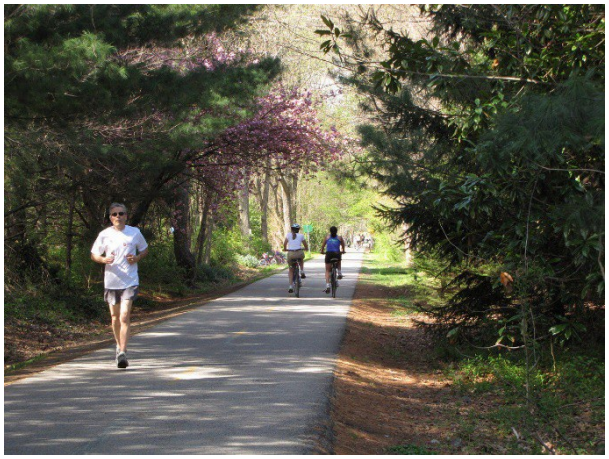
PRINCE WILLIAM COUNTY

Mobility



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INTRODUCTION

INTENT

The intent of this Mobility Plan is to provide an accessible, safe, comprehensive, multimodal transportation network that allows for the safe and efficient movement of goods and people throughout the County and into surrounding jurisdictions. The system includes networks of facilities and infrastructure, including roadways, transit stops and stations, elements supporting active transportation within the roadway right-of-way like pedestrian and bike facilities, and trails separate from the roadway network. It also includes services, including transit operations, taxi, and other ride-hailing models, and potentially bikeshare and other emerging modes including rentable e-scooters.

An integrated transportation system that provides mobility for all underpins the County's vision as "a diverse community striving to be healthy, safe, and caring with a thriving economy and a protected natural environment." It strives to ensure the efficient movement of people and goods, enhance quality of life, and provide for economic growth. As population and commercial growth continue to increase in the County and the region, the existing mobility network will have to change and adapt to accommodate the travel demands and preferences placed upon it. As such, it becomes essential for the County to diversify the way residential, recreational, commercial, and work-related trips move throughout the County. Specific objectives include adapting to changing mobility trends, improving multimodal options, increasing the use of public transit, increasing travel time reliability while concurrently striving to decrease the use of vehicle fuels that contribute to climate change. All elements are proposed to be built and maintained in a safe and sustainable manner.

To manage congestion and provide equitable transportation solutions, Prince William County must invest in all elements of the multimodal system described above. By developing transit-oriented communities ("TOD") which integrate transportation planning with land use planning and utilizing the ten principles of Smart Growth, as stated in the Land Use chapter, the County can reduce the future demand for transportation roadway infrastructure. Concentrating population, jobs, and infrastructure within vibrant, walkable communities throughout Prince William County will help to ease existing road congestion and manage future demand by providing options for multimodal travel and reduce dependency on automobiles. Ensuring that the mobility network includes connections to, and expansion of, the County's recreational trail network also promotes healthier communities, cross-county connectivity, commuter transportation options and the potential for economic growth through tourism.

The Mobility Chapter provides a framework for meeting the existing and future needs of Prince William County, through policies and action strategies directed at a safe, equitable, and connected mobility network. Additionally, it serves as a guide to the County's Departments of Transportation ("DOT") and Parks, Recreation and Tourism ("DPRT"), the Virginia Department of Transportation "VDOT", the Potomac and Rappahannock Transportation Commission ("PRTC") also known as

OmniRide, the Virginia Railway Express ("VRE"), residential/commercial developers, and other transportation-oriented entities in the region in their efforts to provide transportation improvements in accordance with the needs of the County. The specific road, transit, and trail projects proposed in this plan are high priorities for improving safety, equity, and connectivity across the County's mobility network and are therefore expected to be a key focus of capital improvement budgets for the duration of this plan. In addition to major airports in the region, the Manassas Regional Airport, which is the largest general airport in Virginia is located in the City of Manassas and surrounded by Prince William County. This airport serves as a "gateway" for businesses coming to and from Prince William County, serving as an essential mode to further economic progress in the County and region.

To better support the County's intent to provide residents and visitors a truly multimodal transportation network, the recreational trail component of the Comprehensive Plan has been incorporated into this Mobility Chapter.

POLICIES AND ACTION STRATEGIES

MOBILITY POLICY FOCUS AREAS

The Mobility Chapter will focus on the following areas:

1. General Transportation/Mobility (G)
2. Roadway (RP)
3. Transit (TR)
4. Active Mobility/Transportation (AT)
5. Recreational Trails (RT)

As part of the Mobility Chapter update, all policies will be titled "Mobility Policies" and the various Mobility action strategies related to the above areas will fall under one or more of the Mobility Policies.

MOBILITY POLICY 1: Ensure that the County's transportation network prioritizes safety for all mode users, including motorists, transit riders, pedestrians, including students, and bicyclists.

Action Strategies:

G1.1 Utilize improved infrastructure design, enhanced enforcement, and public education to provide increased safety for all transportation modes.

G1.2 Require safety to be a top priority in the planning, design, and construction of all mobility projects to improve safety for all transportation users.

G1.3 Ensure that travelers are informed of all construction projects, utilizing various communication channels, including the County's website, social media, and changeable message signs, and ensure that safe access and mobility is maintained throughout the construction of projects.

G1.4 To ensure safe routes to schools, staff from DOT and other County departments/agencies will meet on a regular basis with the Schools' Safe Routes to Schools coordinator or other representatives from Prince William Public Schools to document needs, identify priorities, develop project proposals, and pursue potential funding sources.

G1.5 Require new residential development within 1 mile of existing or proposed school sites to consider safe routes to school connectivity or walkshed studies in development applications.

G1.6 Prioritize in capital improvement project decisions, sidewalk gaps in existing neighborhoods that are within 1 mile of existing or proposed school sites.

G1.7 Identify programs or initiatives to reduce roadway and pedestrian related fatalities and injuries in the County.

G1.8 Review vehicular crash data in response to requests from County Police, residents, and elected officials to determine the most effective solution to the issue, whether it be intersection improvements, signing, striping, and/or roadway improvements.

G1.9 Utilize technology, such as solar powered Speed Monitoring Signs and Pedestrian Hybrid Beacons ("PHB") if warranted by VDOT to improve safety.

G1.10 Implement Crime Prevention Through Environmental Design ("CPTED") strategies in new and redeveloped transportation projects to improve safety, such as enhanced lighting and unobstructed sidewalks.

G1.11 Prioritize and identify roadway sections that could be realigned to improve overall roadway safety and operations.

G1.12 Prioritize and identify intersections that could benefit from operational improvements, particularly for pedestrian and bicyclist safety, and identify funding to support recommended improvements.

G1.13 Study and evaluate roadway corridors for safety improvements to include "Road Diets" and "Roundabouts".

G1.14 Coordinate with adjacent jurisdictions on mobility projects that are within one mile of and/or cross jurisdictional boundaries to encourage coordination on safety measures.

RP1.1 Develop a program with County Police to implement red light cameras to reduce/enforce speeding and implement cameras on school buses to reduce illegal passing of stopped buses.

RP1.2 Consider developing an annual operating budget in the Capital Improvement Program for the improvement of County-maintained roads to meet Secondary Street Acceptance Regulations ("SSAR") for adoption of roadways in VDOT's Secondary Street System for maintenance. (www.virginiadot.org)

RP1.3 Review the County's roadway network and roadway standards to adequately address the needs of emergency responders – including Fire, Police, and EMS.

RP1.4 Identify neighborhoods where high traffic volumes create safety concerns due to excessive speeds. Identify appropriate traffic calming measures outlined in the *PWC Residential Traffic Management Guide*. Where vehicle volume and speed are a result of cut-through traffic, identify methods for potentially shifting vehicles to roads designed to handle the traffic. Where roadways cross jurisdictional boundaries, partner with adjacent jurisdictions to coordinate on traffic calming measures.

RP1.5 Work with VDOT to implement safety strategies identified in the State Strategic Highway Safety Plan to reduce crashes resulting in severe injuries or deaths, consistent with the national highway strategy Towards Zero Deaths. (www.virginiadot.org)

TR1.1 Coordinate with transit agencies to help ensure safe access to transit facilities in the County through improved infrastructure design, transit stop locations, improved pedestrian and bicycling connections and accommodations, public education, and enhanced enforcement.

AT1.1 Consider alternative bike facility improvements (such as a paved shoulders) in areas where roadways are not planned to have shared use paths.

AT1.2 Update and enhance the bicycle and pedestrian standards in Section 600 of the County's Design and Construction Standards Manual ("DCSM)".

AT1.3 Improve connectivity of sidewalks and trails, including interjurisdictional connections, to ensure continuous, safe access.

AT1.5 Consider reducing the width of roadway travel lanes in Small Area Plans/Town Centers/Activity Centers to provide separated bike lanes/transit lanes and/or parallel parking to reduce speeds and incentivize safe multimodal options.

AT1.6 Identify roadways and develop criteria for establishing safe on-road bicycle routes throughout the County, ensuring that these routes provide access within and between Activity Centers and transit nodes.

AT1.7 All proposed improvements which impact public and private roadway areas should consider bicycle accommodations.

RT1.1 Improve safety and visitor experience along recreational trails through appropriate and consistent trail route and distance markings, and the use of technology, such as Quick Response ("QR") codes, to provide trail maps, contact information, and user guides.

MOBILITY POLICY 2: Prioritize equity and access when planning for mobility projects

Action Strategies:

G2.1 Ensure the quality and function of the transportation system contributes to equitable outcomes for all people by increasing mobility options and access for Equity Emphasis Areas as defined by the Metropolitan Washington Council of Governments ("COG") (www.mwcog.org), increasing accessibility for senior citizens, persons with disabilities, and those with transportation insecurities, and including equity as a planning principle in all mobility projects.

G2.2 Use equity as a planning tool to identify social and racial disparities to mitigate adverse impacts consistent with Board Resolution No. 20-494. (https://eservice.pwcgov.org/documents/bocs/briefs/2020/0616/res20-494.pdf)

G2.3 Consider the connection between neighborhoods and retail and institutional services, transit nodes, and trails when designing roadways, and consider road width, speed limit, medians for protection, pedestrian signals, and facilities in the design of the roadway to allow disadvantaged populations to safely access services.

G2.4 Remove physical barriers that restrict mobility access by discouraging dead end streets and cul-de-sacs and encourage designs that improve walkability, including inter- and intra-residential development pedestrian paths, connections to adjacent jurisdictions, on-street parking, and locating parking lots behind buildings.

G2.5 Identify neighborhoods in need of new or repaired sidewalks, curbs, gutters, ADA ramps, and street pavement or other infrastructure and supporting facilities and services, and consider initiating and maintaining a repair and replacement program for these areas through appropriate private or public means. This includes recognizing future infrastructure enhancements to ensure that they will support transit improvements that incorporate ADA landing pads or widening sidewalks to accommodate bus shelters.

G2.6 Develop a plan to improve communications accessibility by identifying alternative messaging and platforms for non-English speaking, digital illiterate, deaf, and blind persons.

G2.7 Provide information codes, such as Uniform Resource Locator ("URL") codes, at bus stops, wayfinding signs, and recreational and active mobility trails that can be translated into any language with a smart phone.

G2.8 Incorporate universal signage design guidelines consistent with federal and state signage standards.

G2.9 Minimize displacement and environmental impacts to communities when planning for mobility projects. Priority should be given to minimize impacts to existing affordable housing, consistent with Housing Policy 1 in the Housing Chapter.

G2.10 Reduce commuting costs for residents, particularly residents at the poverty level and living in Equity Emphasis Areas ("EEA"), as measured by the U.S. Census American Housing Survey commuting model, by improving access to affordable public transit. (www.census.gov)

TR2.1 Accommodate transit users with special needs, including the elderly, riders with young children, and the people with disabilities, to ensure the mobility needs of all are met, including ADA requirements.

TR2.2 Coordinate with the County Agency on Aging and Department of Social Services to determine where transit services are needed and partner with these agencies and transit service providers to disseminate information and outreach to the elderly and those with limited access to such resources

TR2.3 Consider the location of mobility impaired populations and their travel needs (i.e., doctor, hospital, shopping, social activities, etc.) when determining the location of bus routes.

TR2.4 Examine ways to provide transportation alternatives to those populations that don't have access to OmniRide or VRE. Such alternatives may be microtransit, bike sharing, taxicabs, or paratransit for the elderly, and/or the physically limited or disabled.

AT2.1 Maintain a County online interface for gathering resident input on the location of active mobility gaps and improvements needed to connect residents to retail/commercial/activity/recreational areas.

AT2.2 Where appropriate and consistent with applicable law, during rezoning and special use permit applications, encourage developers to consider providing private and/or public trails for inter-parcel connectivity and/or the recreational and wellness benefits, and/or land dedications/donations where needed to expand local and regional greenway, blueway, and heritage corridors.

RT2.1 Consider establishing a designated maintenance fund for recreational trails as part of DPRT's Capital Maintenance Program.

RT2.2 Seek opportunities to create a variety of accessible recreational trail experiences (bicycle, equestrian, nature trails, etc.) for a diverse mix of populations (i.e., various age groups, level of mobility, etc.).

MOBILITY POLICY 3: Promote sustainability and resiliency when proposing new infrastructure or upgrading existing facilities that impact environmental and cultural resources.

Action Strategies:

G3.1 Coordinate with the County's Public Works Department to encourage increased landscaping and plantings of native plants where applicable along road rights-of-way and in medians, as allowed by VDOT, to enhance the streetscape and environmental impacts of roadway improvements.

G3.2 When planning and implementing transportation infrastructure, identify and seek to protect the existing environmental resources through approaches that avoid, minimize, and mitigate impacts when practicable

G3.3 Use EPA's Environmental Justice Screening and Mapping Tool ("EJScreen") to help identify potential environmental justice impacts of projects. (www.epa.gov)

G3.4 Evaluate identified regional strategies for meeting regional greenhouse gas reduction goals for incorporation into County mobility projects. (www.mwcog.org)

G3.5 Prioritize improvements to vulnerable infrastructure, as identified by VTrans Vulnerability Assessment. (www.vtrans.org)

G3.6 Develop policies to help identify, mitigate impacts, and/or interpret cultural resources that are within right-of-way and/or impacted by developer road projects.

G3.7 Coordinate with the County Archeologist and the County Office of Historic Preservation on County funded mobility projects to identify cultural impact mitigation measures and opportunities to enhance cultural resources.

G3.8 Coordinate with the National Park Service to preserve integrity and enhance visitor experience at the Manassas National Battlefield Park without compromising accesses that currently exist. Study an alternative for Route 29 that serves to maintain and improve existing local access via existing Route 29/Route 234 Business from residential and planned business areas north of I-66 in Prince William and Fairfax County to Manassas residents, businesses, and the higher education campuses south of the park along Route 234 Business. Close Route 29 and Route 234 to through traffic within the park, after an alternative is built. Re-evaluate this action strategy as the preferred park bypass is completed. This includes coordinated efforts with Fairfax County as part of its Comprehensive Plan Update.

G3.9 Coordinate with the Prince William County Office of Sustainability on supporting the Community Energy and Sustainability Master Plan ("CESMP") and ensure that mobility projects support the County's Climate Mitigation and Resiliency goals.

G3.10 Develop short-term and long-term mobility policies to support the County's adopted regional climate mitigation and resiliency goals.

G3.11 Coordinate with regional partners to identify programs and initiatives that support reduction of greenhouse gas emission goals in support of climate resiliency.

RP3.1 Promote the utilization of vehicles that use alternative fuels and other measures, including electricity, to reduce air quality and noise impacts.

RP3.2 Evaluate functional plans and designs for proposed roadway construction projects to identify cultural or environmental issues. Where there are conflicts, identify and consider alternative alignments and improvements to avoid or minimize impacts.

RP3.3 Support the *Journey Through Hallowed Ground* National Heritage Area initiative to designate specified sections of Route 29 and Route 15 within Prince William County as a National Scenic Byway and/or an All-American Road. Employ context sensitive solutions for highway projects within these sections.

RP3.4 Support VDOT's Rural Rustic Road program to identify roads that qualify for this designation. (www.virginiadot.org)

RP3.5 Support VDOT's Scenic Byways program to identify roads having relatively high aesthetic or cultural value, leading to or within areas of historical, natural, or recreational significance. (www.virginiadot.org)

RP3.6 Consider the impact of traffic noise on neighborhoods and as part of County projects, implement appropriate noise mitigation measures in accordance with Federal Highway Administration's ("FHWA's") noise abatement regulations (23 CFR 772). (www.fhwa.dot.gov)

RP3.6 Consider alternative roadway designs during the planning stage that provide environmental benefits through improved operations, such as roundabouts.

RT3.1 DPRT should coordinate with the County's Public Works Department Environmental Services/Watershed Division to establish guidelines and policies for the development of recreational trails within environmentally sensitive habitats and incorporate any design strategies, as appropriate, into related DPRT planning and design documents, such as the DPRT Trail Standards Manual.

MOBILITY POLICY 4: Maximize cost effectiveness of all multimodal projects through strategic project planning, programming, procurement, and delivery.

Action Strategies:

G4.1 Work with federal, state, regional, County, and other public departments and agencies, and private sector sources, to identify, plan, fund, and implement County mobility improvements utilizing outside sources of funding.

G4.2 Collaborate with other agencies and jurisdictions to implement innovative and cost-effective projects.

G4.3 Annually update the Six-Year Highway Primary and Interstate Road Improvement Plan and biannually update the Six-Year Secondary Road Improvement Plan for road construction and seek state and regional funding to implement these plans.

G4.4 Research the use of alternative financing methods, such as mobility bonds and Transportation Improvement Districts, using the County's Capital Improvement Program ("CIP") as a foundation for the timing, location, and construction of roadway and recreational trails/activity mobility facilities.

G4.5 Pursue methods for obtaining private sector resources to assist in the costs of design and/or construction of projects in the CIP. Identify mitigation measures for offsetting the impacts of land development when appropriate and consistent with applicable law

G4.6 Monitor and inform local, regional, and state long-range plans, policies, and projects through County staff participation in committees and working groups to ensure alignment and collaboration with County plans and projects.

G4.7 Identify and apply to federal, regional, and state grant programs to maximize external funding of County mobility projects.

G4.8 Strategically program funds based on funding source requirements and project scope, cost, and schedule to maximize project cost efficiencies and delivery timeline.

MOBILITY POLICY 5: Enhance and expand the transit network and supporting infrastructure.

Action Strategies:

RP5.1 Prioritize and implement infrastructure projects that improve access to transit.

RP5.2 Develop a parking district policy for Activity Centers near existing or planned transit facilities that recognizes and balances the need for short-term and long-term parking supply.

TR5.1 Coordinate with adjacent jurisdictions to identify and develop alternative transit concepts, such as bus rapid transit ("BRT"), light rail transit ("LRT"), Potomac ferry service, Metro rail extensions, and VRE expansion.

TR5.2 Consider initiating feasibility studies of alternative transit concepts that would identify conceptual alignment and engineering; proposed station locations; transit vehicle technology and suitability; initial scan of environmental issues; fatal flaw analysis; and possible funding sources.

TR5.3 Aggressively seek funding through grants to develop alternative transit concepts.

TR5.4 Coordinate with regional, state, and federal agencies to facilitate the design and construction of alternative transit concepts.

TR5.5 Prioritize projects in the Capital Improvement Program ("CIP") that improve intra-County bus network connecting Activity Centers and Equity Emphasis Areas.

TR5.6 Support public information campaigns to increase awareness of all available transportation options.

TR5.7 Integrate multiple modes of transit in centralized locations to create multimodal hubs that will improve mode choice and connectivity of modal systems.

TR5.8 Coordinate with adjacent jurisdictions, and federal, state, transit, and regional departments and agencies, such as, but not limited to, OmniRide, VRE, and DRPT, to ensure that the county's transit system is compatible and connected to existing transit infrastructure in the surrounding metropolitan region.

TR5.9 Encourage development or redevelopment along transit corridors, and within a 1/3 mile of existing or proposed transit facilities (i.e., bus stops, bus shelters, train stations, park-and-ride lots), expanding the transit infrastructure, through projects such as station and parking capacity expansions and additional or improved passenger facilities.

TR5.10 Analyze the feasibility of dedicated transit lanes and transit priority treatments to improve transit travel times and reliability.

TR5.11 Support County and regional commuter programs, including vanpooling, ride hailing, ridesharing, and "slugging", through funding, coordination, and promotion.

TR5.12 Encourage the utilization of public/private partnership bus shuttle programs to connect developments to mobility hubs.

TR5.13 Coordinate with adjacent jurisdictions and transit providers to explore microtransit opportunities.

MOBILITY POLICY 6: Adapt to changing and emerging mobility trends.

Action Strategies:

G6.1 Monitor and plan for emerging mobility trends, including changes in travel behaviors (i.e., decreased vehicle ownership, shift in peak demand, greater demand for walking and biking), and changes in mobility modes and technology (i.e., autonomous vehicles, electric vehicles (including e-bikes), ridesharing, shared mobility devices, microtransit, automated traffic enforcement) through the development of policies and strategies that will address changing mobility needs and support the shared use mobility network.

