018 and relied on INRIX data provided through the Regional Integrated Transportation Information System (RITIS). The period of analysis was 6am to 8pm on weekdays and weekends. For more information see the VTrans Methodology Report.    Description of Need:   "Yes" value for Need – Congestion Mitigation (CoSS) indicates a CoSS segment with a "Need for Congestion Mitigation"    Threshold for Need:   All "Yes" values indicate a Need – Congestion Mitigation (CoSS)  with one or more of the following conditions: 1.) A minimum of 2% person miles traveled must be below 75% of posted speed limit for limited access facilities (PECC) OR 2.) Travel Time Index (TTI) greater than 1.3 for at least three hours for non-limited access facilities OR 3.) Travel Time Index (TTI) greater than 1.5 for at least one hour for non-limited access facilities. The Need for Congestion Mitigation applies to a particular direction for divided roadways and to both directions for undivided roadways. |
| Need - Improved Reliability (CoSS) | Background:   Virginia's Corridors of Statewide Significance (CoSS) network was analyzed using one Performance Measure for Reliability to establish CoSS Needs for Improved Travel Time Reliability. The CoSS component facilities include a primary facility (generally an Interstate or US Highway Route) and major facilities/services, typically within approximately five miles of the primary highway, that provide multiple modes and parallel routes connecting major centers of activity along the corridor.     This measure, Level of Travel Time Reliability (LOTTR), identifies the number of hours of travel along a segment that occurs in highly unreliable conditions. This measure was applied to all CoSS roadways. The analysis year was 2018 and relied on INRIX data provided through the Regional Integrated Transportation Information System (RITIS). The period of analysis was 6am to 8pm on weekdays and weekends. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.     Description of Need:   "Yes" value for CoSS\_Reliability indicates a CoSS segment with a ""Need for Improved Travel Time Reliability"    Threshold for Need:   All "Yes" values indicate a CoSS segment where the Level of Travel Time Reliability (LOTTR) is greater than or equal to 1.5 for at least one hour. The Need for Improved Reliability applies to a particular direction for divided roadways and to both directions for undivided roadways. |
| Need - Rail On-time Performance (CoSS) | Background: Virginia's Corridors of Statewide Significance (CoSS) network includes critical corridors for the movement of people and goods in the Commonwealth. The CoSS component facilities include a primary facility (generally an Interstate or US Highway Route) and major facilities/services, typically within approximately five miles of the primary highway, that provide multiple modes and parallel routes connecting major centers of activity along the corridor. The CoSS Network includes freight and passenger rail lines, and passenger rail stations as major components.  A measure for on-time performance was used to evaluate Needs for passenger and intercity rail. For Amtrak service, the average on-time (per the established schedule) arrival of passenger trains to stations was evaluated. For Virginia Railway Express (VRE), performance was evaluated at the line level with the average on-time (per the established schedule) arrivals for all service provided on each service line. Both Amtrak and VRE analysis was based on 2018 data provided/reported by the operating agencies.  Description of Data: "Yes" value for Need for Rail On-Time Performance (CoSS) indicates a segment associated with a rail station with a “Need for Intercity and Passenger Rail on-time performance improvement.” Only applies to stations within Virginia.  Threshold for Need: "Yes" values for Amtrak Stations indicate average station-level (Amtrak) on-time performance less than 80% on-time at the station. “Yes” values for VRE Stations indicate Average line-level (VRE) on-time performance less than 80% along the line servicing that station. If station is served by multiple lines, the lower of the two on-time performance measures was used. |
| Need - Capacity Preservation (CoSS) | Background:   Virginia's Corridors of Statewide Significance (CoSS) network was assessed against VDOT's Arterial Preservation Network to establish CoSS Needs for Capacity Preservation. The CoSS component facilities include a primary facility (generally an Interstate or US Highway Route) and major facilities/services, typically within approximately five miles of the primary highway, that provide multiple modes and parallel routes connecting major centers of activity along the corridor.     The assessment of Capacity Preservation Needs is based on VDOT's Arterial Preservation Network as of September 2019. The VDOT Arterial Preservation Network is a subset of the state-maintained portion of the National Highway System in Virginia, as well as some additional highways that facilitate connectivity. The CoSS Need for Capacity Preservation applies to the any CoSS segment included in the VDOT Arterial Preservation Network. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for CoSS\_Capacity\_Preservation indicates a CoSS segment with a “Need to preserve and enhance capacity by improving access management, reducing signals or signal phases, and implementing innovative intersection configurations."    Threshold for Need:  "Yes" values indicate a CoSS segment included in the VDOT Arterial Preservation Network. The Need for Capacity Preservation applies to a particular direction for divided roadways and undivided roadways. |
