

*Dulles Community Outreach Project*

# Existing Conditions Report



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**Errata Sheet for the Dulles Community Outreach Project Existing Conditions Report**

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This errata sheet describes changes made to the Dulles 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.

#	Description of Correction	Page
1	South Riding: Paragraph has been replaced to reflect updated information.	31
2	Corrected the spelling of Stone Spring Medical Center re: Life Sciences and Medical to StoneSprings Hospital Center.	37
3	Retail and Commercial Service: First paragraph, 2014 has been corrected to 2015.	41



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



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## Dulles Community Quick Facts

- ◇ **Community Boundary:** The area is bounded by Broad Run and Ryan Road to the north, the Washington Dulles International Airport and Fairfax County to the east, and Braddock Road to the south. The western boundary is comprised of a combination of Relocated Route 659 (Gum Spring Road), the powerline easement and the Light Industrial area associated with the 65 Ldn noise contour of the airport.
- ◇ **Acreage:** The area contains approximately 13,630 acres and 19,129 parcels or portions of parcels (October 2014). (including right-of ways).
- ◇ **Population:** The population in 2014 was 55,137 for the Dulles Community. In 2000 it was 6,740.
- ◇ **Employment:** The employment estimate for 2013 was 13,700. By 2040, the employment forecast is 42,000.
- ◇ **Housing Units:** Today, the Dulles Community has an estimated 17,658 housing units, which consists of 47% single-family detached, 45% single-family attached (i.e. townhome), and 8% multi-family units.
- ◇ **Parcel Size:** The majority of the parcels (approximately 78%) are 1/4 acre or less.
- ◇ **Watersheds:** The area is located in the Broad Run, Lower Goose Creek watersheds which drain into the Potomac River, and the Bull Run and Cub Run watersheds, which drain into the Occoquan.
- ◇ **Major and Minor Floodplain:** There are approximately 1,409 acres of floodplain, or 10% of the total land area.
- ◇ **Forested Area:** Approximately 3214 acres, or 24% of the total land area, is forested.
- ◇ **Quarries:** Approximately 303 acres of land owned by Chantilly Crushed Stone is quarried, or 2% of the total land area.
- ◇ **Major Developments, Existing and Planned:**
  - Residential:* Arcola Center, Kirkpatrick Farms, Loudoun Valley Estates, Providence Glen, South Riding, Stone Ridge, and portions of Brambleton
  - Office/Industrial:* South Riding, Stone Ridge, East Gate
  - Retail:* Dulles Landing, Arcola Center, East Gate

### ◇ Existing Land Use:

Land Use	Parcel Acreage	Percent
Farm	638	4.7%
Flex/Industrial	1,159	8.5%
HOA Open Space/Easement	2,327	17.1%
Miscellaneous	235	1.7%
Mixed Use	15	0.1%
Office	96	0.7%
Public/Civic	1,298	9.5%
Public Right-of-Way	1,330	9.8%
Residential	3,172	23.3%
Retail	390	2.9%
Vacant	2,972	21.8%
<b>Total</b>	<b>13,631</b>	<b>100.0%</b>

*Note: Estimate based on a combination of data sources: Loudoun County GIS and LMIS records. Data reflects existing conditions as of Dec. 1, 2014, to include existing buildings on the ground and/or building permits issued as of Dec. 1, 2014.*

### ◇ Planned Land Use:

Land Use	Acreage	Percent
Residential	6540	48%
Hybrid Retail Center	424	3.1%
Business	2080	15.3%
Industrial	4310	31.6%
Heavy Industrial	275	2.0%
<b>Total</b>	<b>13630</b>	<b>100%</b>

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





## Introduction

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The Loudoun County Board of Supervisors, in accordance with the Board of Supervisors' Strategic Plan, initiated a community outreach process for the Dulles Community designed to conduct a dialogue with citizens of the Dulles 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 presented to the Board of Supervisors in the 3<sup>rd</sup> quarter of 2015.

The purpose of the Dulles Community Existing Conditions Report is to provide a “snapshot” of the Dulles Community for the public who can then use the information as a resource for participation in the outreach process. The Dulles Community Existing Conditions Report describes the existing conditions of the Dulles Community as of December 2014 and includes information on the physical characteristics, archeological and historic resources, current land uses, zoning, existing and proposed 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.

Additional information on the outreach project, including an electronic copy of this report, can be found on the Dulles Community Outreach Project webpage (<http://www.loudoun.gov/dullescommunityoutreach>).

## Community Boundary

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The Loudoun County Comprehensive Plan recognizes the Dulles Community as one of four distinct communities in the County's Suburban Policy Area (the others being Ashburn, Potomac, and Sterling). The boundaries of the Dulles Community include the Broad Run and Ryan Road to the north, the Washington Dulles International Airport and Fairfax County to the east, and Braddock Road to the south. The western boundary is comprised of a combination of Relocated Route 659 (Gum Spring Road), the powerline easement and the Light Industrial area associated with the 65 Ldn noise contour of the airport (Refer to the Vicinity Map, Appendix 1). The Dulles Community includes two election districts: Dulles and Blue Ridge (Refer to the Election Districts Map, Appendix 2).

## Natural Environment

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The Dulles Community is an area of rich, diverse, and sensitive natural resources. In addition to approximately 3200 acres of forest cover, the Community includes approximately 1,400 acres of floodplain and associated water resources, including streams and wetlands, flora and fauna resources, diabase resources, and archaeological and heritage resources (Refer to the Existing Conditions Map, Appendix 3).

### Water Resources

The Broad Run and Elklick Run are defining natural features of the Dulles Community. The Broad Run drains to the Potomac River watershed and the Elklick Run drains to the Occoquan watershed. (Refer to the Major Watersheds Map, Appendix 4). The Broad Run, Lower Goose Creek, Cub Run and Bull Run watersheds include numerous streams, including, the North and South Fork of Broad Run, Lenah Run, Elklick Run 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 Dulles Community are perennial. According to County estimates, a drainage area of approximately 59 acres generally indicates a stream with perennial flow.

There are approximately 1,409 acres of floodplain within the Dulles Community. This makes up approximately 10% of the total land area in the community. Currently, the Federal Emergency Management Agency (FEMA) is in the process of studying and updating the County's floodplain boundaries. Several areas have been identified where the floodplain boundary may be expanded and others where they may be reduced. The preliminary maps can be viewed on the Department of Building Development's webpage (<http://www.loudoun.gov/index.aspx?nid=2693>). Adoption of the updated boundaries by FEMA is anticipated early 2016.

### Stream Monitoring

The US Geological Survey (USGS) and Virginia Department of Environmental Quality (VDEQ) assess both chemicals and fish found in waterways. 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 the Broad Run along the northern edge of the Dulles Community 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 Dulles 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 Dulles Community lies within three of the subwatersheds used in the countywide assessment. These include areas that drain to the Lower Goose Creek subwatershed, the Broad Run watershed and the Bull Run/Cub Run subwatershed. Approximately 56% of the Dulles Community is within the Broad Run watershed, while 1% is within the Lower Goose Creek sub-watershed and 42% within the Bull Run/Cub Run sub-watershed. Refer to Figure 1 for condition ratings for streams in these areas.

**Figure 1. Stream Conditions by Subwatershed**

Assessment Area	Excellent*	Good*	Stress*	Severe Stress*
Broad Run/Sugarland Run	0.0%	0.0%	8.0%	92.0%
Cub Run/Bull Run	10.0%	10.0%	60.0%	20.0%
Lower Goose Creek	3.7%	3.7%	44.4%	48.1%

*\*Percentage of total stream miles.*

In 2014, a more specific assessment, the Upper Broad Run Watershed Management Plan was completed building upon the 2009 assessment and providing the County with a method to assess watersheds and implement watershed management plans on a countywide basis. The Broad 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.

Another significant water resource in the County is the Potomac River. While the Potomac River is not part of the Dulles Community geographically, the Broad Run and Lower Goose Creek watersheds ultimately drain to the Potomac. 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. The Potomac River is impaired due to bacteria, although the source of the pollution has not yet been identified. Fish advisories have been issued for channel catfish off the Loudoun shoreline due to Polychlorinated biphenyl (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 Dulles Community encompass a wide range of environments and support a rich diversity of plant and animal species. Ecological features include plant and animal habitat along streams, within the Haldore “Hal” and Bernice “Berni” Hanson Regional Park, and other open spaces. Within these areas, both within and adjacent to the Dulles Community, various rare, threatened, or uncommon species and plant communities have been identified.

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 Loudoun County, the State has identified the Upland Sandpiper, the Loggerhead Shrike, the Green Floater (mussels) and the Wood Turtle as threatened or endangered.

## Community Resources

Several organizations are active in promoting the ecological health of the Dulles 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. As mentioned above, the Loudoun Wildlife Conservancy has monitored the Broad Run along the northern edge of the Dulles Community for several years and 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.

## Diabase Resources

The Dulles 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.



One quarry is located in the Dulles Community. Chantilly Crushed Stone is located on the north side of Route 50 on Tanner Lane. The quarry was established in 1958 to provide stone products for the construction of the Washington Dulles International Airport which opened in 1963. According to Chantilly Crushed Stone, the company quarries approximately 303 acres and continues to provide stone for asphalt, concrete and construction applications for the surrounding area and the airport. The amount of rock quarried currently averages 1.8 million tons per year (Refer to the Quarry Overlay District Map, Appendix 5).

## Aural Environment

The Metropolitan Washington Airports Authority operates and maintains the Washington Dulles International Airport, which is generally east and northeast of the Dulles Community. Although most airport property is located outside of the Dulles Community, the Airport has a significant land use influence on the community. A significant portion of the County’s Airport Impact Overlay District for the Washington Dulles International Airport lies within the Dulles Community. Based on airport activity, the Federal Aviation Administration (FAA) has designated the Washington Dulles International Airport as a Core airport. The FAA expects Washington Dulles International Airport to grow annually at a rate of 1.97%<sup>1</sup> (Refer to Figure 2) through 2040. Washington Dulles

<sup>1</sup> Federal Aviation Administration, Terminal Area Forecast Summary, Fiscal Years 2013-2040, page 9.

International Airport currently operates with four runways, with a fifth runway open when the airport reaches full capacity.

**Figure 2. Washington Dulles International Airport Activity**

	October 2013-September 2014 <sup>2</sup>	2040 Forecast
Total Passengers	21,588,267	37,790,000 <sup>3</sup>
Aircraft Operations (takeoffs & landings)	294,193	529,000 <sup>4</sup>
Cargo (tonnes <sup>5</sup> )	264,96	760,000 <sup>6</sup>

The County's Airport Impact Overlay District associated with the Washington Dulles International Airport acknowledges the unique land use impacts of the airport, and seeks to protect the viability of the airport by regulating the siting of noise sensitive uses. The Airport Impact Overlay District zoning boundaries are derived from a computer model forecast of aircraft fleet mix, number of operations, flight tracks, altitudes, and hours of operation for the airport at its ultimate, 5-runway, build-out (Refer to the Airport Noise Contours Map, Appendix 6).

The three zoning boundaries establish varying levels of protection up to a prohibition on new housing and noise sensitive uses in the more noise-impacted areas as follows: (i) areas within the Ldn<sup>7</sup> 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. The modeled noise contours reflect a 5-runway configuration of the airport.

## Archaeological & Heritage Resources

### Pre-historic Resources

Evidence of human migration and settlement in Loudoun County, inclusive of the Dulles Community, can be traced in the archaeological record to at least 13,000 years Before Present (B.P.).<sup>8</sup> Migration routes typically followed major watercourses, such as the Potomac River, Goose Creek, Catoctin Creek and the Broad Run, to take advantage of fresh water and a diversity of plants, animals and river cobbles that could be exploited for food and tool manufacturing. By approximately 3,000 B.P., prehistoric populations began to increase and become more sedentary, settling along the large watercourses once traversed during seasonal migration. In addition to more specialized stone tools, the archaeological record reveals the advent of ceramic manufacturing;

<sup>2</sup> Metropolitan Washington Airports Authority, Washington Dulles International Airport, Monthly Air Traffic Summary Report, September 2014.

<sup>3</sup> Federal Aviation Administration, Terminal Area Forecast Summary, Fiscal Years 2013-2040, page 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.

<sup>4</sup> Federal Aviation Administration, Terminal Area Forecast Summary, Fiscal Years 2013-2040, page 11.

<sup>5</sup> 1 tonne = 1 metric ton = 2,200 pounds.

<sup>6</sup> Metropolitan Washington Airports Authority, The Loudoun County Round Table on Air Cargo Development, presentation March 2011. Cargo forecast is for the year 2029.

