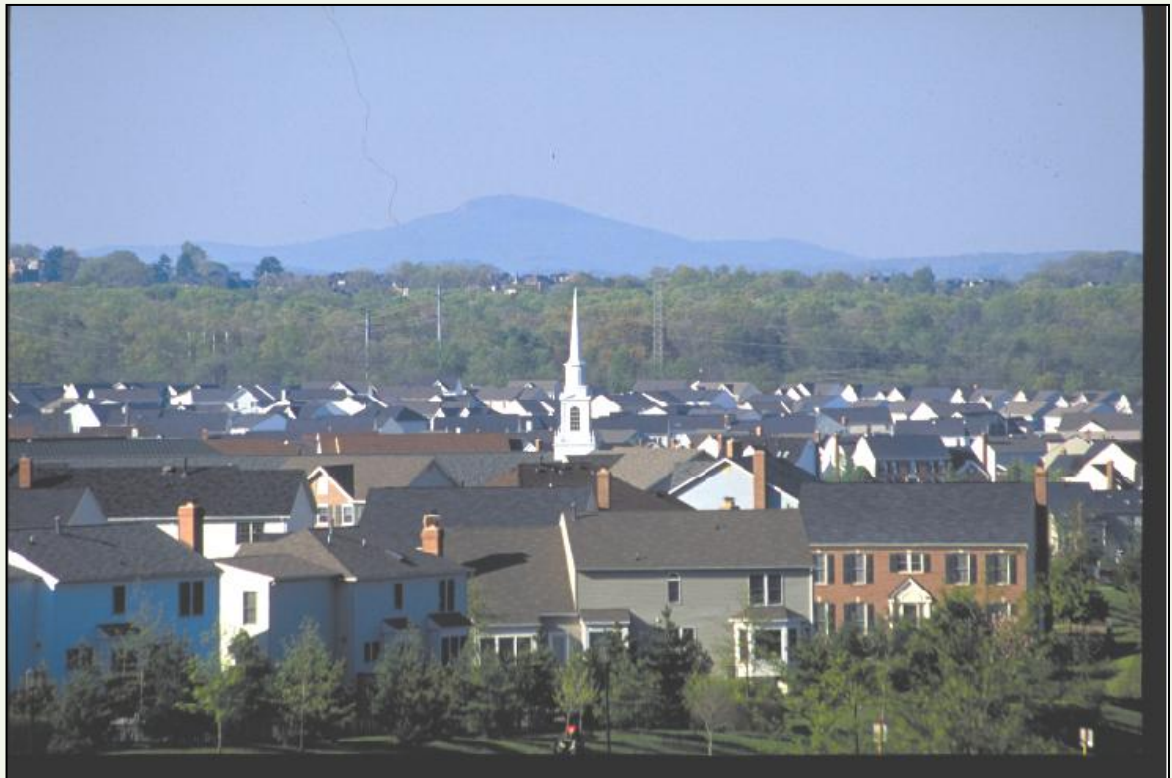


Ashburn Community Outreach Project

Existing Conditions Report Ashburn Community



Revised August 8, 2011
Loudoun County
Department of Planning

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Errata Sheet for the Ashburn Community Outreach Project Existing Conditions Report
Originally Published July, 2011
Revised August 8, 2011

This errata sheet describes changes made to the Ashburn Community Outreach Project Existing Conditions Report to correct errors and provide clarification. Minor grammatical and typographical errors have been corrected, but are not noted on this errata sheet. A marked-up version of the July 2011 version is available upon request from the Loudoun County Department of Planning.

#	Description of Correction	Page
1	Corrected Mike Clem and Daniel Csizmar's names	vii
2	Added Ron Circe, PRCS	vii
3	The statistic re Quarries has been corrected: <i>Approximately 404 acres of land is quarried, or 2% of the total land area.</i>	2
4	Corrected headings in Tables 5 & 6 from "Population" to "Household"	15
5	Added footnote for definition of short sale: <i>Footnote 21: A short sale is a sale of real estate in which the proceeds from the sale are less than the balance owed on the loan.</i>	24
6	Expanded footnote information re the Ashburn Planning Subarea: <i>The Ashburn Planning Subarea is not the same as the Ashburn Community boundary. The Ashburn Planning Subarea is one of ten subareas that have been defined and used by the County since 1995 to forecast long-range demographic trends, guide the placement of new capital facilities, and address service delivery needs. The Ashburn Planning Subarea extends east of the Broad Run to Route 28, south of Ryan Road to Route 606, east of Creighton Road; and includes an area west of the Beaverdam Reservoir, south of Reservoir Road, east of Evergreen Mills Road, and north of Beaverdam Creek and does not include the portion of the Brambleton development located within the Ashburn Community.</i>	26 & 27
7	Relabeled picture to correctly depict Exploration Hall, The George Washington University	30
8	A paragraph was clarified re the completion of the Moorefield Station Fire and Rescue Station #23: <i>The permanent Moorefield Fire and Rescue Station #23 opened in July of 2011. The station is located on Old Ryan Road, adjacent to Route 267 within the Moorefield Station Transit-Oriented Development. Prior to completion of the permanent facility, the station was housed at a temporary, leased facility on Red Run Drive in Ashburn Center. The leased space on Red Run Drive was retained to temporarily house the Fire Marshall's Office until their permanent space is completed within the Brambleton Public Safety Center on Belmont Ridge Road.</i>	30
9	A paragraph was clarified to describe the Potomac Heritage National Scenic Trail: The County is developing a system of linear parks that encompass the Goose Creek and Broad Run stream valley corridors within the Ashburn Community. These trails will consist of natural surfaces intended for hiking and passive recreation. The Broad Run Corridor Trail is planned to link the Potomac Heritage National Scenic Trail with the W&OD Trail. <i>The Potomac Heritage National Scenic Trail runs along the Potomac River corridor and extends for seven miles within the County, from the Fairfax County border to the Keep Loudoun Beautiful Park on Goose Creek. Trailheads can be found at Algonkian Regional Park, Bles Park, Elizabeth Mills Riverfront Park and Kephart Bridge Landing, and the Keep Loudoun Beautiful Park.</i> Existing sections/easements of the Broad Run Corridor Trail within the Ashburn Community are located within Bles Park, Commonwealth Center, Paragon Park, Loudoun Valley Estates, and Loudoun Water. Existing sections/easements of the Goose Creek Corridor Trail are located within Elizabeth Mills Riverfront Park, Keep Loudoun Beautiful Park, Goose Creek Village North and South, and the Rouse/Belmont Glen property.	33
10	A phrase, "and the Potomac Heritage National Scenic Trail," and a sentence, "The Potomac Heritage National Scenic Trail runs along the Potomac River corridor and extends for seven miles within the County, from the Fairfax County border to the Keep Loudoun Beautiful Park on Goose Creek. Trailheads can be found at Algonkian Regional Park, Bles Park, Elizabeth Mills Riverfront Park and Kephart Bridge Landing, and the Keep Loudoun Beautiful Park" was removed from a paragraph that now reads, " <i>The Northern Virginia Regional Park Authority (NVRPA) owns and operates recreational facilities within the community, including the Washington and Old Dominion Trail (W&OD Trail). The W&OD Trail is a 45-mile linear park extending from Arlington to Purcellville.</i> "	33
11	The acronym was corrected from "Adams" to "ADAMS"	34
12	The ultimate condition of Gloucester Parkway was clarified: <i>Gloucester Parkway (Route 2150)/Nokes Boulevard (Route 1793) - Ultimately to be six lanes; east of Loudoun County Parkway to Route 28; anticipated to be constructed in conjunction with future development and would provide the last missing link in the Gloucester Boulevard (Route 2150) corridor.</i>	37
13	Defined the two different types of transit services that operate in the Ashburn Community (commuter bus service and local bus service)	40
14	The title of the map "Ashburn Community 2001 Election Districts" was changed to "Ashburn Community Former Election Districts".	53
15	The title of the map "Ashburn Community 2011 Election Districts" was changed to "Ashburn Community New Election Districts".	55
16	The Ashburn Community Bicycle and Pedestrian Circulation Map has been updated to include existing crosswalks, trails and neighborhood sidewalks as of August 1, 2011. These data continues to be updated based on new information.	75
17	The scale was refined and a Map Number was assigned for all Ashburn Community Maps.	49-80

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All photos in this report, unless otherwise noted, were taken by staff in the Loudoun County Department of Planning.

Acknowledgements

The Loudoun County Department of Planning wishes to acknowledge the following organizations for their assistance and efforts in the production of this report, in particular: Loudoun County Departments of Building & Development (B&D); Construction and Waste Management (CWM); Economic Development (ED); Family Services (FS); Management & Financial Services (MFS); Mapping and Geographic Information (OMAGI); Loudoun County Public Schools (LCPS); Loudoun Water (LW); Parks, Recreation and Community Services (PRCS); Sheriff's Office (SO); Transportation Services (OTS); and the Virginia Department of Transportation (VDOT).

Special thanks to those who contributed research and writing to this report including: Robyn Bailey, ED; Jan Boothby, FS; Kristin Brown, OMAGI; Jack Brown, MFS; Ron Circe, PRCS; Mike Clem, B&D; Dan Csizmar, CWM; Dennis Cumbie, B&D; Sarah Coyle Etro, FS; Arkopal Goswami, OTS; Beth Hilkemeyer, MFS; Jill Kaneff, MFS; Kelly Marrocco, FS; Regina Meck, MFS; Lou Mosurak, OTS; Catherine Nash, SO; Mark Novak, PRCS; Sara Howard-O'Brien, LCPS; Stephanie Payne, FS; Beverly Tate, LCPS; Steve Torpy, PRCS; David Ward, B&D.

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Foreword

In accordance with the Loudoun County Board of Supervisors' Strategic Plan, in April 2011, the Board of Supervisors initiated a community outreach process for the Ashburn Community to identify community sentiment, issues, and priorities as a first step in future Suburban Community Planning efforts. The 2001 Loudoun County Comprehensive Plan (Plan) calls for the development of Community Plans to guide the growth of the Plan-defined Suburban Communities, including the Ashburn Community.

The Ashburn Community Outreach Project is designed to conduct a dialogue with citizens of the Ashburn Community to identify neighborhood and community-wide priorities and to develop strategies to aid in future planning and programmatic activities. The project is designed to be as inclusive as possible and conclude with a consensus report given to the Board of Supervisors in the first quarter of 2012.

The purpose of the Ashburn Community Existing Conditions Report is to provide a "snapshot" of the Ashburn Community for the public who can then use the information as a resource for their participation in the outreach process.

Additional information on the outreach project, including an electronic copy of the Ashburn Community Existing Conditions Report, can be found at www.loudoun.gov/ashburn-outreach.

Ashburn Community Summary Statistics

- **Community Boundary:** The area is bounded by Ryan Road and the Broad Run to the south, by the Potomac River to the north, by the Broad Run to the east, and by the Goose Creek and the Beaverdam Reservoir to the west.
- **Acreage:** The area contains approximately 20,129 acres and 24,649 parcels or portions of parcels (based on Community Boundary Area inclusive of right-of-ways).
- **Population:** According to the U.S. Census Bureau, the population in the year of 2010 was 84,834 for the Ashburn Community. Between 1990 and 2010, the population in the Ashburn Community increased by 51,575 persons or 155%.
- **Employment:** The employment estimate for 2010 is 31,487, with a jobs-to-household ratio of approximately 1.07:1. By 2040, the employment forecast is 76,422.
- **Housing Units:** According to the 2008 Growth Summary the number of housing units forecasted in 2010 was 30,796, consisting of 43% single family detached, 33% single family attached, and 24% multi-family units. The number of housing units forecasted in 2040 is 50,648.
- **Parcel Size:** The majority of the parcels (approximately 72%) are 1/4 acre or less. The average parcel size is approximately 0.86 acres. The largest parcel lying entirely within the Ashburn Community is part of Moorefield Station and consists of 387 acres.
- **Watersheds:** The area is located in the Potomac, Broad Run, and Goose Creek watersheds, which ultimately drain into the Potomac River.
- **Major and Minor Floodplain:** There are approximately 2,693 acres of floodplain, or 13% of the total land area.
- **Forested Area:** Approximately 4,962 acres, or 25% of the total land area, is forested.
- **Quarries:** Approximately 404 acres of land is quarried, or 2% of the total land area.
- **Major Developments:** Residential- Lansdowne, Broadlands, Ashburn Farm, Ashburn Village, portions of Brambleton
Office/Industrial – Beaumeade, WorldCom, One Loudoun
Retail – Brambleton Town Center, Broadlands Village Center
- **Existing Land Use:**

Land Use	Parcel Acreage	Percent
Residential including HOA land	7,890	45%
Office	1,091	6%
Industrial	747	4%
Commercial/Retail	360	2%
Public/Civic	2,192	12%
Vacant	5,502	31%
Total	17,782	100%

Estimate based on a combination of data sources: Loudoun County GIS and LMIS records. Based on actual parcel acreage, excluding right-of-way.

- **Planned Land Use:**

Land Use	Acreage	Percent
Residential	10,048	50%
Existing Village of Ashburn	263	1%
High-Density Residential	200	1%
Keynote Employment	4,002	20%
Business	5,047	25%
Industrial	165	1%
Heavy Industrial	404	2%
Total	20,129	100%

Estimate based on Loudoun County GIS records. Based on acreage of Community Area Boundary, including right-of-way.

Sources: 2008 and 2009 Annual Growth Summaries; Fiscal Impact Committee Guidelines; Department of Management and Financial Services; US Census Bureau, (1990, 2000, 2010); and COG Round 8.0 Cooperative Forecasts, adopted November 2010.

Introduction

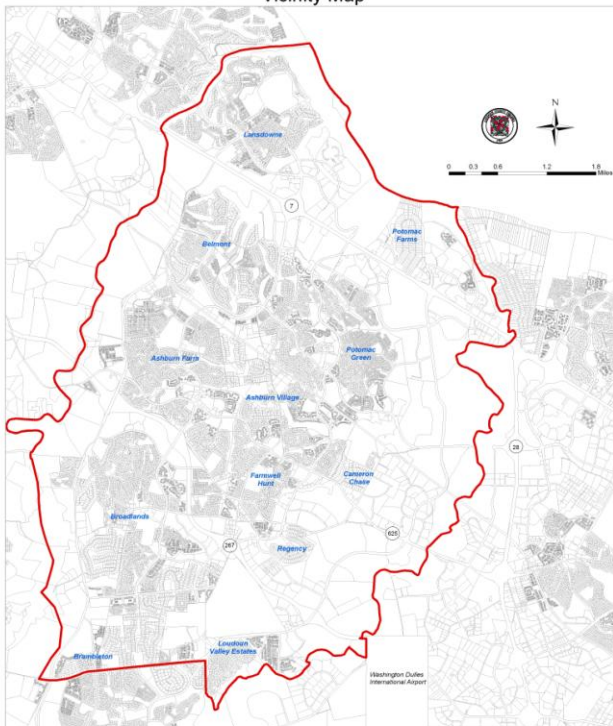
The Ashburn Community Existing Conditions Report describes the existing conditions of the Ashburn Community, including its natural, cultural, and social aspects. It contains information on current land uses, zoning, existing and proposed infrastructure and transportation networks, and public facilities. It also provides a detailed description of community conditions such as population, housing, employment, and economic development.

Data for the report were collected by analyzing existing County information, researching applicable literature and websites, conducting interviews with County staff, reviewing historical information, and conducting field visits in the community. The existing conditions described within this report are not an exhaustive list, but rather are highlights of certain conditions. Other conditions may exist that have not been included in this report.

Community Boundary

The Loudoun County Comprehensive Plan recognizes the Ashburn Community as one of four distinct communities in the County's Suburban Policy Area (the others being Dulles, Potomac, and Sterling). The boundaries of the Ashburn Community include the Potomac River to the north, the Broad Run to the east, the Goose Creek and Beaverdam Reservoir to the west, and Ryan Road and Broad Run to the south (See Vicinity Map, p. 3 and p. 49).

Ashburn Community
Vicinity Map



Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

Surrounding Development

The Ashburn Community is located in the eastern portion of the County where the majority of the suburban-scale residential and non-residential development has occurred. Most of the area surrounding the Ashburn Community is already developed or slated for development. Major developments surrounding the community include: to the east, the approved Dulles World Center and approved Kincora mixed-use projects, Dulles Town Center, Raytheon Company, AOL, and Orbital Sciences Corporation; to the south, Washington Dulles International Airport and the South Riding residential community; to the west, Goose Creek Reservoir; and, to the northwest, the Town of Leesburg.

Natural Environment

The Ashburn Community is an area of rich, diverse, and sensitive natural resources. In addition to approximately 5,000 acres of forest cover, the Community includes approximately 2,700 acres of floodplain and associated water resources, including streams and wetlands, flora and fauna resources, diabase resources, and archaeological and heritage resources (See Existing Conditions Map, p. 57).

Water Resources

The Potomac River, the Broad Run, and the Goose Creek are defining natural features of the Ashburn Community. Both the Broad Run and the Goose Creek drain to the Potomac River (See Major Watersheds Map, p. 59). The Broad Run and Goose Creek watersheds include numerous streams, including Beaverdam Run, Russell Branch, and various unnamed tributaries. The quality of these waters and the surrounding riparian areas are important not only to aquatic life and wildlife, but to County residents and businesses. A substantial number of streams in the Ashburn Community are perennial. According to County estimates, a drainage area of approximately 59 acres generally indicates a stream with perennial flow.



The Broad Run

Stream Monitoring

The US Geological Survey (USGS) and Virginia Department of Environmental Quality (VDEQ) assess both chemicals and fish. Loudoun County is involved in stream monitoring through the Loudoun Watershed Watch (LWW), a consortium of groups, which also includes the Loudoun Wildlife Conservancy and the Goose Creek Association. LWW has monitored Ashburn sites for several years. In addition to monitoring a network of streams throughout the County, LWW holds an annual Family Stream Day, which includes exploration of local urban streams, hands-on landscaping, stormwater and erosion control, stream assessment and monitoring, and measures to improve local streams and environmental health.

Stream Health

In 2009, a countywide stream assessment was performed, which helped the County gain a better understanding of stream conditions across the County,

including the Ashburn Community. The survey examined a total of 500 stream segments with 200 of the sites undergoing a more detailed assessment of benthic (bottom-dwelling) organisms. The detailed assessment examined physical and biological characteristics such as vegetation, stream bank stability, stream bed composition, aquatic diversity, and land use. The Ashburn Community lies within three of the subwatersheds used in the countywide assessment. These include areas that drain directly to the Potomac, the Lower Goose Creek subwatershed, and the Broad Run/Sugarland Run subwatersheds. Approximately 71% of the Ashburn Community is within the Broad Run subwatershed, while 9% drains directly to the Potomac, and 20% is within the Lower Goose Creek subwatershed. Condition ratings for streams in these areas were as follows:

Table 1: Stream Conditions by Subwatershed

ASSESSMENT AREA	Excellent*	Good*	Stress*	Severe Stress*
Broad Run/Sugarland Run	0.0%	0.0%	8.0%	92.0%
Direct to Potomac	0.0%	9.1%	9.1%	81.8%
Lower Goose Creek	3.7%	3.7%	44.4%	48.1%

*percentage of total stream miles

The Broad Run/Sugarland Run area had the greatest amount of stream miles classified as Severe Stress in the County. Stress and Severe Stress means that these waterways are impaired for aquatic life use, as defined by VDEQ for aquatic life use under the Clean Water Act.

VDEQ has determined that the main branch of Broad Run from Waxpool Road to the confluence with the Potomac River is impaired within the Ashburn Community based on levels of PCBs (polychlorinated biphenyls) in fish tissue. The Broad Run segment was first listed as impaired for PCBs in 2006. The source of the impairment is currently listed as “unknown” in the 2010 Virginia Water Quality Assessment Report. The Broad Run also has aquatic life impairments as evaluated from the benthic insects from the northernmost limit of Washington Dulles International Airport to the Potomac River. The source of the contaminants has not been investigated. In 2010 mercury has been found in fish in the Broad Run. Virginia only monitors the main channels of Goose Creek and the Broad Run for fish health impacts. Others streams may need to be assessed for fish health impacts to gain a better understanding of impairments and the source of the contaminants. For stream health, VDEQ monitors and assesses approximately one-third of the perennial streams in Loudoun County for the water-related uses designated under the Clean Water Act.

Another significant water resource in the area is the Potomac River. Although numerous County waterways flow to the Potomac River, water quality monitoring and water quality improvement of the Potomac River are responsibilities of the State of Maryland. Virginia does not typically advise residents of the water quality conditions of the Potomac River. It is the

responsibility of Maryland to make people aware of fish advisories and water quality notices for the Potomac River. However, Maryland does not post these advisories on Virginia lands. The Potomac River is impaired due to bacteria, although the source of the pollution has not yet been identified. The Potomac River also has fish advisories for channel catfish off the Loudoun shoreline due to PCBs and methylmercury. Fairfax Water, which has a water intake on the Potomac River, monitors the Potomac River for pollutants.

Flora and Fauna

Natural and constructed areas within the Ashburn Community encompass a wide range of environments and support a rich diversity of plant and animal species. Ecological features include habitat along streams, portions of the Washington and Old Dominion Railroad Regional Park (W&OD Trail), Bles Park, various areas surrounding Bles Park, and other open spaces. Within these areas, both within and adjacent to the Ashburn Community, various rare, threatened, or uncommon species and plant communities have been identified. These include the Northern Hardpan Basic Oak-Hickory Forest, a rare plant community, Hairy Beardtongue, a state-identified rare plant associated with soils derived from diabase rock, Yellow Lamp Mussel, Epiphytic Sedge, White Trout Lily, Fowl Bluegrass, and Canada Plum. The area also features the Green Floater Mussel, a globally threatened species that lives in the Goose Creek. Rare bird species, identified in the Breeding Birds Atlas as compiled by the US Geological Survey, in or adjacent to the Ashburn Community include the Bald Eagle, Barn Owl, Bobolink, Cerulean Warbler, Common Nighthawk, Dickcissel, Horned Lark, Northern Bobwhite, Red-Breasted Nuthatch, Rusty Blackbird, Savannah Sparrow, and Whip-Poor-Will. Additionally, the Virginia Department of Game and Inland Fisheries (VDGIF) identified a heron rookery with more than 40 nests on a portion of Broad Run south of the Route 7 bridge. Rookeries are considered a critical wildlife resource and are protected by both state and federal law. VDGIF also identified occurrence of the state-threatened Wood Turtle within upstream tributaries of Broad Run.