| Need - Transportation Demand Management (Limited Access CoSS) | Background:   Virginia's Corridors of Statewide Significance (CoSS) network was assessed by each segments facility type to establish CoSS Needs for Transportation Demand Management (TDM). The CoSS component facilities include a primary facility (generally an Interstate or US Highway Route) and major facilities/services, typically within approximately five miles of the primary highway, that provide multiple modes and parallel routes connecting major centers of activity along the corridor.     Designation of segments as Limited Access Facilities for VTrans requires one or more of the following conditions: 1.) VDOT Functional Classification of Interstate, Interstate Ramp, Other Freeway or Expressway, Other Freeway or Expressway Ramp. 2.) are included in the National Highway System (NHS), AND, are greater than 10 miles in length, OR, are at least 5 miles in length and connect to another limited access segment to total at least 10 miles in length, OR, are less than 5 miles in length but connect on each end to limited access facilities to total at least 10 miles in length.     The assessment of Corridor of Statewide Significance Needs for Transportation Demand Management (TDM) on Limited Access Facilities is based on two factors: 1) roadway location (must be a CoSS segment) 2.) Facility type (must be a Limited Access Facility). The CoSS Need for TDM on Limited Access Facilities applies to all segments meeting these conditions. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for Need – Transportation Demand Management (Limited Access CoSS) indicates a CoSS segment with a "Need for new or expanded park and ride facilities, rail and public transportation services and passenger facilities, bicycle and pedestrian facilities where permitted, and expansion and coordination of commuter assistance programs services"    Threshold for Need:   "Yes" values indicate a CoSS segment identified for VTrans as a Limited Access Facility. The Need for TDM (Limited Access CoSS) applies to a particular direction for divided roadways and undivided roadways. |
| Need - Transportation Demand Management (non-Limited Access CoSS) | Background:   Virginia's Corridors of Statewide Significance (CoSS) network was assessed by each segment's facility type to establish CoSS Needs for Transportation Demand Management (TDM). The CoSS component facilities include a primary facility (generally an Interstate or US Highway Route) and major facilities/services, typically within approximately five miles of the primary highway, that provide multiple modes and parallel routes connecting major centers of activity along the corridor.     Designation of segments as non-Limited Access for VTrans requires that it NOT meet one or more of the following conditions: 1.) VDOT Functional Classification of Interstate, Interstate Ramp, Other Freeway or Expressway, Other Freeway or Expressway Ramp. 2.) are included in the National Highway System (NHS), AND, are greater than 10 miles in length, OR, are at least 5 miles in length and connect to another limited access segment to total at least 10 miles in length, OR, are less than 5 miles in length but connect on each end to limited access facilities to total at least 10 miles in length.     The assessment of Corridor of Statewide Significance Needs for Transportation Demand Management (TDM) on non-Limited Access Facilities is based on two factors: 1) roadway location (must be a CoSS segment outside of Metropolitan Planning Areas) 2.) Facility type (must NOT be a Limited Access Facility). The CoSS Need for TDM on non-Limited Access Facilities applies to all segments meeting these conditions. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for Need – Transportation Demand Management (non-limited Access CoSS) indicates a CoSS segment with a "Need for new or expanded park and ride facilities, rail and public transportation services and facilities, bicycle and pedestrian facilities, and expansion and coordination of commuter assistance programs services."     Threshold for Need:   "Yes" values indicate a CoSS segment identified for VTrans as a non-Limited Access Facility outside of Metropolitan Planning Area boundaries. The Need for TDM (non-limited Access CoSS) applies to a particular direction for divided roadways and undivided roadways. |
| Need - Safety Improvement (CoSS Segment) | Background: All roadways in Virginia were analyzed for Safety using a combination of the Potential for Safety Improvement (PSI) and Fatal/Injury Crash Frequency. The first step was to apply Potential for Safety Improvement (PSI) as a metric for identifying and prioritizing segments and intersections for safety improvements. The identified PSI locations have experienced more crashes in the past five years compared to average crashes on similar roadways and intersections within the same VDOT Construction District. The second step was to screen for locations with PSI values for 2+ years, and fatal/injury PSI values for 2+ years, and analyze the fatal/injury crash frequency at these priority locations. For each Construction District, the VDOT Top 100 Potential for Safety Improvement (PSI) Intersections and Segments, and locations with PSI > 0 for 2+ years and with at least 3+ Fatal or Injury crashes at the intersection or segment over the last five years are included as Draft VTrans Mid-Term Needs. Description of Need: “Yes” value for Need - Safety Improvement (CoSS Segment) indicates a “Need for Safety Improvement on Corridors of Statewide Significance”. Threshold for Need: All "Yes" values indicate a segment or intersection with one or more of the following conditions: 1.) Included in VDOT Top 100 Potential for Safety Improvement (PSI) Segments or Intersections OR 2.) Locations with PSI > 0 for 2+ years in the past five years, and with at least 3+ Fatal or Injury crashes at the intersection or segment over the last five years. |