<sup>7</sup> 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.

<sup>8</sup> The pre-historic period is identified as anything predating the first settlement by Europeans in America.



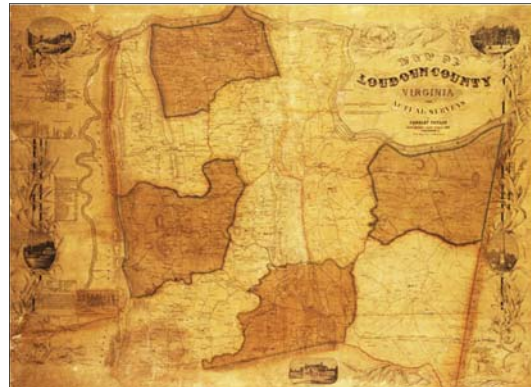
vessels tempered with stone and sand. By 1,000 B.P., populations continued to grow and settlements expanded, resulting in increased competition for resources. In response, village settlements along major watercourses became fortified, surrounded by defensive palisades.

At the time of European contact and the settlement of Jamestown, Loudoun County was inhabited by largely Siouan speaking people. Gradually, these Loudoun inhabitants were consolidated or displaced by the Iroquois. The 1722 Treaty of Albany, a peace treaty between European colonists and the Iroquois Nation, fostered the westward migration of European settlers from the Tidewater to the Piedmont. By the time settlers reached Loudoun County, the earliest inhabitants of the area had departed. Therefore, there are few European accounts of the native peoples who once lived here. Because these early Americans left no written record themselves, what is known about their lives and their culture is only revealed through the archaeological record.

It is likely that there are, or were, prehistoric settlements along the Broad Run in the Dulles Community. However, these sites are largely located in the floodplain and are often buried over decades by sedimentary deposits. Because the County protects floodplains from disturbance and development, little in-depth archaeology has been conducted that would reveal these types of sites. Conversely, hundreds of archaeological sites representing the vestiges of prehistoric migration and seasonal, temporary encampments have been identified in the area, specifically along the Broad Run and its larger tributaries. These sites, represented predominately by various types of stone tools, date from the Early Archaic Period (10,000 BP) to the Woodland Period (350 BP) and offer a glimpse into 10,000 years of human occupation in the County.

## Historic Resources

The first historic period settlers to the southern and eastern parts of the County were English settlers from the Tidewater region engaging in tobacco-based agriculture, a labor-intensive enterprise underpinned by slave labor. Tidewater planters moved westward seeking fertile land and brought their slaves and the institution of slave-based agriculture with them to eastern Loudoun. Several villages developed throughout the area including the Village of Gum Spring (later Arcola) and the community of Ryan. The 1853 Yardley Taylor Map shows a small collection of buildings at the cross roads of what is now Evergreen Mill Road and Gum Spring Road. This area is identified as “Gum Spring” and featured a general store, mill, and the Arcola Methodist Church (c. 1850) which is one of the oldest surviving churches in the area.<sup>9</sup>



*Yardley-Taylor Map of Loudoun County, 1853*

The Yardley Taylor map also identifies an Arcola Post Office just off of Little River Turnpike (Route 50); the post office was relocated to Gum Spring before 1883 and by 1911 the name of the village had been changed to Arcola.<sup>10</sup> Many of the known archaeological and architectural resources throughout the Dulles Community have been impacted by the recent boom of suburban development. A limited number of well-preserved and contextually intact resources remain in the community. Several of these resources

<sup>9</sup> Mary Fishback and Thomas Balch Library Commission, *Images of America: Loudoun County, 250 Years of Towns and Villages*, page 109.

<sup>10</sup> Presgraves, *Loudoun County Families and History*.

are owned by Loudoun County, including the Settle-Dean House, Arcola Slave Quarters, Arcola School, and Lee-Hanson House, which provide opportunities for public education and interpretation of the cultural heritage of the area.

## African American Heritage

The Dulles Community is rich with unique African American resources, unlike northern and western parts of the County that were settled by Quakers and Germans who, largely, did not bring with them a tradition of slave holding. One of the most significant architectural resources in the Dulles Community, and Loudoun County, is the Arcola Slave Quarters located within the Arcola Center development. The building is listed on the National Register of Historic Places and the Virginia Landmarks Register and was acquired by the County in the mid-1990s. The stone slave dwelling was built circa 1800 for slaves of the Lewis Family and is a rare example of a stone slave quarters in Virginia. The building is also one of the last remaining slave quarters in the region and



*The Arcola Slave Quarters was built in the late 18<sup>th</sup> or early 19<sup>th</sup> century for slaves of the Lewis family. Seen above in 2014 the Quarters are a unique and well-preserved example of slave architecture in Virginia.*

provides a rare look into the architectural and cultural landscape of the slave-based farm operation. According to the National Register nomination, the Lewis family owned 31 slaves in the mid-19<sup>th</sup> century. This suggests that this was one of several quarters on the property and confirms the Lewis family's prominence as one of Loudoun's wealthiest families since most slaveholders in the County owned fewer than 10 slaves. The Lewis plantation house burned in the 1920s and a new dwelling was constructed on the same foundation in the 1930s. The proximity of the slave quarters to the plantation house suggests that this particular structure was occupied by house slaves. After the Civil War, the Lewis family retained the property and the quarters were occupied by a family of freed slaves, the Neals, who stayed on the plantation as tenant farmers until the property left the Lewis Family. By the 1930s the building was in use as agricultural storage. Today the building is threatened by natural structural deterioration as time passes and it remains unused.

Not far from the Arcola Slave Quarters are several historically African American settlements which developed after emancipation and the end of the Civil War. The area developed a significant African American population, due in large part to poor soil conditions, which made the land less desirable to white farmers and landowners and therefore expendable for land deeds to emancipated or free African Americans. Conklin, an area originally settled in the early part of the 19<sup>th</sup> century and developed as a mixed-race community in the late 19<sup>th</sup> century on land given or sold to African Americans after the Civil War, is located south of Route 50 and centered on Braddock Road. The hamlet derives its name from the white Conklin family who purchased land in the area in 1871.<sup>11</sup> Later that same year the land was sold to the Broad Run School District for the construction of an African American school in the area. The schoolhouse was finished in 1872 and was used into the 1940s. The building was converted into a residence in the mid-20<sup>th</sup> century. A second one-room

<sup>11</sup> Loudoun County African American Historic Architectural Resources Survey, 2004, page 111.

schoolhouse, The McGraw Ridge School, was constructed for white children in 1889 south of Braddock Road and operated until 1939. By 1890, a small store and post office were established to serve the hamlet. A few years later, the white congregation of Conklin constructed the Fairview Methodist Episcopal Church which operated until the 1930s. Shortly thereafter, the Prosperity Baptist Church was constructed for the African American congregation on land donated by Charles Dean. The church was destroyed by a fire. The best documented farmstead affiliated with the Conklin community is the Settle-Dean property and log cabin which was extensively evaluated as a part of the South Riding development. The house was constructed circa 1810 and is depicted on the Yardley Taylor Map of 1853 as belonging to Thomas Settle. The Dean family worked as post-war domestic servants for Thomas Settle for many years and, upon his death in 1886, Mr. Settle willed the 142-acre property to Mr. Charles W. Dean and his descendants. With the development of the South Riding Community, the Settle-Dean house was relocated a few hundred feet on the west side of Loudoun County Parkway and is currently accessible by trail. Interpretative signage onsite was developed by the Loudoun County Department of Parks, Recreation and Community Services and the Friends of the Arcola Slave Quarters.



*The Settle Dean Cabin in its new location near Loudoun County Parkway is accessible via trail. Photo courtesy of Loudoun County Department of Parks, Recreation and Community Services.*

The settlement of Willard, a small mixed-race community that developed around the crossroads of Sterling Road and Willard Road, was located east of Conklin, now Washington Dulles International Airport. The community featured a church (the Shiloh Primitive Baptist Church built circa 1898), a school, and a small post office built in the first part of the 20<sup>th</sup> century. In 1958, the Federal government condemned nearly 10,000 acres of land in the area for the construction of Washington Dulles International Airport, effectively dissolving the Willard Community.

Just north of the Airport is the African American settlement known as Oak Grove. The community developed at the turn of the 20<sup>th</sup> century after George and Cynthia Bell of Herndon subdivided land from the former Payne Farm into one acre lots, making them relatively affordable. The community included a segregated school, church and general store as well as a baseball league.<sup>12</sup> Oak Grove straddles the boundary between Loudoun and Fairfax Counties, an issue keenly felt in the 1958 County boundary survey. The boundary survey determined that the Oak Grove colored school was actually in Fairfax County. Rather than pay tuition to Fairfax County Schools for allowing the students to remain at Oak Grove, students were bussed to Leesburg.<sup>13</sup> The Oak Grove School remains in Fairfax County and houses the Herndon Police Department. The Oak Grove Baptist Church remains an active congregation in the area.

<sup>12</sup> Loudoun County African American Historic Architectural Resources Survey, page 119.

<sup>13</sup> Friends of the Thomas Balch Library, African American Communities of Loudoun County, <http://www.balchfriends.org/bhmap.htm#>.

## Other Notable Resources

The Dulles Community is bisected by some of the County's oldest roads, making the road network in the Community one of the most widely used and widely unrecognized historic resources. Many of the roads were also routes of travel for Native Americans well before the European settlement of Loudoun County in the early 18<sup>th</sup> century. Braddock Road, previously known as Colchester Road, dates to the mid-18<sup>th</sup> Century and connected travelers between Snickers' Gap in the Blue Ridge Mountains and Colchester in Fairfax County.<sup>14</sup> Similarly, Evergreen Mill Road was part of the Carolina Road, perhaps the earliest established north/south route connecting North Carolina to Pennsylvania, also used by Native Americans after crossing the Goose Creek. Route 50, John Mosby Highway, was previously known as Little River Turnpike. The east-west route was initially developed by Native Americans as a means of travel between the Potomac River and the Shenandoah Valley. After the European settlement of the area, the road remained a well-traveled commerce route for farmers in Loudoun County and the Shenandoah Valley traveling east to Alexandria. The road was formalized in the early 19<sup>th</sup> century and was likely paved with crushed stone. It was privately owned and toll houses were established every few miles between Aldie, due west of the Dulles Community and the home of the Aldie Mill (c. 1803), and Alexandria, although none of the Loudoun toll houses remain today. As a major east-west route, the highway was extremely influential when the Civil War came to Loudoun County. The Mt. Zion Baptist Church, now owned by the Northern Virginia Regional Park Authority (NVRPA), near the intersection of Little River Turnpike (Route 50) and the Carolina Road (later relocated and renamed as Route 15) saw much of the Civil War action in this area of the County. The church, like many others in Loudoun, was repurposed during the war as a prison, barracks, battleground and hospital among other things. The portion of the highway from Washington Dulles International Airport to Winchester was renamed John Mosby Highway for Confederate Colonel John Singleton Mosby who experienced many successes in the area throughout the duration of the War. Extensive archaeological research has been conducted in the area due to the large volume of proposed developments. This research has indicated a significant amount of troop movement through the Dulles Community although the Civil War battles and skirmishes in this area of the County actually took place further west near Aldie and Middleburg.

The Loudoun Branch of the Manassas Gap Railroad roughly follows Braddock Road through the Community before heading north to present-day Route 15 just east of Aldie. Construction began on the railroad in 1851 to connect Alexandria to the Valley at Harper's Ferry. The tracks were destroyed during the Civil War but the right-of-way was cleared to Purcellville and portions of the rail road bed can still be identified.

<sup>14</sup> Phase 1 Architectural and Archaeological Investigation of Settle-Dean Farmstead, Cultural Resources, Inc. July 2001.



In 2009 Loudoun County acquired the historic Lee-Hanson House as part of the 257-acre property slated as the future home of the Hal & Bernie Hanson Regional Park off of Evergreen Mill Road. The Lee-Hanson House (also recognized as the Haldore Hanson House and the Margaret A. Lee House) is a Greek revival style built circa 1870 after the death of Alexander D. Lee in 1868. Lee's large estate was subdivided into a number of smaller farms and this site was purchased by his widow, Margaret.<sup>15</sup> John F. Ryan, the son of Margaret Lee and her first husband William Ryan, was a prominent cattle rancher in Loudoun County and operated the farm from 1875 until 1904.<sup>16</sup> During that same time, he served as a member of the Virginia House of Delegates and was the Speaker of the Virginia House between 1894 and 1898 and again between 1901 and 1904. Ryan is buried in the Darne Family cemetery at Dulles Trade Center on Evergreen Mill Road. The cemetery has also been identified by the County as one of the larger slave cemeteries in the County. County efforts are ongoing to map burial sites on the property. Haldore "Hal" and Bernie "Berni" Hanson, the namesakes of the future park, acquired the property in 1945. In the 1950s, Hal, an employee of the State Department, was named by Senator Joe McCarthy as a communist sympathizer. Though he was cleared of any wrong doing, Hanson left the State Department soon after and moved to the Loudoun County farm.<sup>17</sup> The house remains an excellent and rare example of post Civil War construction in the eastern part of the County.



