

**Tri-County Parkway Location Study**

**LOGICAL TERMINI MEMORANDUM**

**Prepared for:**

**The Virginia Department of Transportation**



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## 1.0 INTRODUCTION

This technical memorandum summarizes the consideration of logical termini for the Tri-County Parkway Location Study. Federal Highway Administration (FHWA) guidance on the determination of logical termini recommends that termini be established such that:

- environmental issues can be treated on a sufficiently broad scope to ensure that the project will function properly without requiring additional improvements elsewhere,
- the project will not restrict consideration of alternatives for other reasonably foreseeable transportation improvements, and
- the project will have independent utility or independent significance, i.e., be useable, and be a reasonable expenditure even if no additional transportation improvements in the area are made.

Four major components contribute to the transportation-related problems in the Tri-County Parkway study area and form the basis for the purpose and need:

- Mobility and Access – the ability to maneuver on or within the transportation system is limited, the options for routes and modes are limited, and the accessibility of destinations is constrained.
- Community Linkage – the efficiency and potential promise of linking community and regional activity centers is hampered or restrained.
- Congestion – the existing and future transportation systems are grossly over capacity leading to unwarranted delay, air quality degradation, unsafe conditions, dangerous emergency response times, and a general decline in the quality of life.
- Network Operations – the ability of the system to operate efficiently is reduced, signalized arterial systems cannot be fine tuned, and delay limits traditional roadway and transit ridership. Routine maintenance issues become significant budget and safety concerns.

## 2.0 HISTORICAL CONTEXT

The Tri-County Parkway was first identified during the development of the transportation element of the comprehensive plans for Prince William, Fairfax, and Loudoun counties. The Tri-County Parkway has been the subject of many local studies and plans, and has been known by many names throughout the years. In Prince William County it has been referred to as the Route 28 Bypass and in Loudoun County the Tri-County Parkway has been known as the Loudoun County Parkway. Several conceptual alignments have been proposed through Fairfax County since it was first proposed in their comprehensive plan. The Tri-County Parkway was adopted by the Metropolitan Washington Council of Governments (MWCOCG) and included in their Constrained Long-Range Plan (CLRP) and Transportation Improvement Program (TIP) beginning in the early to mid 1990's. Currently, the portions of the Tri-County Parkway from VA 234 Business to I-66 and from Route 620 (Braddock Road) to US 50 (Lee Highway) have been recommended in the Northern Virginia 2020 Transportation Plan (NVTP) as short-term improvements (2000-2010). In addition, the portion of the Tri-County Parkway from I-66 to Route 620 (Braddock Road) has been recommended as a mid-term improvement (2010-2020). Currently, only the two short-term projects are in the Constrained Long-Range Plan (CLRP) for the region. The NVTP identifies the Tri-County Parkway as no greater than four lanes south of Route 620 (Braddock Road) and either four or six lanes from Route 620 (Braddock Road) to US 50. The Tri-County Parkway is also listed in the Comprehensive Plans for Fairfax, Prince William, and Loudoun counties.

## 3.0 PURPOSE AND NEED

The proposed logical termini are driven by the purpose and need for the Tri-County Parkway project. The logical termini support the need for the project by establishing limits in the evaluation of alternatives. The logical termini will allow Tri-County Parkway alternatives to be integrated into other regional transportation elements that have been previously adopted in the CLRP and the NVTP. Listed below are four purpose and need elements that will be addressed by the transportation alternatives:

- Improve transportation mobility and capacity and by doing so, improve access and reduce congestion.
- Enhance the linkage of communities and the transportation system that serves those communities. This linkage includes the modal interrelationships between the various transportation systems in the region that are managed by the Virginia Department of Transportation (VDOT), the Virginia Department of Rail and Public Transportation (VDRPT), the Washington Metropolitan Area Transit Authority (WMATA), the Potomac and Rappahannock Transit Commission (PRTC), the Northern Virginia Transit Commission (NVTC), the Virginia Railway Express (VRE), and the Metropolitan Washington Airports Authority (MWAA).
- Accommodate social demands, safety concerns, environmental goals and economic development needs.
- Acknowledge and advance the best components of prior transportation planning efforts, including the local government comprehensive plans, the Northern Virginia 2020 Transportation Plan produced by the Northern Virginia Transportation Coordinating Council (TCC), and the regional CLRP and the TIP produced by the National Capital Region Transportation Planning Board (TPB) with the assistance of the MWCOG.