The Virginia Department of Conservation and Recreation (VDCR) has recognized some of these areas through its Natural Heritage Program, a database of significant natural resources. Natural Heritage resources include the habitat of rare, threatened, or endangered plant and animal species, rare or state-significant natural communities or geologic sites, and similar features of scientific interest. Within the Ashburn Community, the State has identified resources in the area generally north of Route 7, between the Broad Run and the Goose Creek.

Community Resources

Several organizations are active in promoting the ecological health of the Ashburn Community. One of these is the Loudoun Wildlife Conservancy. The Conservancy is a local, all-volunteer, non-profit organization that promotes the

preservation and proliferation of healthy wildlife habitats throughout Loudoun County by fostering an understanding of the value of nature and providing opportunities for applying that knowledge to the betterment of the natural environment.

Another community resource is The Earth Day @ Loudoun Family Festival. The Festival is an annual community event, founded and organized by the Wildlife Habitats Committee of the Broadlands Homeowners Association (HOA). Organizers estimate that more than 6,000 people attended in 2011 and visited more than 100 ecological exhibits, viewed animal and wildlife demonstrations, listened to live music and performers, and explored a green marketplace with a variety of environmentally-friendly products and services. The 2011 event took place at the Spring Valley Nature Preserve in Broadlands, located next to Clyde's at Willow Creek Farm.

The Broadlands HOA maintains a Nature Center of approximately 5,000 square feet. It accommodates local animals, programs, events, and HOA staff offices. The Audubon Naturalist Society and the Broadlands HOA have partnered to provide year-round nature programs for the community. Broadlands participates in the National Wildlife Federation (NWF) Certified Wildlife Habitat Program. Broadlands registered with NWF for certification in March 2003 and was certified in February 2008. Broadlands is the 25th Certified Community in the nation. It has been recognized as a Community Wildlife Habitat through its actions in preserving, enhancing, and restoring wildlife habitat, communicating the importance of habitat stewardship to the public, and establishing a network of communities where people, flora, and fauna can flourish. The Wildlife Habitats Committee keeps Broadlands actively engaged in its Community Wildlife Habitat project and the NWF requires the Habitat Team and community members to participate in post-certification activities and submit yearly updates.

Another community resource is the Aquary, an interpretive center located at Loudoun Water's Broad Run Water Reclamation Facility. The Aquary features water-related indoor and outdoor educational areas and exhibits. The indoor exhibits are located in the administration building and showcase water treatment and distribution, watersheds, water use, and below-ground water facilities. The indoor facility is open during normal business hours and is available for scheduled tours. The outdoor facility features an interpretive trail showcasing a fountain, low-water landscape, bioretention basin, wetlands, overlooks, reforestation areas, ponds, a former farm site, and the Broad Run. The outdoor interpretive trails are always open and are a designated NWF Certified Wildlife Habitat site.

Diabase Resources

The Ashburn Community contains concentrations of diabase rock, an economically important rock that is quarried for high-quality crushed stone for

use in road construction and as an aggregate in concrete production. Diabase, known locally as “trap rock,” is some of the hardest and best rock for concrete and road base material found on the East Coast.

The Luck Stone Corporation of Richmond, Virginia has a number of existing and planned quarries on both the east and west sides of the Goose Creek known as the “Leesburg Plant” (See Luck Stone Quarry Map, p. 63). Access to the quarry is provided from Belmont Ridge Road (Route 659). Luck Stone has



operated on the east side of Goose Creek since 1971. The Leesburg Plant includes Quarries “A” and “B,” which are located north and south of the W&OD Trail, respectively, and connected by a tunnel under the trail. These quarry areas comprise approximately 375 acres east of Goose Creek. Luck Stone also operates the existing Quarry C on the west side of Goose Creek, between the W&OD Trail

and Route 7. Quarry C is approximately 135 acres. Quarry D is planned for the area south of Quarry C and the W&OD Trail and west of Goose Creek. Quarry D is approximately 198 acres. Luck Stone plans to commence extractive quarrying activities here within three to five years. Luck Stone received zoning approval for a combined 472 acres for a quarry area expansion south of Quarry D and west of Goose Creek. Current totals for existing and planned quarry uses in the area are approximately 375 acres east of Goose Creek and 805 acres west of Goose Creek. A tunnel is also planned under Goose Creek to connect the existing quarries east of Goose Creek with the approved, but not yet built, quarries west of Goose Creek. Quarry operations could continue at the Luck Stone quarries for up to 100 years. While the amount of rock quarried from the Luck Stone plant located within the Ashburn Community varies depending on demand, over the past three years the plant has quarried between 1.8 million and 2.2 million tons of diabase rock.

Airport Noise

The Metropolitan Washington Airports Authority operates and maintains the Washington Dulles International Airport (Dulles Airport), which is southeast of the Ashburn Community. Although outside of the Ashburn Community, the Airport has a significant land use influence on the community. Much of the County’s Airport Impact Overlay District for the Dulles Airport lies within the Ashburn Community. Based on airport activity, the Federal Aviation Administration (FAA) has designated the Dulles Airport as an Operational Evolution Partnership (OEP 35) airport. These commercial airports have significant activity with more than 70% of all passengers nationwide moving through them. The FAA expects Dulles Airport to grow fastest among all the

OEP airports for the period 2010 to 2030, with an annual growth rate of 4.2%¹ (See Table 2). Dulles Airport currently operates with four runways but is ultimately planned for five.

Table 2: Washington Dulles International Airport Activity

	May 2010 – April 2011 ²	2030 Forecast
Total Passengers	23,861,093	52,496,000 ³
Aircraft Operations (takeoffs & landings)	337,496	749,000 ⁴
Cargo (tonnes⁵)	330,803	760,000 ⁶

The Airport Impact Overlay District for the Dulles Airport acknowledges the unique land use impacts of the airport, regulates the siting of noise sensitive uses, ensures that the heights of structures are compatible with airport operations, and complements FAA regulations regarding noise and height. Noise contours for the Dulles Airport are derived from a computer model based on the best available data regarding forecast aircraft fleet mix, number of operations, flight tracks, altitudes, and hours of operation for the airport at its ultimate, 5-runway, build-out (See Airport Noise Contours Map, p. 61).

Noise contours depict daily noise averages rather than noise “spikes.” These contours are the County’s primary means to preclude the encroachment of noise-sensitive land uses close to the airport and to ensure the future viability of the Airport, a significant public investment and component of the County economy. The three regulated contours are as follows: (i) areas within the Ldn⁷ 65 or greater noise contour; (ii) areas between the Ldn 60-65 aircraft noise contours; and, (iii) areas outside of, but within one mile of the Ldn 60. Although the overlay reflects the best available information, physical noise impacts may occur outside of these modeled areas and should be expected, particularly due to noise spikes. Additionally, wind direction dictates the direction of aircraft takeoffs and landings. Changes in wind direction, seasonal or otherwise, result in changes in aircraft flight direction with subsequent changes in localized noise impacts. Although the modeled noise contours reflect a 5-runway configuration of the airport, the full utilization of 5 runways

¹ Federal Aviation Administration, “Terminal Area Forecast Summary, Fiscal Years 2010-2030,” p. 1.

² Metropolitan Washington Airports Authority, “Washington Dulles International Airport, Monthly Air Traffic Summary Report, April 2011.”

³ Federal Aviation Administration, “Terminal Area Forecast Summary, Fiscal Years 2010-2030,” p. 9. Per discussion with MWAA staff, the total number of passengers is assumed to be roughly equivalent to twice the number of enplanements, July, 2011.

⁴ Federal Aviation Administration, “Terminal Area Forecast Summary, Fiscal Years 2010-2030,” p. 11.

⁵ 1 tonne = 1 metric ton = 2,200 pounds.

⁶ Metropolitan Washington Airports Authority, “The Loudoun County Round Table on Air Cargo Development,” presentation, March 2011. Cargo forecast is for the Year 2029.

⁷ Ldn is the symbol for “yearly day-night average sound level,” which is the 365-day average, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between 10 p.m. and 7 a.m. local time.

in the future will increase and change the physical noise environment surrounding the airport, which might not be in keeping with the expectations of businesses or residents.

Archaeological and Heritage Resources

The presence of environmental features such as the Potomac River, Goose Creek, and Broad Run played a significant part in the early settlement and land use pattern of the Ashburn Community. These major waterways are the primary location of early historic and prehistoric settlement sites in eastern Loudoun County. The Virginia Department of Historic Resources (VDHR) Data Sharing Service (DSS) (*Virginia Department of Historic Resources, May 2011*) identified 178 previously surveyed archaeological sites in the Ashburn Community; evenly divided between historic and prehistoric⁸ archaeological sites.

Prehistoric Resources

The Native Americans living in the area made use of local waterways and trails. Several large Native American village sites have been identified along the Potomac floodplain and along the larger streams in the Ashburn area. These village sites primarily date to what is known as the Woodland Period (circa 1000 B.C. – A.D. 1500) and were home to dozens, if not hundreds, of people. The people of the Woodland Period were relatively sedentary and developed a form of subsistence farming cultivating corn, beans, and squash.

Some of these village sites also date back to the last part of the earlier Archaic Period (circa 8000-1000 B.C.). Many small temporary camp sites and small tool-making sites from the period have also been identified on the hilltops and along smaller water sources in the area. The native people of the period were more transient than those of the Woodland Period. These people moved around the landscape as they exploited the food sources available during different seasons.

Very little evidence has been found in the area that dates to the earlier Paleo Period (prior to 8,000 B.C.), although some researchers are now actively attempting to find evidence of a “Pre-Paleo” period. Some believe that the East Coast may have been settled much earlier than previously thought. While only a few distinctive and definitive tools from the Paleo Period have been found in Loudoun County, it is certain that people were moving across the area. The people of this period were also hunters and gatherers who made use of whatever food sources they could find and were likely nomadic.

⁸ The prehistoric period is identified as anything predating the first settlement by Europeans in America.

Historic Resources

The first historic period settlers in the Ashburn Community were English plantation owners from Tidewater Virginia seeking fertile agricultural lands. Some of the early historic archaeological sites are associated with the Belmont and Coton Plantations (present day Lansdowne). In addition to the plantations, archaeologists have identified several sites related to enslaved African-Americans who provided the labor that made these larger plantations possible. Numerous smaller tenant farm sites have also been identified in the area.



Janelia Farm

from the nineteenth century. Some of the more noted extant historic buildings in the Ashburn Community include: Belmont Plantation, a federal style plantation house; the wood-frame Gothic Revival style Mt. Hope Baptist Church built in 1899 on Belmont Ridge Road; and Janelia Farm, a French Chateau-inspired home constructed in 1936, which is part of the Howard Hughes Medical Institute (HHMI) Campus.

Old Ashburn

The Village of Ashburn is an example of an early nineteenth century community, which was located at the convergence of several local roads and the Alexandria, Loudoun & Hampshire Railroad (later the Washington & Old Dominion Railroad, and now the W&OD Trail). In 1860, the aptly named crossroads of Farmwell became one of the many rail stops that served agrarian Loudoun County. The railroad transported the cash crops of wheat, corn, and oats as well as livestock and dairy products. In 1896, after an ash tree caught fire and supposedly burned for a week, Farmwell changed its name to Ashburn.

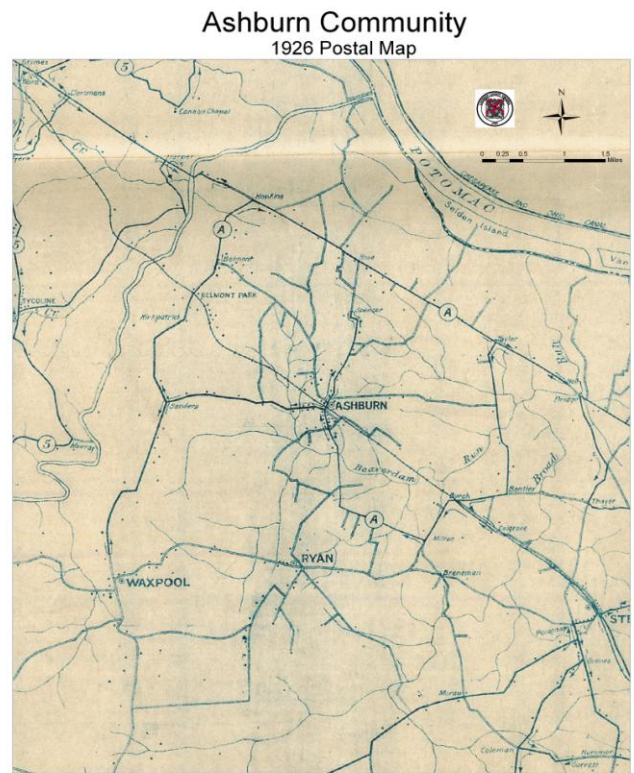
The VDHR Data Sharing Service (DSS) (*Virginia Department of Historic Resources, 2011*) identified 85 previously surveyed historic standing structures in the Ashburn Community, which include residences, agricultural structures, churches, cemeteries, and commercial structures, that date from the late eighteenth century through the mid-twentieth century. Along the banks of Goose Creek are the ruins of industrial sites including mills, mill races, and locks and dams

The village is comprised of numerous turn-of-the-century Victorian homes and commercial structures located near the railroad junction. Although the village has been determined to be eligible for listing on the National Register of Historic Places, only the Carpenter Gothic style Ashburn Presbyterian Church, which was constructed in 1878, is listed in the National Register within the Village. Other smaller historic crossroads communities, including Waxpool and Ryan, were established during the late nineteenth and early twentieth centuries as the agricultural economy of the Ashburn Community boomed. These places have all but disappeared and exist only as place names (See Ashburn Community 1926 Postal Map, p. 12).

Other Historic Resources

Several notable transportation-related historic resources in the area include: portions of pre-revolutionary Vestal's Gap Road; the ruins of the locks associated with the failed Goose Creek Canal; and the Broad Run Bridge and Toll House, which were part of the Leesburg Turnpike System to connect Leesburg with Alexandria and which later became modern day Route 7. Additionally, the road bed of the Washington & Old Dominion Railroad, currently owned by the Northern Virginia Regional Park Authority, bisects the community and serves as an east-west regional multi-use trail connecting Purcellville with Alexandria.

There are a number of historic cemeteries in the Ashburn Community either associated with existing churches or family cemeteries. A large cemetery associated with enslaved African-Americans and their families is located in the southeast quadrant of the intersection of Belmont Ridge Road and Route 7 near Belmont Plantation. A number of small family cemeteries are located throughout the Ashburn Community including the Lee family cemetery at Belmont Plantation, the LeFevre family cemetery located behind the existing pool and clubhouse in Broadlands, and the Craven Family cemetery located in the Ashburn Town Square Shopping Center.



Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

Socio-Economic Characteristics

Income

The Ashburn Community, in both 1999 and 2005-2009, had a higher median household income than the County as a whole. The Ashburn Community had a median household income of \$91,537 in 1999, compared to a median household income of \$80,648 for the entire County. The median household income between 2005 and 2009 for the Ashburn Community was \$121,525, compared to \$112,021 Countywide (*U.S. Census Bureau, 2000 Census and 2005-2009 American Community Survey five-year estimates*).⁹

Diversity

In Loudoun County as a whole, the percentage of the population that is foreign born increased from 11% in 2000 to an average of 20% between 2005 and 2009. The Ashburn Community contains a similar percentage of foreign born people, with 10% in 2000 and 20% on average between 2005 and 2009 (*U.S. Census Bureau, 2000 Census and 2005-2009 American Community Survey five-year estimates*).

In 2010, the largest portion of the Ashburn Community population was White (56,936) followed by Asian (15,347) and African-American (6,635). The racial diversity of the Ashburn Community is similar to the County as a whole, except for the Asian population, which is more prevalent in the Ashburn Community. The Asian population comprised 18.1% of the Ashburn Community's 2010 population, compared to 14.7% for Loudoun County. Also of note is the percentage of Hispanic or Latino population within the Ashburn Community, which doubled between 2000 and 2010, also similar to the County as a whole. The Hispanic or Latino population, which can be of any race, comprised 8.8% of the Ashburn Community's 2010 population (7,454), compared to 12.4% (38,576) for Loudoun County as a whole (*U.S. Census Bureau, 2000 and 2010 Census*).

Land Use

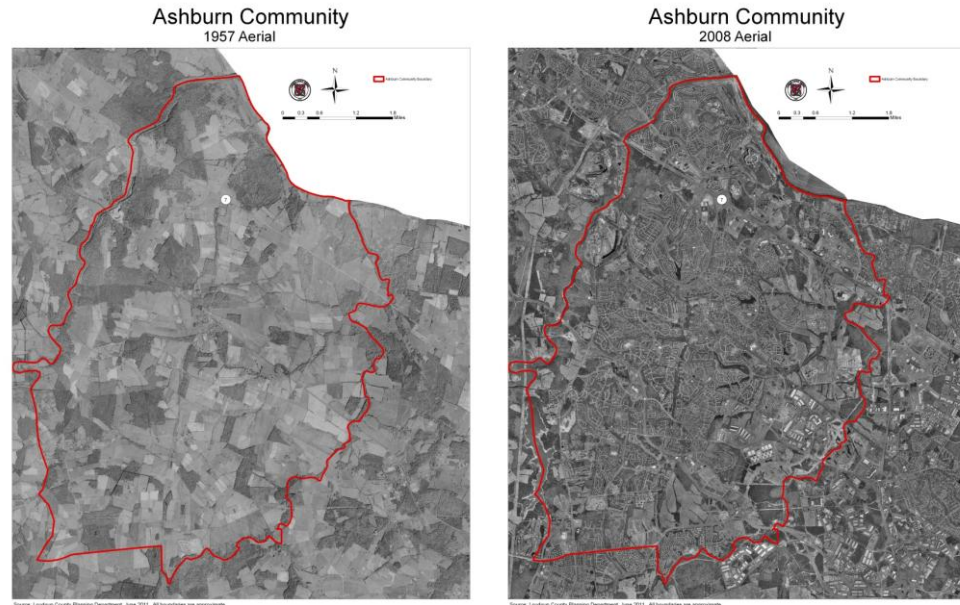
Population and Residential Development

While there were fluctuations, the population within Loudoun County from 1800 (20,523 persons) to 1920 (20,577 persons) remained relatively constant. After 1945, as a result of the automobile, more people were able to work outside of the County. However, the County's population did not increase significantly until 1960 (24,549 persons). Farming began to decline in eastern

⁹ 1999 income is not inflation-adjusted. The 2005-2009 five-year estimate is in 2009 inflation-adjusted dollars.

Loudoun in the late 1950's due to the economic opportunities that followed the construction of the Washington Dulles International Airport. The construction of the airport also brought about purchases of land for commercial development. In 1962, the Zoning Ordinance was amended to allow for planned communities. The development of these communities in eastern Loudoun (Sterling Park and Sugarland Run), as well as subdivisions in Leesburg, were largely responsible for the population of Loudoun County doubling from 21,147 persons in 1950 to approximately 42,000 persons in 1973 and the further demise of agriculture in the County.¹⁰

The Ashburn Community has grown significantly since 1990¹¹ when the community consisted of only 5% of the County's population. Today, the Ashburn Community contains a high percentage (27%) of the County's population. The aerial maps below show the change in development within the Ashburn Community from 1957 to 2008.



The County has also experienced significant growth, nearly doubling in population each decade from 1990 to 2010. However, the Ashburn Community experienced even more growth over the same period with an increase in population from 3,935 persons in 1990 to 84,834 persons in 2010 (See Tables 3 through 6). The Ashburn Community comprised 36% of Loudoun County's growth from 2000 to 2010. When looking at the population by age¹², 25,586 or 33.4% of the population of the Ashburn Community¹³ is nineteen years old or

¹⁰ Poland, Charles P., Jr. (2005). *From Frontier to Suburbia*. Heritage Books, Inc., Westminster, Maryland.

¹¹ Prior to 1990 most of the housing units were located in Ashburn Farm, the Ashbrook area, and Old Ashburn.

¹² 2010 Census Demographic Profiles using the Census Designated Places (CDP) for the Ashburn CDP, Belmont CDP, Broadlands CDP, Lansdowne CDP, Moorefield Station CDP, and University Center CDP.

¹³ This includes a large portion of the Ashburn Community, but not the entire area. The total population of the Ashburn Census Designated Place (CDP), Belmont CDP, Broadlands CDP, Lansdowne CDP, Moorefield Station CDP, and University Center CDP is 76,706 persons.

younger. This is similar to the County as a whole, which in 2010 included 101,042 persons or 32.4% of the total population nineteen years old or younger.

Table 3: Population Trends: Ashburn Community

	Population	Population Change	
	#	#	%
1990	3,935	--	--
2000	33,494	29,558	751%
2010	84,834	51,340	153%

Source: U.S. Census Bureau, Census 1990, 2000, and 2010.

Table 4: Population Trends: Loudoun County

	Population	Population Change	
	#	#	%
1990	86,129	--	--
2000	169,599	83,470	97%
2010	312,311	142,712	84%

Source: U.S. Census Bureau, Census 1990, 2000, and 2010.

Table 5: Household¹⁴ Trends: Ashburn Community

	Household	Household Change	
	#	#	%
1990	1,397	--	--
2000	11,477	10,080	722%
2010	29,509	18,032	157%

Source: U.S. Census Bureau, Census 1990, 2000, and 2010.

Table 6: Household¹⁵ Trends: Loudoun County

	Household	Household Change	
	#	#	%
1990	30,490	--	--
2000	59,900	29,410	96%
2010	104,583	44,683	75%

Source: U.S. Census Bureau, Census 1990, 2000, and 2010.

Ninety-four percent of the housing units located within the Ashburn Community have been developed since 1990. The Metropolitan Washington Council of Governments (COG) forecasts,¹⁶ produced before the 2010 Census data was available, suggest that housing units within the Ashburn Community and Loudoun County will increase by 14,000 and 60,000 respectively from 2010 to 2040. Based on a preliminary analysis of housing unit growth since 2000, the 2010 estimated mix of housing for the Ashburn Community is 39% single-family detached dwellings, 35% single-family attached (townhouses), and 26% multifamily units (apartments and condos). In comparison, housing unit estimates for the County are 54% single-family detached dwellings, 30% single-family attached, and 16% multi-family units (*Loudoun County Department of Management and Financial Services, May 19, 2011*). Most notable is the Ashburn Community's high proportion of apartments and condos compared to Loudoun County as a whole. However, it should be noted that approximately 20% of the multifamily units within the Ashburn Community are age-restricted apartments and condos.

