



The County and its EFCTS Consultant Project Team would appreciate your feedback on the following draft Purpose and Needs statements for the subject project. If you have questions, please contact Alexandra at (804) 915-1584 or via email at amcastrechini@mccormicktaylor.com. Thank you in advance for your participation.

DRAFT PURPOSE

The purpose of this study is to develop and evaluate a range of alternatives to improve mobility and safety for all road users, reduce congestion, and enhance system continuity while meeting the needs of interstate, regional, and local traffic passing through and moving within the study area, including the evaluation of the proposed Route 37 bypass.

DRAFT NEEDS

BICYCLE/PEDESTRIAN

- As indicated in the 2014 Bicycle and Pedestrian Plan Update, the existing bicycle network lacks infrastructure and 62% of roadways have Level of Service (LOS) D (adequate for advanced riders) or worse. The pedestrian results showed that 60% of the network was either deemed adequate or adequate, but not likely used for choice users. With land development since 2014, it is likely that bicycle and pedestrian needs have only increased since this time and linkages are desired to regional parks, schools, and commercial development.

CONGESTION

- Virginia State Route 7 between the Frederick/Clarke County line and the City of Winchester is the major link between Frederick County and destinations in Northern Virginia. Volumes from the STARS study in 2017 indicate that the ADT on this corridor is projected to reach 40,800 vehicles per day (vpd) by 2047. There is a current SMART Scale project aimed at improving safety and traffic flow on Route 7 between Route 815/Millbrook Drive/Blossom Drive and Route 656/First Woods Drive/Greenwood Drive; however, additional segments have been identified in the PSI.
- The intersection of I-81 Exit 317 and Route 11 is the most congested intersection in the Staunton District and is currently being redesigned as a diverging diamond interchange. Additionally, improved connectivity is needed between Route 7 and Route 11 to alleviate congestion.
- Development in the area near the airport along both the Route 50 and Route 522 corridors has the potential to create congestion issues in the future, both at Exit 313 and at intersections along both corridors and the intersection with Crossover Boulevard. This important connection has been identified in the 2035 Frederick County Comprehensive Plan and will offer improved access to the Virginia Inland Port.
- Large scale residential land development on the southern end of the study area is utilizing Warrior Drive and Tasker Road to access I-81 and Route 37. Additional interstate or state route connectivity from Warrior Drive is desired to continue residential development in this area and relieve congestion on Tasker Road.



EASTERN FREDERICK COUNTY TRANSPORTATION STUDY

www.FCVA.us/Departments/Planning-Development/Transportation

SAFETY

- Since 2017, there have been 206 reportable crashes in the 3.76-mile stretch of roadway on Route 7 between the City of Winchester and the Frederick/Clarke County line. The 1.28-mile segment between Greenwood Road and Valley Mill Road has been identified as the #7 top Potential Safety Improvement (PSI) priority by VDOT. A SMART Scale project is currently in the design phase to add capacity and reduce conflict points to a 0.52-mile segment of roadway in this crash cluster area, however this project only addresses a portion of the study area.
- The VA 7 and US 11 corridors have two of the more prominent crash histories, including significant numbers of fatal and injury crashes.
 - ADT on Route 7 EB: 14,000 vpd; Route 7 WB: 14,000 vpd; Total Crashes = 735; Fatal/Injury (FI) Crashes = 176
 - ADT on Route 11 NB: 14,000 vpd; Route 11 SB: 14,000 vpd; Total Crashes = 347; FI = 71
- Eastern Frederick County includes 24 intersections and 15 segments in VDOT's 2017-2021 Top 100 Potential Safety Improvement (PSI) list.
 - Six of the 15 segments are located on Route 7:
 - Begin MP 1.75, end MP 2.00: Total Crashes = 23; Fatal/Injury (FI) Crashes = 8 (VDOT District Rank 26)
 - Begin MP 2.10, end MP 2.26: Total Crashes = 52; FI = 10 (VDOT District Rank 2)
 - Begin MP 2.26, end MP 2.51: Total Crashes = 16; FI = 3 (VDOT District Rank 60)
 - Begin MP 2.51, end MP 2.82: Total Crashes = 21; FI = 6 (VDOT District Rank 13)
 - Begin MP 2.82, end MP 3.26: Total Crashes = 17; FI = 3 (VDOT District Rank 94)
 - Begin MP 3.48, end MP 4.76: Total Crashes = 59; FI = 14 (VDOT District Rank 7) – improvements to this segment have been committed in the SYIP, with construction completed in 2026.

INTERSTATE 81 NEEDS *Identified in the I-81 Corridor Improvement Plan*

- Improvements are needed at the intersection of I-81 Exit 307 to address safety and congestion; however, this is outside of the study area for this project.
- Recent improvements were completed at the I-81 and Route 37 interchange at Exit 310. The installation of a changeable message sign (CMS) is proposed as a safety measure.
- Safety and congestion are an issue at the I-81 and Route 50 interchange at Exit 313. CMS's are proposed at this interchange, however that does not address the existing congestion issue.
- Widening I-81 to three lanes between Exits 313 and 317 (both Northbound and Southbound) was recommended for funding.
- The addition of an auxiliary lane is a recommended improvement between Exits 313 and 315.
- The addition of traffic cameras was recommended at Exit 317.
- A design concept was created for a diverging diamond interchange (DDI) at Exit 317 to address congestion and safety.
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