## **4.0 EVALUATION OF PROPOSED LOGICAL TERMINI**

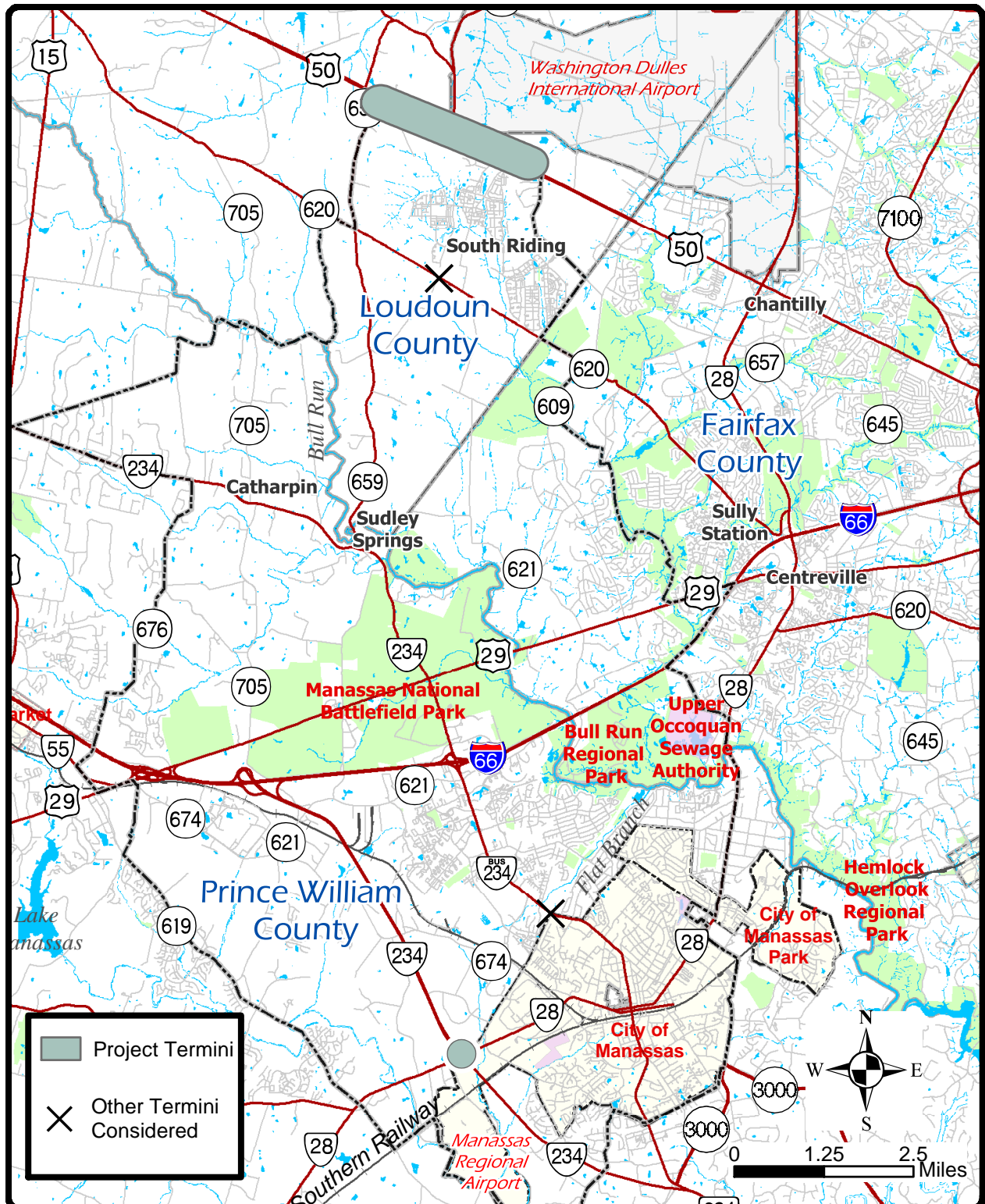
Proposed termini for the Tri-County Parkway location study includes a northern terminus at the intersection of US 50 and Route 606 (Old Ox Road), and a southern terminus at the VA 28/VA 234 Bypass Interchange. These termini establish the general location limits of alternatives that will be given detailed consideration in the Environmental Impact Statement (EIS). This discussion will first consider the northern terminus and then the southern terminus. Figure 1-1 illustrates the two selected logical termini as well as other termini considered but not carried forward.

### **4.1 NORTHERN TERMINUS - US 50 AT ROUTE 606 (OLD OX ROAD)**

The intersection of US 50 and Route 606 (Old Ox Road) is proposed as the northern terminus for the Tri-County Parkway study alternatives. The area near this intersection is currently a mixture of low-density residential, industrial, and commercial land uses. The southwest tip of Dulles International Airport boundary is also near this intersection. Within a half-mile radius of the northern terminus, there are no obvious parklands, historic resources or districts in the immediate vicinity which could be potentially affected by the Tri-County Parkway connection. The purpose of the Tri-County Parkway location study, in part, is to evaluate a new north/south transportation link in Northern Virginia that will connect the City of Manassas with I-66 and the Dulles corridor. One of the strategies to achieve this is to connect to existing portions of the Loudoun County Parkway, which continues to the Dulles Greenway and provides access to Dulles International Airport. A connection with US 50 also represents the potential for a significant break in traffic allowing traffic from the Tri-County Parkway the flexibility of traveling east and west of Dulles International Airport, thus creating a Tri-County Parkway facility that can function independently of other transportation projects. The intersection of US 50 and Route 606 allows flexibility in evaluating alternatives that pass east and west of the Manassas National Battlefield also, while at the same time, providing a connection to the Loudoun County Parkway.