| Need - Safety Improvement (CoSS Intersection) | Background: All roadways in Virginia were analyzed for Safety using a combination of the Potential for Safety Improvement (PSI) and Fatal/Injury Crash Frequency. The first step was to apply Potential for Safety Improvement (PSI) as a metric for identifying and prioritizing segments and intersections for safety improvements. The identified PSI locations have experienced more crashes in the past five years compared to average crashes on similar roadways and intersections within the same VDOT Construction District. The second step was to screen for locations with PSI values for 2+ years, and fatal/injury PSI values for 2+ years, and analyze the fatal/injury crash frequency at these priority locations. For each Construction District, the VDOT Top 100 Potential for Safety Improvement (PSI) Intersections and Segments, and locations with PSI > 0 for 2+ years and with at least 3+ Fatal or Injury crashes at the intersection or segment over the last five years are included as Draft VTrans Mid-Term Needs. Description of Need: “Yes” value for Need - Safety Improvement (CoSS Intersection) indicates a “Need for Safety Improvement on Corridors of Statewide Significance”. Threshold for Need: All "Yes" values indicate a segment or intersection with one or more of the following conditions: 1.) Included in VDOT Top 100 Potential for Safety Improvement (PSI) Segments or Intersections OR 2.) Locations with PSI > 0 for 2+ years in the past five years, and with at least 3+ Fatal or Injury crashes at the intersection or segment over the last five years. |
| Regional Network Name | Indicates the name of the Regional Network for which the segment is associated. |
| Need - Congestion Mitigation (RN) | Background:   VTrans Regional Network (RN) areas were analyzed using two Performance Measures for Congestion to establish RN Needs for Congestion Mitigation.     The first measure, Percent of Person Miles Traveled in Excessively Congested Conditions (PECC), identifies segments where a percent of total vehicles travel at speeds significantly slower than the posted speed. This measure was applied to limited access facilities within the Regional Network areas. The analysis year was 2018, and relied on INRIX data provided through the Regional Integrated Transportation Information System (RITIS). The period of analysis was 6am to 8pm on weekdays and weekends. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    The second measure, Travel Time Index (TTI), identifies segments by the intensity of congestion. This measure was applied to non-limited access facilities within the Regional Network areas. The analysis year was 2018, and relied on INRIX data provided through the Regional Integrated Transportation Information System (RITIS). The period of analysis was 6am to 8pm on weekdays and weekends. For more information see the VTrans Methodology Report linked above.    Description of Need:   "Y" value for Need – Congestion Mitigation (RN) indicates a "Need for Congestion Mitigation" on segments within the Regional Network area.     Threshold for Need:   All "Y" values indicate a Regional Network segment with one or more of the following conditions: 1.) A minimum of 2% person miles traveled must be below 75% of posted speed limit for limited access facilities (PECC) OR 2.) Travel Time Index (TTI) greater than 1.3 for at least three hours for non-limited access facilities OR 3.) Travel Time Index (TTI) greater than 1.5 for at least one hour for non-limited access facilities. The Need for Congestion Mitigation applies to a particular direction for divided roadways and to both directions for undivided roadways. |
| Need - Improved Reliability (RN) | Background:   VTrans Regional Network (RN) areas were analyzed using one Performance Measures for Reliability to establish RN Needs for Improved Travel Time Reliability.     This measure, Level of Travel Time Reliability (LOTTR), identifies the number of hours of travel along a segment that occurs in highly unreliable conditions. This measure was applied to all Regional Network roadways for which data exists. The analysis year was 2018 and relied on INRIX data provided through the Regional Integrated Transportation Information System (RITIS). The period of analysis was 6am to 8pm on weekdays and weekends. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for Need – Improved Reliability (RN) indicates a "Need for Improved Travel Time Reliability" on segments within the Regional Network area.     Threshold for Need:   All "Yes" values indicate a Regional Network segment where the Level of Travel Time Reliability (LOTTR) is greater than or equal to 1.5 for at least one hour. The Need for Improved Reliability applies to a particular direction for divided roadways and to both directions for undivided roadways. |
| Need - Capacity Preservation (RN) | Background:   VTrans Regional Network (RN) areas were assessed against VDOT's Arterial Preservation Network to establish Regional Network Needs for Capacity Preservation.     The assessment of Capacity Preservation Needs is based on VDOT's Arterial Preservation Network as of September 2019. The VDOT Arterial Preservation Network is a subset of the state-maintained portion of the National Highway System in Virginia, as well as some additional highways that facilitate connectivity. The Regional Network Need for Capacity Preservation applies to Regional Network segment included in the VDOT Arterial Preservation Network. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for RN\_Capacity\_Preservation indicates a Regional Network segment with a "Need to preserve and enhance capacity by improving access management, reducing signals or signal phases, and implementing innovative intersection configurations”.    Threshold for Need:   "Yes" values indicate a Regional Network segment included in the VDOT Arterial Preservation Network. The Need for Capacity Preservation applies to a particular direction for divided roadways and undivided roadways. |