The Ashburn Community contains a mixture of uses including residential, public and civic, retail and commercial services, office, and industrial (light and heavy) with 5,502 acres or 31% of the land vacant as shown in Table 7 (p. 16) (See Vacant Parcels Map, p. 69). It should be noted that 4,181 acres or 76% of the vacant land is approved for development but is yet to be developed.

¹⁴ Households as defined by the U.S. Census include all occupied housing units, while a housing unit is defined as a separate living quarters that is either occupied or if vacant, is intended for occupancy.

¹⁵ Households as defined by the U.S. Census include all occupied housing units, while a housing unit is defined as a separate living quarters that is either occupied or if vacant, is intended for occupancy.

¹⁶ COG Round 8.0 forecasts.

Table 7: Existing Land Uses within the Ashburn Community

Land Use	Parcel Acreage	Percent
Residential including HOA land	7,890	45%
Office	1,091	6%
Industrial	747	4%
Commercial/Retail	360	2%
Public/Civic	2,192	12%
Vacant	5,502	31%
Total	17,782	100%

Estimate based on a combination of data sources: Loudoun County GIS and LMIS records.

Based on actual parcel acreage, excluding right-of-way.

Planned Land Use

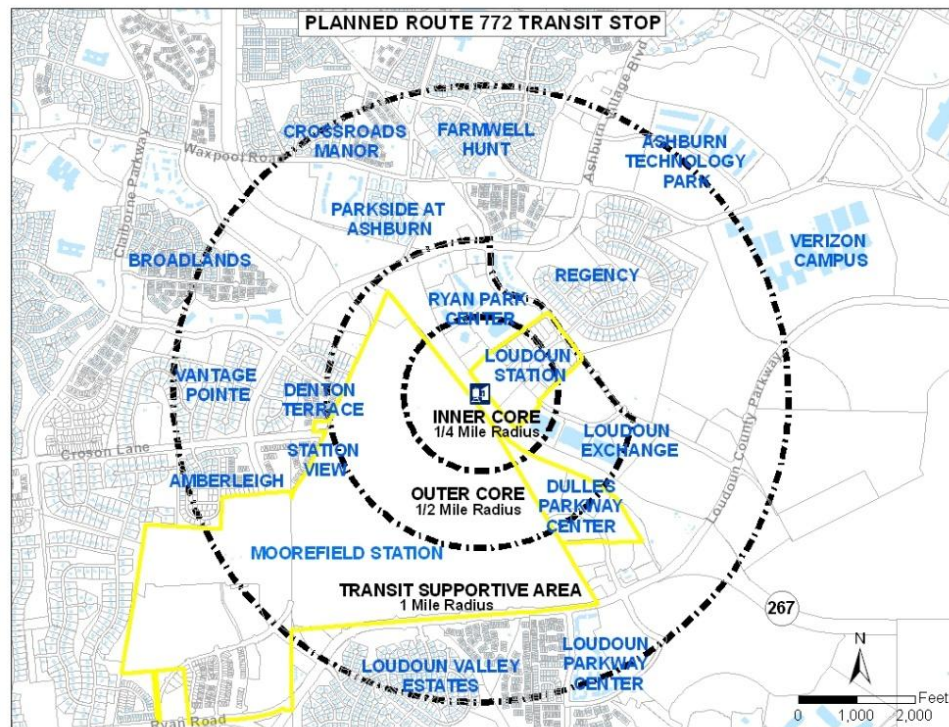
The Comprehensive Plan provides the long-range vision of the County and is the basis for evaluating land-development proposals. The *Revised General Plan* is the foundation for the County's Comprehensive Plan and can be found at www.loudoun.gov/comprehensiveplan.

There are eight different planned land uses designated in the Ashburn Community (Residential, High-Density Residential, Existing Rural Village, Business, Route 28 Business, Keynote Employment, Extractive Industry, and Industrial) as well as a Destination Retail Overlay at the southeast corner of the Dulles Greenway/Route 772 interchange, a Special Activities Area south of the Dulles Greenway and Old Ryan Road, and a Transit-Oriented Development (TOD) designation associated with the Route 772 planned Metrorail transit station (See Planned Land Use Map, p. 65 and Table 8, p. 18). Areas planned for residential uses comprise approximately half of the Ashburn Community (52%). The Village of Ashburn, or Old Ashburn as commonly known, is planned as an Existing Rural Village in an effort to maintain its identity and sense of place. New residential and non-residential development is limited to that which is compatible with existing structures and development patterns. While the Village of Ashburn is within the Suburban Policy Area, the village itself retains a rural character. The earliest residential homes, commercial buildings, and churches remaining in the area are primarily centrally located near the area where the W&OD Trail intersects with Ashburn Road (*Revised General Plan, Chapter 10, Existing Villages*).

The Route 7, Route 267, and Route 625 Corridors are planned as Keynote Employment and Route 28 Business to emphasize their status as emerging business areas (*Revised General Plan, Chapter 4, Business Land Use and Corridor Development*). In addition, the Transit-Oriented Development (TOD) designation associated with the planned Route 772 Metrorail transit station is located along Route 267 between the Loudoun County Parkway and Route 772 interchanges within the southern portion of the Ashburn Community. The TOD is planned as a compact, pedestrian-oriented development with a mix of residential, commercial, public, and employment uses. The TOD encompasses

an area no greater than the 1/2 mile radius from the transit stop to ensure compact mixed-use development, with reliance on transit and pedestrian circulation. A Transit Supportive Area surrounds the TOD, extending from the outer edge (1/2 mile) to one mile from the transit stop. Three developments have been approved with the Planned Development – Transit Related Center zoning designation proximate to the planned Route 772 transit stop (Moorefield Station, Loudoun Station, and Dulles Parkway Center II). The Planned Route 772 Transit Stop Map (Figure 1, p. 17) shows the location of the three approved TODs as well as existing uses within the one-mile radius of the transit stop.

Figure 1



Areas planned as Industrial are located along the Ashburn Community's western boundary along the Route 659 (Belmont Ridge Road) Corridor proximate to the Luck Stone Quarry, taking advantage of the diabase resource within this area (*Revised General Plan, Chapter 5, Mineral Resource Extraction Areas; and Luck Stone Quarry Map, p. 63*).

The Comprehensive Plan envisions that planned residential areas will incorporate a variety of housing types and lot sizes to provide options for a range of lifestyles and incomes, as well as a mix of non-residential land uses to allow residents the opportunity to work and shop nearby. Residential densities up to 4 dwellings per acre are envisioned. Although the densities of individual communities vary greatly, the overall density of the Ashburn Community is

approximately 3.89 dwellings per acre¹⁷. Areas designated for High-Density Residential uses are located along the Dulles Greenway at densities between 8 and 24 dwelling units per acre. The Plan sets forth a requirement that residential and high-density residential communities will incorporate public and civic uses, public parks and other open space areas, and encourages a retail and employment component (*Revised General Plan, Chapter 6, Residential and High-Density Residential*).

The Ashburn Community also has a Destination Retail Overlay which provides an additional development option for properties located within the area. The overlay is located along the Route 267 Corridor in the Ryan Park Center shopping area. The Special Activity Overlay Area, also within the Route 267 Corridor, provides an additional development option for a use or activity that may not be compatible with mixed-use communities due to their scale. Uses include professional sports stadiums, conference facilities, and theme parks. The Route 267 Corridor's location proximate to the airport and future transit make this an attractive area for a Special Activity Use (*Revised General Plan, Chapter 6, Special Activity Uses text*).

Table 8: Ashburn Community Land Use Matrix

Land Use*	Definition
Keynote Employment	Large-scale regional office developments, including office parks, research-and-development parks, and corporate headquarters (example: Howard Hughes Medical Institute's Janelia Farm Research Campus).
Route 28 Business	Low to mid-density office and flex uses; including secure office campuses and research-and-development parks (example: Beaumeade Corporate Park).
Regional Office	Variety of office uses.
Light Industrial	Low-rise (primarily two-story or less) development, includes flex warehouse and small-scale manufacturing.
General Industrial and Extractive Industry	Labor intensive industrial and commercial uses (example: Luck Stone Quarry).
Transit Node: Transit-Oriented Development	Compact mixed-use development at densities to support transit.
Residential	Mixed-type housing neighborhoods. Allows for mix of residential supportive uses (example: Ashburn Village, Broadlands).
High-Density Residential	Single-family attached and multi-family housing. Allows for mix of residential and supportive uses (example: Alexan at Ryan's Corner).
Existing Rural Village	Limited residential and nonresidential activities compatible with existing structures and development patterns.
Destination Retail	Retail uses that act as destinations, attracting customers from a regional market (example: Ryan Park Center).
Special Activity Area	Single use or activity of a scale typically not compatible with mixed-use developments, such as a professional sports stadium, conference facility, or theme park.

* The Plan sets forth a requirement that each of the planned land uses incorporate public and civic uses, public parks and other open space areas. With the exception of the Transit-Oriented Development, which requires a retail and personal service component, the planned land uses permit a retail and personal service component to serve the employees and residents (*Revised General Plan, Chapter 6, Land Use Mix Policies*).

¹⁷ 30,722 housing units in 2010 (includes occupied and vacant dwelling units)/7,890 acres developed with residential uses = 3.89 du/acre

A portion of the Ashburn Community is located within the Route 28 Highway Improvement Tax District (Route 28 Tax District), formed on December 21, 1987 to finance surface transportation improvements to Route 28 in Fairfax and Loudoun Counties (See Route 28 Tax District Map, p. 79). To pay the debt service on the transportation bonds issued to improve Route 28, non-residential property owners within the Tax District currently are assessed additional real property taxes of \$0.18 per \$100. The maximum additional tax assessment is \$0.20 per \$100. Only those properties zoned or used for commercial and industrial purposes are subject to the Tax District's special tax. The County has collected over \$103 million since the district was formed, which has been used to finance the widening of Route 28 and the construction of the Route 28 interchanges (*Department of Management and Financial Services, 2011*).

Plan policies encourage the development of non-residential uses within the Route 28 Tax District to support transportation improvements in the corridor, which in turn broaden economic benefits for the County. Residential development within the Route 28 Tax District is limited to three Mixed-Use Office Centers, the Urban Center, and areas planned Residential and High-Density Residential (*Revised General Plan, Chapter 6, Route 28 Corridor Policy 10*).

Zoning

Loudoun County's Zoning Ordinance is intended to implement the Comprehensive Plan and divides all the land in the County into zoning districts that specify the types of uses allowed and required development standards for each. Residential zoning districts dominate the Ashburn Community, with over 63% of the total acreage. They include Agricultural/Residential (A-3), Countryside Residential-1 (CR1), Countryside Residential-2 (CR2) and a variety of Planned Development-Housing (PD-H) and Residential (R) districts¹⁸. Approximately 33% of the acreage consists of non-residential zoning and industrial districts, including Planned Development – Commercial Center (PD-CC), Planned Development – Commercial Center-Small Regional Center (PD-CC-SC), Planned Development – General Industry (PD-GI), Planned Development – Industrial Park (PD-IP), Planned Development – Office Park (PD-OP), Planned Development – Research and Development Park (PD-RDP), Planned Development –Special Activity (PD-SA), and Mineral Resource-Heavy Industrial (MR-HI). The remaining 4% of the acreage consists of mixed use districts including Planned Development – Town Center (PD-TC) and Planned Development – Transit Related Center (PD-TRC) (See Existing Zoning Districts Map, p. 67).

The majority of the housing stock in the Ashburn Community has been

¹⁸ All of these residential zoning districts permit certain non-residential uses. For example, the PD-H districts are intended to support the development of mixed-use residential communities with supportive non-residential uses.

constructed within the past 20 years. Based on a preliminary analysis of housing unit growth since 2000, the 2010 estimates illustrate a somewhat evenly distributed mix of housing with 39% single-family detached units, 35% townhouses, and 26% multi-family units. The apartment and condominium communities are generally scattered throughout the residential areas.

Most of the residential developments within the Ashburn Community have Homeowner Associations (HOAs) and community amenities (*See Community Facilities Section, p. 28*). The largest master planned residential areas within the Ashburn Community include Ashburn Village, Ashburn Farm, Broadlands, Lansdowne, Belmont, and Belmont Green. Other residential communities in the Ashburn Community include The Regency, Loudoun Valley Estates, Cameron Chase, Potomac Farms, and the historic Village of Ashburn. The majority of the neighborhoods within the Ashburn Community are served by public sewer and water, with the exception of Potomac Farms, portions of the Village of Ashburn, individual homes along Belmont Ridge Road, and the Mt. Hope-Waxpool area.

Larger Residential Subdivisions within the Ashburn Community

Ashburn Farm - Most of the 1,274 acre Ashburn Farm master planned community was originally the Gray Dairy Farm. The development includes 3,792 dwelling units (1,743 single-family detached, 1,499 single-family attached, and 561 multi-family), with its first home being purchased in 1988. Amenities serving Ashburn Farm include a 10,000-square foot community center, 3 swimming pools, 12 tennis courts, 8 multi-purpose courts, 1 sand volleyball pit, 13 tot lots, 1 in-line skating hockey deck, jogging and biking trails, five ponds, the Greg Crittenden Memorial Park, the Trailside Park, and the Ashburn Library. Ashburn Farm also contains two shopping centers: Ashburn Farm Village Center (Parkhurst Plaza) and Junction Plaza (www.ashburnfarmassociation.org; www.ashburnweb.com; and 2008 Growth Summary, Tables F-6 and G-6 Supplement).

Ashburn Village - Open in 1988, the 652-acre Ashburn Village master planned community consists of 4,821 dwelling units (1,475 single-family detached, 2,395 single-family attached, and 951 multi-family) of which several are age-restricted for those 55 years and older. An additional 268 age-restricted units (15 single-family detached, 111 single-family attached, and 142 multi-family) remain to be developed. Ashburn Village amenities include a 32,130-square foot Ashburn Village Sports Pavilion with indoor and outdoor pools and exercise and weight-lifting facilities; three community centers (each with a pool), tennis courts, and basketball and multipurpose courts; the pavilion marina with pedal boats, kayaks, and canoes; six ponds; baseball and soccer fields, a roller hockey rink; tot lots; a butterfly park; and wildlife preserve. Ashburn Village Center also provides shopping for the community residents (www.ashburnweb.com; www.ashburnvillage.org; and 2008 Growth Summary,

Tables F-6, F-7, and G-6 Supplement).

Belmont Country Club - Built around an 18-hole golf course, the 1,144-acre Belmont Country Club includes 1,933 dwelling units (886 single-family detached, 849 single-family attached, and 198 multi-family) in a gated community. Home construction began in 1999. The Belmont Plantation Manor House built in the 1790's and listed on the National Register of Historic Places serves as the golf clubhouse. The clubhouse is a 38,000-square foot facility, including additions made to the original structure. In addition to the golf course and clubhouse, Belmont Country Club offers a recreation center with pool, basketball courts, multipurpose athletic fields, tennis courts, and a volleyball pit (www.ashburnweb.com; www.belmontcountryclub.com; and 2008 Growth Summary, Table F-6).

Broadlands - The more than 1,500-acre Broadlands master planned community is approved for 4,017 dwelling units (1,946 single-family detached, 1,225 single-family attached, and 846 multi-family). As of January 1, 2009, 3,360 units were either built or permitted (1,812 single-family detached, 1,016 single-family attached, and 532 multi-family). Amenities include a community center, three pools, tennis courts, the Broadlands Nature Center, Hillside Park, Oaktree Grove, the Stream Valley Park, tot lots, and jogging and biking trails. Broadlands also contains three shopping centers: Broadlands Marketplace, Broadlands Village Center, and Broadlands Retail and Office Center (www.broadlands.org and 2008 Growth Summary, Tables F-7 and G-6).

Lansdowne¹⁹ - The more than 1,000-acre Lansdowne development, including Lansdowne Village Greens, Leisure World, and Linden Row, is approved for 5,623 units (1,242 single-family detached, 920 single-family attached, and 3,461 multi-family). As of January 1, 2009, 4,138 units were either built or permitted (1,242 single-family detached, 1,032 single-family attached, and 1,864 multi-family). Amenities include two 18-hole golf courses; a 9-hole short course; the renovated Coton Barn clubhouse; fitness, swimming, and tennis facilities; an outdoor amphitheatre; tot lots; sand volleyball court; biking and walking trails; Elizabeth Mills Riverfront Park; and Kephart Bridge Landing. Businesses include INOVA Loudoun Hospital, Lansdowne Resort, Prison Ministries



Potomac Club, Lansdowne

¹⁹ A portion of Lansdowne is located outside the Ashburn Community.

headquarters, and the Jack Kent Cooke Foundation. Lansdowne Village Greens provides shopping for residents.

Located within the Lansdowne development is Leisure World, a 91-acre condominium community offering many on-site amenities for its residents including a clubhouse, indoor swimming pool, rooftop tennis courts, library, computer center, chapel, beauty salon, convenience store, restaurant, bank, and shuttle bus (www.lansdownehoa.com; www.lwva.org; and 2008 Growth Summary, Tables F-7 and G-6).



Moorefield Village Apartments

Other residential communities in the Ashburn Community include Alexan at Ryan's Corner, Alexandra's Grove, Amberleigh, Ashbriar, Ashbrook, Ashburn Manor, Ashburn Meadows, Ashleigh, Belmont Glen, Belmont Greene (Belmont Forest), Belmont Ridge, Cameron Chase, Carisbrooke, Cedar Ridge, Courts of Ashburn, Dulles Parkway Center, The Estates of Forest Ridge, Farmwell Hunt, Flynn's Crossing (Ryan Park Center), Forest Manor, Goose Creek Village South, Hunt at Belmont Country Club, Loudoun Parkway Center, Loudoun Valley Estates, Moorefield Station, Moreland Estates, The Park at Belle Terra, Potter Property, The Regency, The Reserve at Belle Terra, The Ridges at Ashburn, Timberbrooke, University Center, Vantage Pointe, Villages of Waxpool, and Windermere. In addition to Leisure World, the area contains several retirement housing communities providing age-restricted housing for adults 55 years and older. These include Potomac Green as well as portions of Ashburn Village. The Regency at Ashburn is an additional approved but unbuilt residential development within Ashburn Village approved for 268 age-restricted units. Ashby Ponds, also located within the Ashburn Community, is a continuing care retirement facility offering a mix of independent living, assisted living, and skilled nursing units.



Chelsea Courts, University Center

Ashburn Community properties located within the Route 28 Tax District include several residentially-developed properties north of Route 7 that are not taxed and include University Center, Riverside Villages, Chelsea Courts Condominiums, and Regents Walk. A onetime "buy-out" of the Route 28 Tax

District is required for all properties that change from a non-residential to a residential zoning district.

Affordable Housing

More than 60 Affordable Dwelling Units (ADUs) are located within the Ashburn Community as part of the County's ADU Program²⁰. Prices for ADUs are much lower than comparable market rate homes and typically range from approximately \$106,500 to \$142,700 (*Loudoun County Department of Family Services*). These properties are subject to restrictive covenants related to refinancing and transfer for 15 years, after which the units can be sold at market rates with the profit being split between the seller and the County's Housing Trust Fund.

In addition to the home ownership program, an ADU rental program is available for those earning between 30 and 50% of the area median income. Through this program, non-homeowners have the opportunity to rent an apartment from a participating apartment complex at a rent below that of similar units at the complex. Average rental rates range from approximately \$500 to \$1,185 depending on the type and size of the units, excluding cost of utilities. Unit types and sizes range from one-bedroom/one-bath to three-bedroom/two-bath units (*Loudoun County Department of Family Services*). Unit rents are controlled for a period of 20 years. Seven apartment complexes within the Ashburn Community participate in the program with a total of 173 rental units: The Ashborough (32), Archstone Stoneridge (25), Broadlands (15), Camden Lansdowne (26), Camden Silo Creek (18), Moorefield Village (28), and Westwind Farms (29).

Additional opportunities exist for affordable housing in the Ashburn Community outside of the ADU program through grants and services such as the Housing Choice Voucher (HCV) Program and the Low-Income Housing Tax Credit Program. The HCV Program, funded by the U.S. Department of Housing and Urban Development (HUD), provides low-income families, elderly persons, and persons with disabilities with rental housing at affordable prices through rental assistance subsidies. The Low-Income Housing Tax Credit Program, sponsored by the U.S. Treasury Department, administered in Virginia by the Virginia Housing Development Authority, encourages the development of affordable rental housing by providing owners a federal income tax credit. It also provides incentives for private investors to participate in the construction and rehabilitation of housing for low-income families (www.vhda.com). Two apartment complexes within the Ashburn Community offer income-restricted housing: The Wingle House, which offers age-restricted housing for individuals 55 years old and older, and the Fields of Ashburn.

²⁰ The County's ADU Program enables eligible first time homebuyers with moderate income the opportunity to purchase a newly constructed or resale ADU townhouse or condominium. To be eligible, total household income must be more than 30% and less than 70% of the area median income (currently set at \$106,100) based on the Primary Washington Metropolitan Statistical Area.

Foreclosures

While the number of foreclosures in Loudoun County and the Ashburn Community are dramatically lower than levels seen during the peak of the housing crisis/recession (2007/2008), they are still above pre-recession levels. The number of “short sales”²¹ also remains above pre-recession levels. In addition to foreclosures, Loudoun County and the Ashburn Community are affected by a high number of properties where the amount owed on the mortgage exceeds the market value of the home. For example, as of July 2010, two Ashburn zip codes, 20147 and 20148 were estimated to have about 36% and 39%, respectively, of their owner-occupied properties in this “negative equity or underwater” situation (*CoreLogic database report, September, 2010*). By comparison, in Loudoun County as a whole, 37% were “underwater.” While property values are now gradually appreciating in the Ashburn area²², homeowners who either purchased or refinanced during the peak of the housing boom will require a number of years of property appreciation before they will see their equity return. As a result, many homeowners who may need to sell their homes, may find themselves in a short sale situation. This does not provide much in terms of incentives to invest in property improvements.

Economic Development

Loudoun County experienced success in attracting businesses and developers during the economic expansion of the 1990’s. The Ashburn Community contains portions of three business corridors: Route 7, Route 267, and Route 625.