Additionally, the Washington Dulles International Airport is also a significant heritage resource for the Community, eligible for listing on the National Register of Historic Places. Construction of the airport began in 1958 after the Civil Aeronautics Administration (the predecessor of the current Federal Aviation Administration) selected the roughly 10,000 acre site as the home of Washington's second airport (Washington National Airport, now known as Ronald Reagan Washington National Airport, was constructed a few years earlier in the 1940s). The airport was the first in the country designed specifically for jet aircraft. President John F. Kennedy dedicated the airport on November 17, 1962 as the Dulles International Airport (renamed in 1984 to Washington Dulles International Airport) in honor of the late Secretary of State, John Foster Dulles.<sup>18</sup>



*Photo courtesy of the Loudoun County Department of Economic Development and Shutterstock.*

<sup>15</sup> Virginia Department of Historic Resources, Architectural Survey Form, DHR ID # 053-0892, page 1.

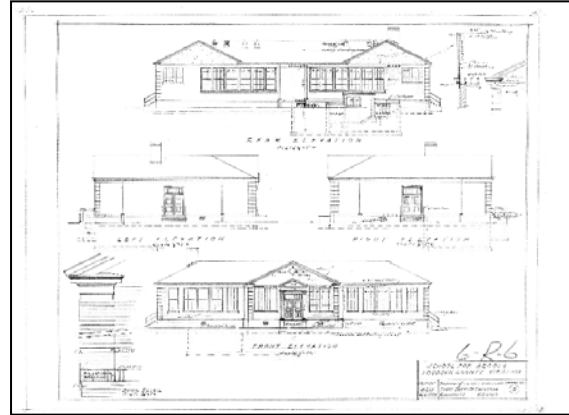
<sup>16</sup> Phase II Archaeological Investigation at Sites 44LD15551, 44LD1553, 44LD1554, 44LD1555 and 44LD1559 at the Hal and Berni Hanson Regional Park Loudoun County, Virginia, prepared by James River Institute for Archaeology, Inc., October 2012, page 8.

<sup>17</sup> Phase II Archaeological Investigation at Sites 44LD15551, 44LD1553, 44LD1554, 44LD1555 and 44LD1559 at the Hal and Berni Hanson Regional Park Loudoun County, Virginia, prepared by James River Institute for Archaeology, Inc., October 2012, page 16.

<sup>18</sup> History of Washington Dulles International Airport, <http://www.metwashairports.com/dulles/661.htm>.



Also of note is the Arcola School, built in 1939 as a part of Franklin Roosevelt’s New Deal. The Arcola School is the only Public Works Administration (PWA) school in Loudoun County. Arcola was a small rural community suffering after the depression and was likely selected as the recipient for a PWA project for that reason. As with all public schools in Virginia at the time, the Arcola School was segregated and only white children were enrolled. The location of a new, multi-room school in Arcola also meant the closing of four smaller one-room school houses nearby. This included the McGraw Ridge School – the white school in nearby Conklin. The school is indicative of the education reform sweeping the Country at the time with different classrooms for each grade. The school is owned by Loudoun County and was listed on the National Register in 2013.



Architectural Drawing for Arcola School, Photo: Jane Covington

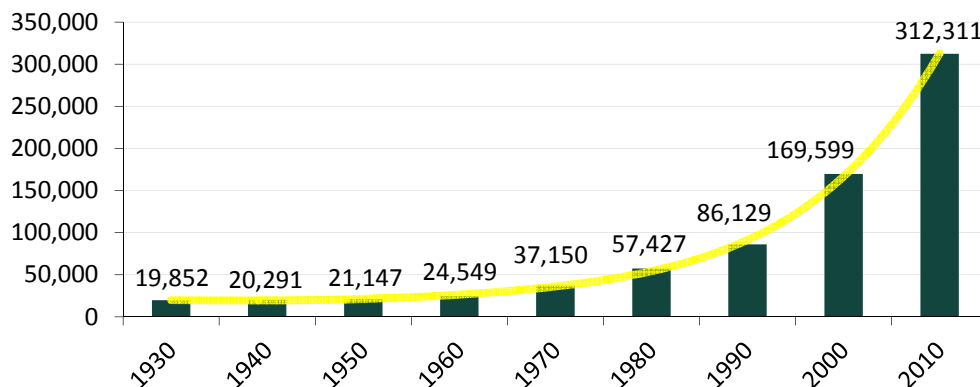
## Demographic Characteristics

### Population

#### Loudoun County

The population within Loudoun County was relatively constant between 1800 (20,523 persons) and 1920 (20,577 persons). After 1945, even with the automobile allowing more people to work outside of the County, the County’s population did not increase significantly until after 1960 (24,549 persons) with the construction of the Washington Dulles International Airport. The construction of the airport brought about purchases of land for commercial development. In 1962, the County’s Zoning Ordinance was amended to allow for planned communities. The development of communities in eastern Loudoun (e.g., Sterling Park and Sugarland Run), as well as subdivisions in Leesburg, were largely responsible for the population more than doubling from 24,549 to 57,427 by 1980 (Refer to Figure 3).

**Figure 3. Historical County Population**



Sources: U.S. Census Bureau, 1930 to 2010 Census.

## Dulles Community

The Dulles Community has grown significantly since 2000 when the community consisted of only 6,740 people or 4% of the County's population (Refer to Figure 4). By 2010, the community had grown to 40,247 people, nearly six times its population in 2000. Today, the Dulles Community's population is estimated to be 55,137, an increase of 14,890 or 37% over the last four years and now consisting of 16% of the County's population. The Dulles Community's current population density is nearly four times denser than the County overall. The high growth and density in the Dulles Community area of the County can be attributed to implementation of the County's Comprehensive Plan's policies focusing growth in the eastern portion of the County (known as the Suburban Policy Area) in order to minimize the County's costs to provide services to communities and protect the open and rural character of areas located west of the Dulles Community, and the fact that a good majority of the land remaining to be developed in the Suburban Policy Area is located in the Dulles Community (aside from the higher density/intensity areas planned for the Route 28 corridor and the transit-oriented development areas near the future Metro Silver Line rail stations). The aerial maps included in Appendices 7 and 8, illustrate the growth in the Dulles Community from 2002 to 2014.

**Figure 4. Current Population**

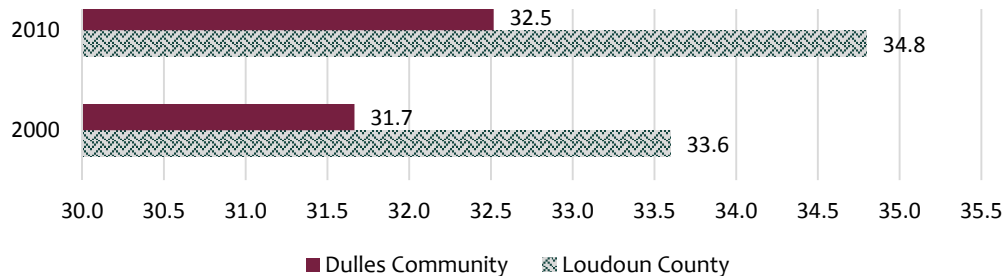
	Dulles Community			Loudoun County		
	Population	Population Change		Population	Population Change	
	#	#	%	#	#	%
<b>2000</b>	6,740	—	—	169,599	—	—
<b>2010</b>	40,247	33,507	497%	312,311	142,712	84%
<b>2014</b>	55,137	14,890	37%	351,611	39,300	13%

Sources: U.S. Census Bureau, 2000 and 2010 Census; Loudoun County Department of Planning and Zoning, April 2014 Estimate Series. Note: The reference date for the data is April 1 of the given year.

## Age of Population

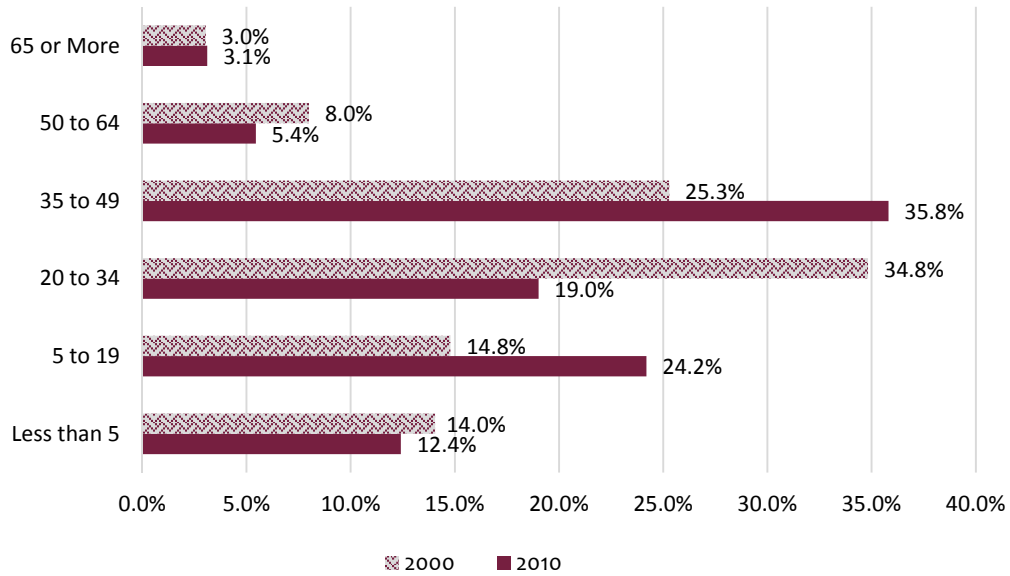
The Dulles Community is a young, family-oriented community (Refer to Figures 5 to 7). Since at least 2000, the community has had a younger population than the County overall and a greater percentage of school age children, which creates high demand for new County services, facilities, and the public school system in the Dulles Community.

**Figure 5. Median Age**



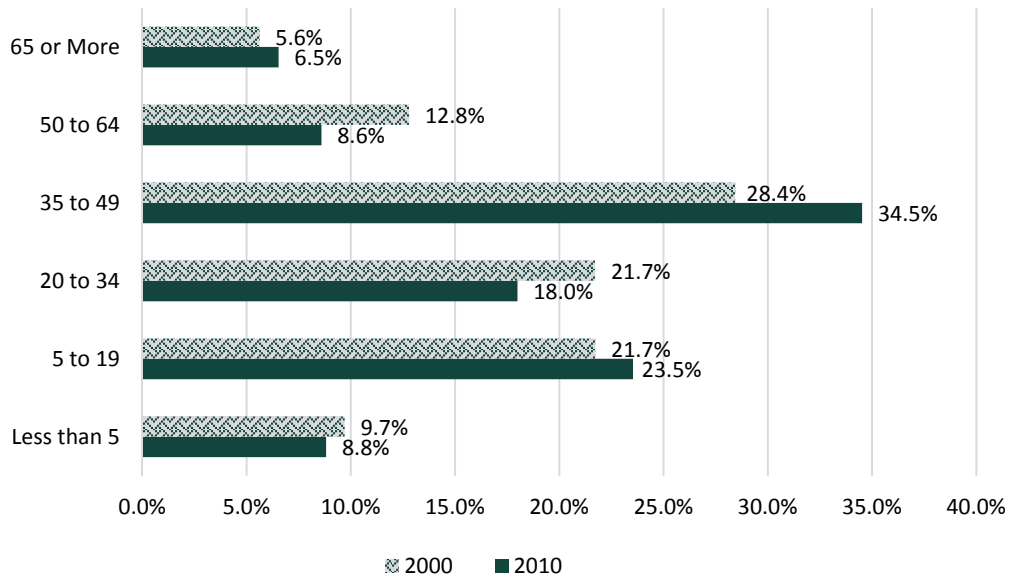
Sources: U.S. Census Bureau, 2000 and 2010 Census.

**Figure 6. Age of Population, Dulles Community**



Sources: U.S. Census Bureau, 2000 and 2010 Census.

**Figure 7. Age of Population, Loudoun County**



Sources: U.S. Census Bureau, 2000 and 2010 Census.