| Need - Transportation Demand Management (Limited Access RN) | Background:   VTrans Regional Network (RN) areas were assessed by each segment's facility type to establish Regional Network Needs for Transportation Demand Management (TDM).     Regional Network TDM Needs requires that a segment be a non-Limited Access Facility. Designation of segments as non-Limited Access for VTrans requires that it NOT meet one or more of the following conditions: 1.) VDOT Functional Classification of Interstate, Interstate Ramp, Other Freeway or Expressway, Other Freeway or Expressway Ramp. 2.) are included in the National Highway System (NHS), AND, are greater than 10 miles in length, OR, are at least 5 miles in length and connect to another limited access segment to total at least 10 miles in length, OR, are less than 5 miles in length but connect on each end to limited access facilities to total at least 10 miles in length.     The assessment of Regional Network Needs for Limited Access Transportation Demand Management (TDM) is based on two factors: 1) roadway location (must be a Regional Network segment) 2.) Facility type (must be a Limited Access Facility). The RN Need for TDM applies to all segments meeting these conditions. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for Need – Transportation Demand Management (Limited Access RN) indicates a Regional Network segment with a "Need for new or expanded park and ride facilities, rail and public transportation services and passenger facilities, bicycle and pedestrian facilities where permitted, and expansion and coordination of commuter assistance programs services".    Threshold for Need:   "Yes" values indicate a Regional Network segment identified for VTrans as a Limited Access Facility and is Functionally Classified above Local Streets in VDOT’s Functional Classification. The Need for TDM (Limited Access RN) applies to a particular direction for divided roadways and undivided roadways. |
| Need - Transportation Demand Management (non-Limited Access RN) | Background:   VTrans Regional Network (RN) areas were assessed by each segment's facility type to establish Regional Network Needs for Transportation Demand Management (TDM).     Regional Network TDM Needs requires that a segment be a non-Limited Access Facility. Designation of segments as non-Limited Access for VTrans requires that it NOT meet one or more of the following conditions: 1.) VDOT Functional Classification of Interstate, Interstate Ramp, Other Freeway or Expressway, Other Freeway or Expressway Ramp. 2.) are included in the National Highway System (NHS), AND, are greater than 10 miles in length, OR, are at least 5 miles in length and connect to another limited access segment to total at least 10 miles in length, OR, are less than 5 miles in length but connect on each end to limited access facilities to total at least 10 miles in length.     The assessment of Regional Network Needs for non-Limited Access Transportation Demand Management (TDM) is based on two factors: 1) roadway location (must be a Regional Network segment within a Metropolitan Planning area) 2.) Facility type (must NOT be a Limited Access Facility). The RN Need for TDM applies to all segments meeting these conditions. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for Need – Transportation Demand Management (Non-Limited Access RN) indicates a Regional Network segment within a Metropolitan Planning Organization (MPO) study area boundary with a "Need for new or expanded public transportation services and facilities, bicycle and pedestrian facilities, coordination of commuter assistance programs, and Shared Mobility."     Threshold for Need:   "Yes" values indicate a Regional Network segment within a Metropolitan Planning Organization (MPO) study area boundary identified for VTrans as a non-Limited Access Facility and is Functionally Classified above Local Streets in VDOT’s Functional Classification. The Need for TDM (Non-Limited Access RN) applies to a particular direction for divided roadways and undivided roadways. |
| Need - Transit Access for Equity Emphasis Areas (RN) | Background:   VTrans Regional Network (RN) areas were assessed for demographic characteristics and transit access at the Census block group level to establish Regional Network Needs for Transit access for Equity Emphasis Areas.     Within Regional Networks, Equity Emphasis Areas are identified as block groups with a score of 2 or higher on an index that considers the relative proportion of a block group's population’s income, age, disability status, racial minority status, Hispanic or Latino origin, and limited-English proficiency compared to the Regional Network as a whole. Equity Emphasis Areas that are mostly outside of a ¼-mile radius of a transit stop are considered underserved by transit. Equity emphasis areas whose population density exceeds the lowest 10th percentile density of communities in the RN already served by fixed-route transit are considered viable for fixed-route transit. The analysis was applied to all Census block groups within Regional Network areas. The analysis year was 2017 and relied on data from the 2017 American Community Survey 5-year estimates from the U.S. Census Bureau. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for Need for Transit Access for Equity Emphasis Areas (RN)   indicates a Regional Network segment within an Equity Emphasis area with a "Need for Accessibility Improvement within Equity Emphasis Areas"     Threshold for Need:   "Yes" values indicates a block group within a Regional Network that are Equity Emphasis Areas that are viable for transit, and are currently underserved by transit. Only applies to segments identified for VTrans as a non-Limited Access Facility that are Functionally Classified above Local Streets in VDOT’s Functional Classification. The Need for Transit Access for Equity Emphasis Areas (RN) applies to a particular direction for divided roadways and undivided roadways. |