Route 7 Corridor

The Route 7 Corridor is planned for office and research uses and is home to the George Washington University, Shenandoah University, Strayer University, and the Howard Hughes Medical Institute’s Janelia Farm Research Campus. The County estimates that approximately 640 acres within the Ashburn Community will be available for development in the next three years. However, 605 of these acres, or 95%, are classified as “Developer/Build only” and typically are not for sale. There are 520 acres and 5.3 million square feet of existing office and light industrial uses along the portion of the Route 7 Corridor within the Ashburn Community (*Economic Development Market Analysis of Eastern Loudoun County Office and Industrial Land, December 2010 Update, Table IV*).

Route 267 Corridor

The Route 267, or Dulles Greenway, Corridor is planned for high-density transit-oriented development. The majority of the vacant land along the corridor is likely to remain vacant while awaiting the arrival of rail, allowing for maximum densities to be realized. There are 108 acres and 1 million square

²¹ A short sale is a sale of real estate in which the proceeds from the sale are less than the balance owed on the loan.

²² 2011 Assessment Summary, Office of the Loudoun County Assessor.

feet of existing office and light industrial uses along the portion of the Route 267 Corridor within the Ashburn Community (*Economic Development Market Analysis of Eastern Loudoun County Office and Industrial Land, December 2010 Update, Table IX*).

Route 625 Corridor

The Route 625 Corridor is planned for office and business uses and is home to many technology companies and the majority of the County's data centers. The County estimates that approximately 508 acres within the Ashburn Community will be available for development in the next three years, all of which are classified as "Developer/Build only" and typically are not for sale. There are 540 acres and 6.5 million square feet of existing office and light industrial uses along the portion of the Route 625 Corridor within the Ashburn Community (*Economic Development Market Analysis of Eastern Loudoun County Office and Industrial Land, December 2010 Update, Table VIII*).

Employment

The Ashburn Community has experienced significant job growth. According to the most recent estimates, jobs increased by 11,272 (56%) from 2005 to 2010. During this same period, 62% of Loudoun County's job growth was in the Ashburn Community. In 2010, 22% of the County's total jobs were located in the Ashburn Community (an estimated 31,487 jobs compared to 143,736 jobs Countywide). The total number of jobs in the entire County is forecasted to be 285,415 in 2040 (*COG Round 8.0 Cooperative Forecasts, adopted November 2010*). With 29,509 households within the Ashburn Community and a jobs to household ratio of 1.07:1, the Ashburn Community is likely a net provider of workers to other areas. County projections indicate that by 2040, approximately 76,422 people will work in the Ashburn Community, an increase of 44,935 from 2010 to 2040. The increase in jobs from 2010 to 2040 will be directly related to the large amount of land within the Ashburn Community designated as commercial that can still be developed or that has plans already submitted.

Table 9: Largest Employers in the Ashburn Community

Organization	Number of Employees
Loudoun County Public Schools	1,000-4,999 (Countywide 10,000+)
INOVA Loudoun Hospital	1,000-4,999
Verizon	1,000-4,999
Lansdowne Resort	500-900
George Washington University	250-499
NALC Health Benefit Plan	250-499
Telos	250-499

Source: 2009 Growth Summary, Table D-6.

In 2009, 57% of the County's Office and 55% of the County's Industrial uses were located within the Ashburn Planning Subarea²³. Approximately 22 million square feet of employment space (includes office, light industrial, and industrial uses) is located within the Ashburn Planning Subarea (*Loudoun County, 2009 Annual Growth Summary, Table G-3*). Densities for office, light industrial, and industrial land within the Ashburn Community range from an average density of a 0.20 Floor Area Ratio (FAR) along the Route 267 Corridor up to a 0.27 FAR along the Route 625 Corridor (*Economic Development Market Analysis of Eastern Loudoun County Office and Industrial Land, December 2010 Update, Tables IV, VIII, and IX*).

Office development within the Ashburn Community is concentrated along the Route 7, Route 267, and Route 625 corridors. The Route 7 Corridor within the Ashburn Community, planned for office and research development, is home to the George

Washington University, Shenandoah University, and Strayer University's Loudoun campuses and the Howard Hughes Medical Institute's Janelia Farm Research Campus. Additional office development includes the Verizon campus located south of Waxpool Road and west of Loudoun County Parkway as well as one story to multi-story buildings within areas such as Ashbrook and Ashburn Farm Professional Park. The area also contains community-serving professional office buildings like the medical offices located within Lansdowne.



Verizon Campus

The Route 625 Corridor within the Ashburn Community is home to the majority of Loudoun's data centers, located within Beaumeade Corporate Park and Ashburn Corporate Center taking advantage of access to infrastructure, such as fiber optic, electric, and water. Many of these data center uses are located within industrial parks, which also include a mix of office uses. Data centers are also located along the Route 267 Corridor within Loudoun Exchange. Heavier industrial uses associated with the Luck Stone Quarry are located along Belmont Ridge Road taking advantage of the diabase resource in this area.

Major office and industrial parks within the Ashburn Community include

²³ The Ashburn Planning Subarea is not the same as the Ashburn Community boundary. The Ashburn Planning Subarea is one of ten subareas that have been defined and used by the County since 1995 to forecast long-range demographic trends, guide the placement of new capital facilities, and address service delivery needs. The Ashburn Planning Subarea extends east of the Broad Run to Route 28; south of Ryan Road to Route 606; east of Creighton Road; and includes an area west of the Beaverdam Reservoir, south of Reservoir Road, east of Evergreen Mills Road, and north of Beaverdam Creek and does not include the portion of the Brambleton development located within the Ashburn Community.

Ashbrook Corporate Center, Ashburn Center, Ashburn Corporate Center, Beaumeade Corporate Park, Commonwealth Center, Janelia Farm, Lansdowne Corporate Center, Loudoun Exchange, Philips Property, University Center, and the Verizon campus. In addition, several mixed-use developments are approved but unbuilt within the Ashburn Community including Dulles Parkway Center II, Loudoun Station, Moorefield Station, and One Loudoun. These developments together include a significant amount of non-residential and residential development within the Ashburn Community (up to 16.7 million square feet of non-residential and more than 9,000 residential dwelling units). However, it is likely that most of the development potential associated with the Loudoun Station and Moorefield Station Transit-Oriented Developments (TODs) will remain vacant awaiting the arrival of rail, allowing maximum densities to be realized.

Retail and Commercial Service Development



Retail development within the Leesburg and Sterling areas accounts for more than 55% (7.8 million square feet) of Loudoun's retail space. The Ashburn Subarea²⁴, however, has almost 3 million square feet of retail uses itself, reflective of the area's significant residential and employment populations (*Loudoun County, 2009 Annual Growth Summary, Table G-3*). Retail space is spread throughout the Ashburn Community primarily within neighborhood shopping centers, providing personal services and convenience goods. These shopping centers are typically grocery store-anchored (such as Harris Teeter, Safeway, or Global Foods) and contain other retail uses including drug stores, personal service uses, and restaurants targeting the local community. In contrast, some of the larger shopping centers adjacent to Route 7 such as Ashbrook Commons Plaza (HomeGoods and AC Moore) and Route 267 such as Ryan Park Center (Home Depot) include larger footprint retailers (excluding grocery stores) that serve a more regional market (See Table 10, p. 28). In addition to the retail centers, listed in Table 10 (p. 28), a few freestanding businesses such as hotels, gas stations, and restaurants can be found within the Ashburn Community. Compact, pedestrian-oriented mixed-use developments, which include retail, have also been approved within the Ashburn Community as part of the Moorefield Station, Dulles Parkway Center, Loudoun Station, and One Loudoun developments.

²⁴The Ashburn Planning Subarea is not the same as the Ashburn Community boundary. The Ashburn Planning Subarea is one of ten subareas that have been defined and used by the County since 1995 to forecast long-range demographic trends, guide the placement of new capital facilities, and address service delivery needs. The Ashburn Planning Subarea extends east of the Broad Run to Route 28, south of Ryan Road to Route 606, east of Creighton Road; and includes an area west of the Beaverdam Reservoir, south of Reservoir Road, east of Evergreen Mills Road, and north of Beaverdam Creek and does not include the portion of the Brambleton development located within the Ashburn Community.

Table 10: Shopping Centers within the Ashburn Community, 2008¹

Approved retail centers greater than 100,000 square feet with remaining portions to be built		
Retail Center	Built or Permitted (square feet)	Total Approved (square feet)
Ashbrook Commons	189,430	300,000
Belmont Greene	128,811	163,350
Broadlands (Broadlands Village Center, Broadlands Marketplace, Broadlands Retail and Office Center)	280,744	474,600
Cameron Chase Village Center	134,527	136,927
Dulles Parkway Center II	0	100,000
Goose Creek Village Center	0	180,005
Lansdowne	150,780	250,000
Loudoun Station	0	Up to 1,130,627
Moorefield Station	0	Up to 9,750,000 non-residential uses ²
Morley Corner	0	125,000
One Loudoun	0	702,000
Ryan Park Center	90,181	233,000
University Center	0	215,482
Total	974,473	4,010,991³
Completed Retail Centers		
Retail Center	Built (square feet)	
Ashburn Farm (Junction Plaza and Parkhurst Plaza)	203,165	
Ashburn Town Square (Farmwell Hunt Plaza)	87,813	
Ashburn Village Center	213,593	
Old Ashburn Square	31,600	
Old Town Center	27,697	
Total	563,868	
GRAND TOTAL	1,538,341	4,574,859²

Sources: Route 7 Retail Market Analysis, 2006; 2008 Growth Summary, Table G-6 and Table G-6, Supplement; ZMAP 2001-0003, Moorefield Station Concept Development Plan (CDP); ZMAP 2002-0005, Loudoun Station CDP; and ZMAP 2005-0041, Dulles Parkway Center Proffers.

¹Table reflects the most recent available data (2008). Please note that square footages within the table do not reflect retail uses constructed since this date.

²The land use mix for non-residential land uses within the inner and outer core calls for a minimum of 20% for office uses and 10% for commercial retail and service uses and a minimum of 50% for office uses and no minimum for commercial retail and service uses within the transit supportive area.

³Total approved retail does not include Moorefield Station as the total amount of non-residential uses that will be devoted to retail cannot be determined at this time.

Community Facilities

Numerous community and civic facilities are present in the Ashburn Community, including several owned and operated by Loudoun County. These include sixteen public schools, the Loudoun County Public Schools (LCPS) Administration Building, the LCPS Staff Training Center, Ashburn Library, the Lansdowne Public Safety Center, Ashburn Fire and Rescue, Moorefield Fire and Rescue, seven mental health residential facilities, nine park-and-ride lots, and several recreational parks. (See Public Facilities and County

Properties Map, p. 71). The Eastern Loudoun Respite Center is currently under construction adjacent to the Broad Run in the University Center development. In addition, a contract postal unit (located within Parkhurst Plaza), higher education facilities, an existing hospital, and many churches are present within the Ashburn Community.

Schools

Public schools in the Ashburn Community include three high schools (Briar Woods, Broad Run, and Stone Bridge), three middle schools (Belmont Ridge, Eagle Ridge, and Farmwell Station), and ten elementary schools (Ashburn, Belmont Station, Cedar Lane, Dominion Trail, Hillside, Mill Run, Newton-Lee, Sanders Corner, Seldens Landing, and Steuart W. Weller). Current enrollment in most of these schools is at or over capacity. Estimates indicate that school enrollment growth in the Ashburn Community will continue to grow over the next five years. Current 2010-2011 program capacity at two of the area schools (Farmwell Middle School and Broad Run High School) reflect on-site trailers; two more schools (Belmont Ridge Middle School and Briar Woods High School) will include trailers at the start of the 2011-2012 school year to address a temporary increase in program capacity.

Four new schools are planned over the next five years²⁵: two elementary schools are planned to open at the start of the 2013-2014 school year (one within the Moorefield Station development and the other at the County-owned Farmwell Road site); a middle school is planned to open at the start of the 2014-2015 school year (co-located on the Newton-Lee Elementary School site); and a high school is planned to open at the start of the 2015-2016 school year, which will require land acquisition at a site yet to be determined (*Loudoun County Public Schools, 2011*). Several private schools are also present within the Ashburn Community, such as Ashburn Village Country Day School, Arris Montessori, County Christian School, Boyd Montessori School, Ideal Schools, Montessori Academy at Belmont Greene, and Saint Theresa Catholic School.

The Loudoun County Department of Parks, Recreation and Community Services offers two youth programs at County schools, the County After-School Activities (CASA) Program and the Youth After School (YAS) Program. CASA offers before and after school activities for elementary age students attending public schools. The YAS Program offers after-school activities for middle school students. All three of the middle schools within the Ashburn Community participate in this program (www.loudoun.gov/prcs).

²⁵ Specific locations will be determined through the legislative process.



*Exploration Hall,
The George Washington University*

The Ashburn Community is home to several higher education facilities including the George Washington University, Shenandoah University, Strayer University, and the Northern Virginia Criminal Justice Training Academy. The George Washington University-Virginia Science and Technology Campus and the Northern Virginia Criminal Justice Training Academy are located within University Center. The George Washington University-Virginia Science and Technology Campus offers approximately 20 academic degree and certificate programs (www.gwvirginia.gwu.edu). The Northern Virginia Criminal Justice Training Academy prepares individuals for careers in law enforcement, corrections, civil process, and court security (www.nvcja.org). Shenandoah University's Northern Virginia Campus, located near Lansdowne, offers undergraduate and graduate degree programs (www.su.edu). Strayer University's Loudoun Campus, located south of Route 7 and west of Route 28, offers both undergraduate and graduate programs (www.strayer.edu/loudoun).

Fire and Rescue

Fire and Rescue Services for the Ashburn Community are provided by the Ashburn Volunteer Fire and Rescue Department and the Moorefield Fire and Rescue Station. The Ashburn Volunteer Fire and Rescue Department operates from two stations, one located on Ashburn Road north of the W&OD Trail and the other being the Lansdowne Public Safety Center located north of Route 7 on Riverside Parkway. The Ashburn Volunteer Fire Company was constructed on Ashburn Road in 1947. When rescue services were added in 1995, the company changed its name to the Ashburn Volunteer Fire and Rescue Department. In 2009, the Ashburn Volunteer Fire and Rescue Department began responding to calls from the Lansdowne Public Safety Center. The permanent Moorefield Fire and Rescue Station #23 opened in July of 2011. The station is located on Old Ryan Road, adjacent to Route 267 within the Moorefield Station Transit-Oriented Development. Prior to completion of the permanent facility, the station was housed at a temporary, leased facility on Red Rum Drive in Ashburn Center. The leased space on Red Rum Drive was retained to temporarily house the Fire Marshall's Office until their permanent space is completed within the Brambleton Public Safety Center on Belmont Ridge Road.

Loudoun County provides career staffing for the Ashburn Volunteer Fire and Rescue Department during the daytime with volunteers on duty in the evenings. The Ashburn Volunteer Fire and Rescue Department responds to more than 4,500 fire and rescue calls per year (www.ashburnfirerescue.org).

Police

The Loudoun County Sheriff operates a field office in the University Center development. Neighborhoods in the Ashburn Community also participate in the Community Policing Program, including Ashburn Farm and Ashburn Village (*Loudoun County Office of the Sheriff, 2011*). This program involves citizens in efforts to improve the quality of life and reduce crime in their communities. According to the Sheriff Office's records, the top three reported violations in the Ashburn Community in 2010 are: (1) larceny, (2) destruction of property, and (3) simple assault. The Ashburn Community is served by School Resource Officers (SROs) at Briar Woods High School, Broad Run High School, Stone Bridge High School, Belmont Ridge Middle School, Eagle Ridge Middle School, and Farmwell Station Middle School who, among other duties, handle all criminal investigations originating in the schools and serve as the law enforcement liaison with the school system (*Loudoun County Office of the Sheriff, 2011*).

Recreational Uses

Within the Ashburn Community, the County operates several parks: Ashburn Park, Beth Miller Park, Bles Park, Brambleton District Park, Chick Ford Field and Ryan Bickel Field, Edgar Tillet Memorial Park, Elizabeth Mills Riverfront Park and Kephart Bridge Landing, Greg Crittenden Memorial Park, Lansdowne Sports Park, Lyndora Park, Ray Muth Sr. Memorial Park, and Trailside Park. Youth league sports utilize all of the fields at county parks and county schools within the Ashburn Community with the exception of high school stadium fields. Additionally, youth leagues negotiate with area HOAs to use their facilities, and any use of private fields is arranged through the league itself. The total estimated number of youth participating in league sports within the Ashburn Community is 20,586²⁶ (See Table 11, p. 32).



Edgar Tillet Memorial Park

²⁶ This number is based on participation numbers and not individual persons. The same child may play two different sports or play in two different seasons and may be counted more than once.

Table 11: Ashburn Community League Sports Participants

Sport	Organization	Summer 2010 July-Sept.	Fall 2010 Oct.-Dec.	Winter 2011 Jan.-March	Spring 2011 April-June
Football	I9		711		
	AYFL		782		
Basketball	2RBL		1,164		
	DYB		241		
	FSBL		646		
Soccer	LYSA	85	2,159	200	2,652
	ASC		1,222		1,360
	ODFC		312		269
Roller Hockey	AILHL		80		95
	Suburban Rugby				24
Wrestling	LYW			66	
	Ranger WC	93		93	
Baseball	DLL		510		1,095
	GLBR		185		188
	LSLL		307		658
Softball	AGSL	148	405		480
	LCGLL		150		250
Volleyball	LYVL		1,080		
	NVAA			197	
Lacrosse	Ashburn		152		300
	South Riding		347		350
Field Hockey	LFHA		130		95
Track	Spec. Forces				35
	NOVA				57
	LT&F				76
	DST&F				99
Independent	11U Blues Brothers (Base)				12
	12U Loudoun Dodgers (Base)				11
	13U Diamond Dawgs (Base)				12
	Ashburn Mustangs 14				10
	Ashburn All Stars (BB)				10
	Ashburn Arsenal				12
	Dulles Mustangs				13
	F&I 18U (softball)		14		
	Fire & Ice 14U				11
	Fuze (LAX)	85			
	LB Rangers G 10U				10
	Ldn Storm (SB)	21			
	Triple Threat (BB)			158	143
	W. Loudoun Baseball				65
	Leesburg Raiders (BB)				11
	Blue Ridge Senators				13
	Loudoun Endurance				12
	Loudoun Xtreme (BB)				38
	Basics 1 st (BB)				24
	Thunder Basketball				10
	Loudoun Xtreme (BaseB)				11
	Loudoun Freedom (BB)				61
	Firecrackers 9U (Soccer)				10
	Catoctin Basketball				69
	Loudoun Bomber (BB)				13
	VA Force (BB)				14
	Loudoun South Eagles (BB)				93

The County is developing a system of linear parks that encompass the Goose Creek and Broad Run stream valley corridors within the Ashburn Community. These trails will consist of natural surfaces intended for hiking and passive recreation. The Broad Run Corridor Trail is planned to link the Potomac Heritage National Scenic Trail with the W&OD Trail. The Potomac Heritage National Scenic Trail runs along the Potomac River corridor and extends for seven miles within the County, from the Fairfax County border to the Keep Loudoun Beautiful Park on Goose Creek. Trailheads can be found at Algonkian Regional Park, Bles Park, Elizabeth Mills Riverfront Park and Kephart Bridge Landing, and the Keep Loudoun Beautiful Park. Existing sections/easements of the Broad Run Corridor Trail within the Ashburn Community are located within Bles Park, Commonwealth Center, Paragon Park, Loudoun Valley Estates, and Loudoun Water. Existing sections/easements of the Goose Creek Corridor Trail are located within Elizabeth Mills Riverfront Park, Keep Loudoun Beautiful Park, Goose Creek Village North and South, and the Rouse/Belmont Glen property.

The Northern Virginia Regional Park Authority (NVRPA) owns and operates recreational facilities within the community, including the Washington and Old Dominion Trail (W&OD Trail). The W&OD Trail is a 45-mile linear park extending from Arlington to Purcellville.

Homeowners' Associations (HOAs) operate numerous recreational facilities located in individual communities, including community centers and pools, playgrounds, recreational courts and fields, and walking trails. Amenities within specific neighborhoods may be used by non-residents for a fee, such as the Ashburn Village Sports Pavillion; however, a limit is placed on the number of non-resident memberships. South of Route 7, the Belmont Country Club is a private facility open to members which offers an 18-hole golf course, clubhouse, and fitness, swimming and tennis facilities. Non-residents of Belmont Country Club may join the country club for a fee. North of Route 7, the Golf Club at Lansdowne offers two 18-hole golf courses, a 9-hole short course, clubhouse, and fitness, swimming and tennis facilities.



Ashburn Lake, Ashburn Village

Other Civic Uses

Other civic uses within the Ashburn Community include a post office and several houses of worship, including ADAMS Ashburn Center, Ashburn Presbyterian, Ashburn United Methodist, Beth Chaverim Reform, Calvary Baptist, Christian Fellowship, Church of Jesus Christ of Latter-Day Saints, Community Church, Greater Zion Baptist, Heritage Baptist, Mount Hope Baptist Church, Our Saviors Way Lutheran, Saint Davids Episcopal, Saint Moses Coptic Orthodox, and Saint Theresa Catholic Church.

One unique civic use is the interpretive community resource called the Aquary, located at Loudoun Water's Broad Run Water Reclamation Facility. The Aquary features water-related indoor and outdoor educational areas and exhibits. The indoor exhibits are located in the administration building and showcase water treatment and distribution, watersheds, water use, and below-ground water facilities. The outdoor facility features an interpretive trail showcasing a fountain, low-water landscape, bioretention basin, wetlands, overlooks, reforestation areas, ponds, a former farm site, and the Broad Run. The outdoor interpretive trails have been designated as a National Wildlife Federation Certified Wildlife Habitat site.

Circulation and Transportation

The road network in the Ashburn Community consists of a hierarchy of road facilities which, with transit service and bicycle and pedestrian facilities, form a transportation system that serves the needs of the area's residents, businesses, commuters, and visitors (See Countywide Transportation Plan Map, p. 73). The 2010 Countywide Transportation Plan (CTP), part of the County's Comprehensive Plan, provides policy guidance and helps inform residents and employers of the County's approach to addressing mobility needs and how the future transportation system may impact a specific neighborhood or property. Major thoroughfares are part of the "regional" or "CTP" road network and form the backbone of the system; all other public roadways are categorized as local or secondary roads.