## Diversity

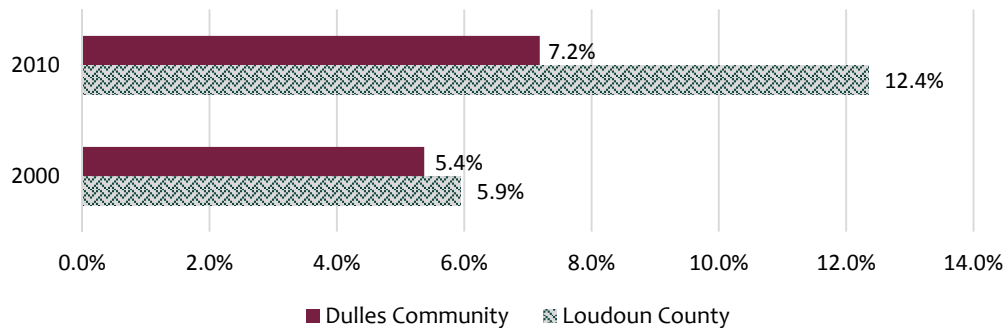
The Dulles Community has a significantly higher minority concentration than the County overall. Minorities are defined as anyone non-White or Hispanic/Latino. The race of many of the minority persons in the Dulles Community is Asian.<sup>19</sup> In 2010, approximately one out of every three persons in the Dulles Community was Asian, as compared to one in seven persons for the entire County. The Hispanic and Latino population in Loudoun County increased from 5.9% in 2000 to 12.4% in 2010, whereas, it did not increase much for the Dulles Community. The concentration of the Hispanic and Latino<sup>20</sup> population in the Dulles community is noticeably lower than the County overall (Refer to Figures 8 to 10).

**Figure 8. Race**

	Dulles Community		Loudoun County	
	2000	2010	2000	2010
One Race	97.80%	95.60%	97.60%	96.00%
White	85.90%	56.10%	82.80%	68.70%
Black or African American	5.10%	7.00%	6.90%	7.30%
American Indian & Alaska Native	0.20%	0.20%	0.20%	0.30%
Asian <sup>(19)</sup>	4.90%	30.30%	5.30%	14.70%
Native Hawaiian & Other Pacific Islander	0.00%	0.10%	0.10%	0.10%
Other Race	1.60%	1.90%	2.30%	4.90%
Two or More Races	2.20%	4.40%	2.40%	4.00%
Total	100.00%	100.00%	100.00%	100.00%

Sources: U.S. Census Bureau, 2000 and 2010 Census.

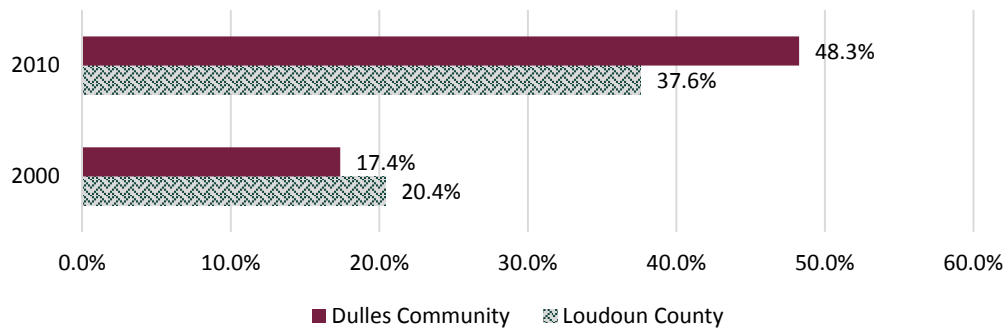
**Figure 9. Hispanic or Latino Population (any race)**



Sources: U.S. Census Bureau, 2000 and 2010 Census.

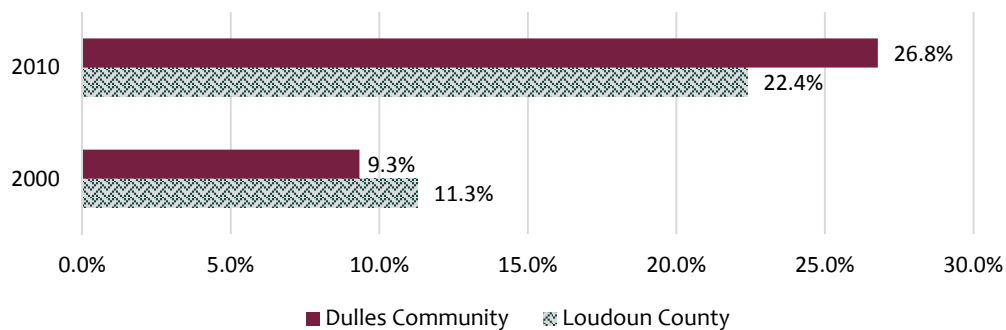
<sup>19</sup> The Census Bureau defines Asians as individuals who self-identify as having origins or heritage from Southeast Asia, the Indian Subcontinent, or the Far East, including for example China, India, Korea, Pakistan, Philippines, and Vietnam. These countries noted as examples represent the largest Asian foreign-born countries of origin for Loudoun's population.

<sup>20</sup> Hispanic/Latinos is an ethnic group, and therefore, can be of any race.

**Figure 10. Minority Population**

Sources: U.S. Census Bureau, 2000 and 2010 Census.

In Loudoun County the percentage of the population that is foreign-born increased from 11.3% in 2000 to an average of 22.4% in the 2008 to 2012 five-year period (Refer to Figure 11). The Dulles Community had a smaller percentage (9.3%) of foreign-born than the County (11.3%) in 2000, but the Dulles Community's percentage (26.8%) in the 2008 to 2012 five-year period increased beyond the County (22.4%).

**Figure 11. Foreign-Born Population**

Sources: U.S. Census Bureau, 2000 Census and 2008-2012 American Community Survey Five-Year Estimates.

## Housing Units

Today, the Dulles Community has an estimated 17,658 housing units: 47% single-family detached, 45% single-family attached, and 8% multi-family units (Refer to Figure 12). The multi-family units (i.e. apartments, condos, and stacked townhomes) are primarily located in Amberlea at South Riding, Arcola Center, Brambleton, East Gate, and Stone Ridge. Eighty-five percent of the housing units located within the Dulles Community have been built since 2000. Although the Dulles Community is only 4% of the County's land area, approximately 14%, or one out of every seven housing units in the County today, are located in the community. The Dulles Community's housing unit density is nearly four times denser than the County overall.





The Dulles Community comprised 21% of the County's housing unit growth between 2000 and 2010. Between 2010 and 2014 it increased to 38% of the County's growth and was 53% of the growth in the Suburban Policy Area. Most residential units remaining to be developed in the Suburban Policy Area are located in the Dulles Community (aside from the Route 28 corridor and the transit-oriented development areas near the future Metro Silver Line rail stations). The aerial maps shown on Appendices 7 and 8 illustrate the growth in the Dulles Community from 2002 to 2014.

**Figure 12. Housing Units**

	Dulles Community			Loudoun County		
	Housing Units	Housing Units Change		Housing Units	Housing Units Change	
	#	#	%	#	#	%
<b>2000</b>	2,589	—	—	62,160	—	—
<b>2010</b>	12,704	10,115	391%	109,442	47,282	76%
<b>2014</b>	17,658	4,954	39%	122,376	12,934	12%

Sources: U.S. Census Bureau, 2000 and 2010 Census; Loudoun County Department of Planning and Zoning, April 2014 Estimate Series. Note: The reference date for the data is April 1 of the given year.

## Households

Households are defined as those housing units that are occupied by people. Today, the Dulles Community's has an estimated 17,111 households (Refer to Figure 13). This is nearly 7 times the number of households that existed in the community in 2000 when there were 2,494.

**Figure 13. Households**

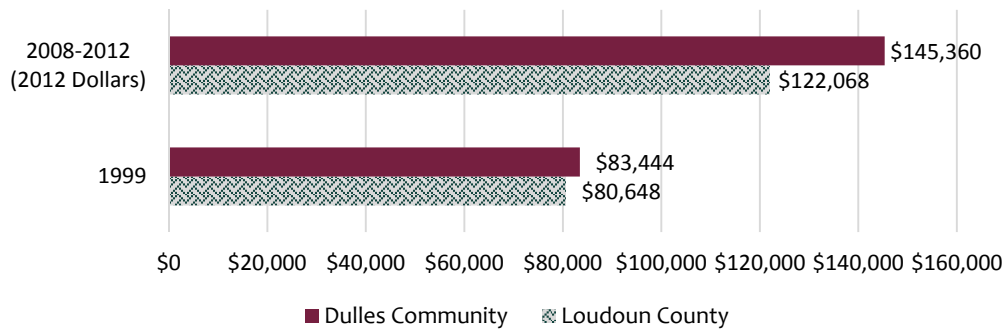
	Dulles Community			Loudoun County		
	Households	Household Change		Households	Household Change	
	#	#	%	#	#	%
<b>2000</b>	2,494	—	—	59,900	—	—
<b>2010</b>	12,287	9,793	393%	104,583	44,683	75%
<b>2014</b>	17,111	4,824	39%	117,117	12,534	12%

Sources: U.S. Census Bureau, 2000 and 2010 Census; Loudoun County Department of Planning and Zoning, April 2014 Estimate Series. Note: The reference date for the data is April 1 of the given year.

## Income

Out of all counties (county equivalents) in the nation, Loudoun County had the 2<sup>nd</sup> highest median household income for the 2008 to 2012 five-year period, following Falls Church, Virginia and out of the communities in Loudoun County, the Dulles Community had the highest household income, 19% higher than the County (Refer to Figure 14). In 2000 the Dulles Community's median household income was only 3% higher. The chart below shows income data in nominal dollars, meaning it is not inflation-adjusted. For information on how the median household incomes compare throughout the Dulles Community and the County, a Median Household Income Map is included as Appendix 9.

**Figure 14. Median Household Income (Nominal Dollars)**



Source: U.S. Census Bureau, 2000 Census and 2008-2012 American Community Survey Five-Year Estimates.

## Land Use

### Existing Land Use

As depicted in Figure 15, the Dulles Community contains a mixture of uses including residential, public and civic, commercial retail and services, office, and industrial (light and heavy). The majority of land has developed as residential, approximately 23%, with another approximate 17% of the land remaining as Homeowner Association open space or open space easements. Nearly 10% of the land in the Dulles Community serves as public right-of-way and another 9.5% of the land houses buildings with public and/or civic uses, such as public safety facilities, community civic centers, and a library. Land for industrial uses, both light and heavy, comprises 8.5% of the land uses in the Dulles Community. Farm uses comprise approximately 5% of the land with another approximate 3% of the land comprised of existing retail uses. Less than 2% of the land is comprised of miscellaneous uses such as utility easements and infrastructure, parking lots, or small commercial businesses in residential structures. Less than 1% of the land is comprised of office or a vertically integrated mixed-use town center environment. (Refer to Existing Land Use Map, Appendix 10)

Approximately 3,000 acres, 22% of the land, is vacant as shown in Figure 15 (Refer to Vacant Parcels Map, Appendix 11). It should be noted that approximately 2,000 acres or 68% of the vacant land is approved for development but is yet to be developed. These existing approvals entitle owners to approximately 8,100 residential units and more than three-million square feet of retail space. Approximately 49% of vacant land, or 1,448 acres, is planned for industrial uses; most of which is located near Washington Dulles International Airport.