G6.2 Monitor changes in travel behaviors to anticipate changes to levels of service and future demand and inform long-range planning for capital projects.

G6.3 Support County and regional telework policies to reduce trip demand.

G6.4 Identify opportunities for implementation of electric vehicle charging stations, or other fueling stations and determine appropriate infrastructure needs for low or zero emissions vehicles, based on current and future technology. Encourage applicants to consider including electric vehicle charging stations during the rezoning and special use permit process.

G6.5 During the rezoning and special use permit process, encourage applicants to consider alternative modes for internal circulation and connectivity to existing transportation networks, such as shared mobility devices, electric scooters and bikes, and micro transit, which provides flexible, demand responsive transit services within a defined geographical area.

G6.6 Encourage the incorporation of technology in mobility projects, including solar power and intelligent transportation systems.

G6.7 Consider regional principles for Connected and Autonomous Vehicles ("CAV"), and alignment with VDOT's CAV Program and Investment Roadmap in roadway projects. (www.virginiadot.org)

G6.8 Work with VDOT to support the Virginia Electrical Vehicle Infrastructure Deployment Plan and state policies for transitioning to a smarter, cleaner electric grid.

MOBILITY POLICY 7: Align mobility priorities with land use to increase mobility options, minimize projected trip demand and improve quality of life for County residents.

Action Strategies:

G7.1 Improve capacity, options, and use of the active mobility and non-motorized network and supporting facilities and enhance intermodal connectivity consistent with land use to minimize trip demand.

G7.2 Shift the focus from planning around vehicle accessibility to supporting more options for public transportation, ride sharing/hailing, biking, and walkable streets.

G7.3 Include all modes of transportation for review and consideration as part of the rezoning and special use permit development review process to help ensure a multimodal transportation assessment of land use.

G7.4 Develop guidelines for multimodal transportation assessment of County projects, to include mode split assumptions between vehicle, transit, and active transportation of trip generation estimates, to provide consistent review of proposed County projects.

G7.5 Coordinate with VDOT to develop values-aligned goals including safety, multimodal access, sustainability, and resiliency in order to assess the impacts of proposed development such as rezonings or special use permits

G7.6 Develop/redevelop guidelines for landscaping, signage, and architectural standards for County gateways and roadway corridors. Continue to create and update Highway Corridor Overlay Districts ("HCODs") and provide well-landscaped and well-maintained County gateways and corridors, or similar regulations for major roadways identified in the Roadway Plan, in conjunction with the Community Design Plan.

G7.7 Prioritize mobility infrastructure in areas identified by the Long-Range Land Use Plan Map as Activity Centers, targeted industries, population growth areas, and major connections and roadway corridors.

G7.8 Support and identify funding for mobility improvements identified in approved Small Area Plans.

G7.9 Identify mobility improvements that support and improve access to the Manassas Regional Airport.

G7.10 Continue to coordinate with VDOT, DRPT, and other regional partners to advocate for enhanced multimodal guidelines, policies, and standards.

RP7.1 Evaluate the level of service ("LOS") of existing and proposed roadway corridors and intersections to achieve a minimum LOS appropriate for the roadway classification and surrounding land uses.

RP7.2 Reduce expected traffic demand through use of Transportation Demand Management ("TDM") strategies and use of Transit-Oriented Development ("TOD") to create compact, mixed-use Activity Centers that encourage greater micro transit, transit, and active mobility trips and reduce vehicle trips. This includes continued coordination with transit partners (OmniRide, VRE, and DRPT).

AT7.1 Expand the DCSM bicycle parking rate requirements for a wider variety of commercial, office, and industrial uses.

AT7.2 Encourage secure, convenient, and well-designed bike parking facilities for at least 5% of the student and/or employee population at County facilities, including schools, libraries, and government buildings.

AT7.3 Apply bike lane designs from the National Association of City Transportation Officials ("NACTO") Urban Bikeway Design Guide and other relevant guiding documents to the County's Small Area Plans and urban areas.

AT7.4 Proposals for new mixed-use commercial, office, or residential development should consider incorporating sidewalks, shared use paths, and or recreational trails, to connect to existing and adjacent facilities of a similar design, particularly where needed to provide connectivity between land uses and improve mobility in the immediate vicinity of the development.

TR7.1 Provide transit connections, such as circulator transit systems, within and between Activity Centers and provide first/last mile connections to transit services and multimodal hubs.

MOBILITY POLICY 8: Meet demand through capacity enhancements and innovative operational improvements

Action Strategies:

RP8.1 Improve roadway capacity by providing new roadway segments and widening existing segments (as detailed in the Roadway Plan and presented in the Roadway Plan Summary); and providing grade separated interchanges or innovative interchange/intersections.

RP8.2 Manage growth in Total Daily Vehicle Hours of Delay through continuing investments in the multimodal transportation system.

RP8.3 Participate in performance-based planning studies, including VDOT's STARS and Pipeline Programs, to identify innovative operational alternatives.

AT8.1 Encourage public and private employers to create programs for employees that reduce trip demand by encouraging use of transit services and active mobility/recreational trail routes to and from the workplace.

AT8.2 Encourage public and private opportunities for alternative uses at Park-and-Ride lots.

RT8.1 Utilize trail counters, user surveys, and/or new technologies to collect demographic data and use patterns of users of the County's recreational trails and identify trail enhancements/programs that increase resident and visitor satisfaction.

MOBILITY POLICY 9: Continue to enhance and expand recreational trail opportunities throughout the County by providing a diverse mix of trail types and experiences to and within the County's parks, and greenway and blueway corridors.

Action Strategies:

RT9.1 When appropriate and consistent with applicable law, seek to acquire fee simple interest in property or public recreational trail easements through land dedications, purchases, grants, or donations that are suitable for expanding or creating new recreational trails/trail networks that support the regional recreational trail planning initiatives of DPRT, PWC Transportation, VDOT, Virginia Outdoors Plan, etc.

RT9.2 Develop a County-wide Trails Master Plan that identifies trail and active mobility gaps and includes priorities for inclusion into capital improvement and capital maintenance budgets. In support of action strategy REC 1.6 (Parks, Recreation and Tourism Chapter) include an evaluation of blueway opportunities and interjurisdictional connections, as well as an analysis of bicycle routes and equestrian trails. This plan should be updated every 10 years following the update to the Parks, Recreation and Open Space Master Plan.

RT9.3 In support of PK 1.6 and REC 1.3 (Parks, Recreation & Tourism Chapter), continue to develop and maintain a database of all County-maintained recreational trails and trail easements, to include primary trail use/type, surface, and other pertinent qualifying details.

RT9.4 During the park master planning process, consider providing/expanding/ improving recreational trail/ active mobility opportunities to and within the County's parks, including expansion of the greenway and blueway trail networks. This should include identifying means to create appropriate bike/pedestrian

access to all park entrances and/or trails from adjacent neighborhoods and establishing/completing accessible routes to and between park facilities.

RT9.5 To address the fitness and health objectives identified in action strategy REC 1.8 (Parks, Recreation & Tourism Chapter), seek opportunities to establish accessible walking/fitness trails around the perimeter of the County's neighborhood and community parks.

RT9.6 Seek opportunities to expand/create recreational trails that connect County parks.

RT9.7 In support of Rec 1.4 (Parks, Recreation & Tourism Chapter), inventory all County parks lacking appropriate bicycle and pedestrian access at the park entrance and coordinate with DOT/VDOT to consider such improvements as adjacent roadways are developed/redeveloped, particularly at the neighborhood park level.

RT9.8 Seek opportunities to expand equestrian and blueway trail opportunities, including the development of trailhead parking areas, as necessary to improve trail use/access.

RT9.9 Provide recreational trail opportunities that serve the specialized needs of residents, with a focus on inclusion and accessibility for all types of recreational trails (i.e., nature, interpretive, equestrian, mountain biking, kayaking, etc.).

MOBILITY POLICY 10: Encourage resident, stakeholder, and inter-jurisdictional participation in the planning and design of the County's recreational trails, and greenway and blueway corridors, to promote a greater sense of community and to enhance regional connectivity.

Action Strategies:

RT10.1 Continue to work with the Prince William County Trails & Blueways Council to collect input on recreational trail opportunities and priorities within each of the County's magisterial districts, and the County-wide trail network.

RT10.2 Continue to seek input/assistance from the Prince William County Trails & Blueways Council, Greater Prince William Trails Coalition, Prince William Trails and Streams Coalition, residents, adjacent jurisdictions, and other stakeholders, to identify recreational trail gaps and prospective routes for implementing the recreational trails, as well as the greenway and blueway components of this Chapter.

RT10.3 Provide an interactive online map to collect resident/stakeholder input on trail gaps (recreational trails, shared use paths, sidewalks, etc.) and establish a database of project priorities.

RT10.4 In support of PK 4.1 (Parks, Recreation & Tourism Chapter) seek opportunities to connect the County's recreational trails to similar trails provided by adjacent jurisdictions, particularly across Bull Run/Occoquan River and other local, regional, state, and federal park and trail providers.

MOBILITY POLICY 11: Balance recreational trail development and maintenance projects to ensure system-wide quality.

Action Strategies:

RT11.1 Develop a database of recreational trail capital improvement and capital maintenance priorities for inclusion into County department budgets. Develop a recreational trail maintenance plan that identifies funding and staffing levels necessary to maintain the County's recreational trails.

RT11.2 Actively pursue recreational trail grant funding that supports the County's recreational trail construction and maintenance efforts. Explore partnerships with adjacent jurisdictions for joint grant applications for multi-jurisdictional projects.

RT11.3 Develop/formalize "Adopt A Trail", "Adopt A Stream", or similar program(s) to promote resident, stakeholder, businesses, and neighborhood investment in the maintenance and improvement of the County's recreational trails, and greenway and blueway corridors. Seek assistance from the Prince William County Trails & Blueways Council, or similar groups/organizations to lead these initiatives.

RT11.4 Where appropriate and consistent with applicable law, encourage rezoning applicants to consider trail connections to the surrounding trail network and allow public access to these trails to enhance overall connectivity, including gaps in the existing trail network, particularly in Equity Emphasis Areas.

MOBILITY POLICY 12: Consider access, mobility and impacts on the transportation system within this region while protecting the character of the County's communities.

Action Strategies:

G12.1 Support the expansion of Broadband in undeveloped areas to provide more teleworking opportunities for its residents, thus reducing the impacts on the roadway network.

RP12.1 Develop roadway typical sections that support rural context to include shoulder and ditch sections, and preservation of rural aesthetics. Consider developing roadway shoulder standards that are wide enough to accommodate bicyclists.

RP 12.2 Support agritourism/agribusinesses through design of gravel roads/parking lots that can accommodate the volume of vehicles generated by the businesses.

RP12.3 Preserve the existing unpaved rural road network. Pave only when VDOT can no longer provide adequate maintenance to keep the facility in operable condition either due to the geometry or traffic demands of the road. Consider alternate paving surfaces such as tar and chip, pave in place and Rural Rustic Road standards.

RP12.4 Request VDOT/CTB to designate rural roads as Virginia Scenic Byways to preserve the cultural and scenic qualities of these roads and to promote tourism.

RP12.5 Make essential safety improvements on unpaved roads based on volumes, type of traffic, and crash data.

RP12. 6 Consider features such as tree canopy, stone walls, and fences, historic and agricultural structures, and significant viewsheds when planning a new roadway.

TR12.1 OmniRide doesn't currently provide service to rural communities due to low densities. However, future consideration may be given to routes that connect villages and hamlets. Park and ride lots should be considered along primary routes to provide options to rural residents for transit service, carpooling, or vanpooling.

ROADWAY PLAN

INTENT

The Roadway Plan provides a guide that will assist the County in its goal of providing the necessary roadway infrastructure to address existing and projected traffic demands in the County. As the County continues to grow, various roadway segments will be improved to maintain desired levels of service. These improvements can include proposing new roadways, widening of existing roadways, and intersection and interchange improvements which can improve the functional level of service and provide safe, efficient movement of traffic. In support of this goal the Roadway Plan identifies and highlights major roadways (interstates, parkways, arterials, and collectors) and provides guidance on the functional classification of existing and proposed roadways, the location of future intersections and interchanges, and anticipated lanes. Prioritization of these improvements will be determined by the Board of County Supervisors.

While there are still numerous segments of roadways that need to be constructed and extended, the total lane miles needed as part of the Roadway Plan is lower compared to the previous plan. This shift is consistent with the Mobility Chapter's enhanced focus on achieving an interconnected multimodal system. While the total number of lane miles needed is decreased, new opportunities are planned to provide enhanced access to other modes of mobility including transit and active transportation, such as walking and biking. In addition, the County has adopted a number of Small Area Plans and continues establish Activity Centers to focus new growth in areas with access to existing transit and create opportunities for more urbanized development. As a result, it is expected that the Level of Service ("LOS") will be closer to LOS E and certain locations LOS F due to density and slower speed of traffic. Please see Appendix A for an overview of the LOS standards.

The Roadway Plan provides a map of the identified roadways in the County. Figure 1 provides general guidance on roadway standards for each type of roadway included in the Plan, and Figure 4 provides specific information about each roadway included in the Plan.

ROADWAY GUIDELINES (see DCSM for specific standards)

Table 1: General Roadway Guidelines and Standards (see DCSM for specific standards)

Functional Classification	Access		Lane Average	ROW Average	Maximum Design Speed	Transit and/or HOV Potential	Bike and Pedestrian Facilities
	Crossovers	Curb Cuts					
Interstates	Interchange 1 mile minimum in urban areas; 2 miles outside of urban areas	Prohibited	4 to 8 lanes May also include an additional 1 to 2 HOV lanes	Variable based on number of lanes and freeway/interstate type	70 mph	Potential for HOV lanes and/or transit corridor	N/A
Parkways (PA-1 / PA-2)	1100 feet 900 feet minimum	Prohibited	4 to 8 lanes	152 / 160 feet	60 mph	Potential for transit corridor	Shared Use Path
Principal Arterial (PA-1 / PA-2)	1100 feet 900 feet minimum	Heavily Discouraged	4 to 8 lanes	152 / 160 feet	60 mph	Potential for transit corridor	Shared Use Path
Minor Arterials (MA-1 / MA-2)	900 feet 700 feet minimum	Discouraged	4 to 6 lanes	128 / 106 feet	50 mph	Potential for transit corridors & bus turnoffs	Shared Use Path and Sidewalk
Collectors (MC-1 / MC-2)[1]	800 feet 650 feet minimum	Allowed	4 lanes	104 / 106 feet	45 mph	Potential for transit corridor & bus turnoffs	Shared Use Path and Sidewalk

[1] Included in DCSM Update

Table 2: Urban Classification Roadway Guidelines and Standards

Functional Classification	Access Crossover	Lane Average	ROW Average	Maximum Design Speed	Transit and/or HOV potential	Bike and Pedestrian Facilities
Through Boulevard (UTB-1)	800 feet 650 feet minimum	4 lanes	101 feet	45 mph	Potential for transit corridor and bus turnoffs	Shared Use Paths and Sidewalks
Boulevard (UB-1)	650 feet 200 feet Minimum	2 lanes	77 feet	30 mph	Potential for transit corridor and bus turnoffs	Bike Lanes, Shared Use Paths, and Sidewalks
Avenue (UAS-1)	650 feet 200 feet Minimum	2 lanes	71 feet	25 mph	Potential for transit corridor	Shared Use Paths and Sidewalks
Street (UAS-1)	650 feet 200 feet Minimum	2 lanes	65 feet	25 mph	Potential for transit corridor	Shared Use Paths and Sidewalks
Private Side Street (UPS-1)	N/A	2 lanes	51 feet	20 mph	N/A	Sidewalks
Private Alley (UA-1)	N/A	2 lanes	20 feet	10 mph	N/A	N/A

ROADWAY PLAN MAP AND SUMMARY TABLE

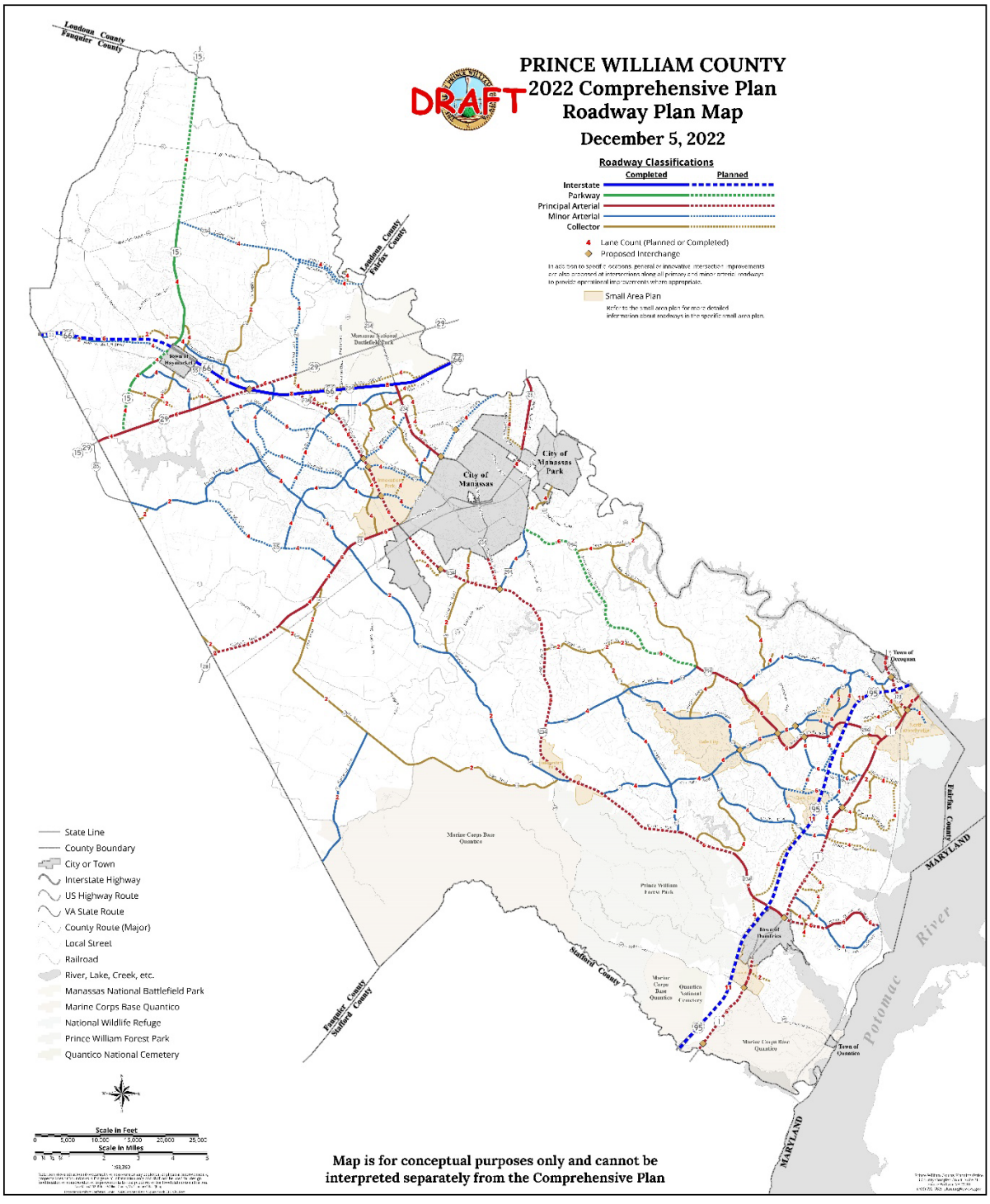

Figure 1: Roadway Plan Map

[Link to Full Sized Map]

Table 3: Roadway Plan Summary

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
I-66	66	Fauquier CL to Rt 29	Interstate	275’ (variable)		6 SOV/2 HOV
I-66	66	Rt 29 to Fairfax CL	Interstate	275’ (variable)		6 SOV/4 HOT
I-95	95	Fairfax CL to Stafford CL	Interstate	450’ (variable)		8 SOV/3 HOT
James Madison Highway	15	Loudoun CL to Lee Highway (Route 29)	Parkway	160’-174’ variable		4
Prince William Parkway	294	Liberia Avenue to Hoadly Road	Parkway	160’	PA-2	6
Centreville Road	28	City of Manassas CL to City of Manassas Park CL	Principal Arterial	128'	MA-1	4
Centreville Road	28	City of Manassas Park CL to Fairfax CL	Principal Arterial	128'	MA-1	4
Dumfries Road	234	Brentsville Road to Richmond Highway (Route 1)	Principal Arterial	160'	PA-2	6