All regional roads are classified into one of the four categories listed below (as defined by the CTP) based on the roadway's function in the overall network. The CTP specifies the functional classification of each CTP road in its current, interim, and ultimate conditions. Functional Classification is defined by FHWA as "the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide." All public roads in unincorporated areas of Loudoun County, including the Ashburn Community, are maintained by the Virginia Department of Transportation (VDOT).

The CTP road network consists of four (4) classifications:

Principal Arterials-roads that primarily serve regional and intrastate traffic, with access from minor arterials and major collectors. The *Route 267 Dulles Greenway* and *Route 7* are principal arterials.

Minor Arterials - roads that primarily serve commuter traffic, with access from major and minor collectors. *Loudoun County Parkway (from George Washington Boulevard to Waxpool Road)* is a minor arterial.

Major Collectors - roads that carry traffic through the County, providing connections between arterials. In the Ashburn Community, access to major collectors is primarily via minor arterials and minor collectors. *Ashburn Farm Parkway, Ashburn Village Boulevard, Belmont Ridge Road, Claiborne Parkway, Gloucester Parkway, Russell Branch Parkway, and a portion of Waxpool Road* are major collectors.



Waxpool Road and Claiborne Parkway

Minor Collectors - roads that carry traffic from local subdivision streets to major collectors and/or arterials. *Ashburn Road, Hay Road, Sycolin Road, and a portion of Waxpool Road* are minor collectors.

The balance of the public road network is made up of local or secondary roads. Generally, these roads include all neighborhood and subdivision streets serving single-family detached developments. Streets serving townhouse and multi-family developments are typically privately owned and maintained by their respective communities/owners associations as they are not eligible for inclusion into VDOT's secondary road system.

According to VDOT's most recent traffic volume estimates (Annual Average Daily Traffic, or AADT²⁷), the roadway that carried, on average, the most daily traffic in the Ashburn Community in 2009 was Route 7, followed by Waxpool Road (See Table 12, p. 36) (*Virginia Department of Transportation, 2009*).

²⁷ The Annual Average Daily Traffic, or AADT, is the estimate of typical daily traffic in both directions on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

Table 12: Annual Average Daily Traffic (AADT) on heavily traveled roads: Ashburn Community, 2009

Roadway	AADT
Route 7 (from Leesburg to Rt. 28)	70,000 - 82,000
Waxpool Road (intersection of Farmwell Rd./Smith Switch Rd. to Rt. 28)	46,000 - 63,000
Route 267 Dulles Greenway (from Belmont Ridge Rd. to Old Ox Rd.)	34,000 – 46,000
Farmwell Road (from Ashburn Rd. to Smith Switch Rd.)	26,000 – 36,000
Ashburn Village Blvd (from Farmwell Rd. to Rt. 7)	13,000 – 21,000
Claiborne Parkway (from Vestals Gap Dr. to Rt. 7)	14,000 - 20,000
Gloucester Parkway (from Ashburn Rd. to end)	15,000
Ashburn Farm Parkway (from Belmont Ridge Rd. to Ashburn Rd.)	7,100 – 21,000
Belmont Ridge Road (from Waxpool Rd. to Rt. 7)	8,200 – 13,000

Note: a range is provided when traffic counts for a roadway are divided in numerous segments, each of which has a different traffic volume estimate. Source: Virginia Department of Transportation (2009). Daily Traffic Volume Estimates Including Vehicle Classification Estimates. Jurisdiction Report 53.

Existing Road Network

Route 267 / Dulles Greenway

The Dulles Greenway is a six-lane limited access principal arterial that travels through the southern portion of the Ashburn Community, providing a direct connection between the Town of Leesburg and Washington Dulles International Airport. It is one of the first highways of its kind in the United States, constructed as an extension of the original toll road (Dulles Toll Road) which provides a direct connection from the airport to Interstate 66. Unlike the Dulles Toll Road, which was built by VDOT on land leased from the Metropolitan Washington Airports Authority (MWAA), the Dulles Greenway was funded and constructed by a private company (TRIP II) and is still owned and maintained by the company. Constructed under the authority of the Virginia Highway Act of 1988, Dulles Greenway is the first private road constructed for public use in Virginia since 1816 (<http://dullesgreenway.com/facts-myths/>). The Dulles Greenway is planned to be widened to eight lanes from the main toll plaza westward.

The Annual Average Daily Traffic for segments of the Dulles Greenway in the Ashburn Community (See Table 12, p. 36) is the third highest despite its design. Two similarly positioned roadways with similar travel routes, Route 7 and Waxpool Road, have signalization and at-grade intersections and have higher AADT counts than the Dulles Greenway. The numbers suggest that the Dulles Greenway is not carrying the volume of traffic intended by the roadway design.

Planned Future Road Network

Although much of the CTP road network within the Ashburn Community has been constructed, several key projects are yet to be completed. These planned improvements would improve traffic flow on existing roadways such as Harry

Byrd Highway (Route 7) and Belmont Ridge Road (Route 659) as well as complete missing roadway links, particularly those across the Broad Run and in the vicinity of planned Metrorail stations in the Dulles Greenway (Route 267) corridor. Significant planned roadway connections and improvements within the Ashburn Community include:

- Route 7 (Harry Byrd Highway) - Currently a six-lane divided facility that is gradually being converted to a limited access highway (the limited access segment is planned to extend westward to the Leesburg Bypass in the Town of Leesburg). The entire segment of Route 7 between Route 28 and the Leesburg Bypass is planned to be widened to eight lanes, and High Occupancy Vehicle (HOV) operations will be considered for the new lanes. Within the Ashburn Community, grade-separated interchanges are planned at Ashburn Village Boulevard (Route 2020)/Janelia Farm Boulevard (Route 2020 Extended) and Belmont Ridge Road (Route 659).
- The Route 7 Parallel Roads (Riverside Parkway (Route 2401) & Russell Branch Parkway (Route 1061)) - Presently, gaps remain in each of these roadways, though construction is underway and/or programmed on some of these missing links.
- Belmont Ridge Road (Route 659) - Planned to be widened to four lanes in the ultimate condition.
- Waxpool Road (Route 625) - Planned to be widened to six lanes as far west as Ashburn Road (Route 641) in the ultimate condition.
- Loudoun County Parkway (Route 607/ Route 1950) - Planned to be widened to six lanes from George Washington Boulevard (Route 1050) south to Old Ox Road (Route 606 in the Dulles Community) in the ultimate condition.
- Gloucester Parkway (Route 2150)/Nokes Boulevard (Route 1793) - Ultimately to be six lanes east of Loudoun County Parkway to Route 28; anticipated to be constructed in conjunction with future development and would provide the last missing link in the Gloucester Boulevard (Route 2150) corridor.
- Claiborne Parkway (Route 901) - The only remaining gap in the corridor is from Croson Lane (Route 645) south to Ryan Road (Route 772) to be completed to its ultimate four-lane divided condition.
- Metrorail-Related Road Improvements in the Dulles Greenway (Route 267) Corridor - Six improvement projects would complete the planned road network between and proximate to the two planned Metrorail stations along the Dulles Greenway at Route 606 and at Route 772. Among the planned road improvements in this area are:

- (1) Widening of the **Dulles Greenway (Route 267)** to eight lanes from the main toll plaza westward;
- (2) Construction of **Lockridge Road (Route 789 Extended)** from the vicinity of the current Dulles North Transit Center at the intersection of Lockridge Road (Route 789) and Moran Road (Route 634) (site of the future Route 606 Metrorail station) northwest across Broad Run and Loudoun County Parkway (Route 1950) to Waxpool Road (Route 625)/Faulkner Parkway/Broadlands Boulevard;
- (3) Construction of the **Greenway Transit Connector** within the Moorefield Station and Loudoun Station developments (site of the future Route 772 Metrorail station) between Croson Lane (Route 645) and Shellhorn Road (Route 643), including a bridge over the Dulles Greenway (Route 267);
- (4) Construction of **Moorefield Boulevard** within the Broadlands South and Moorefield Station developments between Mooreview Parkway (Route 772 Relocated) and Loudoun County Parkway (Route 1950) (opposite Westwind Drive (Route 645 Extended));
- (5) Completion of **Claude Moore Avenue** within the Moorefield Station development from Old Ryan Road (Route 772) (opposite the Greenway East-West Connector (Wynridge Drive)) to Loudoun County Parkway (Route 1950)); and
- (6) Construction of the **Greenway Loop Road** from Lockridge Road (Route 789 Extended) over the Dulles Greenway (Route 267) and across Loudoun County Parkway (Route 1950) through the Dulles Parkway Center development to Moorefield Boulevard in the Moorefield Station development.

Ongoing Projects/Studies

A number of transportation projects are underway to improve operations and safety on existing portions of the road network. The Ashburn Community contains four of Loudoun's "Ten Most Dangerous Intersections" for 2010, including an intersection listed as the most dangerous, (Waxpool Road/Loudoun County Parkway), as identified by the Loudoun County Sheriff's Office. The four intersections identified within the Ashburn Community, along with the number of crashes reported in 2010, are:

- Waxpool Road/Loudoun County Parkway (75 crashes)
- Route 7/Belmont Ridge (65 crashes)
- Route 7/Ashburn Village (42 crashes)
- Route 7/ Loudoun County Parkway (42 crashes)

Ongoing projects and studies to improve traffic operations and safety within the Ashburn Community include:

Waxpool Road

The County has designed and funded a segment of Waxpool Road, between Unbridled Way and Faulkner Parkway, to be widened to four lanes including a signal at Ashburn Village Boulevard. Construction is anticipated to commence in fall 2011. Completion of the project will provide additional capacity and progress the roadway towards the ultimate planned condition.

Russell Branch Parkway

The County is currently undertaking a project to construct the segment of Russell Branch Parkway from Ashburn Road (Route 641) east to Ashburn Village Boulevard (Route 2020), where the roadway is in place through the Ashbrook development. Design is currently underway and the project is partially funded. Time of construction will be determined at a later date, after design is completed.

Loudoun County Parkway

The remaining half-section of Loudoun County Parkway between Gloucester Parkway and the W&OD Trail may potentially be completed via the Public-Private Transportation Act (PPTA) process. The Public-Private Transportation Act of 1995 (PPTA) is the legislative framework enabling the Commonwealth of Virginia, qualifying local governments and certain other political entities to enter into agreements authorizing private entities to acquire, construct, improve, maintain, and/or operate qualifying transportation facilities. Any competing proposals were due to the County by mid-June 2011 and must have been coordinated with the Commonwealth Transportation Board (CTB). A construction date will be determined upon selection of a proposal.

Croson Lane

This project is a completion of Croson Lane (Route 645) as a continuous roadway between Belmont Ridge Road (Route 659) and the Moorefield Station development at Old Ryan Road. The project is part of road improvements related to Metrorail in the Dulles Greenway (Route 267) corridor (specifically identified in the 2010 CTP). The construction of this project will eliminate the gap west to Belmont Ridge (Route 659); thereby improving circulation within the area and supporting future traffic projections. Construction is from a private sector proffer and is currently underway. The completion date has yet to be determined.

Ashburn Village Boulevard

Ashburn Village Boulevard is a north-south connection through the Ashburn Community. It is currently built to its ultimate four-lane divided condition from Route 7 south to the Dulles Greenway (Route 267), with the exception of a short two-lane segment just north of Waxpool Road (Route 625). As part of a private sector proffer, this project includes widening the remaining segment to its ultimate four-lane divided condition north of Waxpool Road, including a signal at Waxpool Road. Construction is underway with completion

anticipated by the end of 2011.

Ashburn Road (Sidewalk Project)

Survey work for improvements to existing sidewalks in the Village of Ashburn has been completed. Partial funding has been made available through private sector proffers. A construction start date has not been determined.

Routes 7/659 Interchange

Design funding for the planned Belmont Ridge Road (VA Route 659) interchange was approved by County voters as part of a Local Road Bond Referendum in November 2006. The County is currently designing a grade-separated interchange to replace the existing intersection arrangement. The project is funded for construction in the VDOT Six-Year Plan with a construction date to be determined after design completion.

Route 7/Ashburn Village Boulevard Interchange

The design for a grade-separated interchange at the Route 7/Ashburn Village Boulevard intersection is nearing completion. The date for construction will be determined after the design is completed in fulfillment of a private sector proffer (One Loudoun).

Transit Services

A Transit Development Plan (TDP), is scheduled to be completed for Loudoun County in mid-summer 2011 by the Virginia Department of Rail and Public Transportation (DRPT). The TDP is a six-year service and funding plan and is designed to help DRPT and transit operators improve their efficiency and effectiveness by identifying the need and required resources for modifying and enhancing services provided to the general public. The TDP focuses on the provision of bus service at the County/agency level and does not include rail planning or implementation; however, it includes the bus service planning for integration with future Metro stations associated with the extension of rail, first to Wiehle Avenue in Fairfax County and then into Loudoun County.

Currently, two different types of transit services operate in the Ashburn Community, commuter bus service and local bus service, along with alternate support services.

Commuter Bus Service

Commuter Bus Service operates during weekday peak periods by Loudoun County Transit. This commuter bus service uses County-owned coach buses and is planned and managed by County staff. At the present time, there are three park and ride lots served by the County's commuter buses within the Ashburn Community:

- Ashburn North Park & Ride Lot - 190 spaces
- Broadlands Marketplace – 75 spaces identified for Park & Ride use

- Christian Fellowship Church – 250 spaces



Commuter buses from these locations provide service to the West Falls Church Metrorail Station in Fairfax County. In addition, the Dulles North Transit Center, located at the intersection of Moran Road and Lockridge Road, serves the residents of Ashburn.

Ridership has increased and the service maintains high participation rates with a monthly average of over 97,000 riders since July 2010. The commuter route to Washington, D.C. has averaged over 77,000 riders since July 2010 with reverse commute riders, from DC to Loudoun, averaging just over 3,000 riders (*Ridership Numbers - July 2010 to May 2011, Office of Transportation Services, 2011*).

Table 13: Ridership rates for Routes in the Ashburn/Dulles Area: July 2010-May 2011

Month	Wash. DC	Cascades	Reverse	Tysons	Total Riders
July	76,234	10,625	3,206	3,022	93,087
August	80,906	11,257	3,509	3,611	99,283
September	80,605	11,750	3,277	5,239	100,871
October	79,016	11,231	3,396	5,750	99,393
November	73,699	10,431	3,253	5,277	92,660
December	69,735	9,522	2,823	4,296	86,376
January	73,017	10,092	2,751	4,802	90,662
February	73,388	10,578	2,771	5,098	91,835
March	82,264	13,231	3,205	6,817	105,517
April	81,080	11,881	2,922	6,163	102,046
May	84,814	12,244	2,875	6,852	106,785
Total	854,758	122,842	33,988	56,927	1,068,515
Monthly Average	77,705	11,167	3,090	5,175	97,138

*The DC route numbers include the Dulles North Transit Center park and ride lot, the Christian Fellowship Church, and Ashburn North park and ride lots.

Local Bus Service

Local Bus Service is operated by Virginia Regional Transit (VRT) on behalf of Loudoun County. VRT currently operates four routes in the Ashburn Community; these routes (“7 to 7 on 7,” Ashburn Village Connector, Ashburn Farm Connector, and the West Falls Church (WFC) Express) converge at INOVA Hospital at Lansdowne, where connections can be made to VRT’s local service to Leesburg and other parts of Loudoun County. A connection can be made from the “7 to 7 on 7” to the Fairfax Connector bus system at the Town Center Plaza shopping center (Route 7 and Dranesville Road). VRT

local fixed-route bus service generally operates between 7 a.m. and 7 p.m. weekdays. The WFC Express, funded with public and private funds, provides service between the West Falls Church Metro Station and the Ashburn North Park & Ride Lot with stops at INOVA Loudoun Hospital, Howard Hughes Medical Institute/Janelia Farm Research Campus, and George Washington University campus.

Local bus service has maintained high ridership rates with a monthly average of over 2,000 riders since July 2010, with the highest ridership counts between the months of June and September (*Ridership Numbers - July 2010 to May 2011, Office of Transportation Services, 2011*).

Support Services

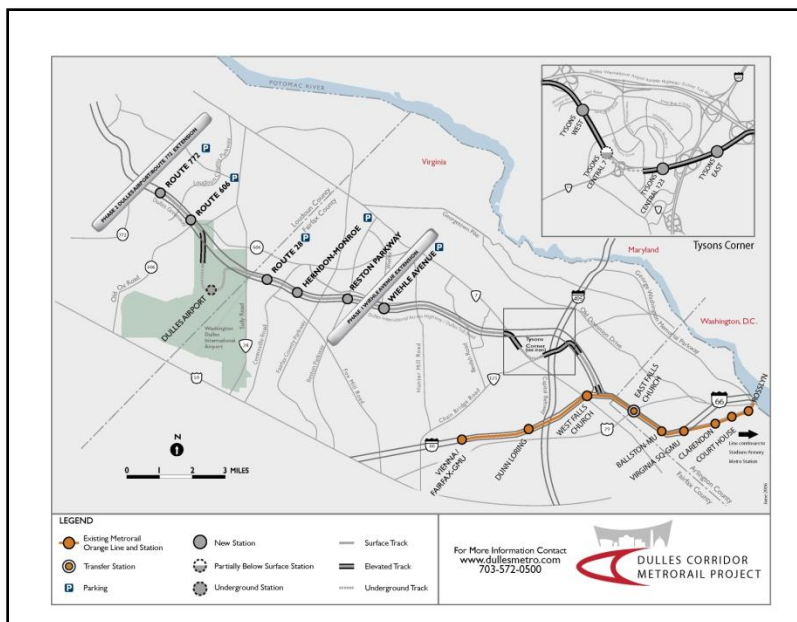
Additional supporting services are offered for commuters and local bus users within the Ashburn community. The Ashburn Farm Shuttle Bus Service supports the Loudoun County Commuter Bus Service with shuttle service to the Dulles North Transit Center from three (3) lots/stops located at:

- Parkhurst Plaza Shopping Center - 25 spaces
- Crossroads United Methodist Church - 90 spaces
- Claiborne Parkway and Belgreen Drive intersection - 'Walk to' bus stop (*no spaces*)

The Tysons Express serves Ashburn residents with Commuter Bus Service to Tysons Corner in Fairfax County from two Park & Ride lots located within the community:

- Broadlands South Park & Ride Lot – 75 spaces
- Broadlands South Second Park & Ride Lot – 160 spaces

This route is currently accommodating over 6,000 riders (from March to May) (*Ridership Numbers - July 2010 to May 2011, Office of Transportation Services, 2011*).



Metrorail

The Metropolitan Washington Airports Authority (MWAA) is constructing a 23-mile, 11-station extension (the Silver Line) of the existing Metrorail system from East Falls Church in Fairfax County to Washington Dulles International Airport and west into Loudoun County. The Dulles Corridor Metrorail Project is one of the County's and region's

priority transportation projects. New Metrorail service in the corridor will expand the reach of the existing regional rail system, offer a viable alternative to automobile travel and support future transit-oriented development along the corridor. The extension will serve Tysons Corner, Virginia's largest employment center, and the Reston-Herndon area, the state's second largest employment area, and will provide a one-seat ride from Loudoun County to Washington, D.C. The project will also benefit employees who travel reverse commutes from neighboring jurisdictions to employment centers in Loudoun County.

In July 2007, the Loudoun County Board of Supervisors approved a Funding Agreement between MWAA, Fairfax County, and Loudoun County to construct and place into service the additional rail line into Loudoun County. The project is being constructed in two phases, in order to meet federal funding requirements, with Phase 1 extending from East Falls Church, through Tysons Corner, to Wiehle Avenue in Reston, and Phase 2 extending from Wiehle Avenue, through Dulles Airport, to Route 772 in Ashburn. Phase 1 is presently in construction and is scheduled to begin service in late 2013. Phase 2 of the project is expected to be completed in 2018.

Once completed, this system will bring rail transit service to transit nodes in the vicinity of Route 606 (Old Ox Road) and Route 772 (Ryan Road) along the Dulles Greenway. The planned location of the future Route 772 Metro station is within the Ashburn community (See Planned Land Use Map, p. 65). The Route 606 and Route 772 stations will include approximately 2,750 and 3,300 parking spaces, respectively, in support of regional commuters.

Bicycle & Pedestrian Facilities (See Bicycle & Pedestrian Circulation Map, p. 75)



Windermere Green

There are numerous bicycle and pedestrian facilities within the Ashburn Community, though the overall network remains incomplete. Along major roadways where there is no sidewalk or trail, dirt paths are often present which indicate regular pedestrian traffic. In addition to facilities along roadways, there are numerous trails within and between individual neighborhoods that typically run along streams and other drainageways, such as the Broad Run Stream Valley Trail Corridor and the Potomac Heritage National Scenic Trail, although these facilities predominantly

function as a recreational use. The County's *Bicycle and Pedestrian Mobility Master Plan*, adopted by the Board of Supervisors in 2003, provides the basis for County policy on non-motorized transportation.

The Office of Transportation Services (OTS) has prepared a baseline map that identifies the existing, programmed, and planned but not programmed (“missing”) bicycle and pedestrian facilities along the CTP roads in the County (See Bicycle & Pedestrian Circulation Map, p. 75). This information is being used to develop a prioritized list of bicycle and pedestrian projects, which when built, will improve the bicycle and pedestrian connectivity between several key locations within the County, such as major employment and retail centers, schools, parks, and future Metrorail stations. Accordingly, the following “missing links” around the proposed Route 772 Metrorail Station have been recommended to be included in the countywide prioritized list:

Within 1-mile radius of Route 772 Station (highest priority):

- Shellhorn Road – between Ashburn Village Boulevard and Loudoun Station; between Loudoun Station and Loudoun County Parkway
- Ashburn Village Boulevard – between Shellhorn Road and Waxpool Road
- Loudoun County Parkway – between Dulles Greenway and Shellhorn Road; between Dulles Greenway and Greenway Loop

Outside 1-mile radius of Route 772 Station:

- Farmwell Road - between Ashburn Village Boulevard and Smith Switch Road
- Ashburn Road - on either side of W&OD Trail
- Claiborne Parkway - along the interchange with Dulles Greenway
- Gloucester Parkway - between Smith Switch Road and Ray Muth Sr. Memorial Park
- Belmont Ridge - on either side of the interchange with Dulles Greenway
- Ryan Road - between Belle Terra Drive and Forest Manor Drive

Infrastructure, Utilities, and Other Facilities

Water and Sewer

Loudoun Water (formerly known as the Loudoun County Sanitation Authority or LCSA), headquartered within the Ashburn Community, provides water and wastewater service to nearly all of the community (See Water and Sewer Facilities Map, p. 77). The source of tap water for customers within the Ashburn Community is the Potomac River, through a purchase agreement with Fairfax Water, and Goose Creek Reservoir through a purchase agreement with the City of Fairfax. These waters are taken from these surface water intakes and subsequently treated for potable uses.