| Need - Transit Access (RN) | Background: VTrans Activity Centers are locations of concentrated employment or other clusters of economic or social activity that are primary attractors of travel trips within Regional Networks. VTrans Activity Centers were originally identified as part of VTrans 2040 and have been modified for the VTrans Update to account for input received from stakeholders in each Regional Network. Generally, Activity Centers in each Regional Network include identified areas of concentrated employment, hospitals with greater than 100 beds, commercial service airports, and four-year colleges and universities.  Once identified, the employee composition by industry types was assessed in order to designate each Activity Center as Local-Serving, Knowledge-Based or Freight-Dependent based on the predominant industry type. The definition of the three categories (local-serving, knowledge-based, freight-dependent) is based on the results of a survey of business location specialists (completed by OIPI in 2014) which resulted in a basis in research for understanding the correlation between economic activity and transportation. The results of this work included a correlation table as a guide for understanding transportation needs of particular industry cluster types.  For those VTrans Activity Centers identified as Local-Serving and Knowledge-Based, the competitiveness of transit access relative to highway access to activity centers for workers was assessed. The VDOT TransCAD model was applied to assess the number of workers that can access an Activity Center within 45 minutes by bus or rail transit compared to auto. The higher the difference between public transportation and auto, the greater the potential need for improved transit services to that Activity Center. See the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs for additional information.  Description of Need: "Yes" value for Need for Transit Access (RN) indicates a Regional Network Activity Center with a "Need for Transit Access Improvements”  Threshold for Need: "Yes" values indicate a Regional Network Activity Center with a transit access Deficit greater than 0. |
| Need - Bicycle Access (RN) | Background:   VTrans Activity Centers are locations of concentrated employment or other clusters of economic or social activity that are primary attractors of travel trips within Regional Networks. VTrans Activity Centers were originally identified as part of VTrans 2040 and have been modified for the VTrans Update to account for input received from stakeholders in each Regional Network. Generally, Activity Centers in each Regional Network include identified areas of concentrated employment, hospitals with greater than 100 beds, commercial service airports, and four-year colleges and universities.     Once identified, the employee composition by industry types was assessed in order to designate each Activity Center as Local-Serving, Knowledge-Based or Freight-Dependent based on the predominant industry type. The definition of the three categories (local-serving, knowledge-based, freight-dependent) is based on the results of a survey of business location specialists (completed by OIPI in 2014) which resulted in a basis in research for understanding the correlation between economic activity and transportation. The results of this work included a correlation table as a guide for understanding transportation needs of particular industry cluster types.     For those VTrans Activity Centers identified as Local-Serving and Knowledge-Based within MPO boundaries, fixed-guideway (rail, light rail) transit stations, and BRT lines the non-motorized (pedestrian and bicycle) access was assessed. All segments within a seven-mile buffer of the Activity Centers (local-serving and knowledge-based) within MPO boundaries, fixed-guideway (rail, light rail) transit stations, or BRT line were identified as Needs for Bicycle Access Improvements. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for Need – Bicycle Access (RN) indicates a Regional Network segment within seven miles of Activity Centers (local-serving and knowledge-based) within MPO boundaries, fixed-guideway (rail, light rail) transit stations, or BRT line with a "Need for Bicycle Access Improvements”    Threshold for Need:   "Yes" values indicate a segment within seven miles of an Activity Center (local-serving and knowledge-based) within an MPO boundary, fixed-guideway (rail, light rail) transit stations, or BRT line. Only applies to segments identified for VTrans as a non-Limited Access Facility that are Functionally Classified above Local Streets in VDOT’s Functional Classification. The Need for Bicycle Access (RN) applies to a particular direction for divided roadways and undivided roadways. |