**Figure 15. Existing Land Use**

Land Use	Acreage	%
Farm	638	4.7%
Flex/Industrial	1,159	8.5%
HOA Open Space/Easement	2,327	17.1%
Miscellaneous	235	1.7%
Mixed Use	15	0.1%
Office	96	0.7%
Public/Civic	1,298	9.5%
Public Right-of-Way	1,330	9.8%
Residential	3,172	23.3%
Retail	390	2.9%
Vacant	2,972	21.8%
<b>Total</b>	<b>13,631</b>	<b>100.0%</b>

*Note: Data reflects existing conditions as of December 1, 2014, to include existing buildings on the ground and/or building permits issued as of December 1, 2014.*

## 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 located at <http://www.loudoun.gov/comprehensiveplan>. There are five different planned land uses designated in the Dulles Community (Residential, Hybrid Retail Center, Business, Extractive Industry, and Industrial) as well as an Arcola Village Overlay, Arcola Village Perimeter Transition, Destination Retail Overlay at the northwest corner of the Loudoun County Parkway/Route 50 intersection, and a Special Activities Area south of the Dulles Greenway and Loudoun County Parkway associated with the Route 772 planned Metrorail transit station (Refer to the Planned Land Use Map, Appendix 12 and Figure 16). Areas planned for residential uses comprise approximately half of the Dulles Community (48%) with areas planned for industrial and mineral extraction uses comprising 34% of the Community. Another fifteen percent (15%) of the community is planned for Business uses (primarily office and light industrial uses) and three percent (3%), approximately 424 acres, of the community is specifically planned for hybrid retail uses.<sup>21</sup> The majority of this land planned for retail is currently under construction as Dulles Landing and Arcola Center. 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

<sup>21</sup> The Planned Land Use designation describes the predominate land use anticipated to develop within this designation, residential and business planned land uses support a mix of complementary uses within specified ranges prescribed in the Comprehensive Plan.

opportunity to work and shop nearby. Residential areas are envisioned to have up to 4 dwellings per acre. Although the densities of individual residential communities vary, the overall density of the Dulles Community's residential areas is approximately 3.74 dwellings per acre.<sup>22</sup>

**Figure 16. Dulles Community Planned Land Uses**

Land Use	Definition
Regional Office	◇ Variety of office uses; includes Class A office
Light Industrial	◇ Low-rise development ◇ Flex warehouse ◇ Small-scale manufacturing
General Industrial & Extractive Industry	◇ Labor-intensive industrial and commercial uses
Residential	◇ Mixed-type housing neighborhoods ◇ Allows for mix of residential supportive uses
Hybrid Retail Center	◇ Large scale retail centers ◇ Allows for mix of office, light industrial and civic uses
Arcola (Village & Transition Area)	◇ Limited residential and non-residential activities
Destination Retail	◇ Retail uses attracting customers from a regional market
Special Activity Area	◇ Single use or activity of a scale typically not compatible with mixed-use developments

### ***Village of Arcola***

The Village of Arcola, which is now a small village of homes and businesses was established in the early 19<sup>th</sup> century, is planned for revitalization in a manner compatible with the existing village while providing a transition to the new development planned around the 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 Arcola is within the Suburban Policy Area, the village itself retains a smaller pedestrian-scale and rural character. The earliest residential homes, commercial buildings, and churches remaining in the area are primarily located along Gum Spring Road near the intersection with Evergreen Mill Road.

### ***Route 50 and Route 606***

Recognizing the importance of the Route 50 corridor as a key economic development corridor, the County formed a Route 50 Task Force in 2004 to address land use and transportation issues along the Route 50 corridor and make recommendations that would help create an attractive gateway to Loudoun County. The Route 50 Task Force consisted of members from various organizations including the County's Economic Development Commission, the Loudoun Convention and Visitors Association, the Metropolitan Washington Airports Authority, property owners, area residents, developers and representatives of heritage and cultural resources groups. The Route 50 Corridor Plan was adopted October 16, 2006 and is intended to implement these recommendations.

<sup>22</sup> 20,129 housing units as of December 1, 2014 (includes occupied and vacant dwelling units)/5,385 acres developed with houses and residential HOA uses = 3.74 du/acre

The Route 50 and Route 606 Corridors are planned as Business and Industrial uses to emphasize their status as emerging business areas. Business and Industrial areas along Route 50 may provide a greater extent of service and retail uses compared to other areas of the County in attempt to address the deficiency of service and retail uses in the Dulles Community. High-Density Residential uses are allowed as a component to Business proposals at densities between 8 and 16 dwelling units per acre, and no greater than 14 dwelling units per acre immediately north of Route 50. Areas planned as Industrial are located along the Route 606 (Old Ox Road) and Route 50 Corridors proximate to Washington Dulles International Airport and the Chantilly Crushed Stone quarry, respectively, taking advantage of the proximity to the airport and diabase resources within this area.

### **Hybrid Retail Center, Destination Retail, Special Activities Overlays**

The Hybrid Retail Center planned land use is a designation unique to the Dulles Community that specifically encourages the development of retail uses that provide for convenience and routine shopping needs, generally defined as Service-Based Retail, and also provide some comparative and specialty goods, generally found in Destination Retail centers (big box retail). A hybrid retail center, generally 250,000 to 450,000 square feet in size, can be developed north and south of the Route 50 corridor in the area designated Hybrid Retail Center (Refer to the Arcola Area/Route 50 Land Use Map, Appendix 13). The County anticipates that other uses (such as office, light industrial, and civic uses) will also develop in the area designated for Hybrid Retail Centers to support the economic viability of the centers.



The Dulles 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 northwest corner of Route 50 and Loudoun County Parkway in the Arcola Center and Dulles Landing shopping area currently under construction. The Special Activity Overlay Area, located in the northern portion of the Dulles Community between Loudoun County Parkway and Old Ox Road, provides an additional development option for a use or activity that may not be compatible with mixed-use communities due to their scale and intensity. Potential uses include professional sports stadiums, conference facilities, and theme parks. The location proximate to the airport and the planned Route 772 Metrorail transit station make this an attractive area for a Special Activity Use.

## **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 Dulles Community, comprising over 63% of the total acreage. They include Countryside Residential-1

(CR1) and a variety of Planned Development-Housing (PD-H) and Residential (R) districts.<sup>23</sup> Approximately 36% of the acreage consists of non-residential zoning (16%) and industrial districts (20%), including General Business (GB), Commercial Light Industrial (CLI), Rural Commercial (RC), Planned Development – Commercial Center (PD-CC-CC), Planned Development – Commercial Center-Small Regional Center (PD-CC-SC), Planned Development – Commercial Center- Regional Center (PD-CC-RC), Planned Development – General Industry (PD-GI), Planned Development – Industrial Park (PD-IP), Planned Development – Office Park (PD-OP), and Mineral Resource-Heavy Industrial (MR-HI). Less than 1% of the acreage consists of mixed-use districts including Planned Development – Town Center (PD-TC), Planned Development – Mixed Use Business (PD-MUB) and Planned Development – Transit Related Center (PD-TRC) (Refer to the Existing Zoning Map, Appendix 14).

## Residential Development

The majority of the housing stock in the Dulles Community (85%) has been constructed within the past 14 years. Most of the residential developments within the Dulles Community have Homeowner Associations (HOAs) and community amenities (Refer to the Community Facilities Section). The largest master planned residential areas within the Dulles Community include Arcola Center, a portion of Brambleton, Kirkpatrick Farms, Loudoun Valley Estates, South Riding, and Stone Ridge. Other residential communities in the Dulles Community include Avonlea, Blue Spring Farm, Braddock Corner, East Gate, Providence Glen, Ridings at Blue Spring, and the Village of Arcola. A complete list of the HOAs in the Dulles Community can be located in Figure 17. The majority of the neighborhoods within the Dulles Community are served by public sewer and water, with the exception of the Village of Arcola, the Hutchison subdivision, a few properties in the Elk Lick/Braddock Road area, and some properties along the Gum Springs Road Corridor.

**Figure 17. Dulles Community Homeowner Associations**

Amber Springs Condominium	Centre Park Stoneridge Condo.	Poland Road Property
Amberlea at South Riding	East Gate	Providence Glen
Arcola Center	Eastgate Square	Providence Ridge
Arcola Grove	Elk Lick Estates	Reserve at South Riding
Avonlea	Estates at Elk Run	Ridings at Blue Spring
Belmont Trace	Evergreen Meadows	South Riding Proprietary Inc.
Blue Spring Farm	Frontier Springs	Stone Ridge
Braddock Corner	Kimmitt Property	Stratshire Crossing
Brambleton Brand Property	Kirkpatrick Farms	Tall Cedar Estates
Brambleton Community Assoc.	Lakeside at South Riding	The Woods at Brambleton
Brambleton Corner	Little River Commons	Trente Grove
Briarfields Estates	Loudoun Valley Estates I, II, III	Valley Vista
Bridle Ridge	Mercer Park Condominium	Westview Estates
Cedar Hunt	Poland Estates	Westwind Crossing

<sup>23</sup> 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.



## **Major Residential Projects and Subdivisions**

There are more than one hundred major residential projects with 20 or more units approved in Loudoun County of which 16 are located in the Dulles Community. As of January 1, 2014, 33,013 residential units have been approved by the County but have yet to be built. One quarter of these units, or approximately out of every four approved units, are located in the Dulles Community. The units remaining to be built within the major approved residential projects that are fully or partially within the Dulles Community consist of 19% single-family detached, 43% single-family attached, 38% multi-family, and 1% group quarters (i.e., nursing homes, assisted-living facilities). For a list of the major approved residential projects in the Dulles Community, along with the number of approved and remaining to be permitted units for each project can be found in Figure 18. A brief summary of large existing residential projects in the Dulles Community are below:

### **Brambleton**

A portion of Brambleton is located within the northern portion of the Dulles Community. The project includes Brambleton Brandt, Brambleton Corner, and Brambleton Town Center. Brambleton is approved for up to 6,735 housing units. It is also approved for approximately 973,550 square feet of commercial uses. Amenities currently include a 100-acre regional park, a golf course, swimming facilities, multi-purpose courts, tot lots and community centers throughout the development. Commercial uses are primarily located within a town center setting that includes an 8-screen movie theater. There are currently five pending rezoning applications for this community under review by the County.

### **Kirkpatrick Farms**

This development is completed and has 1,144 total units, comprised of 365 single-family attached, 621 single-family detached, and 158 multi-family housing units. Amenities include fitness, swimming, basketball and tennis facilities; a community center; and a lake with gazebo, walking trails and outdoor fitness stations.

### **Loudoun Valley Estates**

The majority of Loudoun Valley Estates is located within the Dulles Community and includes Loudoun Valley Estates I, II and III. The entire project is approximately 1,488 acres and is approved for a total of 3,738 residential units (1,487 single-family detached, 1,306 single-family attached and 945 multi-family). Loudoun Valley Estates I is completely built with 476 single-family detached and 235 single-family attached units. Loudoun Valley Estates III is also complete with 266 single-family detached units. Loudoun Valley Estates II is currently under construction with 1,142 units existing or permitted as of January 1, 2014 (471 single-family detached, 543 single-family attached and 128 multi-family units) with 1,619 units remaining to be constructed (274 single-family detached, 528 single-family attached and 817 multi-family units). It is also approved for an approximately 100,000 square foot on-site grocery store anchored retail center. Amenities include a clubhouse, 3 swimming pools (including a 25-meter competition pool), playgrounds, tennis and basketball courts, parks, tot lots, athletic fields, a full-service fitness center, 140 acres of tree preservation area, 130 acre Broad Run Stream Valley Park and walking trails. Three on-site schools, including the Rosa Lee Carter Elementary School, Stone Hill Middle School, and the Rock Ridge High School are located in Loudoun Valley Estates II.

### **South Riding**

The South Riding proprietary HOA<sup>24</sup> is approximately 2,250 acres. The residential portion contains just over 6,500 units, with 45.4% single-family detached, 47.4% single-family attached, and 7.2% multi-family. The commercial component is approved for up to 4,284,000 square feet of commercial uses. Amenities include an 18-hole golf course; fitness, swimming, and tennis, volleyball and basketball facilities; parks, playgrounds, a town green, a fishing pier and 4-miles of bike and pedestrian trails; a community center and a ‘Town Hall’ civic building. South Riding Market Square shopping center includes many businesses that offer local convenience goods and services.



### **Stone Ridge**

The majority of Stone Ridge is located within the Dulles Community. The entire project is 1,000 acres and includes Amber Spring, Centre Park, Mercer Park, Stone Springs, and Summerwalk. The project is approved for 3,265 residential units. It is also approved for approximately 2,927,900 square feet of commercial uses. Amenities include a clubhouse, playground, swimming and tennis facilities, an event lawn and amphitheater and walking trails. Stone Ridge Village Center includes office buildings and a shopping center that offers local convenience goods and services. Stone Ridge is also home to Gum Springs Library which is currently the only existing library in the Dulles Community.

### **Age-Restricted Housing**

In recent years, the County has received interest in and an influx of age-restricted and/or continuing care retirement community rezoning applications. This is likely to continue as Loudoun County’s general population continues to age in concert with the overall American population. As of January 1, 2014, the County has 4,439 independent living and 1,004 assisted-living or nursing home age-restricted residential units built or permitted, none of which were located in the Dulles Community. The County has also approved 3,865 independent living and 473 assisted-living or nursing home age-restricted housing units but these units remain to be built. Two approved, age-restricted projects are located in the northern portion of the Dulles Community, Brambleton Active Adult and Brambleton Brandt, have yet to begin construction. Brambleton Active Adult is approved for 1,502 independent living units and allowed to construct assisted-living facilities in the commercially designated areas defined in the project’s approved Concept Development Plan (CDP). The Brambleton Brandt project is approved for a 60,000 square foot assisted-living facility for approximately 75 units.