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Gordon Boulevard	123	Fairfax CL to Express Drive / Belmont Bay Drive	Principal Arterial	120’	(see text)	6
Lee Highway	29	Fauquier CL to James Madison Highway (Route 15)	Principal Arterial	existing		4
Lee Highway	29	James Madison Highway (Route 15) to Pageland Lane	Principal Arterial	156'	PA-1	6
Nokesville Road	28	Fauquier Drive to Vint Hill Road	Principal Arterial	160’		4
Nokesville Road	28	Vint Hill Road to City of Manassas CL	Principal Arterial	156'		6
Potomac Shores Parkway	234	Richmond Highway (Route 1) to Cherry Hill Road	Principal Arterial	160'	(see text)	6
Prince William Parkway	234	I-66 to City of Manassas CL	Principal Arterial	160’		6
Prince William Parkway	234	City of Manassas CL to Brentsville Road	Principal Arterial	160’		6
Prince William Parkway	294	Hoadly Road to Caton Hill Road	Principal Arterial	156'		6

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Prince William Parkway	294	Caton Hill Road to Richmond Highway (Route 1)	Principal Arterial	156'		4
Richmond Highway	1	Fairfax CL to Joplin Road / Fuller Road	Principal Arterial	140'	(see text)	6
Richmond Highway	1	Joplin Road / Fuller Road to Stafford CL	Principal Arterial	150'	(see text)	6
Sudley Road	234 Business	I-66 to City of Manassas CL	Principal Arterial	160’		6
Balls Ford Road	621	Devlin Road to Sudley Road (Route 234 Business)	Minor Arterial	128'		4
Belmont Bay Drive	1306	Gordon Boulevard (Route 123) to Palisades Street	Minor Arterial	128'		4
Benita Fitzgerald Drive	2480	Dale Boulevard to Cardinal Drive	Minor Arterial	128'		4
Bristow Road	619	Nokesville Road (Route 28) to Dumfries Road (Route 234)	Minor Arterial	existing		2
Cardinal Drive	610	Minnieville Road to Richmond Highway (Route 1)	Minor Arterial	existing	(see text)	4

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Caton Hill Road	849	Minnieville Road to Prince William Pkwy (Route 294)	Minor Arterial	120	(see text)	4
Dale Boulevard	784	Hoadly Road to Benita Fitzgerald Drive	Minor Arterial	110′ - 160′ (variable)	(see text)	4
Dale Boulevard	784	Benita Fitzgerald Drive to Richmond Highway (Route 1)	Minor Arterial	180′	(see text)	6
Devlin Road	621	Linton Hall Road to Wellington Road	Minor Arterial	128′	MA-1	4
Dumfries Road	234 Bus.	City of Manassas CL to Prince William Parkway (Route 294)	Minor Arterial	128′	MA-1	4
Fleetwood Drive	611	Fauquier CL to Aden Road	Minor Arterial	62'	RM-1	2
Gideon Drive	2068	Dale Boulevard to Smoketown Road	Minor Arterial	120'	(see text)	6
Heathcote Boulevard	2502	James Madison Highway (Route 15) to Lee Highway (Route 29)	Minor Arterial	128'	MA-1	4

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Hoadly Road	642	Dumfries Road (Route 234) to Prince William Parkway (Route 294)	Minor Arterial	110’	(see text)	4
John Marshall Highway	55	Thoroughfare Road to Haymarket town limits	Minor Arterial	128'	MA-1	4
John Marshall Highway	55	Haymarket town limits to Lee Highway (Route 29)	Minor Arterial	128'	MA-1	4
Linton Hall Road	619	Lee Highway (Route 29) to Glenkirk Road	Minor Arterial	128'	MA-1	6
Linton Hall Road	619	Glenkirk Road to Nokesville Road (Route 28)	Minor Arterial	128'	MA-1	4
Manassas Battlefield Bypass	TBD	Sudley Road Extended to Fairfax CL	Minor Arterial	128'	(see text)	4
Minnieville Road	640	Dumfries Road (Route 234) to Cardinal Drive	Minor Arterial	128'	MA-1	4
Minnieville Road	640	Cardinal Drive to Caton Hill Road	Minor Arterial	128'	MA-1	6

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Minnieville Road	640	Caton Hill Road to Old Bridge Road	Minor Arterial	128'	MA-1	4
Neabsco Mills Road	638	Dale Boulevard to Richmond Highway (Route 1)	Minor Arterial	128'	MA-1	4
Old Bridge Road	641	Prince William Parkway (Route 294) to Colby Drive	Minor Arterial	existing		4
Old Bridge Road	641	Colby Drive to Gordon Blvd (Route 123)	Minor Arterial	120’	(see text)	6
Opitz Boulevard	2000	Gideon Drive to Richmond Highway (Route 1)	Minor Arterial	110’	(see text)	6
Pageland Lane	705	Sudley Road (Route 234) to Route 29 Alternate Road	Minor Arterial	128’	MA-1 modified	4
Potomac Center Boulevard	638	Dale Boulevard to Opitz Boulevard	Minor Arterial	128'	MA-1	4
Potomac Shores Parkway	TBD	Cherry Hill Road to River Heritage Boulevard / Marina Access Road	Minor Arterial	121'	(see text)	4
Prince William Parkway	294	Dumfries Road (Route 234) to Liberia Avenue	Minor Arterial	118’	(see text)	4

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
River Heritage Boulevard	1194	Richmond Highway (Route 1) to Potomac Shores Parkway / Patriot Circle	Minor Arterial	121'	(see text)	4
Rixlew Lane	668	Wellington Road to Sudley Road (Route 234 Business)	Minor Arterial	existing		4
Rollins Ford Road	3500	Vint Hill Road (Route 215) to Linton Hall Road	Minor Arterial	128’	MA-1	4
Route 28 Bypass (Godwin Drive Ext.)	TBD	Sudley Road (Rt 234 Business) to Fairfax County	Minor Arterial	128’	MA-1 (modified)	4
Smoketown Road	2000	Minnieville Road to Gideon Drive	Minor Arterial	110’	(see text)	6
Somerset Crossing Drive	3310	James Madison Highway (Route 15) to Lee Highway (Route 29)	Minor Arterial	128'	MA-1	4
Spriggs Road	643	Hoadly Road to Dumfries Road (Route 234)	Minor Arterial	110’	(see text)	4

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Sudley Manor Drive	1566	Vint Hill Road (Route 215) to Prince William Parkway (Route 234)	Minor Arterial	110’	(see text)	4
Sudley Manor Drive	1566	Prince William Parkway (Route 234) to Sudley Road (Route 234 Business)	Minor Arterial	110’	(see text)	6
Sudley Road	234	James Madison Highway (Route 15) to Pageland Lane/Manassas Battlefield Bypass	Minor Arterial	106’	MA-2	4
Telegraph Road	2190	Minnieville Road to Horner Park and Ride Lot Road	Minor Arterial	128’	MA-1	4
Telegraph Road	1781	Horner Road Park and Ride Lot to Caton Hill Road	Minor Arterial	128'	MA-1	6
Telegraph Road	1781	Caton Hill Road to Opitz Boulevard	Minor Arterial	128'	MA-1	4
University Boulevard	840	Lee Highway (Route 29) to Godwin Drive	Minor Arterial	128'	MA-1	4

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Vint Hill Road	215	Fauquier CL to Rollins Ford Drive	Minor Arterial	existing		2
Vint Hill Road	215	Rollins Ford Drive to Nokesville Road (Route 28)	Minor Arterial	128’	MA-1	4
Wellington Road	674	Linton Hall Road to Prince William Parkway (Route 234)	Minor Arterial	128'	MA-1	6
Wellington Road	674	Prince William Parkway (Route 234) to Godwin Drive	Minor Arterial	128'	MA-1	4
Aden Road	646	Nokesville Road (Route 28) to Bristow Road	Major Collector	existing		2
Ashton Avenue	1600	Balls Ford Road to Godwin Drive	Major Collector	110’	(see text)	4
Auburn Road	602	Fauquier CL to Vint Hill Road (Route 215)	Major Collector	existing		2
Balls Ford Road	621	Sudley Road (Route 234 Business) to Coppermine Drive	Major Collector	104'	MC-1	4

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Bethlehem Road	821	Balls Ford Road to Sudley Manor Drive	Major Collector	90’		2
Blackburn Road	638	Featherstone Road to Richmond Highway (Route 1)	Major Collector	existing		2
Bradys Hill Road	1109	Richmond Highway (Route 1) to Kerill Road	Major Collector	66'	RM-2	2
Catharpin Road	676	Sudley Road (Route 234) to Heathcote Boulevard	Major Collector	existing		2
Catharpin Road	676	Heathcote Boulevard to John Marshall Highway (Route 55)	Major Collector	106'	MC-2	4
Clover Hill Road	861	Harry Parrish Drive to Godwin Drive	Major Collector	110'	(see text)	4
Coverstone Drive	1596	Bethlehem Road to Sudley Road (Route 234 Business)	Major Collector	64'	(see text)	4
Cushing Road	781	Brady Lane to I-66	Major Collector	104'	MC-1	4
Davis Ford Road	663	Prince William Parkway to Yates Ford Road	Major Collector	77’	RL-2	2

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Farm Creek Drive	1379	Featherstone Road to Rippon Boulevard	Major Collector	104'	MC-1	4
Fauquier Drive	605	Fauquier CL to Nokesville Road (Route 28)	Major Collector	66'	RM-2	2
Featherstone Road	636	Richmond Highway (Route 1) to Farm Creek Drive	Major Collector	74'	CI-1	4
Fitzwater Drive	652	Nokesville Road (Route 28) to Aden Road	Major Collector	66'	RM-2	2
Freedom Center Boulevard	842	University Boulevard to Wellington Road	Major Collector	104'	MC-1	4
Groveton Road	622	I-66 Bridge to Balls Ford Road	Major Collector	106'	MC-2	4
Gum Spring Road	659	Loudoun CL to Sudley Road (Route 234)	Major Collector	106'	MC-2	4
Heathcote Boulevard	NA	James Madison Highway (Rt 15) to Antioch Road	Major Collector	77’	RM-2	2
Hornbaker Road	660	Wellington Road to Nokesville Road (Route 28)	Major Collector	104'	MC-1	4

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Horner Road	639	Summerland Drive to Gordon Boulevard (Route 123)	Major Collector	104'	MC-1	4
Longview Drive/Montgomery Avenue	1279	Prince William Parkway (Route 294) to Opitz Boulevard	Major Collector	existing		2
Lucasville Road	692	City of Manassas CL to Bristow Road	Major Collector	62’	RL-2	2
McGraws Corner Drive	3315	Somerset Crossing Drive to Lee Hwy (Route 29)	Major Collector	104'	MC-1	4
Neabsco Road	610	Richmond Highway (Route 1) to Daniel Ludwig Drive	Major Collector	110’	(see text)	4
Occoquan Road	906	Old Bridge Road to Richmond Highway (Route 1)	Major Collector	existing		4
Old Carolina Road	703	James Madison Highway (Route 15) to Haymarket town limits (north)	Major Collector	104'	MC-1	4
Old Carolina Road	703	Haymarket town limits (south) to Lee Highway (Route 29)	Major Collector	77'	RL-2	2

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Old Centreville Road	616	Fairfax CL to Centreville Road (Route 28)	Major Collector	104'	MC-1	4
Peaks Mill Road	TBD	Purcell Road to Prince William Parkway (Route 294)	Major Collector	77’	RM-2	2
Powells Creek Boulevard	2550	Richmond Highway (Route 1) to River Ridge Boulevard	Major Collector	90’ - 110’	(see text)	4
Purcell Road	643	Dumfries Road (Route 234) to Hoadly Road	Major Collector	77'	RM-2	2
Reddy Drive	2000	Richmond Highway (Route 1) to Blackburn Road	Major Collector	existing		2
Ridgefield Road	3300	Prince William Parkway (Route 294) to Dale Boulevard	Major Collector	110’	(see text)	4
Rippon Boulevard	1392	Richmond Highway (Route 1) to Farm Creek Drive	Major Collector	104'	MC-1	4
River Ridge Boulevard	1189	Richmond Highway (Route 1) to River Heritage Boulevard	Major Collector	90’ - 110’	(see text)	4

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
River Ridge Boulevard	1189	River Heritage Boulevard to Wayside Drive	Major Collector	existing		2
Rollins Ford Road	3500	Linton Hall Road to University Blvd.	Major Collector	104′		4
Route 29 Alternate	TBD	Lee Highway/Rt 29 to Fairfax CL	Major Collector	(see text)		4
Signal Hill Road	689	Liberia Avenue to Signal View Drive	Major Collector	68′	(see text)	4
Signal View Drive	2590	City of Manassas Park CL to Signal Hill Road	Major Collector	100′	(see text)	4
Smoketown Road	2000	Griffith Avenue to Old Bridge Road	Major Collector	existing		4
Springwoods Drive	2410	Old Bridge Road to Chanceford Drive	Major Collector	100′	(see text)	4
Telegraph Road (to be renamed)	TBD	Minnieville Road to Horner Road Commuter Lot access	Major Collector	existing	RM-1	2

FACILITY	ROUTE #	TERMINI	FUNCTIONAL CLASS	RIGHT-OF-WAY STANDARD		NUMBER OF LANES
Thoroughfare Road	682	James Madison Highway (Route 15) to McGraws Corner Drive	Major Collector	existing	RM-2	2
Van Buren Road-North	627	Cardinal Drive to Dumfries Road (Route 234)	Major Collector	104'	MC-1	4
Van Buren Road-South	627	Dumfries Road (Route 234) to Batestown Road	Major Collector	104'	MC-1	4
Waterway Drive	1451	Dumfries Road (Route 234) to Cardinal Drive	Major Collector	110’	(see text)	4
Wayside Drive	1140	Richmond Highway (Route 1) to Medford Drive	Major Collector	90’ - 110’	(see text)	4
Williamson Boulevard	1596	Sudley Road (Route 234 Business) to Portsmouth Road	Major Collector	90’	(see text)	4
Yates Ford Road	612	Prince William Parkway (Route 294) to Davis Ford Road	Major Collector	100’	(see text)	4
Yates Ford Road	612	Davis Ford Road to Fairfax CL	Major Collector	existing		2

ROADWAY DESCRIPTIONS

The following narratives discuss the roadways identified in Figure 4 above. The narratives provide general information about each of these roadways. The information provided below is current as of the date of adoption of the Comprehensive Plan. You should refer to the Prince William County Department of Transportation website (www.pwcva.gov/department/transportation) for current information.

Interstates

I-66 (Fauquier County line to Fairfax County line) (275' minimum/variable) – Construction of a third general purpose lane, plus high occupancy vehicle/toll lanes (HOT) lane/fourth general purpose lane has been completed between Fairfax County and the I-66/Rt 15 interchange. An extension of the third general purpose lane and shared HOV/fourth general purpose lane from the I-66/Route 29 interchange to the Fauquier County line is being proposed to assist in the inter-county movement of traffic to and from the western portion of Prince William County.

I-95 (Fairfax County to Stafford County) (450' minimum/variable) – First identified in the 1982 Comprehensive Plan, reversible HOV lanes have been completed from the Occoquan River to Quantico Creek, south of Route 234. The conversion of those reversible HOV lanes to high occupancy toll (HOT) lanes – as well as the addition of a third HOT lane and the extension of those lanes to Garrisonville Road in Stafford County was completed in 2014. The construction of a fourth general purpose lane has been recommended to assist in handling the increasing commuter traffic associated with adjacent jurisdictions to the north and south.

Parkways

James Madison Highway/Route 15 (Loudoun County to Lee Highway/Route 29) (160' PA-2 standard – 174' only in some locations. This roadway supports inter-county traffic to and from Loudoun and Fauquier Counties, as well as supports intra-county movement to and through the Gainesville area. It is the only existing major roadway connection between Prince William County and Loudoun County. Grade separation with the Norfolk-Southern rail line should be evaluated for feasibility and need. The recommended right-of-way for this roadway corresponds generally to the PA-2 standard – except in segments where the VDOT functional plan for this roadway recommends a higher right-of-way standard. Context sensitive solutions for improving this roadway should be evaluated and used where appropriate given that this roadway is within the Journey Through Hallowed Ground corridor.

Prince William Parkway (Liberia Avenue to Hoadly Road) (160’ PA-2 standard) – This road serves cross-county trips and provides a connection from the eastern end of the County to the City of Manassas and to points north and west of Manassas (through additional sections of the Parkway).

Principal Arterials

Centreville Road/Route 28 (City of Manassas to Fairfax County) (128' MA-1 standard) – This road is a traditional commercial corridor linking the City of Manassas with Fairfax County (and I-66 further to the north). A standard principal arterial typical section is not recommended between Fairfax County and the City of Manassas because of the extent and nature of existing development. As such, a minor arterial standard is being proposed. Operational improvements should be evaluated for this corridor.

Dumfries Road/Route 234 (Brentsville Road to Richmond Highway/Route 1) (160' PA-2 standard) – This section of Route 234 carries heavy volumes of both inter- and intra-county traffic. In conjunction with Route 234, this roadway connects the eastern end of the County to the western end of the County and provides access to both I-66 and I-95. The recommended right-of-way corresponds with the standard PA-2 section, as well as the VDOT engineering plans for this completed section of roadway. This roadway is part of the Corridor of Statewide Significance (North-South Corridor).

Gordon Boulevard/Route 123 (Fairfax County to Express Drive/Belmont Bay Drive) (120' existing) – This road leading into Fairfax County will continue to carry increased vehicular traffic. It provides an important connection from Old Bridge Road and Richmond Highway (Route 1) to I-95 and is a route for eastern Prince William County residents to travel to the employment areas in central Fairfax County and the City of Fairfax. The recommended right-of-way corresponds with the standard typical section provided within the VDOT engineering plans for Route 123.

Lee Highway/Route 29 (Fauquier County to James Madison Highway/Route 15) (156' PA-1 standard) – This portion of Lee Highway (Route 29), located between Fauquier County and Pageland Lane, is designated as one of the National Highway System's high priority corridors for federal funding. The reconfiguration of the Route 29/I-66 interchange, grade separation of the Norfolk-Southern railroad as it crosses Route 29, and a grade-separated interchange at the Route 29/Rt 55/Linton Hall Road intersection were recently completed. Context sensitive solutions for improving this roadway should be evaluated and used within sections of this corridor designated as a Virginia Byway, National Scenic Byway, or All-American Road. The closure of Route 29 within the Manassas National Battlefield Park is being proposed after the construction of the Manassas Battlefield Bypass and/or Rt. 29 Alternate Road is completed. This roadway is part of the Corridor of Statewide Significance (Seminole Corridor).

Nokesville Road/Route 28 (Fauquier Drive to Vint Hill Road) (160' PA-2 standard); (Vint Hill Road to City of Manassas) (156' PA-1 standard) – This section of roadway provides a connection between Fauquier County and areas within and adjacent to the City of Manassas including Innovation Park, the Manassas Regional Airport, the Broad Run VRE Station, and many of the surrounding industrial areas.

Potomac Shores Parkway (Richmond Highway/Route 1 to Cherry Hill Road) (160' existing) – This roadway will extend Dumfries Road (Route 234) east of Richmond Highway (Route 1) in order

to provide access to Potomac Shores, including the Potomac Shores Virginia Railway Express ("VRE") station. The proposed roadway will be a controlled access facility. The recommended right-of-way corresponds with the right-of-way approved with the Potomac Shores Potomac Shores rezoning.

Prince William Parkway/Route 234 (I-66 to Brentsville Road, excluding the City of Manassas) (160' PA-2 standard) – This section of Route 234 provides intra-county connections to employment areas such as Innovation Park, as well as connections to many of the industrial areas within the Brentsville District. When linked with the section of Dumfries Road this roadway provides a major connection between I-95 and I-66. This roadway is part of the Corridor of Statewide Significance (North-South Corridor).

Prince William Parkway/Route 294 (Hoadly Road to Richmond Highway/Route 1) (156' PA-1 standard) – This road is designed to help facilitate the large volumes of traffic going to and coming from the I-95 corridor and provides access to the commercial areas within and surrounding Potomac Mills. Richmond Highway/Route 1 (Fairfax County to Stafford County – excluding the Town of Dumfries) (140' – 150') Richmond Highway functions as a multimodal principal arterial carrying both intra and inter-county traffic. As I-95 gets more congested, traffic volumes will continue to increase on Route 1 and there will be a need for grade-separated interchanges/innovative intersections at Route 234, Dale Boulevard, and Route 123. The 140' right-of-way is being proposed from Fairfax County to the Joplin/Fuller intersection (excluding the area associated with the Route 1/Route 123 interchange) and 150' right-of-way is being proposed for the section between the Joplin Road/Fuller Road intersection and Stafford County.

Sudley Road/Route 234 Business (I-66 to City of Manassas) (160' existing) – This road provides a primary commuter route for residents accessing I-66. Additionally, this road serves a large retail area of the County. Operational improvements should be analyzed for this corridor.

Minor Arterials

Balls Ford Road (Devlin Road to Sudley Road/Route 234 Business) (128' MA-1 standard) – This road provides access to and from I-66 for the nearby existing and planned industrial uses. This road provides access to the new Park and Ride Lot on Century Park Drive that provides direct access to and from the Express/High Occupancy Toll (HOT) lanes on I-66. The road has been relocated from Doane Road west to Devlin Road to accommodate an interchange with Route 234.