Most (up to 13.8 million gallons per day) of the wastewater Loudoun Water



Broad Run Water Reclamation Facility

collects in the County is treated by D.C. Water (formerly known as D.C. Water and Sewer Authority) at their Blue Plains Treatment Plant. Blue Plains is one of the largest water reclamation facilities in the world and is located in southwest DC. The Broad Run Water Reclamation Facility (BRWRF), which can treat/reclaim up to 11 million gallons of wastewater per day, supplements the capacity at Blue Plains.

The BRWRF also provides a septage receiving station for septage hauled to the facility from individual homes and businesses with septic tanks or portable toilets. In addition, Loudoun Water treats all the waste-activated sludge from community systems owned or managed by Loudoun Water in other areas of the County. The BRWRF is located along Loudoun County Parkway within the Ashburn Community. This facility uses state-of-the-art membrane technology to produce an effluent which can be used for urban, industrial, agricultural, environmental, and recreational applications. Loudoun Water has made significant investments in architecture, state-of-the-art odor control, and landscaping along Loudoun County Parkway in order to be a positive addition to the local community.

Some of the older neighborhoods within the Ashburn Community are not served or are only partially served by public water and sewer. These include the Potomac Farms (privately owned public water supply, private wells, septic systems, alternative discharging systems, and pump-and-haul), Old Ashburn (private wells, septic systems, and alternative discharging systems), individual homes along Belmont Ridge Road (private wells and septic systems), and the Mt. Hope-Waxpool area (private wells, septic systems, and pump-and-haul). All four residential communities have parcels with sewage disposal systems more than 30 years old; some that have previously failed and have been replaced with alternative discharging systems, and others that may have reached the end of their life spans. These parcels typically have poor soils and do not have a designated reserve area. Water complaints have occurred from the residents of Potomac Farms due to low pressure and aesthetic water quality issues. The "Loudoun County Water and Wastewater Needs Assessment, December 2010" estimated costs of more than \$3.2 million (in 2004 dollars) to extend public water and sewer to these communities.

Loudoun Water is planning to construct its own intake in the Potomac River, upstream of the Potomac's confluence with the Goose Creek, and a treatment

Additional non-potable water (reuse water) is available from BRWRF. The first water reuse project installed 3,900 feet of 16-inch "purple pipe" for a water reuse main to serve a private office building and the "One Loudoun" World Trade Center on Route 7. The second project installed 4,920 feet of purple pipe to the National Rural Utilities Cooperative Finance Corporation located along Route 28. Both customers expressed interest in receiving reclaimed water for irrigation, cooling towers, and other non-potable uses in order to meet LEED (Leadership in Environmental and Energy Design) criteria. Additional projects are planned or in design that will extend reuse water south of the BRWRF to businesses in the Beaumeade area.

facility in the same area. Luck Stone and Loudoun Water have worked together to develop a long-range plan for the Luck Stone Quarry, which involves conversion of the rock quarries to accommodate growth in water demand and to provide a source of water storage. Loudoun Water plans to pump water from the Potomac River to several retired rock quarries for storage and to a new water treatment facility to be built on Loudoun Water property at the crossing of the Dulles Greenway over the Goose Creek. The first quarry to become available will provide approximately one billion gallons of raw water storage. Over a 30-year planning period, another quarry will provide an

additional four billion gallons of storage. Loudoun Water forecasts that planned growth in Loudoun County will require an estimated 90 million gallons per day by 2040.

Stormwater Management

Over 23.4% of the Ashburn Community's land area is impervious. This exceeds the County-wide average of just under 9%, reflecting the extensive development that has taken place. The impervious cover generates a great amount of stormwater runoff. Although the community accounts for only 6% of the County area, it contains 34% of the County's stormwater infrastructure. Stormwater infrastructure carries water from roads, buildings, and parking lots through a series of pipes, culverts, and open channels. Stormwater ponds, in combination with other design elements, help reduce flooding and environmental impacts to streams by reducing peak stormwater flows and reducing pollution. Based on County GIS records, the Ashburn Community has an estimated 260 miles of storm drain pipes and 336 miles of open channels designed for stormwater management. It also has 203 stormwater ponds.²⁸

Though most of the Ashburn Community features constructed stormwater management systems to protect water resources and manage polluted stormwater runoff, various older systems were developed in the community that do not meet current standards for stormwater runoff and water quality. In cases where stormwater infrastructure components do not meet current Virginia stormwater requirements or are nonexistent, stream health and water

²⁸ Dry ponds and wet ponds are stormwater infrastructures designed to hold stormwater. Generally, dry ponds are designed to drain completely within a couple of days while wet ponds hold some water indefinitely.

quality may be compromised. There are no specific plans to improve or upgrade community systems beyond repairing facilities that are functioning poorly. The County is informed of problems through public input via the Stormwater Hotline and through an inspection program contracted through the Loudoun County Department of General Services.

A number of buried stormwater pipes in the Ashburn Community are 54, 60, 72, and 84 inches in diameter and are intended to handle the stormwater runoff from developed areas and reduce flooding. Although these pipes perform these functions, the prevalence of large pipes alters the flow dynamics of streams and floodplains. Streams experience high peak stormwater discharges and quickly receding flows. While stormwater regulations are designed to control the effects of limited size rainfalls by controlling stormwater volumes, velocities, and pollutants flowing into streams and floodplains, such measures lose their effectiveness with larger or more frequent storms once the ground is saturated. Additionally, associated impervious cover increases the flashiness of stormwater runoff, where water volumes and velocities quickly rise to high levels and then quickly recede. During the past decade higher peak flows have been measured in the Broad Run watershed due to increases in impervious cover in the Ashburn Community. In addition to non-point source pollution such as nitrogen and phosphorus, increases in impervious cover increase the sediment load flowing into streams. Impervious cover also reduces the base flow of our streams, which is the groundwater that migrates into the streambeds and accounts for stream flows during periods of no rainfall. The Ashburn Community contains several stormwater ponds in-line with streams and floodplains, altering the ecology of those water resources. Some of the largest ponds are used as amenities with generally stable water levels, limiting storage capacity.



The Estates at Forest Ridge

Since the adoption of the Stormwater Management Ordinance in 2003, the County has maintenance responsibility for all stormwater facilities that lie within County easements, with the exception of wet ponds. Regarding wet ponds, an agreement is created that distinguishes the responsibilities of the County from those of the property owner. Generally, the County is responsible for ensuring that the facilities function properly and the property owner is responsible for the aesthetics. The County is not responsible for stormwater

facilities for which there is no County easement. In those cases, the County takes responsibility when the property owner properly grants an easement.

Electricity

Within the Ashburn Community, high tension electrical lines run alongside the Washington and Old Dominion Trail (W&OD Trail) and just east of the Loudoun County Parkway from the W&OD Trail to Shellhorn Road near the Dulles Greenway. Dominion Virginia Power overhead transmission lines are present along sections of some of the roadways and within many of the older neighborhoods and commercial areas. In the newer areas, electric lines have typically been buried. There are several electrical sub-stations serving the Ashburn Community both inside and outside of the community. Northern Virginia Electric Cooperative (NOVEC), which has certain service areas in Loudoun County, does not service the Ashburn Community.

Cable TV, Internet, and Telephone

Three cable television providers serve the Ashburn Community, each of which holds a non-exclusive franchise with the County. All companies provide telephone and Internet services, and providers use overhead transmission lines along sections of some of the roadways and within many of the older neighborhoods and commercial areas. Newer subdivisions have buried transmission lines. There are several wireless telecommunication towers in the Ashburn Community providing cellular phone and data services to area residents and businesses, most located along the Dulles Greenway. Satellite television and internet service is also available from several commercial providers.

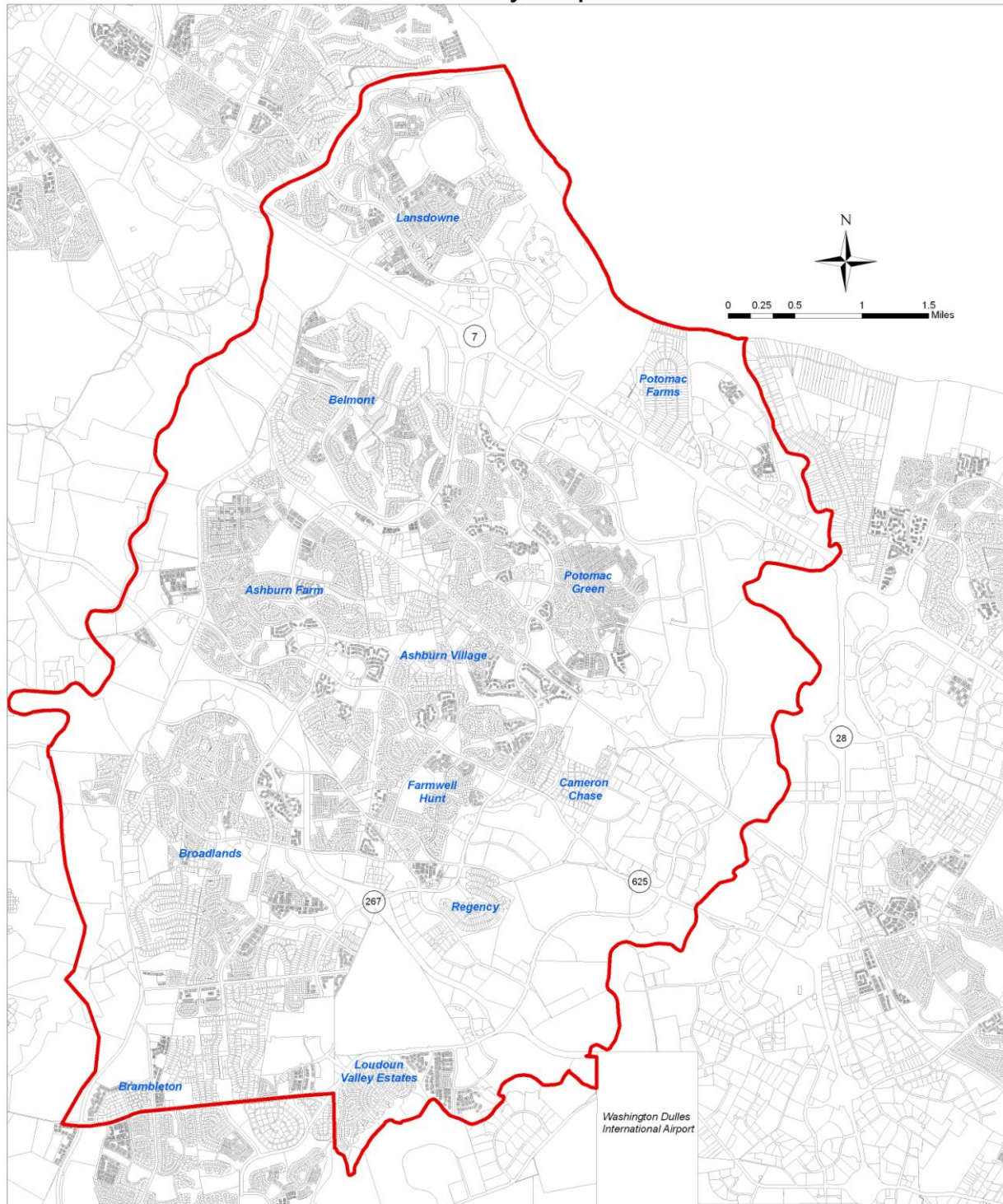
The Ashburn Community is home to the Metropolitan Area Exchange-East (MAE-East), a significant crossroads of fiber optic cable that provides large amounts of broadband capacity for Internet users. The community also contains an extensive fiber optic network, which provides superior high-speed voice, video, and data transmission. High-speed fiber optics technology enables business, government, defense electronics, and others to transmit large amounts of data safely and securely. The fiber infrastructure within the eastern portion of the Ashburn Community is crucial to providing connectivity to other companies and networks worldwide, providing the area with a national market advantage.

Natural Gas

Washington Gas maintains natural gas transmission lines within the Ashburn Community and provides natural gas service to the Ashburn Community. Columbia Gas provides service to other parts of Loudoun County but does not supply the Ashburn Community.

Ashburn Community

Vicinity Map



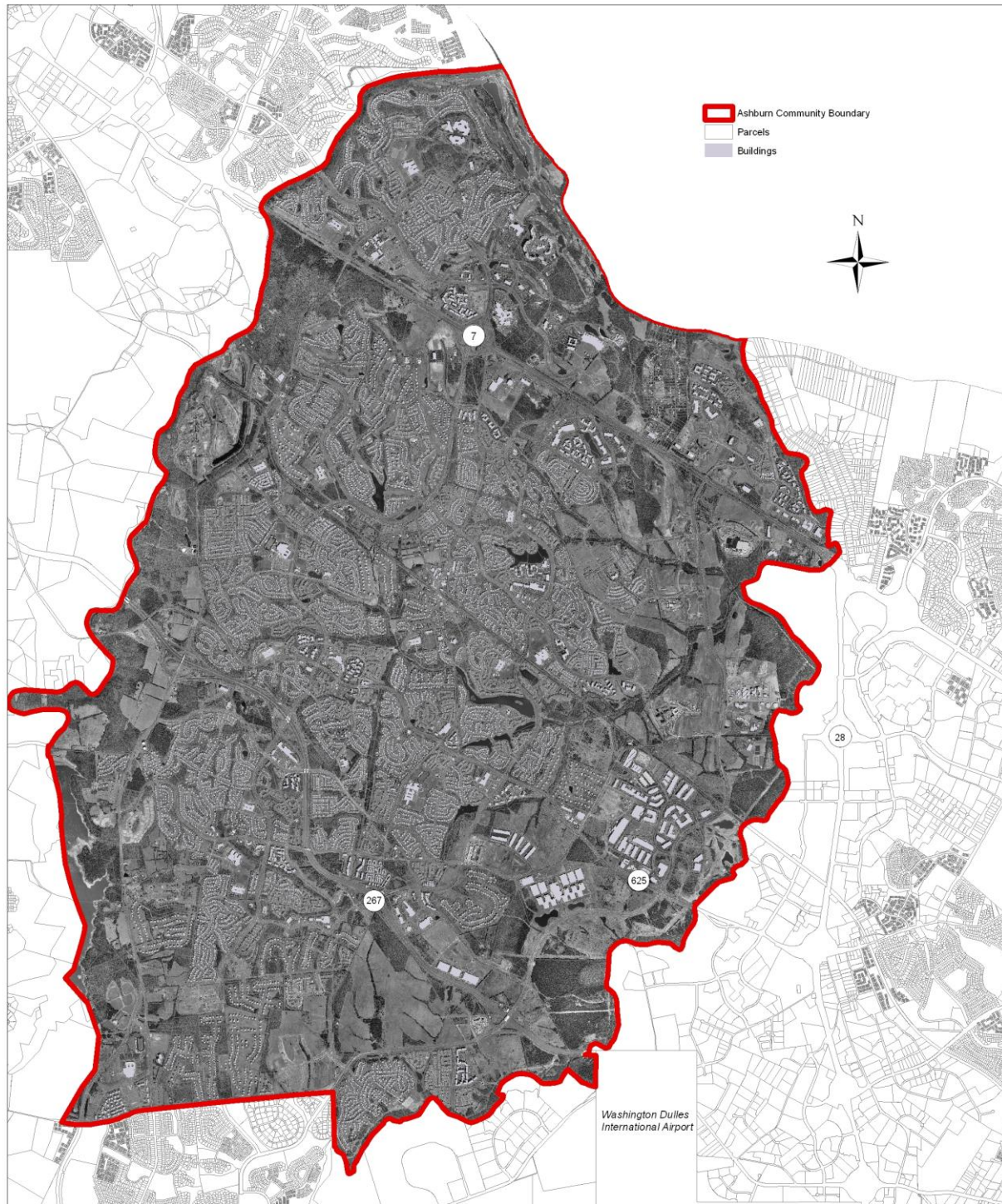
Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

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Ashburn Community

2008 Aerial

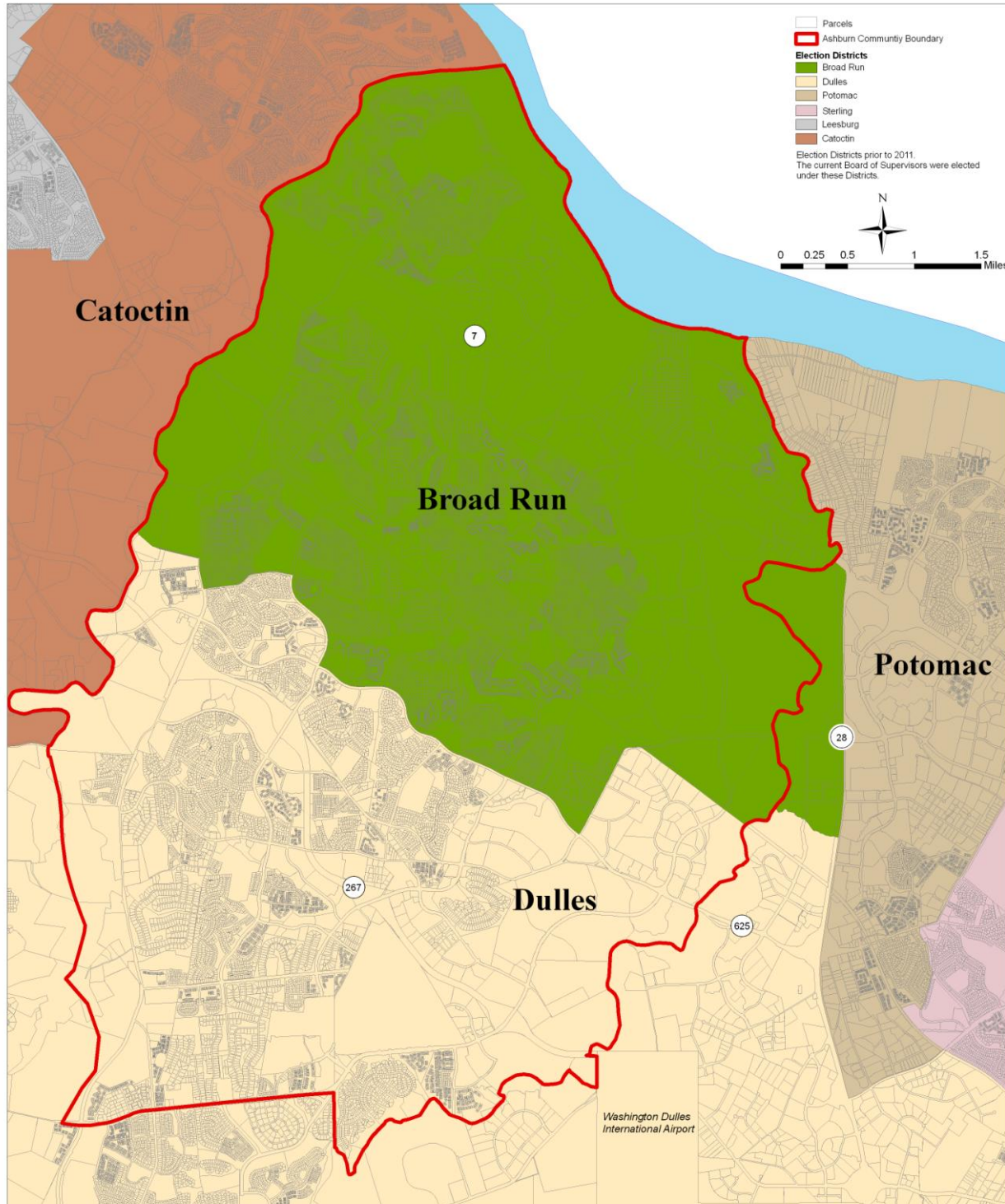


Source: Loudoun County Planning Department. June 2011. All boundaries are approximate.