<sup>24</sup> The South Riding proprietary HOA includes Amberlea, Cedar Hunt Section 2, Cedar Hunt Section 3, the Dean Property, Estates at Elk Run (West Riding), Lakeside, South Riding, and South Riding Station.

Figure 18. Dulles Community Major Approved Residential Projects

Major Approved Residential Projects (20+ Units), January 1, 2014 Dulles Community																
Planning Subarea/Project Name	Total Approved Units (Per Rezoning or By-right) as of 1/1/14					Total Approved Units (Refined by Actual Subdivisions) as of 1/1/14					Units Remaining to be Permitted as of 1/1/14					Percent Complete
	Zoning Type					Structure Type					Structure Type					
	SFD	SFA	MF	GQ	Total	SFD	SFA	MF	GQ	Total	SFD	SFA	MF	GQ	Total	
Arctola Center	0	550	619	0	1,169	0	550	619	0	1,169	0	445	533	0	978	16%
Avonlea (Pinebrook Village, Pinebrook Estates)	65	343	0	0	408	65	343	0	0	408	0	24	0	0	24	94%
Avonlea Reserve	0	109	0	0	109	0	109	0	0	109	0	109	0	0	109	0%
Brambleton <sup>(1)(2)</sup>	2,310	3,260	1,099	75	6,744	2,310	3,251	1,099	75	6,735	641	1,812	0	75	2,528	62%
Brambleton Active Adult	0	315	1,187	0	1,502	0	315	1,187	0	1,502	0	315	1,187	0	1,502	0%
Briarfield Estates	72	0	0	0	72	72	0	0	0	72	8	0	0	0	8	89%
Cardinal Torris Property	0	70	0	0	70	0	70	0	0	70	0	70	0	0	70	0%
East Gate	0	193	428	0	621	0	193	428	0	621	0	84	282	0	366	41%
Fox Gate	0	0	110	0	110	0	0	110	0	110	0	0	110	0	110	0%
Glascok Field at Stone Ridge	0	138	138	0	276	0	138	138	0	276	0	138	138	0	276	0%
Loudoun Valley Estates II	745	1,071	945	0	2,761	745	1,071	945	0	2,761	274	528	817	0	1,619	41%
Stone Ridge <sup>(1)(3)</sup>	853	1,252	1,160	0	3,265	779	1,310	861	0	2,950	144	96	254	0	494	83%
Stone Ridge East	160	0	0	0	160	160	0	0	0	160	160	0	0	0	160	0%
Trent Grove (Graham Flynn)	0	149	0	0	149	0	149	0	0	149	0	38	0	0	38	74%
Westridge (CD Smith) <sup>(1)</sup>	153	214	88	0	455	153	214	88	0	455	153	214	88	0	455	0%
Willowford, The Grange <sup>(1)</sup>	382	0	0	0	382	382	0	0	0	382	246	0	0	0	246	35%
<b>Total</b>	<b>4,740</b>	<b>7,664</b>	<b>5,774</b>	<b>75</b>	<b>18,253</b>	<b>4,666</b>	<b>7,713</b>	<b>5,475</b>	<b>75</b>	<b>17,929</b>	<b>1,626</b>	<b>3,873</b>	<b>3,409</b>	<b>75</b>	<b>8,983</b>	<b>0%</b>

(1) Only a portion of the project is within the Dulles Community. Figures represent the entire project, including the portion outside the Dulles Community.

(2) The Brambleton project includes Brambleton (ZMAP-1993-0005), Brambleton Brandt (ZMAP-2004-0024), Brambleton Corner (ZMAP-2004-0025), and Brambleton Town Center (ZMAP-2004-0026). The total approved figures are representative of the entire Brambleton project, including portions outside the Dulles Community. However, the remaining units to be built are primarily within the Dulles Community.

(3) The Stone Ridge project includes the Amber Spring, Centre Park, Mercer Park, Stone Springs, and Summerwalk apartments/condos at Stone Ridge. The total approved figures are representative of the entire Stone Ridge project, including portions outside the Dulles Community. However, the majority of the project is within the Dulles Community.

**Residential Structure Type Category Definitions:**  
Single-Family Detached (SFD): A dwelling that is not attached to any other dwelling by any means.  
Single-Family Attached (SFA): Dwelling units in a variety of attached configurations, including townhomes, duplexes, triplexes, and quadplexes, where each unit has their own ground floor external entrance.  
Multi-Family (MF): A building containing multiple dwelling units. Multi-Family dwelling units are commonly referred to as "garden style," "mid-rise," and "high-rise" condominiums/apartments, as well as Group Quarters (GQ). A Group Quarter (GQ) is a place where people live in a group living arrangement. Examples include nursing homes, congregate care, college dormitories, homeless shelters, and detention centers. Note: Independent-living age-restricted units are not considered group quarters. They are classified under the typical housing types of SFD, SFA, and MF.

**Disclaimer:**  
The Loudoun County Department of Planning makes every reasonable effort to ensure the accuracy of this information. This table provides the best estimates of development based on the legislative approval documents, building permits issued, data in the County's geographic information system, and data in the County's Land Management Information System (LMIS). Loudoun County does not assume any liability arising from the use of this data. This data is provided without warranty of any kind, either expressed or implied.

## Housing Affordability

Affordability of housing can be measured through average home sales price and average homes sales price per square feet statistics. This particular data is available by zip code. A Zip Code Map is shown in Appendix 15. The Dulles Community is primarily covered by zip codes 20105 (Aldie/Stone Ridge), 20148 (Ashburn-south of Greenway), 20152 (South Riding/Chantilly), and 20166 (Arcola/Dulles). The average home sales price by zip code is useful for knowing what geographic areas may have homes in a buyer's price range, irrespective of the size of the home. The average sales price per square feet on the other hand, provides a picture of the best value for the dollar. Dollar values specified below represent a one year time span from the beginning of the third quarter of 2013 to the end of the second quarter of 2014, or July 1, 2013 to June 31, 2014. The home sales data represents existing homes on the ground. New construction home sales are not included.

### Average Home Sales Price

The average home sales price in Loudoun County is \$465,979 (Refer to Figure 19). The average home sales price data indicates that zip code 20166 (Arcola/Dulles) has an average home sale price of \$403,029, which is the second lowest of all zip codes in the County (Refer to the Zip Code Map, Appendix 15). The Chantilly/South Riding zip code has an average sale price slightly below the overall County average, while Aldie/Stone Ridge and Ashburn area south of the Greenway are 4% and 15% above the County average respectively (Refer to Figure 20). However, the overall averages by zip code can be misleading because they do not account for the differences among zip codes in the proportion of homes sold by unit type. Interpreting sales price data by unit type provides a clearer, more reasonable picture of the differences in sales prices throughout Loudoun County. Single-family detached homes in the Dulles Community zip codes are similarly priced or higher priced than the County average single-family detached home price. Of the four zip codes in the Dulles Community, the Chantilly/South Riding area is the lowest priced and the Ashburn area south of the Greenway is the highest priced. Compared to the County average of single-family attached homes (i.e. townhomes, duplexes, triplexes, and quadraplexes) the Arcola/Dulles zip code is 4% less, while the other areas are similarly priced or hire priced, with the Ashburn area south of the Greenway being the highest priced area within the Dulles Community. The multi-family housing units (i.e. garden-style condos, stacked townhome condos) in the Dulles Community's zip codes are 6% to 19% higher than the County average price, with the Aldie/Stone Ridge area having the lowest prices and the Chantilly/South Riding area having the highest priced multi-family housing.

**Figure 19. Average Sales Price**

Zip Code	Place	All Homes	Single-Family Detached	Single-Family Attached	Multi-Family
20105	Aldie/Stone Ridge	\$486,586	\$610,510	\$409,777	\$283,073
20148	Ashburn (south of Greenway)	\$537,508	\$683,130	\$448,406	\$308,083
20152	Chantilly/South Riding	\$459,548	\$578,367	\$389,773	\$315,821
20166	Arcola/Dulles	\$403,029	\$582,522	\$370,322	\$283,733
	Loudoun County	\$465,979	\$577,531	\$386,967	\$265,274

Source: The Metropolitan Regional Information System (MRIS) as of Aug 5, 2014 as provided by Real Estate Business Intelligence, LLC.



**Figure 20. Average Sales Price Percentage Difference from Loudoun County Average**

Zip Code	Place	All Homes	Single-Family Detached	Single-Family Attached	Multi-Family
20105	Aldie/Stone Ridge	4.40%	5.70%	5.90%	6.70%
20148	Ashburn (south of Greenway)	15.40%	18.30%	15.90%	16.10%
20152	Chantilly/South Riding	-1.40%	0.10%	0.70%	19.10%
20166	Arcola/Dulles	-13.50%	0.90%	-4.30%	7.00%

Source: The Metropolitan Regional Information System (MRIS) as of Aug 5, 2014 as provided by Real Estate Business Intelligence, LLC.

### Average Home Sales Price per Square Foot

The average home sales price per square foot in Loudoun County is \$210 (Refer to Figures 21 and 22). The Dulles Community provides most of eastern Loudoun County's best home value for the dollar. In general, the Dulles Community's lesser number of amenities and entertainment options and greater distance to jobs in comparison to the rest of eastern Loudoun County appears to keep the cost of housing per square foot lower than other portions of the County.

**Figure 21. Average Sales Price per Square Foot**

Zip Code	Place	All Homes	Single-Family Detached	Single-Family Attached	Multi-Family
20105	Aldie/Stone Ridge	\$189	\$210	\$176	\$174
20148	Ashburn (south of Greenway)	\$197	\$204	\$197	\$170
20152	Chantilly/South Riding	\$205	\$207	\$192	\$242
20166	Arcola/Dulles	\$217	\$208	\$225	\$208
	Loudoun County	\$210	\$218	\$205	\$195

Source: The Metropolitan Regional Information System (MRIS) as of Aug 5, 2014 as provided by Real Estate Business Intelligence, LLC.

**Figure 22. Average Sales Price per Sq. Ft. Percentage Difference from Loudoun County Average**

Zip Code	Place	All Homes	Single-Family Detached	Single-Family Attached	Multi-Family
20105	Aldie/Stone Ridge	-9.80%	-3.90%	-14.50%	-10.50%
20148	Ashburn (south of Greenway)	-6.40%	-6.40%	-3.80%	-12.90%
20152	Chantilly/South Riding	-2.50%	-5.20%	-6.60%	24.20%
20166	Arcola/Dulles	3.40%	-4.50%	9.40%	6.60%

Source: The Metropolitan Regional Information System (MRIS) as of Aug 5, 2014 as provided by Real Estate Business Intelligence, LLC.

## Affordable Housing

More than 984 Affordable Dwelling Units (ADUs) are located within the Dulles Community as part of the County's ADU Program with another 229 units approved within the Dulles Community<sup>25</sup>. Prices for ADUs are much lower than comparable market rate homes and typically range from approximately \$120,000 to \$180,000 depending on the type of unit. These properties are subject to restrictive covenants related to refinancing and transfer for at least 15 years, after which the units can be sold at market rates with the difference between market rate and ADU price being split between the seller and the County of Loudoun Housing Trust.

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<sup>26</sup>. 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 \$530 to \$1,300 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. Unit rents are controlled for a period of 20 years. One apartment complex within the Dulles Community, The Abbey at South Riding, participates in the program with a total of 39 rental units.

Another affordable housing program made available through proffers in the Dulles Community is the Loudoun County Affordable Market Purchase Program (AMPP), which provides newly constructed, affordable for-sale housing for income-eligible citizens who live or work in the county<sup>27</sup>. Six (6) proffered units have been constructed as part of the Reserve at South Riding I subdivision. Eight (8) additional proffered units are approved for the Arcola Center application, but construction has not begun on these units.

Additional opportunities exist for affordable housing in the Dulles 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 apartment developers with a federal income tax credit. It provides incentives for private investors to participate in the construction and rehabilitation of housing for low-income families ([www.vhda.com](http://www.vhda.com)).

<sup>25</sup> 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. The information was compiled from several sources including: the Commissioner of Revenue's Office, the DFS Harmony Housing data base, and from the DFS application tracking spreadsheet.

<sup>26</sup> The Area Median Income (AMI) for Loudoun County is based on the median income for the Washington Metropolitan Statistical Area, currently set at \$107,000.

<sup>27</sup> The Affordable Market Purchase Program (AMPP) enables eligible first-time homeowners with moderate income the opportunity to purchase a newly constructed townhouse or condominium. First-time homeowners desiring to purchase a home must have a total household income more than 70% and less than 100% of the Area Median Income (AMI) based on the Washington Metropolitan Statistical Area.