Belmont Bay Drive (Gordon Boulevard/Route 123 to Palisades Street) (128' MA-1 standard) – This road provides a connection between the Belmont Bay development (including the town center, marina, and other proposed uses within the development) and the Route 1 area, including the Woodbridge Virginia Railway Express ("VRE") station. The recommended right-of-way corresponds with the MA-1 standard typical section. Belmont Bay may want to consider a reduction in travel lanes with a rezoning application that reduces the number of vehicles forecast for this road in order to include additional pedestrian/bicycle facilities.

Benita Fitzgerald Drive (Dale Boulevard to Cardinal Drive) (128’ MA-1 standard, existing) – This road provides a north-south intra-county connection between Dale Boulevard and Cardinal Drive. The road distributes traffic generated in southeastern Dale City and the north sections of Montclair onto Dale Boulevard where traffic can proceed to I-95. No additional right-of-way is needed for this roadway.

Bristow Road (Nokesville Road/Route 28 to Dumfries Road/Route 234) (existing) – Traffic volumes have increased along this intra-county connecting roadway. Although volumes are substantial, the historic and cultural impacts to the villages of Brentsville and Bristow that will result by widening the road are significant enough that the County proposes leaving the right-of-way and cross-section of this roadway as it currently exists. Additionally, potential methods for bypassing both Bristoe and Brentsville should be analyzed to see if a solution to both the traffic and historic/cultural issues can be achieved.

Cardinal Drive (Minnieville Road to Richmond Highway/Route 1) (104’ MC-1 standard – 128’ MA-1 standard, existing) – This road provides a connection between Richmond Highway and Minnieville Road and allows access to both roads from the Montclair and Cardinal Drive residential areas.

Caton Hill Road (Minnieville Road to Prince William Parkway/Route 294) (120’ existing) – The connection of this road from Minnieville Road to the Prince William Parkway provides improved access to the commercial centers along Minnieville Road and the Parkway, as well as improved access to the major commuter parking lots (Horner Road and Telegraph Commuter Lots) along I-95. The right-of-way corresponds with the existing right-of-way provided for this already constructed roadway.

Dale Boulevard (Hoadly Road to Benita Fitzgerald Drive) (110’ - 160’ existing); (Benita Fitzgerald Drive to Richmond Highway/Route 1) (180’ existing) – This arterial traverses the heart of Dale City extending from Route 1 to Hoadly Road. Dale Boulevard provides residents of Dale City a direct route to I-95 and the road is a major intra-county connection. The recommended right-of-way corresponds with the existing right-of-way acquired for this road.

Devlin Road (Linton Hall Road to Wellington Road) (128' MA-1 standard) – This road connects Linton Hall Road to Wellington Road and beyond to Balls Ford Road through the new Balls Ford Road/Prince William Parkway interchange. The realignment of this road with Balls Ford Road also provides for an improved connection for these areas to Route 234 Bypass, Sudley Road, and I-66.

Dumfries Road/Route 234 Business (City of Manassas to Prince William Parkway/Route 234) (128’ MA-1 standard) This road, located between Route 234 and the Manassas City limits, serves as the southern link of the business route into the City of Manassas. The Comprehensive Plan for the City of Manassas proposes widening the section of Dumfries Road leading into Prince William County to a four-lane section and as such, this proposed widening would match that project.

Fleetwood Drive (Fauquier County to Aden Road) (62’ RM-1 standard) – This roadway provides a connection for residential travelers between eastern Fauquier/northern Stafford Counties and Aden Road. Because of right-of-way constraints, Fleetwood Drive is planned to remain a two-lane road.

Gideon Drive (Dale Boulevard to Smoketown Road) (120’ existing) – This road provides direct access to Potomac Mills and the Hylton Chapel. Additionally, this road allows for access to the PRTC Transit Center and provides access to I-95 through a connection with Dale Boulevard.

Heathcote Boulevard (James Madison Highway/Route 15 to Lee Highway/Route 29) (128' MA-1 standard) Heathcote Boulevard parallels both I-66 and Route 55 (John Marshall Highway) and is designed to carry local residential traffic north of I-66 to the employment and commercial areas along Lee Highway (Route 29) in Gainesville.

Hoadly Road (Dumfries Road/Route 234 to Prince William Parkway/Route 294) (110’ existing) – Hoadly Road is a four-lane divided facility that allows for intra-county movement between Dumfries Road and the Prince William Parkway. The recommended right-of-way corresponds with the 110’ that currently exists for this roadway.

John Marshall Highway/Route 55 (Thoroughfare Road to Lee Highway/Route 29 – excluding the Town of Haymarket) (128' MA-1 standard) – This road serves traffic generated in and attracted to the Gainesville/Town of Haymarket area. The recommended right-of-way for this road corresponds with the MA-1 standard typical section. Note that the section of Route 55 leading into the Town of Haymarket from the east and west must be transitioned to an MC-1 standard section (104’) or smaller in order to provide a feasible connection to the town’s two-lane section of Route 55 (Washington Street). Final engineering will be needed in order to determine the appropriate right-of-way transition lengths.

Linton Hall Road (Lee Highway/Route 29 to Nokesville Road/Route 28) (128' MA-1 standard) – Increasing traffic volumes on this intra-county route and development in the Gainesville area created the need for the widened sections of this roadway. Linton Hall Road provides an important connection between Lee Highway (Route 29) and Nokesville Road (Route 28).

Manassas Battlefield Bypass (Lee Highway/Route 29 to Fairfax County) (128’ MA-1 modified) – This roadway is proposed to provide connectivity around the Manassas National Battlefield Park in an effort to accommodate traffic shifts created by the closure of Lee Highway and Sudley Road to through traffic within the Battlefield. In addition, Groveton Road/Featherbed Lane are also being proposed as closed to all through traffic. As such, this bypass provides an inter-county connection The alignment of this roadway (between Sudley Road and Route 29) is an extension of Sudley Road. There is no need for both the Rt. 29 Alternate and the Manassas Battlefield Bypass. Both have been included in the Roadway Plan to provide alternatives for restricting through traffic through the Manassas Battlefield Park, a goal of the National Park Service.

Minnieville Road (Dumfries Road/Route 234 to Old Bridge Road) (128' MA-1 standard) – Minnieville Road provides a connection for traffic in Dale City to reach the northeast areas of the County including the Lake Ridge and Occoquan areas surrounding Old Bridge Road. Additionally, Minnieville Road provides access to areas along Dumfries Road, such as parts of Quantico and the Prince William Forest Park. The recommended right-of-way corresponds with the MA-1 standard typical section.

Neabsco Mills Road (Dale Boulevard to Richmond Highway/Route 1) (128' MA-1 standard) – This road handles local traffic generated by proposed employment centers along Richmond Highway (Route 1) and in nearby areas. This road, which parallels I-95 and Richmond Highway (Route 1), relieves these two roads of local traffic and provides improved emergency access to the Sentara Northern Virginia Medical Center. The recommended right-of-way corresponds with the MA-1 standard typical section.

Old Bridge Road (Prince William Parkway/Route 294 to Colby Drive) (Colby Drive to Gordon Boulevard/Route 123) (120') – This road provides a major intra-county connection and provides access to both I-95 and the Prince William Parkway. This road will continue to handle increased traffic volumes as development continues in the residential and commercial sections of Lake Ridge.

Opitz Boulevard (Gideon Drive to Richmond Highway/Route 1) (110' existing) – This road connects the Potomac Mills area to Richmond Highway (Route 1) and provides access to the Sentara Northern Virginia Medical Center. The recommended right-of-way generally corresponds with existing right-of-way acquired for this road, but in areas where less than 110 feet exist, additional right-of-way to reach 110 feet may be required.

Pageland Lane (Sudley Road/Route 234 to Route 29 Alternate Road) (128' Modified M-1 standard) – Pageland Lane provides access to the Manassas National Battlefield Park via Groveton Road. Additionally, it provides an important connector between Rt. 29 and Sudley Road to serve the recommended land uses in the Pageland Corridor. This road should include shared use paths on both sides to provide connectivity to the Manassas National Battlefield Park. In addition, there should be a limited number of intersections with roundabouts instead of traffic signals to respect the integrity of the adjacent park.

Potomac Center Boulevard (Dale Boulevard to Opitz Blvd) (128' MA-1 standard) – This road handles local traffic generated by proposed employment centers along Richmond Highway (Route 1) and in nearby areas. This road, which parallels I-95 and Route 1, relieves these two roads of local traffic and provides improved emergency access to the Sentara Northern Virginia Medical Center. The recommended right-of-way corresponds with the MA-1 standard typical section.

Potomac Shores Parkway (Cherry Hill Road to River Heritage Boulevard / Marina Access Road) (121’ existing) – This section of Potomac Shores Parkway connects the marina area of Cherry Hill to the Potomac Shores development. A reduced and modified minor arterial section was allowed with the Potomac Shores Town Center because traffic volumes did not generate the need for a principal arterial section. As such, the right-of-way for this section of roadway corresponds to the existing right-of-way provided with the Potomac Shores development.

Prince William Parkway/Route 294 (Dumfries Road/Route 234 to Liberia Avenue) (118' existing) – This roadway is an extension of Liberia Avenue that provides a connection between the Prince William Parkway (Route 294) section that traverses the eastern end of the County and the section of the Prince William Parkway (Route 234) that traverses the western end of the County. Although most sections of the Parkway function as principal arterials, the characteristics of this section of roadway more closely represent a minor arterial.

River Heritage Boulevard (Richmond Highway/Route 1 to Potomac Shores Parkway/Patriot Circle) (121’ existing) – This road on the Cherry Hill Peninsula provides access for the proposed Potomac Shores development from Richmond Highway (Route 1), including access to the proposed marina on the Potomac River. The recommended right-of-way corresponds with the approved right-of-way associated with the Potomac Shores development.

Rixlew Lane (Wellington Road to Sudley Road/Route 234 Business) – This road provides a connection between Wellington Road and Sudley Road (Route 234 Business) adjacent to the Manassas Mall. Because of right-of-way constraints, the recommended right-of-way corresponds to the existing right-of-way.

Rollins Ford Road (Vint Hill Road/Route 215 to Linton Hall Road) (128' MA-1 standard) – This road provides an alternative to Glenkirk Road and provides access to Vint Hill Road and Linton Hall Road for the residential developments in the area. A connection is proposed from Linton Hall Road to University Boulevard to provide an additional north-south connection access to the adjacent industrial areas and Gainesville High School. The recommended right-of-way corresponds with the MA 1 standard typical section.

Route 28 Bypass (Sudley Road/Route 234 Business to Fairfax County) (128' existing MA-1 standard modified) – This proposed road will be an extension of Godwin Drive from Sudley Road (Route 234 Business) into Fairfax County. Limited access is proposed for this roadway, and interchanges/ innovative intersections are planned at both Sudley Road (Route 234 Business) and Lomond Drive. The Route 28 Bypass will provide substantial relief to the sections of Nokesville Road (Route 28) within Prince William County, the City of Manassas, and Fairfax County, as well as provide relief to I-66 by improving travel time reliability along these major corridors. A modified MA-1 standard is planned for this project.

Smoketown Road (Minnieville Road to Gideon Drive) (110’ existing) – This road provides access to the commercial areas near and within the Potomac Mills Mall. In conjunction with Opitz Boulevard, the two roadways also provide a connection from the Prince William Parkway to

Richmond Highway (Route 1). The recommended right-of-way for Smoketown Road corresponds with the existing right-of-way acquired for this already constructed roadway.

Somerset Crossing Drive (James Madison Highway/Route 15 to Lee Highway/Route 29) (128' MA-1 standard) – This roadway allows relief for east-west traffic that would ordinarily travel along Route 55 (John Marshall Highway) and provides an alternate connection for residential trips within the area.

Spriggs Road (Hoadly Road to Dumfries Road/Route 234) (110' existing) – This road provides an important north-south intra-county connection between Dumfries Road and Hoadly Road. The road provides direct access to two mid-County high schools and a middle school. The recommended right-of-way for Spriggs Road corresponds with the existing right-of-way for this already constructed project.

Sudley Manor Drive (Vint Hill Road/Route 215 to Sudley Road/Route 234 Business) (110') – This road provides access to Linton Hall Road, Wellington Road, the Prince William Parkway, and Sudley Road for residential areas such as Braemar and Victory Lakes. The proposed grade-separated interchange at Prince William Parkway (Route 234) will help alleviate the potential traffic concerns of having three major roadways (Wellington Road, Prince William Parkway, Sudley Manor Drive) intersect within proximity. The recommended right-of-way corresponds with existing right-of-way acquired for this already constructed roadway.

Sudley Road/Route 234 (James Madison Highway/Route 15 to Manassas National Battlefield Bypass) (106' MA-2 standard) – This roadway provides an important east-west connection in the northern/western end of the County. After the Manassas Battlefield Bypass or the Rt. 29 Alternate bypass is built, the existing sections of Sudley Road that traverse through the Manassas National Battlefield Park are proposed to close to through traffic and only be available to traffic with destinations within the Park. The recommended right-of-way corresponds to the MA-2 standard typical section.

Telegraph Road (previously Summit School Road) (Minnieville Road to Horner Road Park and Ride Lot) (128' MA-1 standard) –This roadway provides a bypass connection for traffic to and from the Potomac Mills Mall area to Minnieville Road and serves the new high school and industrial development in the area. This road can carry the heavy amounts of traffic that would normally travel along the right-of-way constrained section of Telegraph Road between Meridian Hill Drive and Minnieville Road. The recommended right-of-way corresponds with the MA-1 standard typical section.

Telegraph Road (Horner Road Park and Ride Lot to Caton Hill Road) (128' MA-1 existing) – This roadway is the spine road for the Landing at Prince William Small Area Plan as well as provides access to the Horner Road Commuter Lot and the PRTC transit center. Telegraph Road creates an important north-south connection parallel to I-95. The recommended right-of-way corresponds with the standard MA-1 typical section.

Telegraph Road (Caton Hill Road to Opitz Boulevard) (128’ MA-1) – This roadway provides access to the Potomac Mills Mall as well as connections to the Horner Road Commuter Lot and the PRTC transit center. Telegraph Road creates an important north-south connection parallel to I-95. The recommended right-of-way corresponds with the standard MA-1 typical section.

University Boulevard (Lee Highway/Route 29 to Godwin Drive) (128' MA-1 standard) – University Boulevard is designed to carry residential traffic from the Linton Hall/Sudley Manor areas to the planned employment areas at Innovation Park and Gainesville. Additionally, this roadway creates a major intra-county connection between Lee Highway (Route 29) and Nokesville Road (Route 28). The recommended right-of-way corresponds with the MA-1 standard typical section. It also provides access from the south and east to Gainesville High School.

Vint Hill Road/Route 215 (Fauquier County to Rollins Ford Road (existing)**; Rollins Ford Road to Nokesville Road/Route 28)** (128’ MA-1 standard) – This road, paralleling Linton Hall Road and connecting Fauquier County with Nokesville Road (Route 28), provides an alternative to Linton Hall Road for traffic destined for the Route 28 employment areas. The section between Fauquier County and Rollins Ford Drive is planned for 2 lanes and the right-of-way is existing. Widening is not recommended for this section of Vint Hill Road that bifurcates Greenwich due to the existing development and geometry of the road through this area. In addition, Fauquier County’s Comprehensive Plan does not include widening Vint Hill Road to four lanes. The section between Rollins Ford Drive and Nokesville Road/Route 28 is planned for 4 lanes and the recommended right-of-way corresponds with the MA-1 standard typical section.

Wellington Road (Linton Hall Road to Godwin Drive) (128’ MA-1 standard) – With the connection to Linton Hall Road, Wellington Road provides important intra-county access to Innovation Park, Virginia Gateway, the concert pavilion, and industrial areas fronting the roadway. The road also provides access to the City of Manassas. The combination of the bridging of this roadway over the Prince William Parkway (Route 234), and the proposed grade-separated interchange at the Prince William Parkway and Sudley Manor Drive, will help alleviate the potential traffic concerns of having three major roadways (Wellington Road, Prince William Parkway, Sudley Manor Drive) all intersect within close proximity. The recommended right-of-way corresponds with the MA-1 standard typical section.

Major Collectors

Aden Road (Nokesville Road/Route 28 to Bristow Road) (existing) – Running mainly through areas planned as Agricultural & Forestry (AF), this road provides access for northern Stafford and eastern Fauquier counties, as well as parts of the Quantico Marine Base. Because no widening is being proposed for this roadway, the recommended right-of-way corresponds to the existing right-of-way for this road.

Ashton Avenue (Balls Ford Road to Godwin Drive) (110’ existing) – This road provides an alternative route for traffic using Sudley Road. The recommended right-of-way corresponds with existing right-of-way acquired for this road.

Auburn Road (Fauquier County to Vint Hill Road/Route 215) (existing) – Auburn Road is the extension of Rogues Road in Fauquier County and provides access to and from the Vint Hill Road area of the County. Because no widening is being proposed for this roadway the recommended right-of-way corresponds to the existing right-of-way for this road.

Balls Ford Road (Sudley Road/Route 234 Business to Coppermine Drive) (104' MC-1 standard) – This road provides access to a variety of commercial, retail, industrial, and residential uses on the southern side of I-66. The recommended right-of-way corresponds with the MC-1 standard typical section.

Bethlehem Road (Balls Ford Road to Sudley Manor Drive) (90' RM-2 modified) – Bethlehem Road is a curving two-lane road with industrial uses on the west side and residential uses on the east side. It is included in the Roadway Plan in order to construct safety improvements such as realignment/relocation of the road and to include pedestrian/bicycle facilities.

Blackburn Road (Featherstone Road to Richmond Highway/Route 1) (existing) – This roadway assists in distributing traffic to and from Richmond Highway (Route 1), but also serves as a way of accessing properties on the east side of Route 1 without having to access Route 1. In conjunction with Neabsco Mills Road, Opitz Boulevard, and Reddy Drive, this roadway provides a loop that connects the retail areas in Potomac Mills, I-95, the Sentara Northern Virginia Medical Center, and the residential areas to the east and west of Route 1. The recommended right-of-way corresponds to the existing right-of-way along this roadway.

Bradys Hill Road (Richmond Highway/Route 1 to Kerill Road) (66' RM-2 standard) – This road provides access from Richmond Highway (Route 1) to the eastern areas of Dumfries and Triangle. As generally outlined in the Potomac Communities Plan, Bradys Hill Road is expected to be extended eastward from its existing terminus to provide a third east-west collector street in the area (in addition to Graham Park Road and Fuller Heights Road). The proposed alignment would generally follow the northern edge of the proposed Fuller Heights Park and would terminate in the vicinity of Kerill Road. The right-of-way for this roadway corresponds to the standard RM-2 typical section.

Catharpin Road (Sudley Road/Route 234 to Heathcote Boulevard) (existing)**; Heathcote Boulevard to John Marshall Highway/Route 55)** (106' MC-2 standard) – This road provides an important intra-county connection between the retail and employment areas in Gainesville and the residential areas surrounding Sudley Road. The recommended right-of-way for the widened section between Heathcote Boulevard and John Marshall Highway (Route 55) corresponds with the MC-2 standard typical section. The segment between Sudley Road (Route 234) to Heathcote Boulevard is to remain as two lanes.

Clover Hill Road/Harry J. Parrish Boulevard (Wakeman Drive to Prince William Parkway/Route 234) (110' existing) – This road provides access to the Manassas Regional Airport as well as the industrial areas along the roadway. The connection of this road to the north of the Prince William Parkway also provides access into the City of Manassas. The recommended right-

of-way corresponds with a modified version of the MC-1 standard typical section.

Coverstone Drive (Bethlehem Road to Sudley Road/Route 234 Business) (64' existing) – This road provides access for residential areas to Sudley Road. The proposed extension of Coverstone Drive to Bethlehem Road provides a connection that allows for access to Sudley Manor Drive and Wellington Road. Additional right-of-way for this roadway between Ashton Avenue and Sudley Road is not feasible, but sufficient pavement currently exists to provide a four-lane roadway on a lesser right-of-way (provided on-street parking is removed from both sides of the road). The recommended right-of-way for Coverstone Drive corresponds to the existing right-of-way for the sections of the road that have already been constructed.

Cushing Road (Brady Lane to I-66) (104' MC-1 standard) – This road connects Brady Lane (relocated Balls Ford Road) with I-66. Access to I-66 from this facility would be limited to outbound traffic onto I-66 east. A 400 – 500 space commuter parking lot is located on the northern part of the roadway. This road would be a four-lane divided facility with pedestrian and bicycle facilities, as depicted in the recommended MC-1 standard typical section.

Davis Ford Road (Prince William Parkway/Rt 294 to Yates Ford Road) (existing RL-2 standard modified) - This roadway provides an important connection between the Government Complex Activity Center, the surrounding residential communities, and Fairfax County. Safety and operational improvements are recommended along with pedestrian/bicycle facilities.