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Ashburn Community Former Election Districts

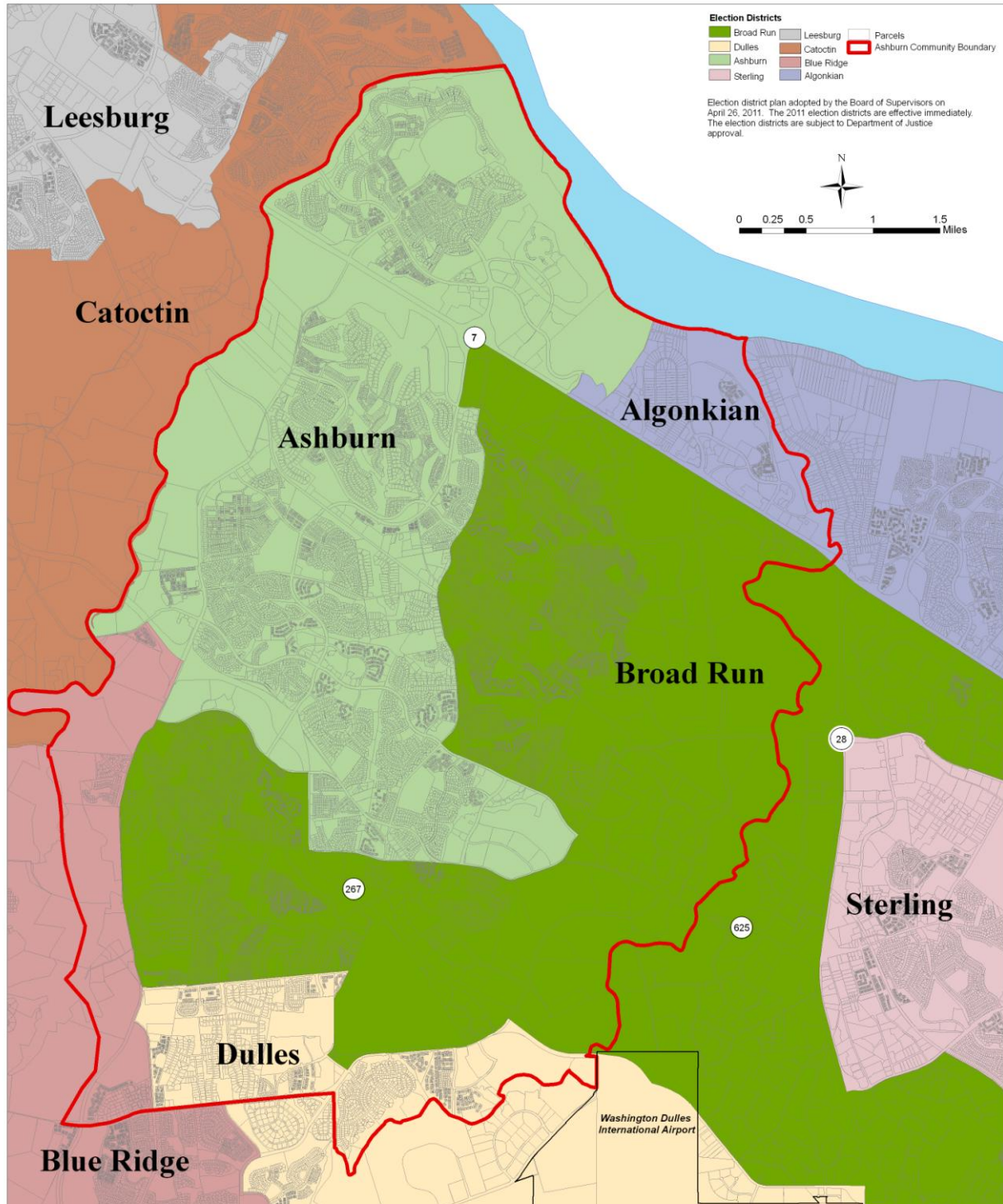


Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

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Ashburn Community New Election Districts

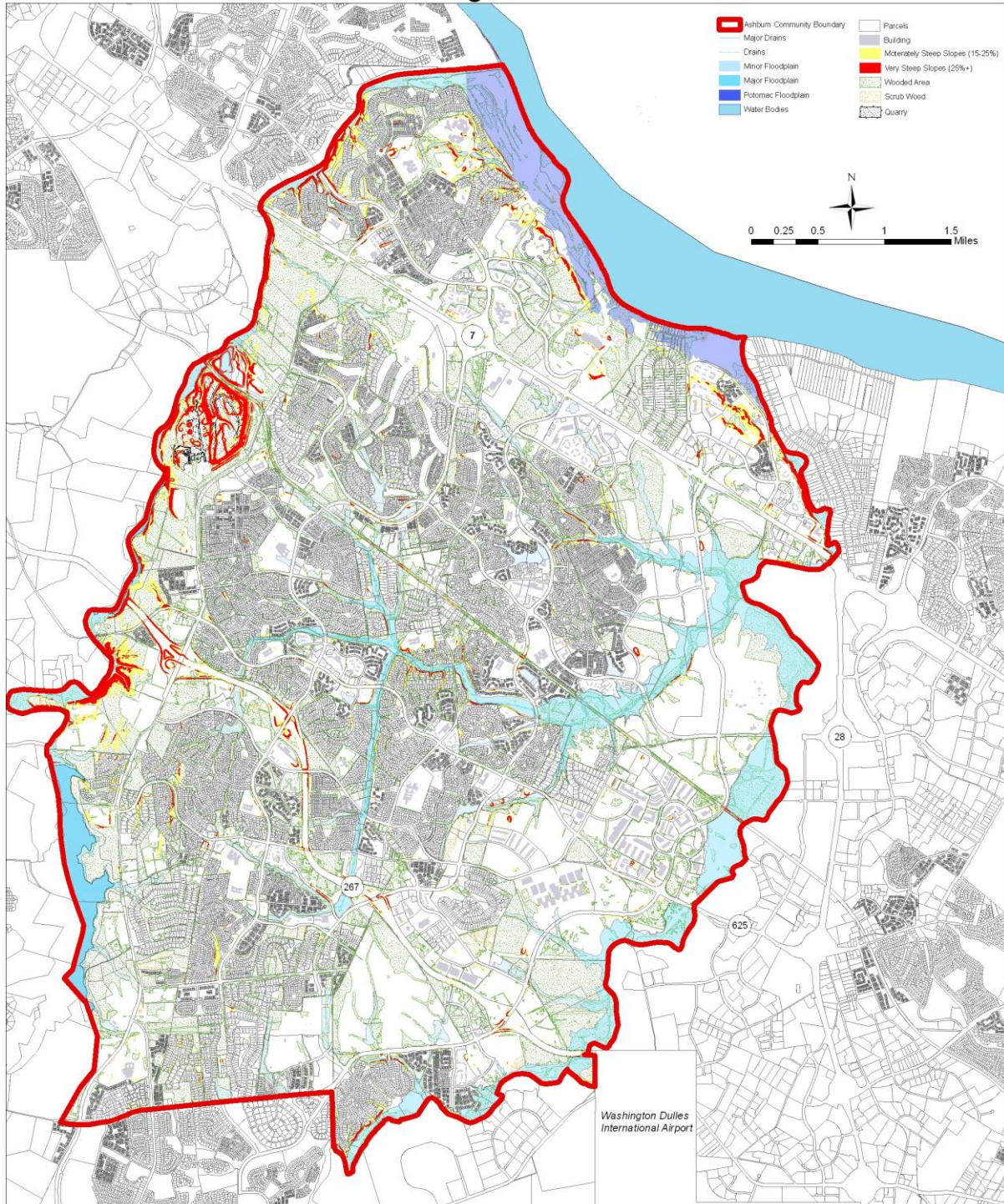


Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

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Ashburn Community Existing Conditions



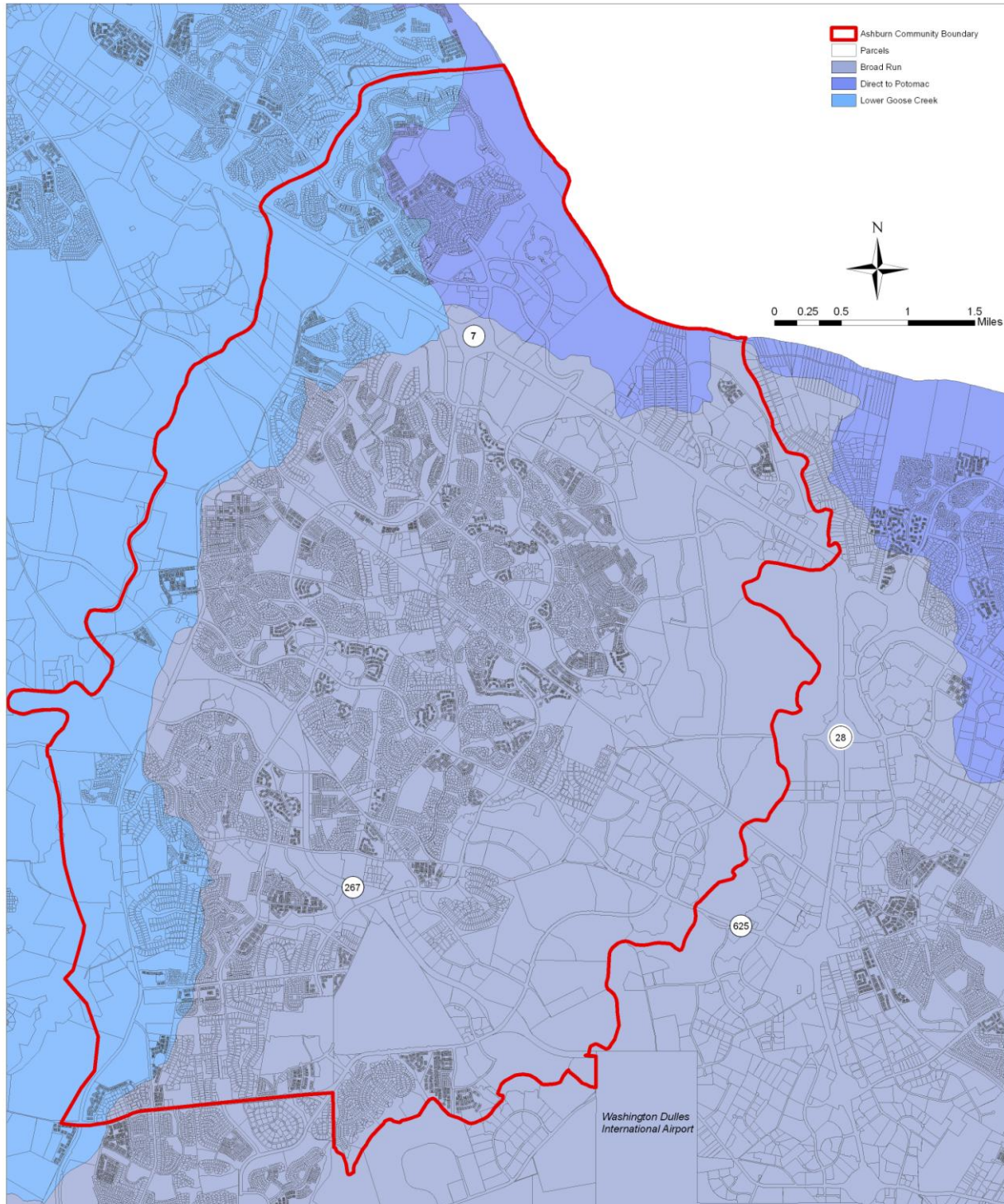
Source: Loudoun County Planning Department. June 2011. All boundaries are approximate.

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Ashburn Community

Major Watersheds

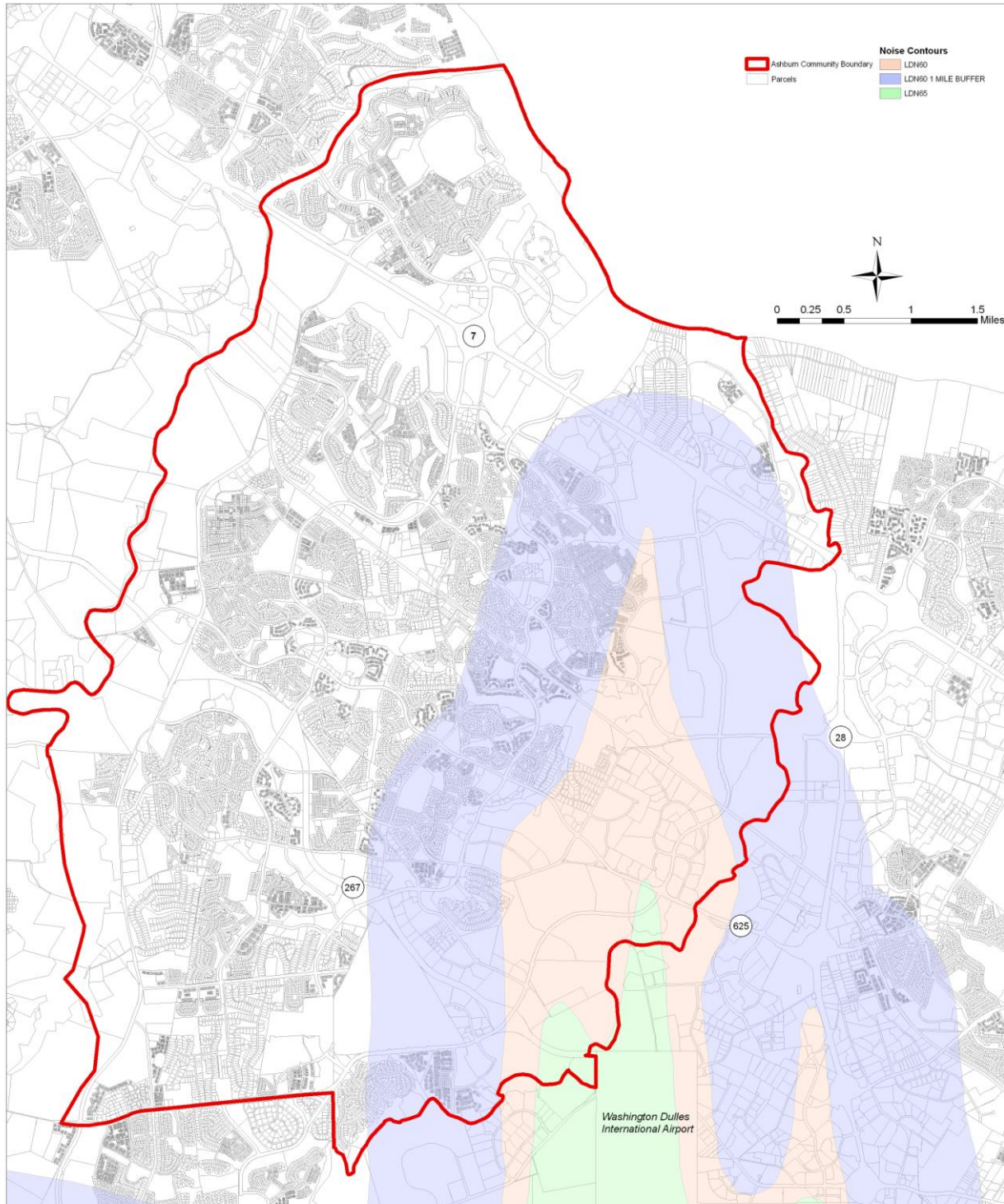


Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

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Ashburn Community Airport Noise Contours



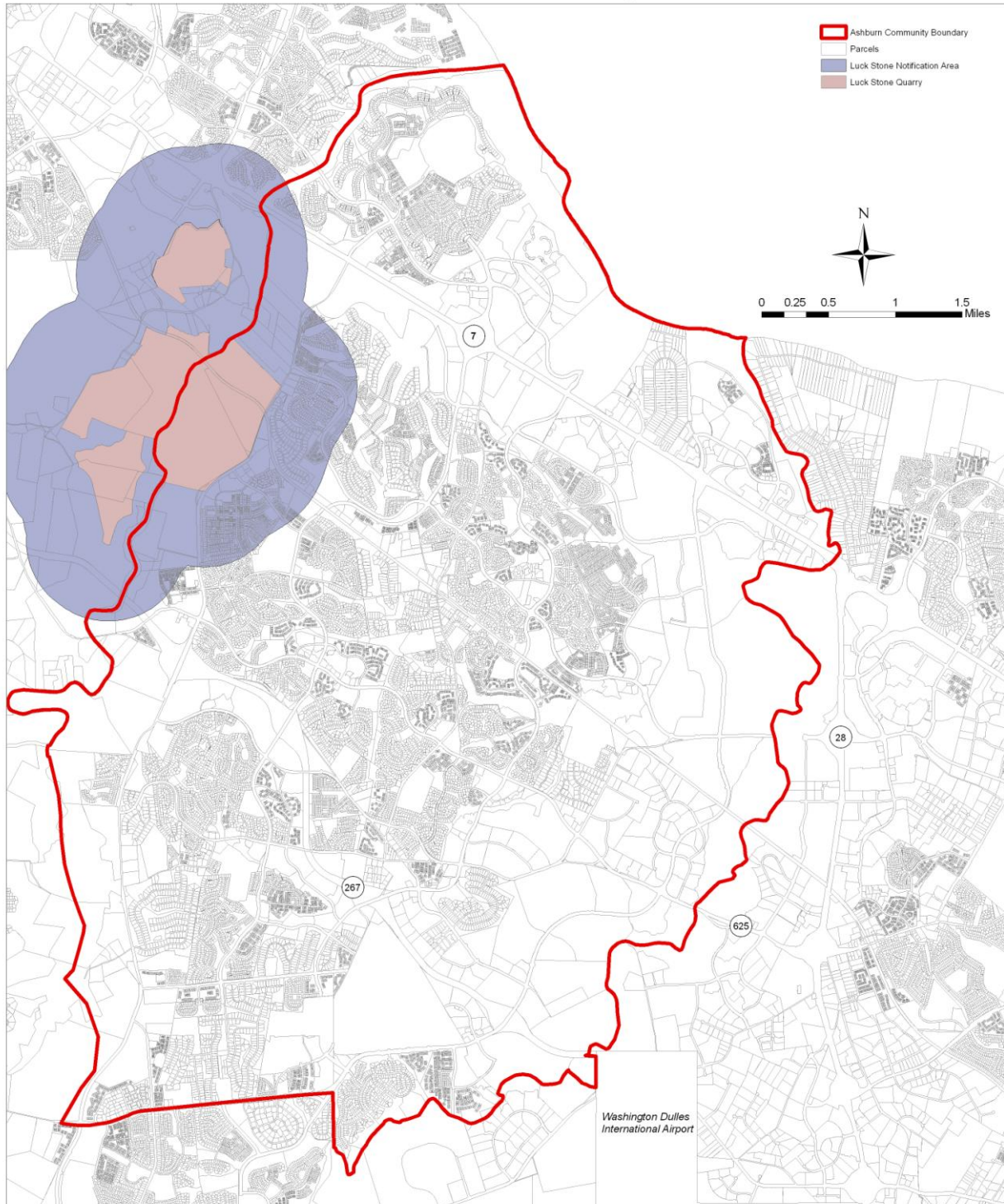
Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

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Ashburn Community

Luck Stone Quarry

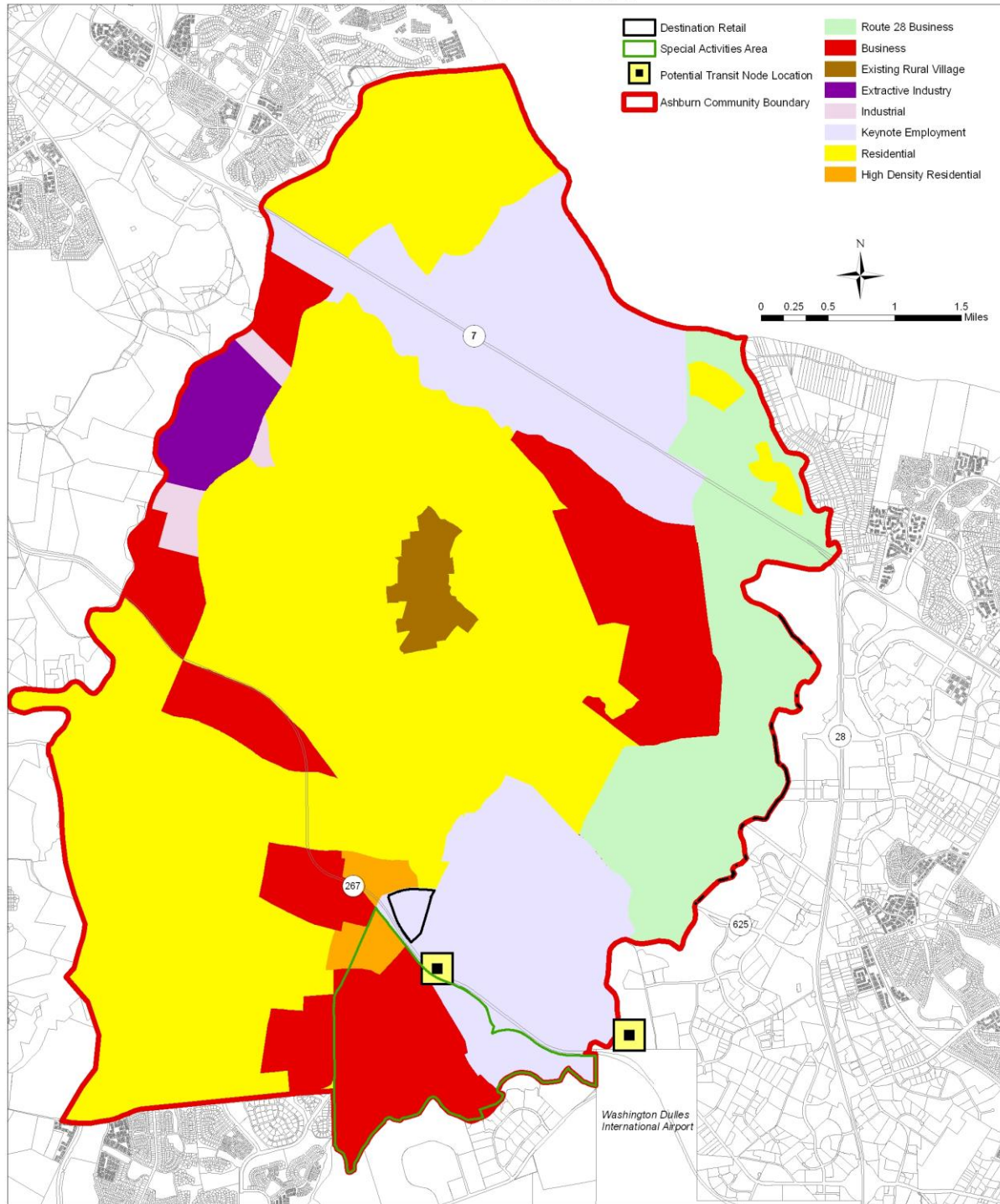


Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

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Ashburn Community Planned Land Use

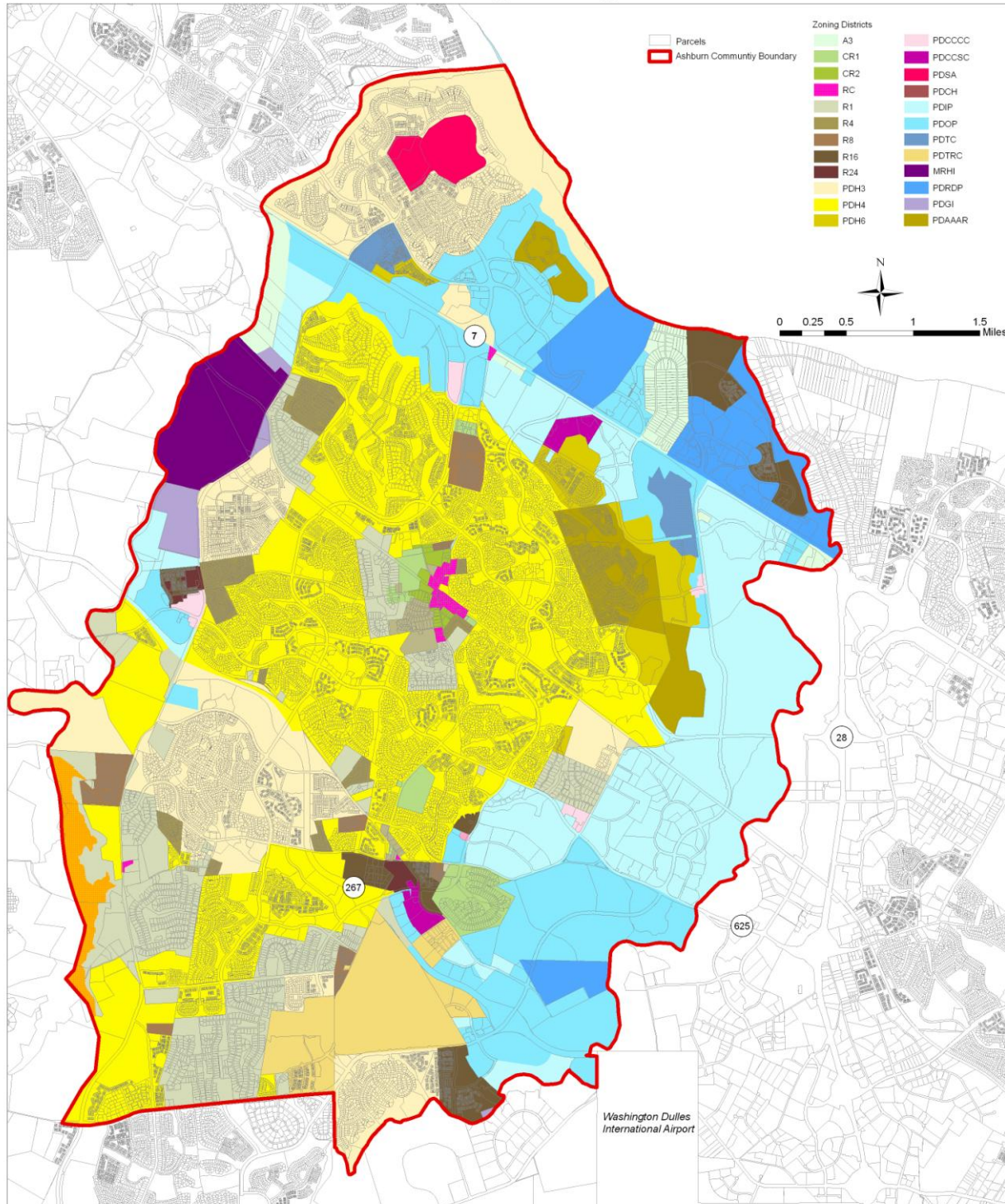


Source: Loudoun County Planning Department. June 2011. All boundaries are approximate.