| Need - Pedestrian Access (RN) | Background:   VTrans Activity Centers are locations of concentrated employment or other clusters of economic or social activity that are primary attractors of travel trips within Regional Networks. VTrans Activity Centers were originally identified as part of VTrans 2040 and have been modified for the VTrans Update to account for input received from stakeholders in each Regional Network. Generally, Activity Centers in each Regional Network include identified areas of concentrated employment, hospitals with greater than 100 beds, commercial service airports, and four-year colleges and universities.     Once identified, the employee composition by industry types was assessed in order to designate each Activity Center as Local-Serving, Knowledge-Based or Freight-Dependent based on the predominant industry type. The definition of the three categories (local-serving, knowledge-based, freight-dependent) is based on the results of a survey of business location specialists (completed by OIPI in 2014) which resulted in a basis in research for understanding the correlation between economic activity and transportation. The results of this work included a correlation table as a guide for understanding transportation needs of particular industry cluster types.     For those VTrans Activity Centers identified as Local-Serving and Knowledge-Based within MPO boundaries, fixed-guideway (rail, light rail) transit stations, and BRT lines the non-motorized (pedestrian and bicycle) access was assessed. All segments within a one mile buffer of the Activity Centers (local-serving and knowledge-based) within MPO boundaries, fixed-guideway (rail, light rail) transit stations, or BRT line were identified as Needs for Pedestrian Access Improvements. For more information see the VTrans Methodology Report at http://vtrans.org/mid-term-planning/mid-term-needs.    Description of Need:   "Yes" value for Need – Pedestrian Access (RN) indicates a Regional Network segment within one mile of Activity Centers (local-serving and knowledge-based) within an MPO boundary, fixed-guideway (rail, light rail) transit stations, or BRT line with a "Need for Pedestrian Access Improvements”    Threshold for Need:   "Yes" values indicate a segment within one mile of an Activity Center (local-serving and knowledge-based) within an MPO boundary, fixed-guideway (rail, light rail) transit stations, or BRT line. Only applies to segments identified for VTrans as a non-Limited Access Facility that are Functionally Classified above Local Streets in VDOT’s Functional Classification. The Need for Pedestrian Access (RN) applies to a particular direction for divided roadways and undivided roadways. |
| Need - Roadway Capacity (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Roadway Capacity (UDA)  indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for roadway capacity and infrastructure improvements (additional lanes)”.     Threshold for Need:   "Yes” value for Need – Roadway Capacity (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Roadway capacity/infrastructure improvements to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Roadway Operations (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes (UDA only)" value for Need – Roadway Operations (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for roadway operations (intelligent transportation systems, including traffic signals)”.    Threshold for Need:   "Yes” value for Need – Roadway Operations (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Roadway operations to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Intersection Design (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Intersection design (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for intersection design or other improvements (roundabouts, improved geometry, add turning lanes).”     Threshold for Need:   "Yes” value for Need – Intersection design (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Intersection design or other improvements to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Street Grid (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Street Grid (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a ¼ mile buffer of the UDA (in proximity to UDA) with a “Need for street grid (better street connectivity, new streets to break up long blocks, connectors between streets)”.     Threshold for Need:   "Yes” value for Need – Street Grid (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Street Grid to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Safety Features (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Safety Features (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for safety features”.     Threshold for Need:   "Yes” value for Need – Safety Features (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Safety features to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Traffic calming (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Traffic Calming (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for traffic calming features”.     Threshold for Need:   "Yes” value for Need – Traffic Calming (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Traffic calming features to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Signage/wayfinding (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Signage/wayfinding (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for signage/wayfinding”.     Threshold for Need:   "Yes” value for Need –Signage/wayfinding (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Signage/wayfinding to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Transit Frequency (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Transit Frequency (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for transit frequency (reduce headways)”.     