Farm Creek Drive (Featherstone Road to Rippon Boulevard) (104' MC-1 standard) – This roadway provides access to the Featherstone Industrial Center, as well as provides access to the Rippon VRE station. Additionally, in conjunction with Rippon Boulevard and Featherstone Road, Farm Creek provides access to Richmond Highway (Route 1). The recommended right-of-way corresponds with the MC-1 standard typical section.

Fauquier Drive (Fauquier County to Nokesville Road/Route 28) (66' RM-2 standard) – This road, known as Dumfries Road in Fauquier County, connects Lee Highway (Route 29) in the Warrenton area with Nokesville Road (Route 28) in Prince William County. Upgrading this road to a two-lane road that meets VDOT and County standards is recommended. As such, the recommended right-of-way corresponds with the RM-2 standard typical section.

Featherstone Road (Richmond Highway/Route 1 to Farm Creek Drive) (74' CI-1 standard) – Featherstone Road provides access for residential areas east of Richmond Highway (Route 1). Additionally, this road provides a connection to the industrial area along Farm Creek Drive. The recommended right-of-way corresponds to the CI-1 standard typical section.

Fitzwater Drive (Nokesville Road/Route 28 to Aden Road) (66' RM-2 standard) – This road provides access to the core area of Nokesville. Additionally, the western section of this road provides a connection to Fauquier County. The recommended right-of-way corresponds with the RM-2 standard typical section. A standard major collector typical section is not recommended due to the extent and nature of existing development along the roadway.

Freedom Center Boulevard (University Boulevard to Wellington Road) (104' MC-1 standard) – This road connects Wellington Road with University Boulevard and provides access to the George Mason University - Science and Technology Campus. The recommended right-of-way corresponds with the MC-1 standard typical section.

Groveton Road (I-66 Bridge to Balls Ford Road) (106' MC-2 standard) – This road provides access to the Manassas National Battlefield Park and to industrial areas south of I-66. Additionally, it is one of only a few overpasses crossing I-66 in this area. After a Manassas Battlefield Bypass/Rt. 29 Alt. Road is constructed, access on this roadway north of Pageland Lane will only allow local access. The recommended right-of-way for this section of roadway corresponds with the MC-2 standard typical section.

Gum Spring Road (Loudoun County to Sudley Road/Route 234) (106' MC-2 standard) – This road, leading into Loudoun County, distributes trips into the employment areas in Fairfax and Loudoun Counties via Route 50. This roadway is located off Sudley Road (Route 234), northwest of the Manassas National Battlefield Park. The recommended right-of-way corresponds with the MC-2 standard typical section.

Heathcote Boulevard (James Madison Highway/Route 15 to Antioch Road) (77' RL-2 standard). – In order to provide additional east-west capacity in the western end of the County, Heathcote Boulevard parallels both I-66 and Route 55 (John Marshall Highway) and is designed to carry local residential traffic north of I-66 to the employment and commercial areas along Lee Highway (Route 29) in Gainesville. This roadway is a 2-lane section within a reduced right of way to help serve as an emergency access to the hospital. The extension of this roadway will be concurrent with development of GPIN 7298-35-4814. The alignment will be coordinated by the County and developer. If the roadway is extended before the development of GPIN 7298-35-4814, the County shall work with the adjacent property owner to minimize impacts to the operation of the existing farm.

Hornbaker Road (Wellington Road to Nokesville Road/Route 28) (104' MC-1 standard) – This road provides access to Wellington Road, Innovation Park, and the Prince William Parkway (Route 234) for industrial uses north of Nokesville Road (Route 28). The recommended right-of-way corresponds with the MC-1 standard typical section

Horner Road (Summerland Drive to Gordon Boulevard/Route 123) (104' MC-1 standard) – Horner Road provides intra-county connections to Gordon Boulevard, as well as the Prince William Parkway and I-95 (through Summerland Drive). Although this road carries relatively high volumes of traffic, due to right-of-way constraints the recommended right-of-way corresponds with the standard MC-1 typical section.

Longview Drive/Montgomery Avenue (Prince William Parkway/Route 294 to Opitz Boulevard) (existing) – This road distributes residential trips to Richmond Highway (Route 1) through Opitz Boulevard and the Prince William Parkway. The recommended right-of-way corresponds to existing right-of-way acquired for this road.

Lucasville Road (City of Manassas to Bristow Road) (62' RL-2 standard) – This road distributes local trips from the surrounding residential areas, as well as provides access into the City of Manassas. The recommended right-of-way corresponds with the RL-2 standard typical section.

McGraws Corner Drive (Somerset Crossing Drive to Lee Highway/Route 29) (104' MC-1 standard) –McGraws Corner Drive facilitates intra-county east-west traffic flows between Lee Highway (Route 29) and Somerset Crossing Drive. Additionally, this road relieves congestion on Route 29 and provides improved access to residential and commercial uses along this corridor. The recommended right-of- way corresponds with the MC-1 standard typical section.

Neabsco Road (Richmond Highway/Route 1 to Daniel Ludwig Drive) (110' existing) – This road circulates local traffic from adjacent residential areas and provides access for recreational trips bound for Leesylvania State Park and the adjacent marinas on Neabsco Creek. The recommended right-of-way corresponds with existing right-of-way acquired for this road.

Occoquan Road (Old Bridge Road to Richmond Highway/Route 1) (existing) – This road provides access to the Woodbridge VRE commuter rail station and also allows for access north of Old Bridge Road into the town of Occoquan. Occoquan Road is planned to remain a four-lane, undivided facility – as such, the recommended right-of-way corresponds with existing right-of-way acquired for this road.

Old Carolina Road (James Madison Highway/Route 15 to Haymarket Town Limits) (104' MC-1 standard); Haymarket Town Limits to Lee Highway/Route 29 (77' – modified RL-2) This road provides access into the Town of Haymarket as well as improved access and mobility to residential areas planned in this corridor. This is a four-lane divided facility whose right-of-way corresponds with the MC-1 standard typical section north of the Town of Haymarket. It is a 2-lane undivided roadway with a shared use path on the east side south of the Town of Haymarket.

Old Centreville Road (Fairfax County Line to Centreville Road/Route 28) (104' MC-1 standard) –Old Centreville Road provides an additional and alternative connection as an alternative to Centreville Road (Route 28) to Fairfax County. The recommended right-of-way corresponds with the MC-1 standard typical section.

Peaks Mill Road (Purcell Road to Prince William Parkway) (77' RM-2 standard modified) – This proposed mid-County connection between Route 234 and the Prince William Parkway will provide access from planned residential areas north of Hoadly Road. This roadway provides an alternative to Hoadly Road and assists in alleviating congestion at the intersections of Dumfries Road/Hoadly Road and Prince William Parkway/Davis Ford Road/Hoadly Road. The extension of this roadway should include the analysis of additional traffic safety improvements to mitigate cut-through traffic and speeding to include Pole Mounted Speed Signs and Roundabouts. The recommended right-of-way corresponds with the RM-2 standard typical section.

Powells Creek Boulevard (Richmond Highway/Route 1 to River Ridge Boulevard) (90’ - 110’, existing) – This road provides additional access to Richmond Highway (Route 1) for the communities adjacent to the roadway. The recommended right-of-way corresponds with the existing right-of-way acquired for this road.

Purcell Road (Dumfries Road/Route 234 to Hoadly Road) (MC-77’ RM-2 modified standard) – This roadway provides an extension of Dale Boulevard to help facilitate traffic coming to and from Dumfries Road. The recommended right-of-way corresponds with the RM-2 standard typical section. The County should coordinate with VDOT to identify safety and operational improvements and pedestrian/bicycle facilities are recommended for this roadway.

Reddy Drive (Richmond Highway/Route 1 to Blackburn Road) (existing) – This road serves as a connector for the Opitz/Neabsco Mills loop road as it crosses Richmond Highway (Route 1) and to Rippon Boulevard. It also provides an extension of Opitz Boulevard east of Route 1/Richmond Highway and serves as a link in the “loop road” connection in the Potomac Communities (along Opitz Boulevard, Blackburn Road, and Neabsco Mills Road). The right-of-way recommended for this roadway corresponds with the existing right-of-way.

Ridgefield Road (Prince William Parkway/Route 294 to Dale Boulevard) (110’ existing) – This road provides an additional connection between Dale Boulevard and the Prince William Parkway and offers an alternative to Hillendale Drive. This road provides substantial traffic relief to Hillendale Drive and other residential roadways connecting to Dale Boulevard and/or the Prince William Parkway.

Rippon Boulevard (Richmond Highway/Route 1 to Farm Creek Road) (104' MC-1 standard) – Rippon Boulevard provides access to the Rippon VRE commuter rail station from Richmond Highway (Route 1) and I-95 (through Dale Boulevard). Additionally, Rippon Boulevard provides access to the Featherstone Industrial Center. Although constrained along the eastern end of the roadway due to residential development, the recommended right-of-way corresponds with the standard MC-1 typical section.

River Ridge Boulevard (Richmond Highway/Route 1 to Wayside Drive) (90’ - 110’ and existing) – This road provides access to the adjacent residential communities from Richmond Highway (Route 1). The recommended right-of-way corresponds with the acquired and existing right-of-way for this roadway.

Route 29 Alternate Route (Lee Highway/Route 29 to Fairfax County) (MC-1 modified). This roadway will provide the southern bypass of the Manassas National Battlefield Park to facilitate closing Lee Highway and Sudley Road to through trips in the Park. A 4-lane major collector with a shared use path on the south side with a reduced right-of-way through the Park is recommended (right-of-way to be determined in conjunction with the NPS). It should be noted that Fairfax County does not provide a connection to this road so that it connects back to Rt. 29 in Fairfax County. This alignment is dependent on a Comprehensive Plan update in Fairfax County. There is no need for both the Rt. 29 Alternate and the Manassas Battlefield Bypass. Both have been included in the

Roadway Plan to provide alternatives for restricting through traffic through the Manassas Battlefield Park, a goal of the National Park Service.

Signal Hill Road (Liberia Avenue to Signal View Drive) (68' existing) – This road provides access to and from the residential and retail developments that surround it. The recommended right-of-way corresponds with existing right-of-way.

Signal View Drive (City of Manassas Park to Signal Hill Road) (100' existing) – This road serves local traffic generated in residential areas north of the Prince William Parkway and provides access to Manassas Drive and areas within the City of Manassas Park (including the Manassas Park VRE via Manassas Drive). The recommended right-of-way corresponds with the existing right-of-way.

Smoketown Road (Griffith Avenue to Old Bridge Road) (existing) – This roadway provides access to and from the residential and commercial areas to the north of Old Bridge Road. The recommended right-of-way corresponds with existing right-of-way.

Springwoods Drive (Old Bridge Road to Chanceford Drive) (100' existing) – This road collects residential traffic originating in the adjoining subdivisions and distributes it to Old Bridge Road. The recommended right-of-way corresponds with existing right-of-way.

Telegraph Road (to be renamed) (Minnieville Road to Terminus) (existing RM-1 standard) – This road is down planed from a four-lane minor arterial to a two-lane major collector due to the construction of Summit School Road (now Telegraph Road).

Thoroughfare Road (James Madison Highway/Route 15 to Old Carolina Road) (existing RM-2 standard modified) – This road provides improved access to residential uses in the Lee Highway (Route 29) corridor and a connection between Old Carolina Road and Rt. 15 as an alternative to Somerset Crossing Drive.

Van Buren Road – North (Cardinal Drive to Dumfries Road/Route 234) (104' MC-1 standard) – This road would parallel I-95 and is proposed to connect to Cardinal Drive across from Benita Fitzgerald Drive. This road will allow an alternate route and can remove local traffic from I-95. The recommended right-of-way corresponds with the MC-1 standard typical section.

Van Buren Road – South (Dumfries Road/Route 234 to Batestown Road) (104' MC-1 standard) –This roadway parallels I-95 and provides access to and from the Town of Dumfries. This road will allow an alternate route and can remove local traffic from I-95. The recommended right-of-way corresponds with the MC-1 standard typical section.

Waterway Drive (Dumfries Road/Route 234 to Cardinal Drive) (110' existing) – This four-lane road serves local traffic generated within Montclair and provides access for this community onto Dumfries Road and Cardinal Drive. The recommended right-of-way corresponds with existing right-of-way.

Wayside Drive (Richmond Highway/Route 1 to Medford Drive) (90’ – 110’ existing) – Wayside Drive serves as the major roadway connection for the Wayside Village community and provides access to Richmond Highway (Route 1) for additional communities to the east of the Town of Dumfries. The recommended right-of-way corresponds with right-of-way.

Williamson Boulevard (Sudley Road/Route 234 Business to Portsmouth Road) (variable, up to 90’) – This road is designed to relieve Sudley Road of local traffic generated by properties to the east of the roadway. The recommended right-of-way corresponds with existing right-of-way acquired for this road.

Yates Ford Road (Prince William Parkway/Route 294 to Davis Ford Road) (100’); (Davis Ford Road to Fairfax County) (existing) – Yates Ford Road distributes traffic from Fairfax County to the Prince William Parkway. The recommended right-of-way corresponds with the existing right-of-way.

TRANSIT PLAN

INTENT

Transit plays a major role in mobility for Prince William County. Public transit services are primarily provided by the Potomac Rappahannock Transportation Commission ("PRTC") which operates as OmniRide by providing express and local bus services, and the Virginia Railway Express ("VRE") which provides commuter rail services. Prince William County works closely with OmniRide and VRE to ensure that mobility needs and goals in the County are met. The County partners with OmniRide, VRE, and other transit agencies on transportation planning initiatives, strategies, transit projects, policy issues, and general coordination of local plans. Since Prince William County does not operate transit services within its boundaries, the County partners and coordinates very closely with PRTC and VRE on transit related plans. In addition, the County works with other transit agencies such as the Virginia Department of Rail and Public Transportation to identify potential future transit alternatives to include the extension of Metrorail, high-capacity transit options, and other transit opportunities.

OmniRide is a public transportation agency located in Woodbridge, Virginia, and is the operational name for mobility services offered by PRTC. OmniRide's goal is to provide safe, reliable, and flexible mobility options with the intent of reducing congestion and pollution. In addition to Prince William County, there are five other jurisdictions that are members of PRTC to include the City of Manassas, City of Manassas Park, Stafford County, Spotsylvania County, and Fredericksburg City where each jurisdiction collects a 2.1% motor fuels tax which is used to subsidize transit services. Currently, Prince William County allocates all of the 2.1% motor fuels tax collected in the County to support OmniRide. OmniRide operates express and local bus services in neighborhoods surrounded by the busy I-95 and I-66 corridors. In addition, PRTC promotes carpools and vanpools, encourages Transportation Demand Management Strategies, and works with employers to support commuter benefit programs. OmniRide currently implements a Strategic Plan that connects the local visions with strategies and actions. In 2016, OmniRide started developing this plan to help shape the agency's services for the next decade. The plan has three phases which includes developing strategies for establishing alternative funding mechanisms and sources, reevaluating OmniRide's vision to identify strategic recommendations for future services, and detailed plans for future transportation services and Transportation Demand Management ("TDM") initiatives.

The Virginia Railway Express is a joint project between PRTC and the Northern Virginia Transportation Commission with the goal of providing safe, cost effective, accessible, reliable, convenient, and comfortable commuter-oriented rail passenger service between Prince William County and Washington, D.C. VRE began in 1992, operating 16 trains from 16 stations and carried, on average, 5,800 passengers daily. In 2019, VRE operated 30 trains from 19 stations and carry, on average, 20,000 passengers daily. This includes 5 stations in Prince William County. VRE is overseen by the VRE Operations Board, consisting of members from each of the jurisdictions to include Prince William County that supports VRE, and supervises all operating aspects of the

Virginia Railway Express. Prince William County provides local funds to support operating and capital expenses at VRE. Prince William County's subsidy is based on the VRE Master Agreement and calculated using passenger survey data. VRE has two primary plans, the VRE System Plan 2040, which provides a framework for system investments and actions to pursue through 2040 to best meet regional travel needs and a Transit Development Plan which provides an overview of all major VRE projects and initiatives. It includes a six-year plan and a fiscally unconstrained Plan.

Please visit OmniRide (www.omniride.com) and VRE (www.vre.org) websites to view the latest relevant plans.

Transit Connectivity Map

The Transit Connectivity Map was developed in coordination with OmniRide and VRE to identify potential transit connections, such as bus routes, high-capacity transit, or on-demand/micro-transit between development focus areas including activity centers, redevelopment corridors, small area plans, hamlets, and villages. The intent of this map is to provide general guidance on how key areas in the County can potentially be connected through various transit routes by 2040. The connections identified are the groundwork for additional analysis to be conducted as demand for these services increases. Future routes may be different than what is shown. Further coordination with OmniRide will need to occur to ensure new services coincide with future development and growth in these areas.

Future Transit Alternatives Map

The Future Transit Alternatives Map identifies potential transit options and alternatives that may or may not occur by 2040 and will require additional feasibility studies or analyses. This map identifies potential transit alternatives and hubs based on future land uses. Since the implementation of various transit alternatives does not fall within Prince William County control, these alternatives will require further coordination with various transit stakeholders. Many alternatives identified have policy implications and will need to be further evaluated.

The Transit Connectivity and Future Transit Alternatives Maps include various elements to include the following:

- Current and Potential Bus Routes – Identifies existing and potential OmniRide bus routes.
- Commuter Lot - Allows commuters to park at a convenient commuter lot location and then finish their commute using alternative transportation modes such as carpool, vanpool, bus, train, bike, or walking.
- On-Demand or Micro-Transit – Shared public transit transportation that serves passengers using dynamically-generated routes in response to demand. Passengers may be expected to travel to and from common pick-up or drop-off areas.
- Ferry Terminal – Serves as a fixed location for the loading, boarding, departure, or arrival of a recreation or commuter ferry service.

- High-Capacity Transit (“HCT”) – Covers various public transit options that provide a substantially higher level of passenger capacity and includes transit technology that operates on separate right of way. Examples include Bus Rapid Transit, Light Rail Train, or High Frequency Bus Service (both local and regional).
- VRE Facilities – Identifies existing and potential Virginia Railway Express stations.
- Metrorail Facilities – Identifies potential Metrorail stations and routes
- Multimodal Hub – A centralized location which allows passengers and users to switch between different modes of transportation
- Transit District or Center – A location where public transportation routes converge.
- Shuttle/Trolley - Potential shuttle service to include a trolley that would connect major subareas and surrounding areas of a Small Area Plan or Activity Center.