Three apartment complexes within the Dulles Community offer income-restricted housing. No age-restricted housing, housing for individuals 55 years old and older, is available within the Dulles Community.

## Economic Development

The Dulles Community is one of the Department of Economic Development's Corridors of Significance for its long-term importance to the County's commercial development. Further, the Community's current mix of uses from high-end flex, industrial, office, and emerging medical office and retail are reflective of the Community's marketing assets for the attraction of the County's priority air cargo and aviation, life sciences and medical, technology, and retail clusters.

## Economic Development Highlights

### **Route 606 High-End Flex/Light Industrial:**

The Dulles Community is home to flex/light industrial businesses important to Loudoun's aviation and air cargo cluster. Flex/light industrial is in high demand and the County has a limited amount of land designated for such uses. The proximity to Washington Dulles International Airport and the supply of vacant industrially zoned and planned land uses in the Dulles Community is expected to give rise to more flex/industrial growth in this community between now and 2040. The current inventory of flex space in the Community includes property within industrial parks concentrated along the Route 606 Corridor, also known as the "Back door to Dulles", including the Airport Commerce Center, Dulles Trade Center 1 and 2, Dulles Trade Center West, Evergreen Commerce Center, Mercure Business Park, and Northwoods. These industrial parks are planned for further development. In addition, Arcola Center is an emerging community that will include flex/light industrial, that of which had its first flex/light industrial permitting activity in 2014.

Currently, businesses at Dulles Airport have the capacity to expand cargo operations inside-the-fence, but the existing road network surrounding the airport is not suited for the increased capacity. The *Targeted Cluster Analysis & Strategy* report commissioned by the Department of Economic Development and conducted by Camoin Associates in 2012 stated that issues related to traffic and congestion near Washington Dulles International Airport were identified as barriers to economic development and needed to be addressed, particularly if the County hoped to attract any firms that needed high-volume ground transportation access to and from the airport. A key recommendation was for the County, in partnership with the state and the airport, to specifically address the traffic in and around the airport, including roads that are used by airport-related services, maintenance and freight activities. The Route 606 Widening Project is viewed as a critical transportation piece to the vision of an 18-mile Dulles Loop (also formed by portions of Routes 28 and 50) that would support future economic growth of the airport and the County's air cargo and aviation related industry cluster. For more information on the Route 606 transportation plans please refer to the Circulation and Transportation section of the report.

### **Route 50 Industrial**

Chantilly Crushed Stone Quarry is located north of Route 50 and south of the Airport between Vance Road to the west and Willard Road to the east. The quarry is zoned Mineral Resource – Heavy Industry (MR-HI). The properties immediately to the east and west of the Quarry are also

zoned for heavier industrial uses (PD-GI and GB). These heavy industrial uses are important to providing a diverse economy in Loudoun.

The properties north of Route 50 in the vicinity of the quarry and have direct access to Route 50, currently include landscaping material and vehicle storage yards. The properties in this vicinity are split zoned CLI (Commercial Light Industrial) and MR-HI. However, it is difficult to market property for development within this area as there may be conflicts in uses on the same property and the same permitted uses must be allowed in both zoning districts.

### **Transitions from Industrial to Retail, Office and Medical Office**

The Route 50 Corridor directly south of the airport contains a mix of zoning districts comprised of CLI, PD-MUB, and PD-CC-SC. The Route 50 Corridor is transitioning from predominantly industrial uses to include a mix of retail and office serving the growing residential population in this area. Branding the eastern portion of the Route 50 corridor as a gateway to these emerging clusters is difficult, however, given the older, inconsistent uses along the corridor.

### **Life Sciences and Medical**

The Dulles Community may likely emerge as a center of health care and life science jobs. The Camoin Associates report commissioned by the Department of Economic Development predicts a 34% increase in the number of jobs in life sciences in the County through 2022. The majority of the jobs will be in health services. With the StoneSprings Hospital Center that is currently under construction just to the west of the intersection of Route 50 and Gum Springs Road, in addition to smaller medical office planned in the vicinity of the hospital, a sizeable amount of the County's forecasted health services jobs through 2022 will be located within the Dulles Community.



## **Employment**

The Dulles Community is an emerging employment area. In 2005 approximately 6% of jobs in Loudoun County were located in the Dulles Community. In 2013 approximately 9% of jobs in Loudoun County were located in the Dulles Community. The number of jobs in the Dulles Community doubled between 2005 and 2013, and is expected to triple between now and 2040 (Refer to Figure 23).

**Figure 23. Number of Jobs**

	<b>Dulles Community</b>	<b>Loudoun County</b>
2005*	6,500	115,000
2013*	13,700	148,600
2040**	42,000	283,200

\*Estimate \*\*Forecast

Source: Virginia Employment Commission, ES-202 2<sup>nd</sup> QTR 2005 and 2<sup>nd</sup> QTR 2013; Loudoun County Department of Planning and Zoning, Round 8.3 Adjusted Forecasts, August 2013.

Like most of the County, small businesses make up the majority of business establishments in the Dulles Community. Within the Dulles Community, 82% of business establishments are small businesses that employ 19 or fewer employees. In addition to its small business community, the Dulles Community is home to a number of large employers from a range of sectors (Refer to Figures 24 and 25).

**Figure 24. 2013 Business Establishment Share**

Number of Employees	2005	2013
Less than 10	63%	69%
10 to 19	14%	13%
20 to 49	14%	11%
49 to 99	5%	4%
100 or More	4%	3%
Total	100%	100%

Source: Virginia Employment Commission, ES-202 2<sup>nd</sup> QTR 2005 and 2<sup>nd</sup> QTR 2013.

**Figure 25. 2013 Top Ten Largest Employers**

Dulles Community	Number of Employees
Loudoun County Public Schools	1,000 to 2,000
JK Moving	500 to 1,000
Global Wireless Solutions	100 to 500
Harris Teeter	100 to 500
Heritage Landscape	100 to 500
Loudoun County Government	100 to 500
Meadows Farm	100 to 500
Niitek	100 to 500
Southland Concrete	100 to 500
Valley Crest Landscape	100 to 500

Source: Virginia Employment Commission, ES-202 2<sup>nd</sup> QTR 2013.

### Employment by Business Type

Employment in the Dulles Community has been dominated by industrial employment, but the community is now in transition as it begins to add much retail, office, and mixed-use developments. In 2005 retail and other employment were small components of the Dulles Community's employment. By 2013 the number of retail jobs had grown to nearly 6 times that of 2005. By 2013 the number of "other" jobs had grown to nearly 8 times that of 2005. There were only 3 public schools open as of the 2<sup>nd</sup> quarter (Qtr.) of 2005. By the 2<sup>nd</sup> Qtr. of 2013 there were 10 public schools open. The schools are a large reason for the increase in "other" employment. The number of industrial and office jobs nearly doubled between 2005 and 2013, yet their share of the Dulles Community's employment decreased due to the rapid growth of retail and schools.

The community is forecasted for much employment growth through 2040 in various business sectors. Major approved office projects that are forecasted to have development include Arcola Town Center, Brambleton, Stone Ridge, and East Gate. Major approved retail projects that are

forecasted to have development between 2013 and 2040 include Dulles Landing, Arcola Center, Avonlea Plaza, Brambleton, Fox Gate, and South Riding Market Square Phase II. Major approved “other” employment projects that are forecasted to be built after 2013 include schools, HCA Stone Springs Hospital and supporting medical offices, and Dulles South Multi-Purpose Center Phase II. Hotels are also included in “other” employment, of which some are planned in the community.

**Figure 26. Employment by Business Type**

	Number of Jobs			Share of Employment		
	2005*	2013*	2040**	2005*	2013*	2040**
Flex/Industrial	3,100	4,300	15,100	47%	31%	36%
Office	2,400	2,900	10,700	38%	20%	19%
Retail	600	4,200	7,900	10%	31%	25%
Other	400	2,300	8,300	5%	17%	20%
Total	6,500	13,700	42,000	100%	100%	100%

\*Estimate \*\*Forecast

Source: Virginia Employment Commission, ES-202 2<sup>nd</sup> QTR 2005 and 2<sup>nd</sup> QTR 2013; Loudoun County Round 8.3 Adjusted Forecasts, August 2013.

Comparing the number of jobs in a community to the number of households is a measure of how many people have to commute outside the County to work and the balance between residential and commercial development. Since the late 1990s the Metropolitan Washington Council of Governments (COG) has advocated a jobs-housing goal of 1.6 for the region. The Washington metropolitan region’s jobs-housing ratio is currently 1.6 and forecasted to be 1.7 by 2040 according to the COG Round 8.3 Cooperative Forecasts, adopted September 2014. Loudoun County’s current jobs-housing ratio is 1.40. Under Loudoun’s current planned land use and zoning, Loudoun is expected to reach 1.69 by 2040. Loudoun’s current residential vacant land supply per zoning and the planned land use is limited, while commercial vacant land is not limited. These conditions will allow jobs to grow to better balance the residential/non-residential in the County. The current jobs-housing ratio in the Dulles Community is 0.87 jobs per household. This indicates that a good majority of the residents in the Dulles Community work outside the Community. Similar to the County, by 2040 jobs in the Dulles Community are expected to have grown to better balance the residential/non-residential in the community. The Dulles Community’s jobs-housing ratio is forecasted to reach 1.5 or 1.6 by 2040.

### **Nonresidential Square Footage**

The Dulles Community’s largest nonresidential type of space is industrial. The community’s share of Loudoun County’s existing square footage of flex/industrial, retail, and office space is 16%, 10%, and 2% respectively. The nonresidential space in the community has grown significantly since 2006. Since 2006, office space has increased 488%, flex/industrial by 50%, while retail has had slow growth. However, with Dulles Landings first phase set to open in 2015 the retail sector will begin to see much growth (Refer to Figures 27 thru 29).

**Figure 27. Nonresidential Square Footage by Type**

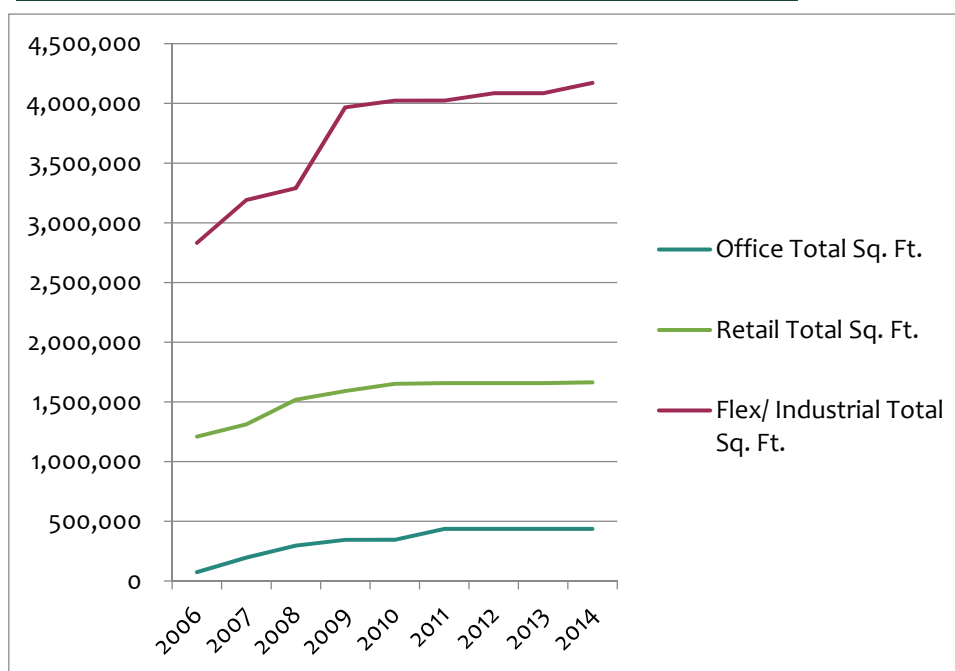
	Dulles Community Square Footage	Loudoun County Square Footage
Flex/Industrial	4,172,068	26,127,325
Retail	1,663,403	16,863,524
Office	435,742	17,444,296

Source: Costar, Analysis by Department of Economic Development, December 2014.

**Figure 28. Cumulative Nonresidential Square Footage, Table**

	Office Total Sq. Ft.	Retail Total Sq. Ft.	Flex/ Industrial Total Sq. Ft.
2006	74,040	1,209,532	2,832,564
2007	195,614	1,312,103	3,190,962
2008	296,669	1,518,313	3,290,193
2009	345,203	1,591,230	3,967,008
2010	345,203	1,651,905	4,023,808
2011	435,742	1,656,871	4,023,808
2012	435,742	1,656,871	4,084,362
2013	435,742	1,656,871	4,084,362
2014	435,742	1,663,403	4,172,068

Source: Costar, 3rd Quarter Data, Analysis by Department of Economic Development, December 2014.