### **4.2 SOUTHERN TERMINUS - VA 28/VA 234 BYPASS INTERCHANGE**

The southern terminus for the Tri-County Parkway location study is proposed at the VA 28/VA 234 Bypass Interchange. The existing land use near the proposed southern terminus is industrial/business and commercial. The Manassas Regional Airport is located directly to the south of this interchange. There are no obvious parklands, historic resources or districts in the immediate vicinity or north of this location that could potentially be affected by any improvements to or adjacent to this interchange. The proposed southern terminus would allow commuters the ability to link to the major employment centers and traffic generators in the area including: Prince William Business Park, Lockheed Martin, Manassas Gateway Business Park, Manassas Air and Rail Industrial Park, and Manassas Regional Airport.



**FIGURE 1-1  
 LOGICAL TERMINI**

It also creates a common endpoint to evaluate alternatives to the east and west of Manassas National Battlefield. Though not originally shown in local comprehensive plans, an alternative to the west of the Manassas National Battlefield will need to be evaluated as an avoidance alternative to taking Section 4(f) property from Bull Run Regional Park. For alternatives to the east of the Battlefield, this terminus also allows any capacity improvements required to Godwin Drive to be included as part of the Tri-County Parkway project. Since the Tri-County Parkway is proposed as a six-lane roadway south of I-66 and Godwin Drive is currently four-lanes, improvements to Godwin Drive may be required to create a contiguous typical section for the Tri-County Parkway facility that can handle projected traffic. Additionally, improvements may be required to the VA 28/VA 234 Bypass interchange to accommodate a connection with Godwin Drive if it were to become a portion of the Tri-County Parkway.

## 5.0 TERMINI CONSIDERED BUT NOT CARRIED FORWARD

During the initial scoping of the project, several other termini were considered. Based upon the ensuing discussion, these other termini have been dropped from consideration.

A southern terminus for the Tri-County Parkway was considered at the existing intersection of Godwin Drive and Business VA 234 (Sudley Road). The original route for the Tri-County Parkway was proposed as a continuance of Godwin Drive north of Sudley Road. From this point, the Tri-County Parkway would continue north along Flat Branch and would eventually pass through Bull Run Regional Park. Godwin Drive is a four-lane divided roadway with sufficient right-of-way for expansion to six lanes. Additionally, VDOT owns right-of-way north of the Business VA 234 (Sudley Road)/Godwin Drive intersection in anticipation of future roadway improvements. The former southern terminus has been dropped for two reasons; 1) if a future Tri-County Parkway were constructed as a six-lane facility north of the Business VA 234 (Sudley Road)/Godwin Drive intersection, improvements may be required to upgrade Godwin Drive to six-lanes south of the project and also to connect the Tri-County Parkway to the VA 28/VA 234 Bypass interchange, 2) if this terminus was chosen, it would likely limit the ability to evaluate western avoidance alternatives of Bull Run Regional Park. A southern terminus at the VA 28/VA 234 Bypass interchange would provide more flexibility in evaluating avoidance alternatives to Bull Run Regional Park, and would also allow any necessary improvements to Godwin Drive to be included as part of an overall stand-alone Tri-County Parkway project.

A northern terminus for the project was initially proposed at Route 620 (Braddock Road) near the South Riding development. Currently the developer of the South Riding community has committed to complete the construction of a four-lane divided section of the Tri-County Parkway between Route 620 (Braddock Road) and US 50. The initial northern terminus of the Tri-County Parkway was proposed at the intersection of Route 620 and this future four-lane roadway. It was later determined that this terminus would limit the ability to evaluate Tri-County Parkway alternatives that would tie-in to Route 620 east or west of this location. Since Route 620 is a rural two-lane unpaved roadway west of the Loudoun/Fairfax County line, termini connecting to Route 620 at any location other than South Riding would not be logical as existing Route 620 could not effectively serve the traffic entering and exiting the Tri-County Parkway without major improvements. As in the case with the southern terminus, a northern terminus at US 50 would provide more flexibility in evaluating a wider range of alternatives and would allow the Tri-County Parkway to function as intended without requiring improvements to other facilities.

## 6.0 CONCLUSION

The northern and southern termini selected for the Tri-County Parkway Location Study are shown in Figure 1-1. The logical termini for this project have been selected in accordance with FHWA Technical Guidelines for termini development. Efforts have been made to ensure that the proposed termini would allow the evaluation of project alternatives that: 1) would function independently of and not force other transportation improvements, 2) would not restrict the consideration of project alternatives that avoid significant environmental resources (such as Bull Run Regional Park), and 3) would allow for consideration of environmental issues on a broad scope so that segments of the project would not force improvements in areas where environmental issues would be insurmountable.