TRANSIT CONNECTIVITY MAP

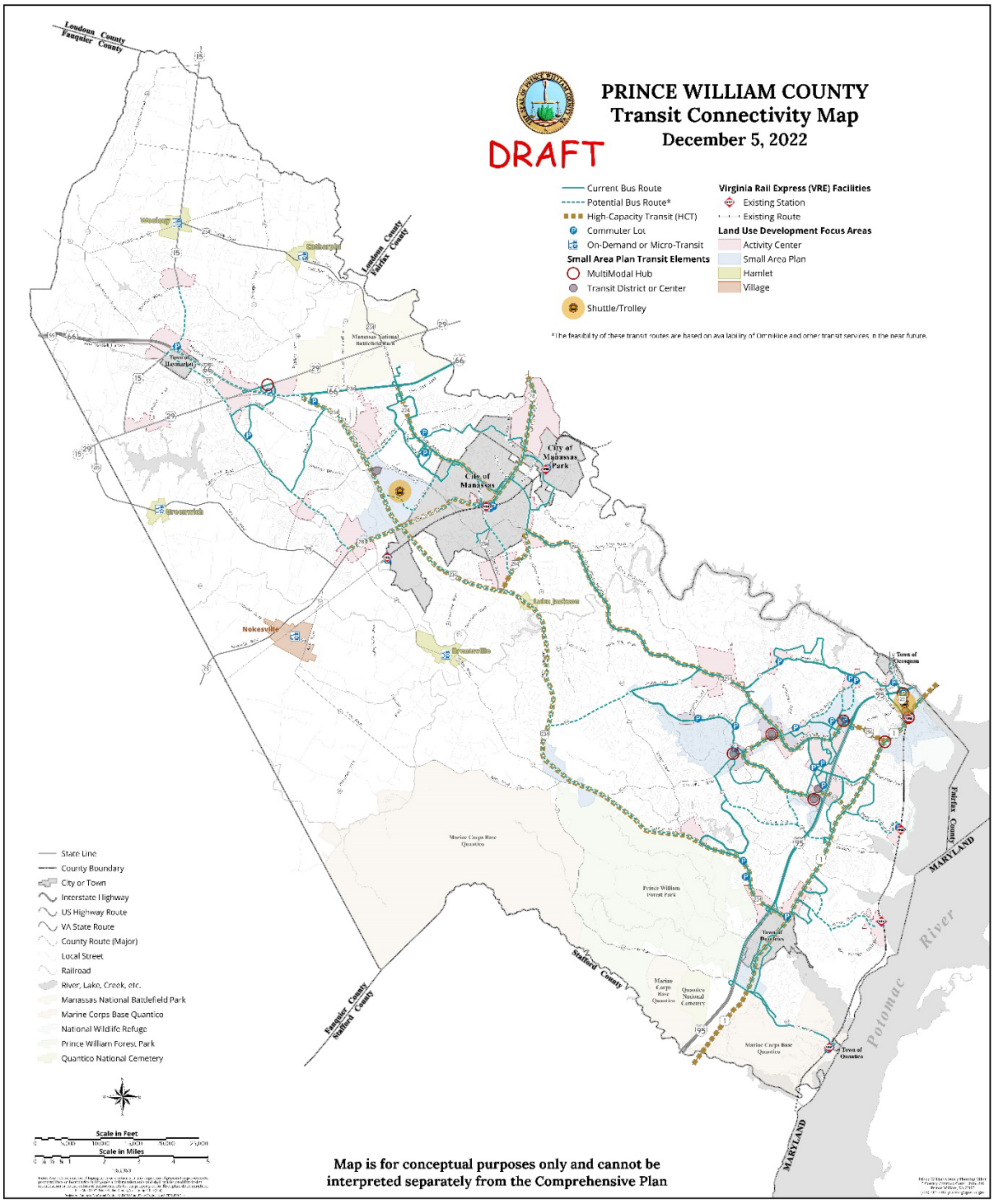

Figure 2: Transit Connectivity Map

[Link to Full Sized Map]

FUTURE TRANSIT ALTERNATIVES MAP

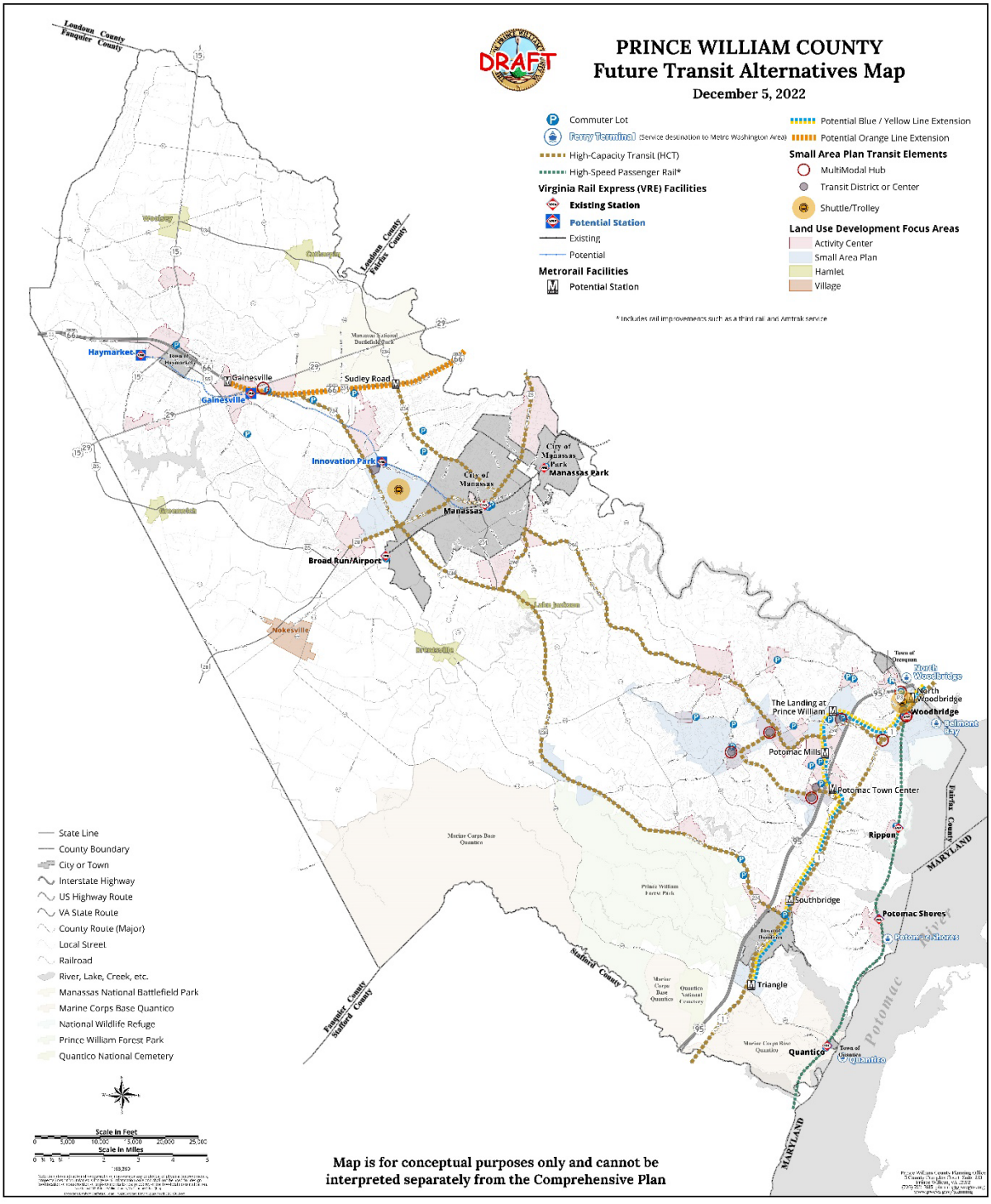

Figure 3: Future Transit Alternatives Map

[Link to Full Sized Map]

COUNTYWIDE TRAILS PLAN

INTENT

Trails are a crucial component of providing a safe, reliable, and interconnected multimodal mobility network. Planning for redundant systems of mobility ultimately enable residents to choose the mode of transportation which best suits their needs such as exercise, access to transit, commute to work, school, shopping, or other destinations. Access to a robust active mobility network gives County residents a healthy alternative to reach their destination and reduces vehicle traffic and greenhouse gas emissions.

A primary component of active mobility are recreational trails which focus on providing recreational opportunities to everyone. These trails can be muti-faceted and serve a variety of activities including walking, jogging, hiking, cycling, mountain biking, equestrian riding, and in the instance of blueway trails can include paddling/boating. Previously, trails were primarily considered non-motorized transportation facilities, but with the advent of new technologies like electric bicycles, the variety of users is increasing and design parameters for trails of all types are continually changing.

The successful development of an interconnected, multimodal, Countywide active mobility and trail network takes investment and planning at multiple levels. The planned and proposed trails identified on the Countywide Trails map should be given high priority when reviewing land development applications and investment of various funding sources (i.e., development proffers, grants, bonds, etc.). In addition to the trails shown on the Countywide Trails map, all communities should be developed with appropriate pedestrian connections (sidewalks, paths, recreational trails, etc.) that enable residents within these communities to be directly connected from their residences to the Countywide trail network. Connections at this level will help ensure that residents have greater access to recreation, transit, places of employment, and will result in a decreased dependence on vehicles.

COUNTYWIDE TRAILS MAP AND SUMMARY TABLES

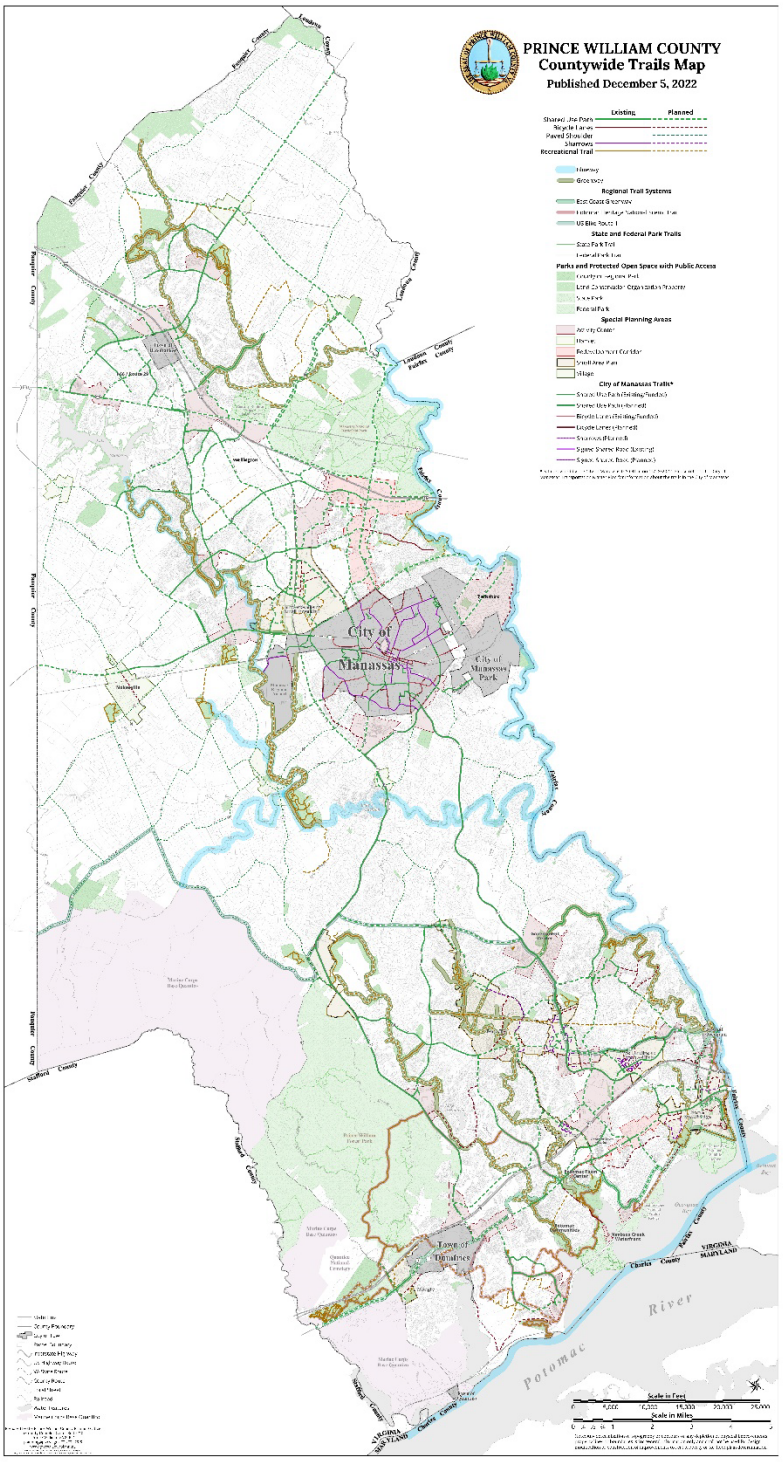

Figure 4: Countywide Trails Map

[Link to Full Sized Map]

Table 4: Bicycle Facility Summary

FACILITY	TERMINI	FACILITY TYPE
Aden Road	Nokesville Road (Route 28) to Joplin Road	Paved Shoulder
Aden Road	Joplin Road to Bristow Road	Shared Use Path
Annapolis Way	Gordon Boulevard to Richmond Highway (Route 1)	Bike Lanes
Antietam Road	Cotton Mill Drive to Old Bridge Road	Bike Lanes
Antioch Road	James Madison Highway (Route 15) to Waterfall Road	Paved Shoulder
Ashton Avenue	Balls Ford Road to Godwin Drive	Shared Use Path
Balls Ford Road	Wellington Road to Mayhew Sports Complex	Shared Use Path
Bayside Avenue	East Longview Drive to Mount Pleasant Drive	Bike Lanes

FACILITY	TERMINI	FACILITY TYPE
Belmont Bay Drive	Gordon Boulevard (Route 123) to Palisades Street	Shared Use Path
Belmont Bay Drive	Palisades Street to Harbor Side Street	Bike Lanes
Benita Fitzgerald Drive	Dale Boulevard to Cardinal Drive	Shared Use Path
Bethlehem Road	Balls Ford Road to Sudley Manor Drive	Shared Use Path
Blackburn Road	Featherstone Road to Rippon Boulevard	Bike Lanes
Brentsville Road	Prince William Parkway to Lucasville Road	Paved Shoulder
Bristow Road	Nokesville Road (Route 28) to Independent Hill Drive	Paved Shoulder
Bristow Road	Independent Hill Drive to Dumfries Road (Route 234)	Shared Use Path
Burwell Road	Vint Hill Road to Fitzwater Drive	Paved Shoulder

FACILITY	TERMINI	FACILITY TYPE
Carriage Ford Road	Aden Road to Fauquier County Line ("CL")	Paved Shoulder
Cardinal Drive	Minnieville Road to Richmond Highway (Route 1)	Shared Use Path
Catharpin Road	Sudley Road (Route 234) to Fallen Oaks Place	Paved Shoulder
Catharpin Road	Fallen Oaks Place to John Marshall Highway (Route 55)	Shared Use Path
Caton Hill Road	Minnieville Road to Prince William Parkway (Route 294)	Shared Use Path
Centreville Road	City of Manassas CL to City of Manassas Park CL	Shared Use Path
Centreville Road	City of Manassas Park CL to Fairfax CL	Shared Use Path
Chanceford Drive	Springwoods Drive to Greatbridge Road	Shared Use Path
Clover Hill Road	Harry J. Parrish Boulevard to Prince William Parkway (Route 234)	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Cockpit Point Road	Possum Point Road to termini	Bike Lanes
Colchester Road	Featherstone Road to termini	Bike Lanes
Colvin Lane	Aden Road to Valley View Drive	Paved Shoulder
Cotton Mill Drive	Griffith Avenue to Hedges Run Drive	Shared Use Path
Cotton Mill Drive	Hedges Run Drive to Mohican Road	Bike Lanes
Course View Way	Dawson Beach Road to Belmont Bay Drive	Bike Lanes
Coverstone Drive	Bethlehem Road to Sudley Road (Route 234 Business)	Shared Use Path
Crockett Road	Valley View Drive to Old Church Road	Paved Shoulder
Cushing Road	Balls Ford Road to I-66	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Dale Boulevard	Hoadly Road to Ridgefield Road	Shared Use Path
Dale Boulevard	Ridgefield Road to Glendale Road	Sharrows
Dale Boulevard	Glendale Road to Darbydale Avenue	Shared Use Path
Dale City Small Area Plan – East Gateway Proposed Road Network	See Dale City Small Area Plan for more details	Sharrows
Dale City Small Area Plan – Mapledale Node Proposed Road Network	See Dale City Small Area Plan for more details	Shared Use Path
Dale City Small Area Plan – Minnieville Node Proposed Road Network	See Dale City Small Area Plan for more details	Bike Lanes/Sharrows
Dale City Small Area Plan – Parkway Node Proposed Road Network	See Dale City Small Area Plan for more details	Shared Use Paths/Sharrows
Darbydale Avenue	Minnieville Road to Evergreen Drive	Bike Lanes
Davis Ford Road	Yates Ford Road to Prince William Parkway (Route 294)	Paved Shoulder

FACILITY	TERMINI	FACILITY TYPE
Dawson Beach Road	Richmond Highway (Route 1) to Occoquan Bay National Wildlife Refuge	Shared Use Path
Delaney Road	Dale Boulevard to Minnieville Road	Bike Lanes
Devils Reach Road	Carolyn Forest Drive to Occoquan Road	Bike Lanes
Devlin Road	Linton Hall Road to Wellington Road	Shared Use Path
Dumfries Road	Brentsville Road to Richmond Highway (Route 1)	Shared Use Path
Dumfries Road	City of Manassas CL to Prince William Parkway (Route 234)	Shared Use Path
East Longview Drive	Richmond Highway (Route 1) to Harrison Street	Bike Lanes
Elm Farm Road	Prince William Parkway to Minnieville Road	Shared Use Path
Express Drive	Dawson Beach Road to Belmont Bay Drive	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Euclid Avenue	City of Manassas CL to City of Manassas Park CL	Bike Lanes
Farm Creek Drive	Featherstone Road to Rippon Boulevard	Shared Use Path
Featherstone Road	Richmond Highway (Route 1) to Marseille Lane	Shared Use Path
Featherstone Road	Marseille Lane to Bay Street	Bike Lanes
Fisher Avenue	Harrison Street to Mt. Pleasant Drive	Sharrows
Fitzwater Drive	Nokesville Road (Route 28) to Aden Road	Bike Lanes
Fitzwater Drive	Burwell Road to Nokesville (Route 28)	Paved Shoulder
Fleetwood Drive	Fauquier CL to Parkgate Drive	Paved Shoulder
Freedom Center Boulevard	University Boulevard to Wellington Road	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Fuller Heights Road	Fuller Road to Fuller Heights Park	Shared Use Path
Fuller Road	Joplin Road to Fuller Heights Road	Shared Use Path
Gideon Drive	Dale Boulevard to Smoketown Road	Shared Use Path
Glenkirk Road	Linton Hall to Hamill Run Drive	Shared Use Path
Godwin Drive	City of Manassas CL to Dumfries Road (Route 234 Business)	Bike Lanes
Golansky Boulevard	Prince William Parkway to Smoketown Road	Bike Lanes
Gordon Boulevard	Fairfax CL to Express Drive / Belmont Bay Drive	Shared Use Path
Graduation Drive	James Madison Highway (Route 15) to terminus	Shared Use Path
Greatbridge Road	Chanceford Drive to Old Bridge Road	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Griffith Avenue	Smoketown Road to Cotton Mill Drive	Shared Use Path
Groveton Road	Balls Ford Road to Route 29 Alternate	Shared Use Path
Gum Spring Road	Loudoun CL to Sudley Road (Route 234)	Shared Use Path
Hamill Run Drive	Glenkirk Road to Rollins Ford Road	Shared Use Path
Harbor Side Street	Palisades Street to Belmont Bay Drive	Bike Lanes
Harrison Street	East Longview Drive to Fisher Avenue	Sharrows
Hazelwood	Carriage Ford Road to Fleetwood Drive	Paved Shoulder
Heathcote Boulevard	Lee Highway (Route 29) to Antioch Road	Shared Use Path
Hedges Run Drive	Cotton Mill Drive to Old Bridge Road	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Hereford Road	Minnieville Road to Forestdale Avenue	Bike Lanes
Hillendale Drive	Prince William Parkway (Route 294) to Dale Boulevard	Shared Use Path
Hoadly Road	Dumfries Road (Route 234) to Prince William Parkway (Route 294)	Shared Use Path
Hooe Road	Bristow Road to Crockett Road	Paved Shoulder
Hornbaker Road	Wellington Road to Nokesville Road (Route 28)	Shared Use Path
Horner Road	Summerland Drive to Occoquan Road	Shared Use Path
Horner Road	Occoquan Road to Gordon Boulevard	Sharrows
Hylton Center Boulevard	Prince William Parkway to George Mason Circle	Bike Lanes
Independent Hill Drive	Dumfries Road (Route 234) to Bristow Road	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Industrial Way	Pump Station Way to Hornbaker Road	Paved Shoulder
Innovation Park William Small Area Plan -Proposed Road Network	See Innovation Park Small Area Plan for more details	Bike Lanes/Sharrows
James Madison Highway	Loudoun CL to Lee Highway (Route 29)	Shared Use Path
John Marshall Highway	Fauquier CL to Throughfare Road	Paved Shoulder
John Marshall Highway	Thoroughfare Road to Haymarket town limits	Shared Use Path
John Marshall Highway	Haymarket town limits to Lee Highway (Route 29)	Shared Use Path
Joplin Road	Aden Road to Independence Nontraditional School	Shared Use Path
Joplin Road	Park Entrance Road to Fuller Road	Shared Use Path
Kahns Road	Purcell Road to Hoadly Road	Paved Shoulder

FACILITY	TERMINI	FACILITY TYPE
Kathrine Johnson Avenue	Wellington Road to University Boulevard (Innovation Town Center)	Bike Lanes
Kettle Run Road	Vint Hill Road to Fitzwater Drive	Paved Shoulder
Keyser Road	Bristow Road to Orlando Road	Paved Shoulder
Lake Drive	Pine Road to terminus	Bike Lanes
Lake Jackson Drive	City of Manassas CL to Dumfries Road (Route 234)	Paved Shoulder
Landing at Prince William Small Area Plan Proposed Road Network	See Landing at Prince William Small Area Plan for more details	Bike Lanes/Sharrows
Lee Highway	Fauquier CL to Pageland Lane	Shared Use Path
Limestone Drive	Wellington Road to Linton Hall Road	Shared Use Path
Linton Hall Road	Lee Highway (Route 29) to Gateway Center Drive	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Linton Hall Road	Gateway Center Drive to Nokesville Road (Route 28)	Shared Use Path
Logmill Road	Mountain Road to Sudley Road	Paved Shoulder
Lomond Drive	Route 28 Bypass to City of Manassas CL	Shared Use Path
Lucasville Road	City of Manassas CL to Bristow Road	Paved Shoulder
Manassas Battlefield Bypass	Sudley Road to Fairfax CL	Shared Use Path
Marina Way	Occoquan Road to Annapolis Way	Sharrows
Marina Way	Annapolis Way to Termini	Shared Use Path
McGraws Corner Drive	Somerset Crossing to Lee Highway (Route 29)	Shared Use Path
Minnieville Road	Dumfries Road (Route 234) to Old Bridge Road	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Mohican Road	Cotton Mill Drive to Cromwell Court	Bike Lanes
Moore Drive	Signal Hill Road to Prince William Parkway (Route 294)	Paved Shoulder
Mountain Road	Loudoun CL to Waterfall Road	Paved Shoulder
Mount Pleasant Drive	Richmond Highway (Route 1) to Bayside Avenue	Bike Lanes
Mount Pleasant Drive	Bayside Avenue to Fisher Avenue	Sharrows
Neabsco Mills Road	Opitz Boulevard to Richmond Highway (Route 1)	Shared Use Path
Neabsco Road	Richmond Highway (Route 1) to Indus Drive	Shared Use Path
Neabsco Road	Indus Drive to Daniel Ludwig Drive	Bike Lanes
Nokesville Road	Fauquier CL to City of Manassas CL	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Occoquan Road	Old Bridge Road to Richmond Highway (Route 1)	Bike Lanes
Old Bridge Road	Prince William Parkway (Route 294) to Gordon Boulevard (Route 123)	Shared Use Path
Old Carolina Road	James Madison Highway (Route 15) to Haymarket TL	Shared Use Path
Old Carolina Road	Haymarket TL to Lee Highway (Route 29)	Shared Use Path
Old Centreville Road	Fairfax CL to Centerville Road (Route 28)	Shared Use Path
Old Church Road	Bristow Road to Parkgate Drive	Paved Shoulder
Old Triangle Road	Town of Dumfries TL to Fuller Heights Road	Bike Lanes
Opitz Boulevard	Richmond Highway (Route 1) to Gideon Drives	Shared Use Path
Orlando Road	Keyser Road to Aden Road	Paved Shoulder