Threshold for Need:   "Yes” value for Need – Transit Frequency (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Transit frequency to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Transit Operations (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Transit Operations (UDA)   indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for transit operations (including real time information, transit-only lane, transit signal priority).     Threshold for Need:   "Yes” value for UDA\_transit\_ops indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Transit operations to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Transit Capacity (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Transit Capacity (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for transit capacity and access (more/larger transit vehicles, more routes, transit stops)”.     Threshold for Need:   "Yes” value for Need – Transit Capacity (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Transit capacity and access to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Transit Facilities (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Transit Facilities (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for transit facilities and amenities (improved transit stops/shelters, lighting, transit storage or maintenance facilities)”.     Threshold for Need:   "Yes” value for Need – Transit Facilities (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Transit facilities and amenities to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Bicycle Infrastructure (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Bicycle Infrastructure (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for bicycle infrastructure (bicycle lanes, crossing, paths, parking, bike-specific traffic signals)”.     Threshold for Need:   "Yes” value for Need – Bicycle Infrastructure (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Bicycle Infrastructure to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Pedestrian Infrastructure (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Pedestrian Infrastructure (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for pedestrian infrastructure (cross walks, pedestrian signals, pedestrian islands or bumpouts)”.     Threshold for Need:   "Yes” value for Need – Pedestrian Infrastructure (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Pedestrian Infrastructure to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Complete Streets (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Complete Streets (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a ¼ mile buffer of the UDA (in proximity to UDA) with a “Complete streets improvements beyond bike/pedestrian facilities”.    Threshold for Need:   "Yes" value for Need – Complete Streets (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Complete streets improvements beyond bike/pedestrian facilities to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Sidewalks (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Sidewalks (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a quarter mile buffer of the UDA (in proximity to UDA) with a “Need for sidewalks.”     Threshold for Need:   "Yes” value for Need – Sidewalks (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Sidewalks to be high, moderate, or low Need for promoting development of the UDA. |
| Need - On-Street Parking (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – On-Street Parking (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a ¼ mile buffer of the UDA (in proximity to UDA) with a “Need for on-street parking capacity”.     Threshold for Need:   "Yes” value for Need – On-Street Parking (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated On-street parking capacity to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Off-Street Parking (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Off-street Parking (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a ¼ mile buffer of the UDA (in proximity to UDA) with a “Need for off-street parking capacity”.     Threshold for Need:   "Yes” value for Need – Off-street Parking (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Off-street parking capacity to be high, moderate, or low Need for promoting development of the UDA. |
| Need - Environment (UDA) | Background:  Urban Development Areas (UDAs) are locally-designated focus areas of development, identified in local comprehensive plans, that are consistent with and referenced to Code of Virginia § 33.2-353 and § 15.2-2223.1. Per the Code of Virginia, Urban development areas, if designated, shall incorporate principles of traditional neighborhood design, which may include transportation elements such as pedestrian-friendly road design, interconnection of new local streets with existing local streets and roads, and connectivity of road and pedestrian networks.    In Summer 2019, local authorities completed a survey to identify each UDA’s transportation issues and needs. Locally-determined transportation needs for Urban Development Areas include categories for bicycle and pedestrians, circulation and access, safety, transit enhancements and external access to the UDA.    Description of Need:  "Yes" value for Need – Environment (UDA) indicates a non-limited access roadway segment located within the boundaries of a code-referenced Urban Development Area (within UDA) or within a ¼ mile buffer of the UDA (in proximity to UDA) with a “Need for improvements to the natural environment, stormwater management, site design, or landscaping”.     Threshold for Need:   "Yes” value for Need – Environment (UDA) indicates a segment located within the boundaries of a code-referenced Urban Development Area (survey question #15) or within a ¼ mile buffer of the UDA (survey question #16) that local authority/survey respondent indicated Improvements to the natural environment, stormwater mgmt., site design, or landscaping to be high, moderate, or low Need for promoting development of the UDA. |