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Ashburn Community Existing Zoning

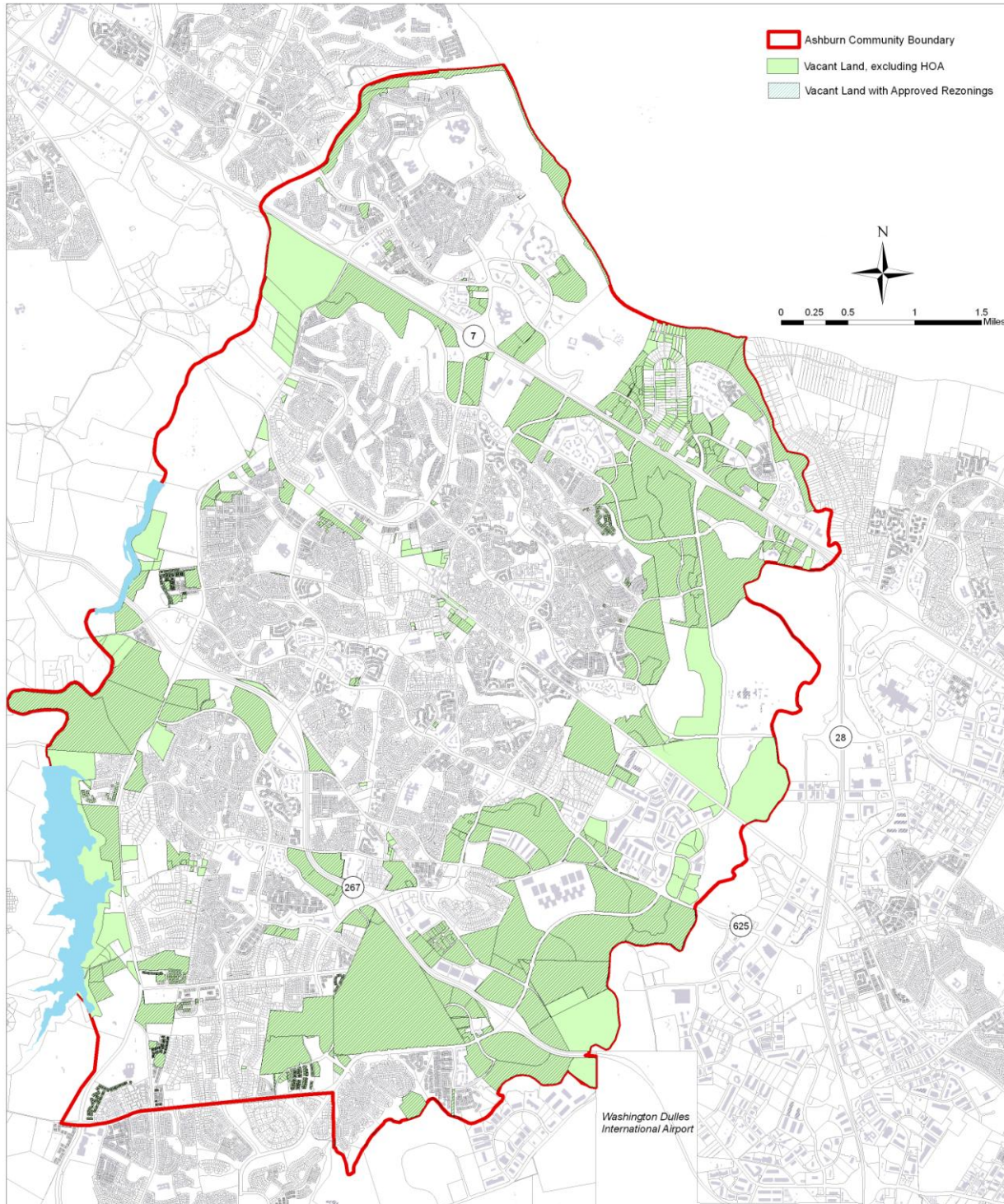


Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

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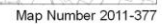
Ashburn Community Vacant Parcels



Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

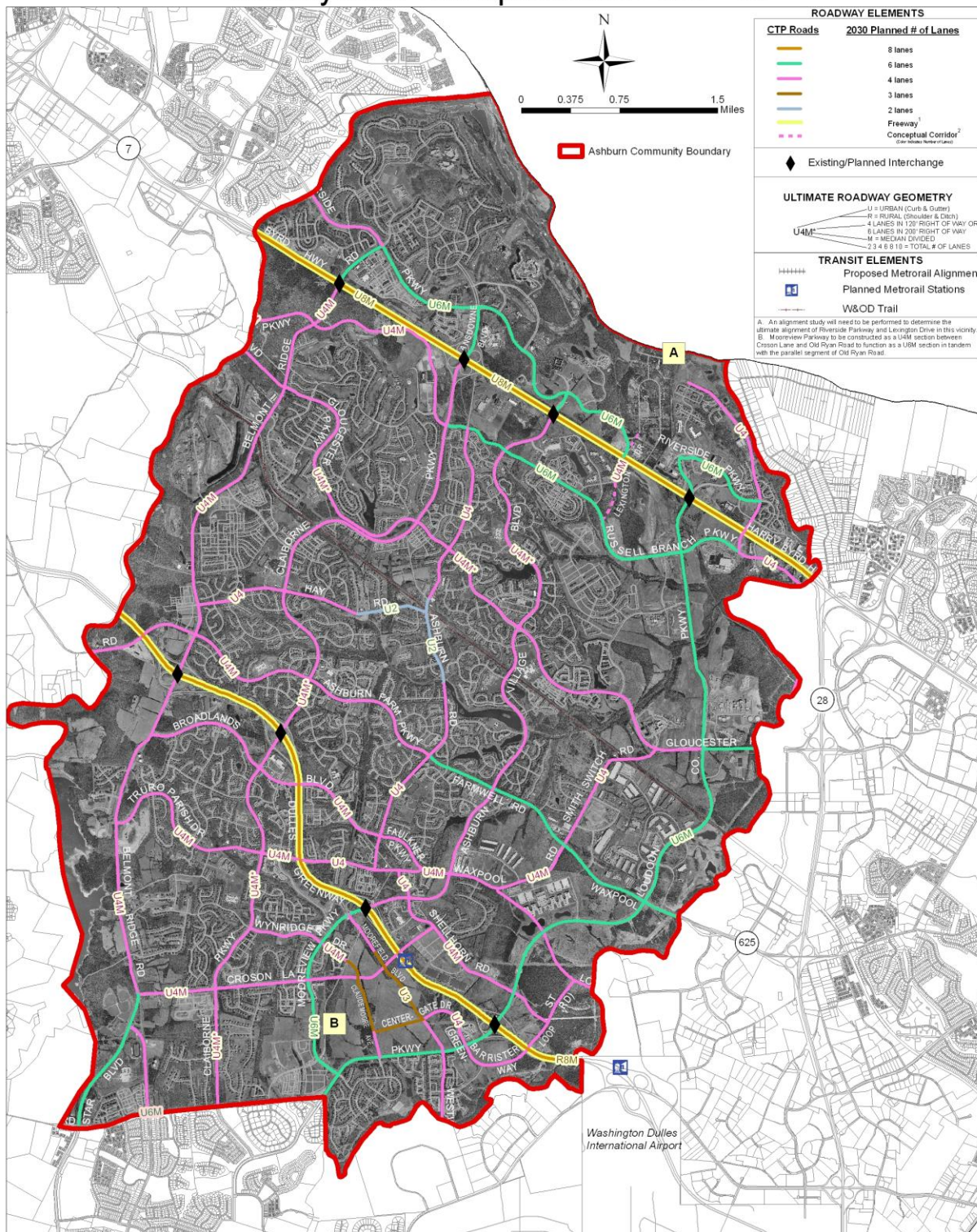
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Ashburn Community Countywide Transportation Plan



¹The Freeway network will be considered for further study of alternate lane operations which may include the dedication of high-occupancy vehicle and/or express busway use when new lanes are added.

²A Conceptual Corridor is a recommended new corridor that does not substantially follow an existing roadway. The alignment shown is only one possibility. Detailed study will be required before a specific alignment is recommended.

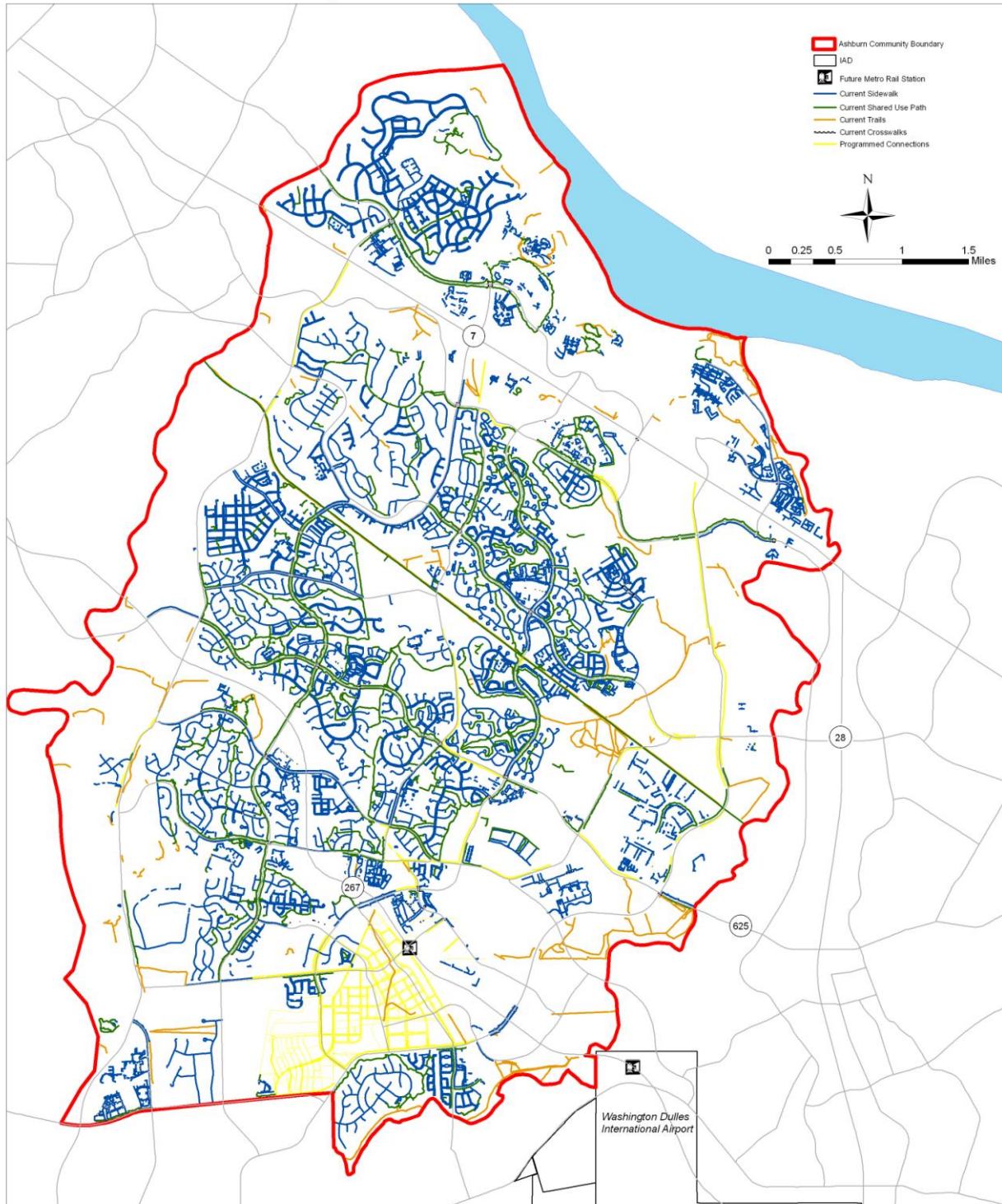
Source: Loudoun County Planning Department June 2011. All boundaries are approximate.

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Ashburn Community

Bicycle & Pedestrian Circulation



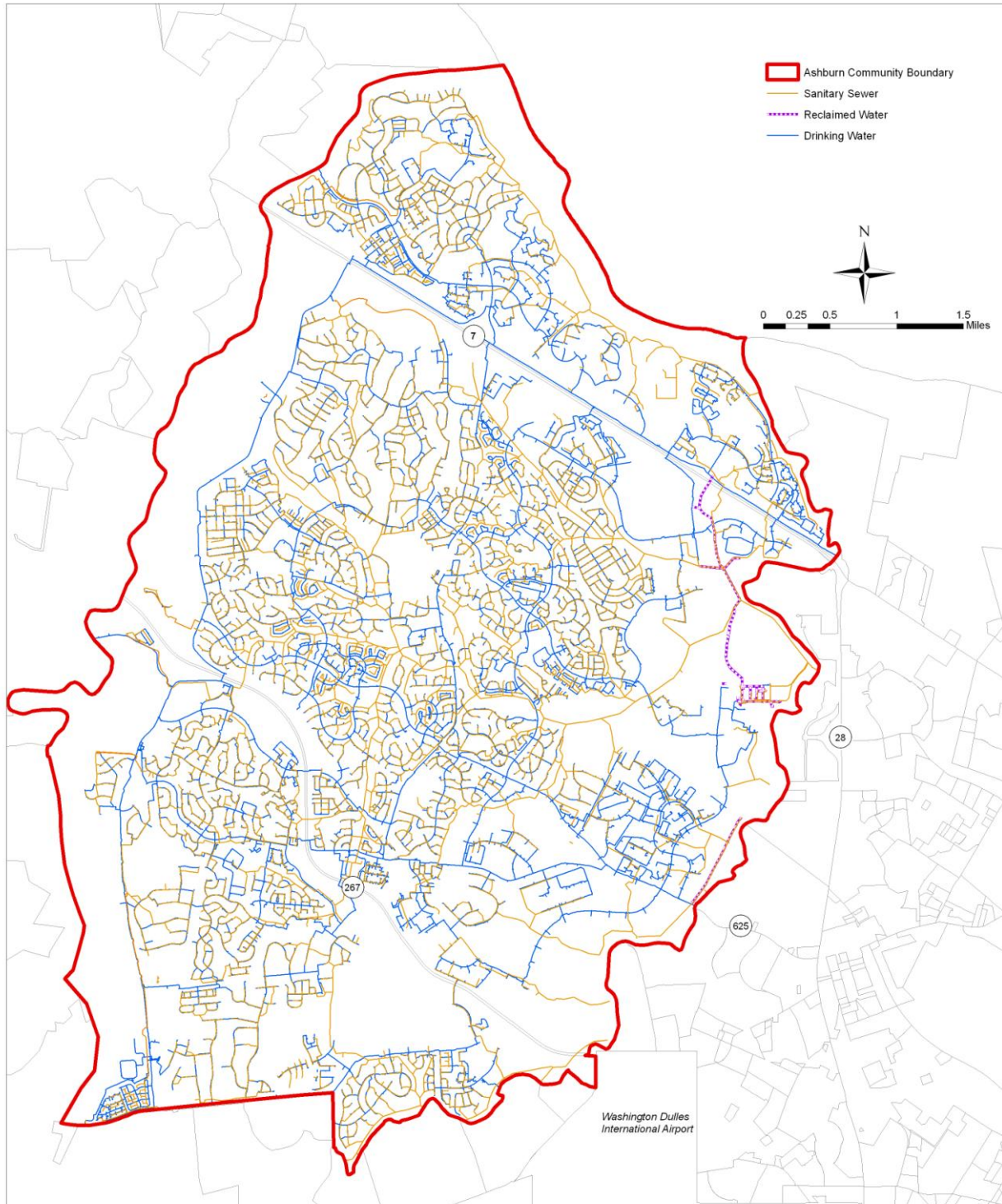
Source: Loudoun County Office of Transportation Services and Office of Mapping and Geographic Information Systems.
Data as of August 1, 2011. Please note this data continues to be updated based on new information. All boundaries are approximate.

Map Number 2011-372

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Ashburn Community

Water and Sewer Facilities



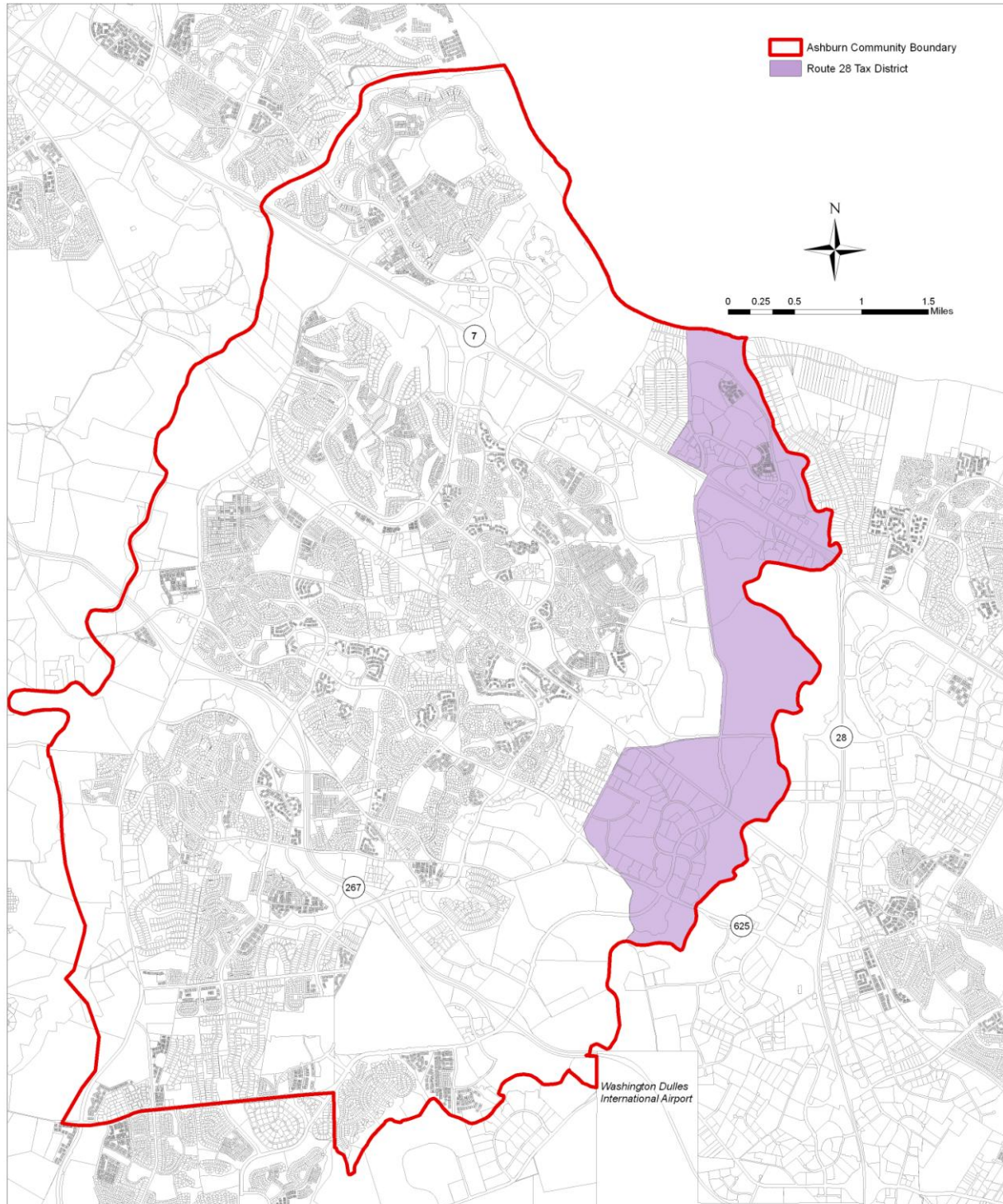
Source: Loudoun County Planning Department, June 2011. All boundaries are approximate.

Map Number 2011-385

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Ashburn Community

Route 28 Tax District



Source: Loudoun County Planning Department. June 2011. All boundaries are approximate.

Map Number 2011- 379

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