FACILITY	TERMINI	FACILITY TYPE
Owls Nest Road	Vint Hill Road to Burwell Road	Paved Shoulder
Pageland Lane	Sudley Road (Route 234) to Groveton Road	Shared Use Path
Palisades Street	Belmont Bay Drive to Harbor Side Street	Bike Lanes
Parkgate Drive	Valley View Drive to Fleetwood Drive	Paved Shoulder
Parkgate Drive	Old Church Road to Aden Road	Paved Shoulder
Portsmouth Road	Williamson Boulevard to Sudley Road (Route 234 Business)	Shared Use Path
Potomac Shores Parkway	Town of Dumfries TL to the second intersection with River Heritage Boulevard	Shared Use Path
Prince William Parkway (Route 294)	Liberia Avenue to Dumfries Road	Shared Use Path
Prince William Parkway (Route 294)	Liberia Avenue to Richmond Highway (Route 1)	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Prince William Parkway (Route 234)	Balls Ford Road to Innovation Drive Connector Trail	Shared Use Path
Prince William Parkway (Route 234)	City of Manassas CL to Liberia Avenue	Shared Use Path
Pump Station Way	Industrial Road to Broad Run Linear Park	Paved Shoulder
Purcell Road	Vista Brooke Drive to Token Forest Drive	Paved Shoulder
Purcell Road	Token Forest Drive to Hoadly Road	Shared Use Path
Purcell Road	Dumfries Road (Route 234) to Vista Brooke Drive	Shared Use Path
Reddy Drive	Richmond Highway (Route 1) to Blackburn Road	Shared Use Path
Regency Road	Dawson Beach Road to Wood Street	Bike Lanes
Residency Road	Nokesville Road (Route 28) to Broad Run VRE Station	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Richmond Highway	Fairfax CL to Town of Dumfries	Shared Use Path
Richmond Highway	Town of Dumfries to Stafford CL	Shared Use Path
Ridgefield Road	Prince William Parkway (Route 294) to Dale City Small Area Plan Street 30	Shared Use Path
Rippon Boulevard	Richmond Highway (Route 1) to Farm Creek Drive	Shared Use Path
River Heritage Boulevard	Richmond Highway (Route 1) to Potomac Station Way	Shared Use Path
Rixlew Lane	Wellington Road to Sudley Road (Route 234 Business)	Shared Use Path
Rollins Ford Road	Linton Hall Road to University Boulevard	Shared Use Path
Route 28 Bypass / Godwin Drive Extended	Sudley Road (Route 234) to Fairfax CL	Shared Use Path
Route 29 - Alternate Route	Lee Highway (Route 29) to Fairfax CL	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Russell Road	Prince William Parkway (Route 294) to Dale City Small Area Plan Boundary	Paved Shoulder
Signal Hill Road	Liberia Avenue to Signal View Drive	Shared Use Path
Signal Hill Road	Signal View Road to Moore Drive	Paved Shoulder
Signal View Drive	Manassas Drive to Signal Hill Road	Shared Use Path
Smoketown Road	Griffith Avenue to Gideon Drive	Shared Use Path
Somerset Crossing Drive	James Madison Highway (Route 15) to Lee Highway (Route 29)	Shared Use Path
Spriggs Road	Hoadly Road to Dumfries Road (Route 234)	Shared Use Path
Springwoods Drive	Chanceford Drive to Old Bridge Road	Shared Use Path
Sudley Manor Drive	Vint Hill Road to Sudley Road	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Sudley Manor Drive	Sudley Road (Route 234 Business) to Ben Lomond Park Drive	Bike Lanes
Sudley Road (234 Business)	I-66 to City of Manassas CL	Shared Use Path
Sudley Road	US 15 to I-66	Shared Use Path
Summit School Road (To be renamed Telegraph Road)	Minnieville Road to Optiz Boulevard	Shared Use Path
Summerland Drive	Horner Road to Prince William Parkway	Shared Use Path
Thomasson Barn Road	Hornbaker Road to Discovery Boulevard	Shared Use Path
Thoroughfare Road	John Marshall Highway (Route 55) to James Madison Highway (Route 15)	Paved Shoulder
Thoroughfare Road	James Madison Highway (Route 15) to Hopewells Landing Drive	Shared Use Path
University Boulevard	Lee Highway (Route 29) to Godwin Drive	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Valley View Drive	Parkgate Drive to Bristow Road	Paved Shoulder
Van Buren Road-North	Cardinal Drive to Dumfries Road (Route 234)	Shared Use Path
Veterans Drive	Bay Street to Veterans Memorial Park	Bike Lanes
Vint Hill Road	Fauquier CL to Rollins Ford Road	Paved Shoulder
Vint Hill Road	Rollins Ford Road to Nokesville Road (Route 28)	Shared Use Path
Waterfall Road	US 15 to Antioch to James Madison Highway (Route 15)	Shared Use Path
Waterfall Road	Antioch Road to Mountain Road	Paved Shoulder
Waterway Drive	Dumfries Road (Route 234) to Cardinal Drive	Bike Lanes
Wellington Road	Linton Hall Road to Prince William Parkway (Route 234) Godwin Drive	Shared Use Path

FACILITY	TERMINI	FACILITY TYPE
Wellington Road	Prince William Parkway (Route 234) to Godwin Drive	Shared Use Path
Williamson Boulevard	Sudley Road (Route 234 Business) to Portsmouth Road	Shared Use Path
Wood Street	Belmont Bay Drive to Regency Road	Bike Lanes
Yates Ford Road	Prince William Parkway (Route 294) to Fairfax CL	Paved Shoulder

Table 5: Greenway Trail Summary

GREENWAY TRAILS	TERMINI	INTERIM SITES
Catharpin Creek	Bull Run Mountain to Pageland Lane	James S. Long Regional Park
Little Bull Run	Silver Lake Regional Park to Sudley Rd (Route 234)	Conway Robinson SP
Rocky Branch	Bridlewood-Rocky Branch Park site to Broad Run Linear Park	Bristow Run ES
Broad Run (north)	Lake Manassas to Rt. 28	Rollins Ford Park, Broad Run Linear Park, Victory Lakes ES
Broad Run (south)	Brentsville Historic Site to Doves Landing Park/Sinclair Mill site	N/A
Bull Run	Manassas National Battlefield Park to Ben Lomond Regional Park	Mayhew Sports Complex
Occoquan	PWC Government Center to Town of Occoquan	Lake Ridge Marina & Golf Course
Neabsco Creek	Hoadly Road to Neabsco Regional Park	Saratoga Hunt Park site, Greenwood Farms Park site, Sharron Baucom-Dale City Recreation Center, Cloverdale Park

GREENWAY TRAILS	TERMINI	INTERIM SITES
Powell's Creek (north)	Colgan High School to Forest Park High School	Landfill Environmental Center (future), Minnieville Manor Park
Powell's Creek (south)	Forest Park High School to Powell's Landing Park	N/A
Potomac Heritage National Scenic Trail (PHNST)	Town of Occoquan to Stafford County line	Occoquan Bay NWR, Veterans Memorial Park, Featherstone NWR, Neabsco Regional Park, Leesylvania State Park, Cockpit Point Battery site, Town of Dumfries, Prince William Forest Park, Locust Shade Park
East Coast Greenway (ECG)	Fairfax County line to Stafford County line	Primarily overlaps with PHNST corridor

Table 6: Blueway Trail Summary

BLUEWAY TRAIL	PLANNED PUT-IN/TAKE-OUT	STATUS
Cedar Run	Aden Road/Doves Landing Park	Planned; no facilities
Broad Run (north)	Lake Manassas to Broad Run VRE Station	Planned; no facilities; navigability is TBD
Broad Run (south) Valley View Park	Brentsville Historic Site to Doves Landing Park	Planned; no facilities
Occoquan River	Doves Landing to Lake Ridge Park Marina	Available to public; parking at Occoquan River access is limited; entrance is steep
Bull Run/ Occoquan	Ben Lomond Park to Lake Ridge Park Marina	Planned; no facilities in Ben Lomond Park

APPENDIX A

LEVEL OF SERVICE STANDARDS FOR ROADWAYS AND INTERSECTIONS

New development creates demands on County roadways and intersections that affect the ability of those facilities to meet established level of service (LOS) standards. Therefore, it is important that new roadways, innovative intersections and widened facilities be provided in order to address this demand. As such, proposed developments must be evaluated in order to quantify impacts to roadways and intersections caused by that development and the needed improvements to mitigate the development's impacts and maintain or achieve the acceptable County standard for LOS. Additionally, the demand for future roadway improvements based on development growth should be monitored, and methods for maintaining an acceptable roadway LOS must be evaluated.

Applicants for rezonings or special use permits for all uses should propose mitigation measures to address project impacts in order to meet the established LOS standards for roadways and intersections. The County will conduct project site specific, individualized assessments then determine whether any proffers or special use permit conditions meet Constitutional and Virginia Code requirements.

The standard measurement for level of service is based on the following criteria as established by the most recent edition of the Transportation Research Board's "Highway Capacity Manual"[1]:

- LOS A through LOS F for roadways based on volume to capacity ratios of the roadway link.
- LOS A through LOS F for intersections based on average intersection delay of the intersections.

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[1] ***LOS A*** describes primarily free-flow operations at average travel speeds, usually about 90 percent of free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Average delay at signalized and unsignalized intersections is minimal.

LOS B represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification. The ability to maneuver within the traffic stream is only slightly restricted and on average, intersection related delays are not bothersome. Drivers are not generally subjected to appreciable tension.

LOS C represents stable operations; however, ability to maneuver and change lanes in mid-block locations may be more restricted than at LOS B.-Longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the roadway's average free-flow speed. Intersection related delays may begin to become problematic for some movements. Motorists will experience appreciable tension while driving.

LOS D borders on a range in which small increases in flow may cause substantial increases in delay and hence, decreases in arterial speed. LOS D may be due to adverse signal progressions, inappropriate signal timing, high volumes, or some combination of these factors. Average travel speeds are about 40 percent of free-flow speed. Intersection delays are problematic for many of the critical movements (i.e. side streets or turning movements) although the intersection as a whole may still be functional.

LOS E is characterized by significant delays and low average travel speeds of one-third the free-flow speed or less. Such operations are caused by some combination of: adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing. At intersection LOS E, critical movements have high average delays and the intersection as a whole reaches the point of near gridlock.

LOS F characterizes arterial flow at extremely low speeds below one-third to one-fourth of the free-flow speed. Congestion is likely at signalized intersections, as well as high delays and extensive queuing. Adverse progression is frequently a contributor to this condition.

The LOS rating system to measure traffic congestion on roadway segments, intersections and entire urban areas was initially presented in the 1965 *Highway Capacity Manual.* VDOT, FHWA, and the County use LOS as a benchmark for the success of regional and local transportation roadway networks. The fundamental reason that state and local governments plan new or widen roads is to improve LOS during the peak hours, which creates roads that may be underutilized during the rest of the day.

While congestion is a considerable problem, it is not the County's only problem. The County has recognized the need for multimodal levels of service through the Strategic Plan's Mobility Goal to "have an accessible, comprehensive, multimodal network of transportation infrastructure that supports local and regional mobility." One of the objectives to achieve this goal recognizes the need to build a robust economy and to provide more job opportunities within the County to help reduce commute times and congestion issues. In order to implement the goals of the Town Centers/Activity Centers /Small Area Plans, the County needs new performance measures to measure accessibility, economic development, sustainability and livability. This requires less reliance on achieving a specific LOS, and more reliance on creating a sense of place with measures related to economic, social, and environmental outcomes, where people live, work, and play in the same geographic area and accept that congestion is expected in its Activity Centers.

In previous Comprehensive Plans, the minimum acceptable LOS for roadways and intersections in Prince William County was LOS D. All developments were expected to maintain LOS D or better for roadways and intersections currently operating at or above LOS D, and not deteriorate roadways and intersections currently operating below LOS D. LOS impacts can be addressed through proffers or special use permit conditions, among other things, providing additional roadway capacity, signalization, turn lanes, traffic reducing transportation demand management strategies, or other improvements that address the project's impacts.

However, the County recognizes that it is not possible to address congestion through road investments alone and has reduced the acceptable standard in the Mobility Chapter to LOS E specifically in Small Area Plans, in Activity Centers, and on Arterials. Applicants should address the development's impacts to maintain LOS E or better for roadways and intersections currently operating at or above LOS E, and not deteriorate roadways and intersections currently operating below LOS E. This standard better aligns with the multimodal focus of the chapter by allowing for reduced levels of service in areas where there are alternative transportation options, including transit.

Additionally, the LOS standards do not account for the impacts of people walking, biking, rolling, and/or riding transit. A related measure posts vehicle hours of delay ("VHD"), which is related to the vehicle miles traveled ("VMT") in the Strategic Plan. However, a sole focus on impacts to drivers undermines consideration of more value-aligned goals including

safety, access, sustainability, and resilience.

In the future, the County will explore evaluating transportation performance by metrics beyond conventional LOS and VHD. The Virginia Department of Transportation ("VDOT") and the Department of Rail and Public Transportation ("DRPT") recognize that Multimodal System Plans for Activity Centers/Small Area Plans can be developed so that the future roadway network and street sections for the entire area could be established with this plan. DRPT updated the Multimodal System Plan Guidelines in 2020 to bring them in line with the state practice and new national guidance. They provide a process for jurisdictions to designate connected networks for all travel modes and design and retrofit corridors that fit within the surrounding context within centers of activity, Prince William County followed the principals of the Multimodal System Plan in the development of its Small Area Plans/Activity Centers but has not applied to DRPT for approval of these plans. This is due to the complexity of the original Guidelines published in 2013. At the time that the Small Area Plans were being developed, there had not been a jurisdiction that had received approval for a Multimodal System Plan. The County will continue to follow these guidelines, but it may not apply for DRPT/VDOT approval for the Plan.

LEVEL OF SERVICE STANDARDS FOR TRAILS

The County's goal of developing the trail network proposed in this chapter will require a multi-departmental approach, including when reviewing land development applications/proposals, most importantly through coordination of the Planning Office, Department of Transportation, and Department of Parks, Recreation, and Tourism. Where appropriate and consistent with applicable law, the review of development applications should take into consideration the shared use paths, bicycle facilities, and recreational trails shown on the Countywide Trails map, as well as consider pedestrian connections via sidewalks within all new developments. Where appropriate and consistent with applicable law, developments should provide pedestrian and/or bicycle connections within its boundaries that are of a similar type and design consistent with current standards, and adjacent development. These facilities should be designed in accordance with current design guidelines (current applicable guidelines are identified below). A multi-departmental review of bicycle and pedestrian connectivity will help ensure that all residences are connected to the larger Countywide trail network.

The following design guidelines identify level of service quality for the various trail types:

- Shared Use Path – Section 600 of PWC Design and Construction Standards Manual (DCSM)
- Bicycle Lane
- Sharrows
- Paved Shoulder

- Bike Parking/racks for Specific Land Uses – Section 600 of DCSM
- Bike Repair Stations
- Recreational Trail (Asphalt Park Trail) – Section 600 of DCSM
- Recreational Trail (Full Bench Cut Trail/Relevant DPRT Class 1 to 5 Trail) – DPRT Trails Standards Manual (2017) and Section 600 of DCSM
- Recreational Trail (Hiking Trail/Greenway Trail/DPRT Class 1 to 5 Trail) – DPRT Trails Standards Manual (2017) and Section 600 of DCSM
- Recreational Trail (Equestrian Trail) – DPRT Trail Standards Manual (2017) and Section 600 of DCSM
- Recreational Trail (Multi-Use/Mountain Bike Trail) – DPRT Trail Standards Manual (2017)

In addition to the policies and action strategies contained within the Mobility chapter, the Parks, Recreation & Tourism Chapter includes a number of policies aimed at developing and expanding the County's recreational trail system and provides a general guide for level of service for the County's trail system.

TRANSIT

OmniRide

DRPT has established guidelines that measure performance and determines improvements to systemwide and each service type – local vs commuter service. Metrics such as ridership, cost efficiency, safety, service quality, and system coverage/availability are measured. In general, ridership on the local routes matches with the level of service provided. OmniRide planners review the performance data to determine whether routes need to be adjusted to increase or decrease route coverage/schedule. OmniRide also reviews large rezoning cases to determine whether a bus shelter(s) and/or shuttle(s) runs within the development or to VRE/Commuter Parking Lots would be appropriate based on the project's specific impacts and applicable law. OmniRide is currently developing on-time and performance methodology and standards and will be included in updates to the FY2020-2029 Transit Strategic Plan. (www.omniride.com)

Virginia Rail Express (VRE)

VRE has established a load factor rather than level of service ("LOS"). For rolling stock, VRE's goal is to provide a seat for each passenger on a train. If the load factor is exceeded, VRE will add additional cars to a train or another train to service to alleviate passenger crowding. Per the VRE Transit Development Plan ("TDP"), VRE's maximum load factor is 1.11 (ratio of total passengers to seated passengers) during peak periods, based on the seating capacity of VRE equipment + standing capacity (per manufacturer). In practice, however, the ability to add seats to a train or additional trains into service can be constrained by the available VRE coach fleet size and agreements with host railroads that limit the number

and times VRE trains can be operated.

For station planning and design, there are industry accepted guidelines that can be used by an agency for planning purposes for station facilities. For example, VRE has used the TCRP Transit Capacity and Quality of Service Manual, 3rd Edition, Exhibit 10-32 (www.trb.org), LOS C as the guideline to determine the platform area to accommodate future passenger loads when designing new platform facilities such as the current L'Enfant Station improvement project. That guideline can also be applied to existing facilities to justify the need for platform expansion, although VRE platforms most subject to crowding are at the destination stations where the two lines merge (e.g., Alexandria inward) and there is the potential for passengers to be waiting for trains from both lines at the same time. Because passenger loads are typically less at origin stations and because platforms have been designed to accommodate a full train length, LOS at those stations tends to stay low.

The Transit Cooperative Research Program ("TCRP") Manual addresses all aspects of physical station design (e.g., stair width, sidewalks, etc.) and include LOS guidelines for some of those station elements too. Most VRE stations are fairly simple, and those other guidelines may not apply, but some may be used in station planning and design to confirm other features (e.g., stairway width) which will accommodate expected passenger loads.

APPENDIX B

OVERVIEW OF TRAVEL DEMAND MODELING

Travel demand modeling in all metropolitan regions is based upon the model developed by the federally mandated Metropolitan Planning Organization ("MPO"). For the Washington, DC, region, the MPO is the Transportation Planning Board (TPB) of the Metropolitan Washington Council of Governments ("MWCOG"). VDOT derives its Northern Virginia District model from the MWCOG model which is the basis for the model used in Prince William County. These models all forecast average 24-hour weekday traffic volumes ("AWDT").

The essential difference between the County model and the regional model is the level of detail included within each, both in terms of the roadway network and the demographic data used to generate the number of trips being simulated. The MWCOG model is a multi-jurisdictional model which forecasts future travel demand across the entire Washington, DC, region. The VDOT model simulates traffic across Northern Virginia and demographic data are more detailed than used in the MWCOG model. The County's model, developed to support the County's Comprehensive Plan, is even more detailed. In addition to Interstate and Primary roadways generally found in the MWCOG and VDOT models, the County model also includes a number of Secondary roadways as well. For the purposes of the County model, all roads in the Roadway Plan of the Comprehensive Plan are included, as well as other significant roadway connections within the model as determined by County staff.