| RN eligible UDA Needs | Indicates whether the segment exists in a location to satisfy the CTB policy for UDA Needs to be eligible as RN Needs. |
| Need for Improved Access to Industrial and Economic Development Area | [Background: The Virginia Business Ready Sites Program (VBRSP) is a discretionary program to promote development sites. Political subdivisions of the Commonwealth of Virginia, including counties, cities, towns, industrial/economic development authorities are eligible to submit sites into the program. For VTrans Mid-Term Needs, VEDP Business Ready Sites Program readiness status of Tier 3 or above are considered for access Needs. Description of Need: For identified VEDP Business Ready Sites Program sites with readiness of Tier 3 or above, there is a “Need to connect or improve access to and from the nearest CoSS for sites that have achieved readiness status of Tier 3 or higher in VEDP’s Business Ready Sites Program (UDA Only)”. Where the above conditions apply to IEDA’s within a RN where UDA needs are also considered as RN Needs per CTB policy, there is a “Need to connect or improve access to and from the nearest CoSS for sites that have achieved readiness status of Tier 3 or higher in VEDP’s Business Ready Sites Program (UDA, RN)” Threshold for Need: VEDP Business Ready Sites Program readiness status of Tier 3 or above.](http://www.ctb.virginia.gov/resources/2020/jan/res/19.pdf) |
| Need - Safety Improvement (Segment) | Background:   All roadways in Virginia were analyzed for Safety using a combination of the Potential for Safety Improvement (PSI) and Fatal/Injury Crash Frequency. The first step was to apply Potential for Safety Improvement (PSI) as a metric for identifying and prioritizing segments and intersections for safety improvements. The identified PSI locations have experienced more crashes in the past five years compared to average crashes on similar roadways and intersections within the same VDOT Construction District. The second step was to screen for locations with PSI values for 2+ years, and fatal/injury PSI values for 2+ years, and analyze the fatal/injury crash frequency at these priority locations.       For each Construction District, the VDOT Top 100 Potential for Safety Improvement (PSI) Intersections and Segments, and locations with PSI > 0 for 2+ years and with at least 3+ Fatal or Injury crashes at the intersection or segment over the last five years are included as VTrans Mid-Term Needs. The Needs identified refer to a particular direction for divided roadways and to both directions for undivided roadways.    Description of Need:   "Yes" value for Need – Safety Improvement (Segment) indicates a "Need for Safety Improvement”.     Threshold for Need:   "Yes" values indicate a segment with one or more of the following conditions: 1.) Included in VDOT Top 100 Potential for Safety Improvement (PSI) Segments or Intersections OR 2.) Locations with PSI > 0 for 2+ years in the past five years, and with at least 3+ Fatal or Injury crashes at the intersection or segment over the last five years. |
| Need - Safety Improvement (Intersection) | Background: All roadways in Virginia were analyzed for Safety using a combination of the Potential for Safety Improvement (PSI) and Fatal/Injury Crash Frequency. The first step was to apply Potential for Safety Improvement (PSI) as a metric for identifying and prioritizing segments and intersections for safety improvements. The identified PSI locations have experienced more crashes in the past five years compared to average crashes on similar roadways and intersections within the same VDOT Construction District. The second step was to screen for locations with PSI values for 2+ years, and fatal/injury PSI values for 2+ years, and analyze the fatal/injury crash frequency at these priority locations. For each Construction District, the VDOT Top 100 Potential for Safety Improvement (PSI) Intersections and Segments, and locations with PSI > 0 for 2+ years and with at least 3+ Fatal or Injury crashes at the intersection or segment over the last five years are included as Draft VTrans Mid-Term Needs. Description of Need: "Yes" value for Need - Safety Improvement (Intersection) indicates a "Need for Safety Improvement”.  Threshold for Need: All "Yes" values indicate a segment or intersection with one or more of the following conditions: 1.) Included in VDOT Top 100 Potential for Safety Improvement (PSI) Segments or Intersections OR 2.) Locations with PSI > 0 for 2+ years in the past five years, and with at least 3+ Fatal or Injury crashes at the intersection or segment over the last five years. |
| Need - Pedestrian Safety Improvement | Background:  VDOT's Pedestrian Safety Action Plan conducted a predictive systemic analysis to consider corridors that do not have a strong crash history but should be prioritized for proactive pedestrian crash countermeasure improvements based on pedestrian safety factors. VDOT compiled GIS data to complete this analysis, considering the roadway conditions and other measures of pedestrian exposure to crash injury or fatality. Most priority corridors were in developed areas, along multi-lane roadways near destinations where pedestrians may frequent.    Description of Need:   "Yes" value for Need – Pedestrian Safety Improvement indicates a segment with a "Need for Pedestrian Safety Improvement”.    Threshold for Need:   "Yes" values indicate a segment included as a Priority Corridor identified in VDOT’s Pedestrian Safety Action Plan (2018). |