The County travel demand model is primarily used to simulate the effect of loading future traffic (as generated by land uses identified in the Land Use Chapter of the Comprehensive Plan) on a future roadway network. The primary goal is to identify what improvements may be required for specific roadway segments in order for them to operate at acceptable levels of service (see Appendix A) with the inclusion of proposed land use related traffic. There are four main steps in the travel demand modeling process: trip generation, trip distribution, mode choice, and traffic assignment. A brief discussion of each of these steps follows.

Trip Generation

The first step in the modeling process is to determine how many trips will occur in the future. To do this, future land uses, as determined by the Prince William County Planning Office and submitted to MWCOG, are converted into average daily person trips. The PWC Planning Office submits its forecasts for employment, housing, and population for the next 25 years, and MWCOG reviews the data from all of its members and determines control totals for each demographic for each jurisdiction. These totals must be maintained for all travel demand model runs. This is accomplished by applying standard trip-making rates to the variables which make up future land use. Dwelling units represent the location where

trips begin, or are produced, and jobs represent the locations where trips end, or are attracted. To facilitate this conversion, the area being modeled is divided into small geographic areas called traffic analysis zones ("TAZs"). The result of this first step in the modeling process is a table of person-trip ends produced and attracted for each of the TAZs by trip purpose (i.e., work, shop, industrial, other).

Trip Distribution

The second step in the modeling process uses the table of person-trip ends produced and attracted by each TAZ and allocates those trips between the TAZs. This is accomplished by matching each trip produced in each TAZ to a trip attracted in each TAZ with MWCOG's Origin Destination information. The result of this step is a table which shows how many person-trips will take place between each of the TAZs. This table is referred to as a zone-to-zone person-trip table.

Mode Choice

The third step in the modeling process forecasts how each trip in the zone-to-zone person-trip table will take place. A trip can take place by car, bus, truck, or by some other means or mode of travel. As noted earlier, the model used in Prince William County uses primarily two modes - automobile and transit/HOV. The MWCOG model uses a very detailed process to calculate this split based on the relative time and cost of using each mode for each trip and the vehicle ownership of the trip maker. The County model transfers this information to the County's TAZ geography. The results of this step in the modeling process are a series of tables which identify zone-to-zone person-trips by mode of travel. Following the convention of an earlier version of the MWCOG model, the County model performs this split only for work trips. For travel completely within PWC, trip tables that are sensitive to trip purpose, traveler household income, and proximity of bus route/VRE line to traveler's origin and destination are used. These tables are based on MWCOG's home interview survey (most recent 2007-08) and adjusted to reflect the actual number of transit trips within PWC. For trips outside of PWC, the model uses the outputs of the MWCOG model which incorporate all of its assumptions about transit. Pedestrian/Bicycle trips are removed from the trip generation step based on trip purpose and Area Type (based on population and employment density as calculated by TAZ). The model uses a 20-40% pedestrian share for Central Business District areas and significantly less for other areas such as Urban or Suburban Heavy. The County Planning Office and Department of Transportation have identified percentage of pedestrian/bicycle trips internal to each identified Activity Centers.

Traffic Assignment

The traffic assignment step in the modeling process places the zone-to-zone person-trips by automobile mode onto the roadway network which has been assumed to be constructed in the same goal year as the demographic data used in the Trip Generation step. Trips made by transit are not assigned to this network. The roadway network is

developed in three phases: the network that currently exists is identified, then expanded to include any improvements which have been committed to or funded, and finally expanded again to include any additional improvements desired and/or required to satisfactorily handle projected traffic. Typically, this step in the process involves assigning the trips identified in the previous three steps to the roadway network which will be completed after all identified improvements have been made. The entire network is then evaluated and roadway segments not operating adequately are identified and improvements are envisioned to improve performance. This can be a very time-consuming step because several model runs are required to achieve desired levels of service. In the final analysis, it is possible that not all segments of the roadway system will be operating at the desired level of service. In many cases, roadway improvements which would aid in mitigating congestion are clearly infeasible due to cost, right-of-way impacts, environmental concerns, or other considerations.

The final results of the four-step modeling process include a map which shows how each of the roadway segments included in the network will operate in the future. From this map, a list of required improvements to the existing roadway network is derived in order for the transportation system to operate as shown on the map. As noted at the beginning of this section, the travel demand model evaluates the average number of automobile trips which will likely occur on a theoretical roadway network on an average weekday in the future. The level of congestion for each segment of the network is expressed in terms of “Level of Service” (as discussed in Appendix A). The travel demand model is a planning tool intended for generalized, County-wide application. It does not evaluate how well individual intersections will operate during periods of peak volume. That type of analysis is conducted using more detailed micro-simulation software and an examination of trip-making at a much finer level of detail than an area-wide travel demand simulation model. This type of analysis typically takes place during the review of development applications and site/subdivision plans.

APPENDIX C

OVERVIEW OF CONGESTION MANAGEMENT

Managing congestion is a complex process of balancing the traffic demand of a roadway network with the capacity of that network. This process can be addressed from the demand perspective (demand management), the supply perspective (operational management), or from a combination of the two methods (control measures). What follows is an overview of the available tools currently in use throughout the metropolitan Washington, D.C., region.

Transportation Demand Management

Transportation Demand Management ("TDM") are strategies that redistribute or reduce travel demand by influencing traveler's behavior. TDM is defined in Title 23 of the United States Code and in the Washington, D.C., region, TDM strategies are established by the federally designated Metropolitan Planning Organization ("MPO"), the Metropolitan Washington Council of Governments ("MWCOG"). Managing demand on the County roadway network is consistent with the MWCOG's regional strategies, as detailed in the Transportation Planning Board ("TPB") Visualize 2045 Appendix E (www.visualize2045.org). TDM strategies include commuter programs, public transportation improvements (including the provision of bicycle and pedestrian facilities), and growth management through transportation and land use activities.

TDM strategies are most often provided in the form of employer-based incentives such as ridesharing and telecommuting (which reduce demand), and/or flexible work schedules (which shift demand to non-peak times of the day). TDM strategies can also be provided in the form of neighborhood-based incentives such as shuttle buses and neighborhood day-care/pre-school childcare services. These work and homebased improvements help to reduce the demand on the highway system. By assembling TDM plans from across the County, trends can be identified and methods developed to further reduce demand at the public level. This can include strategies such as providing public shuttle buses or regular bus service from major employer/neighborhood collection points to transit centers. When these TDM strategies are organized into a plan, they can be quantified, and a value established. Therefore, when developers of major traffic generating projects submit a TDM plan which includes provisions for ensuring implementation, incentives in the form of trip generation credits can be provided in accordance with the County DCSM ("DCSM"). The amount of credit that can be taken varies based on the extent of the improvements provided and their level of success in similar situations. The TDM strategies should be given a quantifiable measure of effectiveness, as well as alternative solutions in the event their strategies are not successful.

Operational Management

Managing the capacity and maximizing the system effectiveness of the roadway network is a key element of TDM established by Title 23. MPOs, as a part of the scope of their planning process, are encouraged to provide strategies and projects that will promote operational management. Operational management strategies are cost effective operational improvements and can include (but are not limited to): restriping of intersections, coordination and synchronization of traffic signals, closure of median breaks, incident management programs, transit management programs, priority transit/emergency vehicle routing, and Intelligent Transportation System ("ITS") technologies, such as electronic toll collection, automated traffic enforcement, permanent or portable Closed Circuit Television ("CCTV") at common congestion points to monitor traffic conditions, and real-time parking management.

Although the preceding Operational Management strategies largely fall within the purview of the MPO and VDOT, there is also a role for the County in managing roadway capacity. As a part of the development application process, the County is responsible for identifying measures to mitigate the impacts of projects on the roadway network. These mitigation measures include operational improvements such as providing or upgrading traffic signals, installing left and right turn lanes, restriping existing intersections, and consolidating access points through interparcel connectivity. Through this process, the County is afforded the opportunity to assist in improving the region's ability to manage transportation network capacity and improve the flow of traffic on the County's roadways.

Transportation Control Measures

Strategies and programs which address management of both the demand and the capacity of the roadway network fall into the category of transportation control measures ("TCM"). Title 23 requires metropolitan planning areas to provide a congestion management system during their transportation planning process, which provides measures for identifying and mitigating congestion, as well as monitoring the effectiveness of the various management strategies. The congestion management system for the Washington D.C. region is the TPB's Congestion Management Process. The purpose of these strategies is to reduce transportation-related emissions by reducing vehicle use or improving traffic flow as defined in Section 108 of the Clean Air Act ("CAA"). TCMs are an important part of meeting the standards of the CAA and helping the region to attain the National Ambient Air Quality Standards ("NAAQS"). In areas of non-attainment of the NAAQS for ozone or carbon monoxide pursuant to the Clean Air Act, Federal funds may not be programmed for any highway project which results in a significant increase in carrying capacity for single-occupant vehicles unless the project is part of an approved congestion management system.

While the MPO is responsible for developing the TCMs for the region, the County is a crucial participant. By establishing County-wide TCM strategies, the Board of County Supervisors is able to better guide and support regional efforts.

APPENDIX D

PROPOSED INTERCHANGE AND INNOVATIVE INTERSECTION LOCATIONS

Interchanges utilize grade separation to allow for the movement of traffic between two or more roadways utilizing a system of bridges, overpasses, and tunnels to allow for the free flow movement of at least one of the routes that pass through the interchange.

Innovative intersection and interchange designs modify vehicle, pedestrian, and bicycle movements at conventional intersections to provide cost-effective solutions and options to reduce delay, increase efficiency, and provide safer travel for all users. Additional info can be found on VDOT's webpage. (www.virginiadot.org)

The following section highlights corridors and locations of proposed interchanges or proposed upgrades to intersections throughout the County. These improvements and upgrades also include innovative intersection designs.

- Route 1 (Richmond Highway) / Route 123 (Gordon Boulevard)
- Route 1 (Richmond Highway) / Dale Boulevard
- Route 1 (Richmond Highway) / Route 234 (Dumfries Road)/Potomac Shores Parkway
- Route 1 (Richmond Highway) / Joplin Road/Fuller Road
- Route 1 (Richmond Highway) / Neabsco Road / Cardinal Drive
- Route 1 (Richmond Highway) / Russell Road
- Route 123 (Gordon Boulevard) / Old Bridge Road
- Route 28 Bypass (Godwin Drive Extended) / Route 234 Business (Sudley Road)
- Route 28 Bypass (Godwin Drive Extended) / Lomond Drive
- Route 234 Bypass (Prince William Parkway) / Sudley Manor Drive/Wellington Road
- Route 234 Bypass (Prince William Parkway) / University Boulevard
- Route 234 Bypass (Prince William Parkway) / Clover Hill Road
- Route 234 Bypass (Prince William Parkway) / Brentsville Road / Dumfries Road
- Route 294 (Prince William Parkway) / Old Bridge Road
- Route 294 (Prince William Parkway) / Minnieville Road
- Route 294 (Prince William Parkway) / Smoketown Road
- Minnieville Road / Dale Boulevard
- Minnieville Road / Smoketown Road

In addition to specific locations, general or innovative intersection improvements are also proposed at intersections along all primary and minor arterial roadways to provide operational improvements where appropriate.

APPENDIX E

Appendix E provides a summary of planning level cost estimates for major road/interchange projects identified in the Plan. Cost estimates are subject to change based on further analysis.

Table 7: Cost Estimates of Roads/Interchanges

Project Type	Project Name	Project Description	Project Cost (2020)
Innovative Intersection	Prince William Parkway/Old Bridge Road	Intersection improvements to realign Prince William Parkway	$40,000,000
Innovative Intersection	Route 1/Route 234/Potomac Shores Parkway	Quadrant intersection and commuter lot	Developer Project
Innovative Intersection	Route 15 and Route 29	Proposed innovative intersection at Route 15 and Route 29	$80,000,000
Innovative Intersection	Route 234/Clover Hill Road	Innovative Intersection consisting of bowtie intersection	$20,000,000
Interchange	Prince William Parkway/Minnieville Road	Proposed interchange location	$80,000,000
Interchange	Route 1/Dale Boulevard	Proposed interchange location	$150,000,000
Interchange	Route 1/Joplin Road/Fuller Road	Proposed interchange location	$150,000,000

Project Type	Project Name	Project Description	Project Cost (2020)
Interchange	Route 1/Route 123	Proposed interchange location	$150,000,000
Interchange	Route 28 Bypass/Godwin Drive/Sudley Business	Proposed interchange location	$150,000,000
Interchange	Route 28 Bypass/Lomond Drive	Proposed interchange location	$150,000,000
Interchange/Innovative Intersection	Route 234/Sudley Manor Drive and Wellington Road	Proposed interchange at Route 234 and Sudley Manor Drive to grade separate traffic and innovative intersection at 234 and Wellington to further reduce congestion and improve throughput on Route 234	$180,000,000
Road Project	Catharpin Road (Heathcote Drive to Route 55)	Proposed road improvement to widen roadway from 2 to 4 lanes. Total length of proposed widening is 0.7 miles. Project will include a 10' shared use path on the east side of the roadway.	$30,000,000
Road Project	Dale Boulevard (Benita Fitzgerald Blvd to Route I)	Proposed road improvement to widen from 4 lanes to 6 lanes. Total length of project is approximately 3.6 miles	$300,000,000
Road Project	Davis Ford Road	Safety improvements on existing roadway	TBD

Project Type	Project Name	Project Description	Project Cost (2020)
Road Project	Devlin Road (Linton Hall Road to University Boulevard)	Proposed road improvement to widen Devlin Road from two to four lanes between Linton Hall and University Boulevard. Project will include pedestrian and bicycle facilities	$40,000,000
Road Project	Farm Creek Drive (Featherstone Road to Rippon Boulevard)	Proposed road improvement to widen from two to four lanes. Project length is approximately 1 mile and will include pedestrian and bicycle facilities	$50,000,000
Road Project	Fitzwater Drive (Route 28 to Aden Road)	Proposed road improvement to widen existing two-lane roadway to RM-2 typical standard with bike and pedestrian facilities	$10,000,000
Road Project	Fleetwood Drive (Fauquier County to Aden Road)	Proposed road improvement to widen approximately 5 miles of existing lanes to right of way standards for a two-lane minor arterial roadway	$50,000,000
Road Project	Gideon Drive (Dale Boulevard to Smoketown)	Proposed road improvement to widen 0.8 miles of roadway from 4 lanes to 6 lanes. Project includes a 10' shared-use path on the east side of the roadway	$150,000,000
Road Project	Groveton Road (Pageland Lane to Balls Ford Rd)	Proposed road improvement to widen roadway from two to four lanes along a 0.5-mile segment. This road provides access to Manassas National Battlefield Park and industrial areas south of I-66.	$85,000,000

Project Type	Project Name	Project Description	Project Cost (2020)
Road Project	Gum Springs Road (Loudoun County to Sudley Road)	Proposed road improvement to widen from two to four lanes. Project length is approximately 0.3 miles. A 10' shared use path will be constructed on the east side	$30,000,000
Road Project	Heathcote Boulevard Extension	Extend existing Heathcote Boulevard as a two-lane roadway to connect to Antioch Road	$50,000,000
Road Project	Horner Road (Prince William Parkway to Route 123)	Proposed road improvement to widen from 2 lanes to 4 lanes along a 1.3-mile segment. Improvements include a 10' shared use path on the south side	$75,000,000
Road Project	Manassas Battlefield Bypass	Proposed four-lane road connection to provide a northern bypass	$500,000,000
Road Project	McGraws Corner Drive (Somerset Crossing Drive to Route 29)	Proposed road improvement to extend McGraws Corner Drive as a four-lane roadway 0.7 miles from Route 29 to Somerset Crossing. Project includes a 10' shared use path along the south/west side	$50,000,000
Road Project	Neabsco Road (Route 1 to end)	Proposed road improvement to widen roadway from two to four lanes the approximately 2-mile length of Neabsco Rd. Project includes a 10' shared use path on the south side	$100,000,000

Project Type	Project Name	Project Description	Project Cost (2020)
Road Project	Old Centerville Road (Fairfax County to Route 28)	Proposed road improvement to widen from two to four lanes. Total project length is 1.8 miles	$230,000,000
Road Project	Opitz Boulevard (Gideon Drive to Route 1)	Proposed road improvement to widen from four to six lanes. Total project length is 1.5 miles and includes a 10' shared-use path on the south side of Opitz Blvd	$150,000,000
Road Project	Pageland Lane	Widen from 2 to 4 lanes between Route 29 to Route 234 (Sudley Road). Includes shared use path on both sides of roadway	$220,000,000
Road Project	Peaks Mill Road	Extend Peaks Mill Road as a two-lane roadway to connect Purcell Road to Prince William Parkway	$40,000,000
Road Project	Powells Creek Boulevard (Route 1 to River Ridge Boulevard)	Proposed road improvement to widen 0.8-mile segment from two to four lanes	$50,000,000
Road Project	Prince William Parkway (Hoadly Road to Liberia Ave)	Proposed road widening from four lanes to six lanes	$350,000,000
Road Project	Rippon Boulevard (Route 1 to Farm Creek Road)	Proposed road improvement to widen from two to four lanes on this 2-mile segment. Project includes a 10' shared use path on south side	$120,000,000

Project Type	Project Name	Project Description	Project Cost (2020)
Road Project	Rollins Ford Road (Linton Hall Road to University Boulevard)	Proposed road improvement to extend Rollins Ford to the proposed University Blvd Extension as a four-lane roadway with a 10' shared-use path.	$40,000,000
Road Project	Route 1 (Brady's Hill to Dale Boulevard)	Proposed road improvement to widen Richmond Highway (Route 1) from four to six lanes with a 10' shared use path along the west side of the roadway and a 5' sidewalk along the east side of the roadway. Project includes improvements to intersections along the entire 2-mile segment	$200,000,000
Road Project	Route 15 (Loudoun County to Route 234)	Widen road from 2 lanes to 4 lanes with a 10’ shared use path on the east side. Project length is approximately 4.2 miles.	$250,000,000
Road Project	Route 15 (Route 29 to I-66)	Proposed road improvement. Widening from 2 lanes to 4 lanes. Project length is approximately 3.6 miles	$100,000,000
Road Project	Route 15 Overpass	Four-lane overpass at the Norfolk Southern Railroad crossing at Route 15, that will accommodate vehicles, pedestrians, and bikers.	$70,000,000

Project Type	Project Name	Project Description	Project Cost (2020)
Road Project	Route 234 Bypass (Route 28 to I-66)	Proposed road improvement to widen from four to six lanes. Project length is 4.4 miles and includes a 10' shared-use path and intersection interchanges/innovative improvements	$300,000,000
Road Project	Route 28 (Fitzwater Drive to Fauquier County)	Proposed road improvement to widen roadway from two to four lanes and construct a 10' shared use path along south side	$50,000,000
Road Project	Route 28 Bypass	Extension of Godwin Drive from Sudley Business to Fairfax County Line	$300,000,000
Road Project	Route 29 (Heathcote Drive to Pageland Lane)	Proposed road improvement to widen to four lanes.	$150,000,000
Road Project	Route 29 (Route 15 to Virginia Oaks Drive)	Proposed road improvement to widen 2.6 miles of roadway from four to six lanes from Route 15 to Virginia Oaks Drive.	$150,000,000
Road Project	Route 29 Alternate	Proposed four-lane facility parallel to I-66 to provide a bypass or alternate roadway to existing Route 29 around the Manassas Battlefield National Park.	$350,000,000
Road Project	Signal Hill Road (Liberia Avenue to Signal View Drive)	Proposed road improvement to widen to four lanes with a 10’ shared use path. Total project length is 0.25 miles.	$25,000,000

Project Type	Project Name	Project Description	Project Cost (2020)
Road Project	Van Buren Road (Cardinal Drive to Route 234)	Proposed road improvement to construct an extension of Van Buren Road to connect Cardinal Drive to Dumfries Road (Route 234). Roadway will be designed as a four-lane divided major collector and includes a bridge over Powells Creek, a 10' shared-use path and 5' sidewalk.	$200,000,000
Road Project	Van Buren Road (Route 234 to Batestown Road)	Proposed road improvement to widen 1.1-mile segment from two to four lanes	$100,000,000
Road Project	Vint Hill Road	Widen from 2 to 4 lanes between Schaeffer Lane and Rollins Ford Road. Note-widening could extend to Fauquier County Line	$80,000,000
Road Project	Wayside Drive (Route 1 to Congressional Way)	Part of internal road network for Potomac Shores	Developer Project
Road Project	Wellington Road (Linton Hall Rd. to Godwin Drive)	The 4.8-mile segment from Linton Hall to Route 234 Wellington will be widened from two to four lanes. The 1.9-mile segment from Route 234 to Godwin will be widened from four to six lanes. The total project length is 6.7 miles and will include a 10' shared-use path	$300,000,000

Project Type	Project Name	Project Description	Project Cost (2020)
Road Project	Williamson Boulevard (Route 234 Business to Portsmouth Road)	Improvements will be within existing right of way	$18,000,000