**Figure 29. Cumulative Nonresidential Square Footage, Graph**

### Vacancy Rates

The vacancy rates of flex/industrial, retail, and office in the Dulles Community are similar to Loudoun County overall. The vacancy rates represent space which is currently vacant and is currently being marketed as available space. The fairly high vacancy rate of office is a sign of the continued impact of the economic downturn, but this is expected to improve as the nation and region's economy improves (Refer to Figure 30).

**Figure 30. Vacancy Rates**

	Dulles Community	Loudoun County
Flex/Industrial	7.16%	7.30%
Retail	4.28%	3.90%
Office	13.08%	15.50%

Source: Costar, Analysis by Department of Economic Development, December 2014.

## Retail and Commercial Service

Currently the Dulles Community is served by neighborhood retail centers but not regional destination, big-box retail, with the exception of Home Depot. At this time residents must make a trip into Fairfax County to reach large retail and big-box stores. That will soon be changing in 2015 with the opening of the first portion of Dulles Landing at the intersection of Route 50 and Loudoun County Parkway. The later phases of Dulles Landing, along with the planned Arcola Center will further alleviate the need to have to travel to Fairfax County by providing regional destination, big-box retail within the community.

### Shopping Centers (Completed)

- ◇ **Dulles 606 Retail Center:** The total square footage is 97,000. There is no large anchor store. The shopping center contains fast food restaurants and small neighborhood service, retail shops.
- ◇ **South Riding Market Square Phase I:** Anchored by Giant and Home Depot. The total retail square footage is 244,000.
- ◇ **South Riding Town Center:** Anchored by Food Lion. The total retail square footage is 107,000.
- ◇ **Stone Ridge Village Center:** Anchored by Harris Teeter. The total retail square footage is 132,400 square feet.

### Shopping Centers (Approved but Unbuilt or Partially Completed)

- ◇ **Avonlea Plaza:** Approved for up to 300,000 square feet. The site plan is currently under review by the County and indicates that the developer is proposing the project to be a movie theatre anchored retail center.
- ◇ **Arcola Center:** Arcola Center is a mixed-use community. The project allows up to 1,180,000 square feet of retail. The retail component of the project has not commenced construction. When it is built it will add more big-box retailers and a main street town center pedestrian friendly area to the Dulles Community.



- ◇ **Brambleton:** Brambleton is a mixed use community. The project currently has 320,000 square feet of retail and office constructed in the town center. The constructed portion of the project is anchored by Harris Teeter and Fox Regal Cinemas. Although the constructed portion is currently located in just the town center, there are other parts of Brambleton that allow office and retail. Some of the existing structures in the town center have retail on the bottom floor and office on the upper floors. The project allows up to 950,000 square feet of office and retail combined (600,000 SQFT retail and 350,000 SQFT office).
- ◇ **Brambleton Active Adult:** Brambleton Active Adult is a planned mixed-use community. It is approved for up to 136,850 square feet of commercial which can be retail, office, or a mix.
- ◇ **Brambleton Brandt:** The project is approved for 26,700 square feet of retail, of which 12,500 has been built.
- ◇ **Dulles Landing:** Dulles Landing is under construction and has been since August 2013. The first part of the project is currently scheduled to be completed and open in mid-2015 and includes the following big name retailers committed to spaces: PetSmart, TJ Maxx, Home Goods, Michaels, Ross, and Famous Footwear. The next part of the project will include Walmart and Dicks Sporting Goods. Walmart was issued building permits for construction in September 2014 and is currently under construction. Dicks Sporting Goods was issued build permits for construction in June 2014 and is currently under construction. All together there has been 431,700 square feet issued with building permits as of December 1, 2014. The entire project is approved for 722,675 square feet per site plan.
- ◇ **East Gate:** This project has 141,000 square feet of retail approved per site plan, of which 112,636 had been built as of December 1, 2014. The project is anchored by Harris Teeter. The remaining structures to be built include three small restaurants and one moderately sized retail or restaurant establishment.
- ◇ **Fox Gate:** Fox Gate is a planned mixed-use community. It is approved for up to 308,000 square feet of retail. The project is planned at the intersection of Route 50 and Tall Cedars Parkway.
- ◇ **Gum Springs Village Center:** The total existing square footage is 30,100 square feet. The center is allowed to add another 20,400 square foot building and a 10,000 square foot building, for a total of 30,400 additional square feet.
- ◇ **Loudoun Valley Estates:** Neighborhood retail center approved for 100,000 SF. It will be located in the vicinity of the new Rock Ridge High School near Loudoun County Parkway. Loudoun County Parkway will be the main thoroughfare used by the retail center's shoppers. The developer does not plan to construct the retail center until the final segment of Loudoun County Parkway is completed.
- ◇ **South Riding Market Square Phase II:** Approved for up to 387,300 square feet of retail. The project will be located to the north of existing South Riding Market Square (Phase I) and south of Route 50.

## Existing and Planned Community Facilities

The Dulles Community is growing rapidly and several community facilities have come on line in recent years to serve the growing population. There are many facilities that the County intends to build in the coming years. There are two documents that outline the County's plans for these new facilities: The Capital Improvements Program (CIP) and the Capital Needs Assessment (CNA). The CNA uses the County's projected population growth and adopted capital facility standards to identify the type and number of capital facilities that will be needed to serve the public over a ten-year planning period beyond the end of the current Capital Improvements CIP timeframe, while maintaining the County's desired levels of services to its residents. The CIP then helps prioritize these requests for new facilities in relation to Department service planning, opportunities for co-location, availability of funding and land sites, the demonstrated need for new facilities, and direction from the Board of Supervisors.

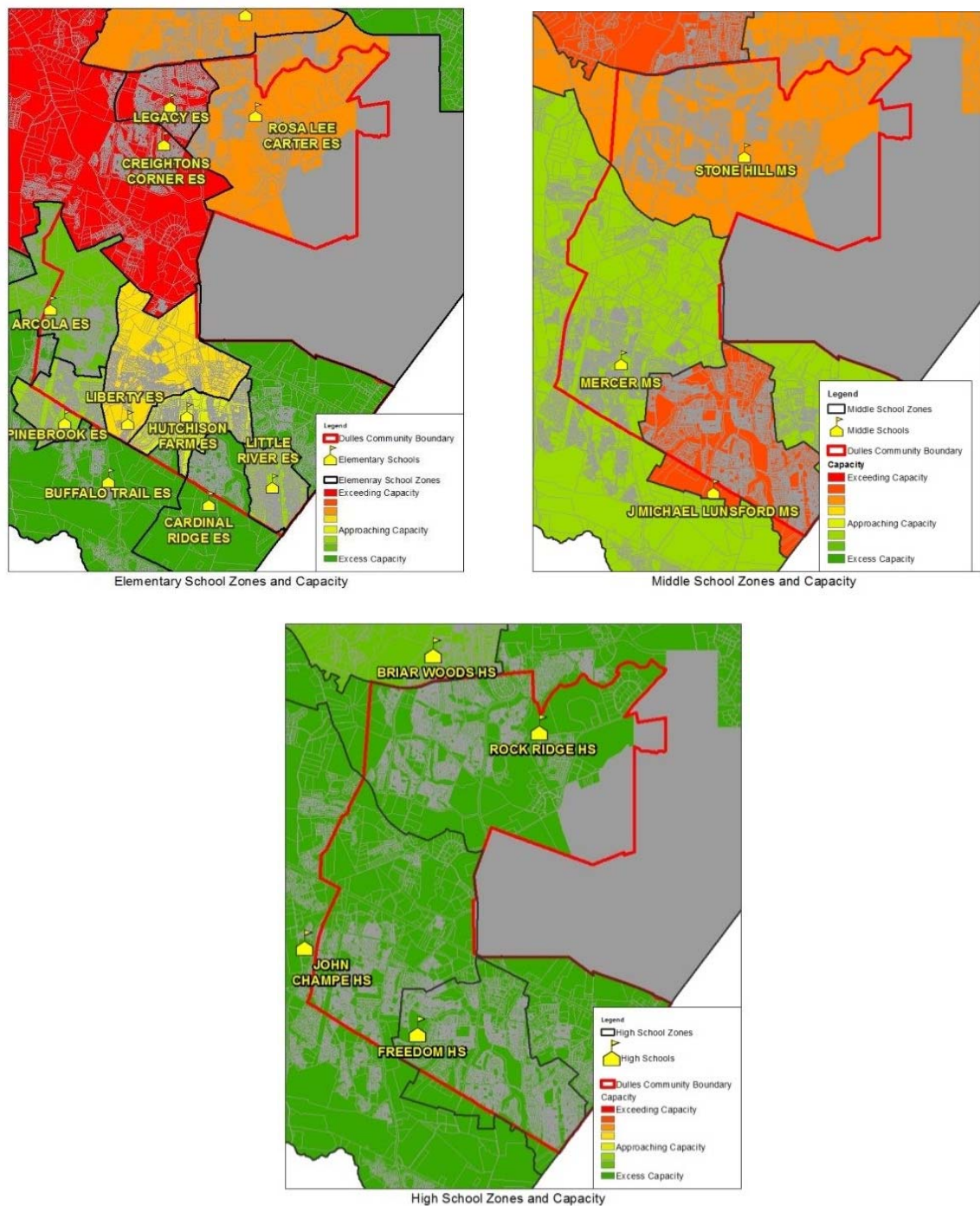
Community Facilities can be both public and private. In the Dulles Community, County-owned facilities comprise a significant component of the facilities and include community centers, public schools, libraries, public safety facilities, mental health residential facilities, and several recreational parks. (See Public Facilities and County Properties Map, Appendix 16). Several new facilities will also be coming online in the coming years. The Dulles Community is also home to privately-owned community facilities including existing healthcare facilities, places of worship, and private schools. In many instances, there are existing and planned public facilities that are located just outside the Dulles Community Boundary but serve the residents within the Community. These facilities are also discussed below, as appropriate.

### Schools

There are currently 11 public elementary schools, 4 middle schools, and 4 high schools that serve the Dulles Community or areas immediately adjacent to the Community. In some instances, these schools are located outside the Dulles Community Boundary. Figure 31 shows the current 2014-15 school year building program capacities and the September 30, 2014 enrollment for each of the existing public schools. The images below graphically depict the 2014-15 school attendance zones that, based on September 30, 2014 enrollment, have excess or insufficient capacities. It is, however, important to note that these images reflect enrollments and attendance zones at a particular point in time even though school enrollments and attendance zones are dynamic given continued growth of the Community.

In order to address the growing enrollments, the County's adopted Fiscal Year 2015 CIP provides plans for constructing 6 new schools within or surrounding the greater Dulles Community over the next 5 years including 2 elementary schools, 2 middle schools, and 2 high schools. These new schools are expected to alleviate current capacity issues. While exact school sites are not certain, a site along Braddock Road, just west of the Dulles Community Boundary, has been identified for one of these middle schools. The County also has plans to construct an elementary school on the John Champe High School site located immediately west of the Dulles Community boundary. Several private preschools, infant daycare facilities, and the Boyd School which serves infants to Kindergarten are also located within the Dulles Community. Figure 32 lists the Elementary, Middle and High Schools currently serving the Dulles Community.

**Figure 31. 2014-2015 School Year Capacity<sup>28</sup>**



<sup>28</sup> Approaching Capacity is defined as any schools with between 0 and 1 percent of total capacity remaining. Exceeding Capacity and Excess Capacity are defined as any schools exceeding or under capacity by 10 or more percent respectively.

**Figure 32. Public Schools**

<b>Public Schools Serving Dulles Community</b>				
	<b>2014-15 Capacity</b>	<b>September 30, 2014 Enrollment</b>	<b>Capacity Remaining</b>	<b>% Capacity Remaining</b>
<b>Elementary Schools</b>				
Arcola ES	872	797	75	8.6%
Creighton's Corner ES	942	1093	-151	-16.0%
Hutchison Farm ES	842	834	8	1.0%
Legacy ES	941	1083	-142	-15.1%
Liberty ES	978	980	-2	-0.2%
Little River ES	826	811	15	1.8%
Rosa Lee Carter ES	908	987	-79	-8.7%
Buffalo Trail ES*	942	692	250	26.5%
Cardinal Ridge ES*	1000	876	124	12.4%
Discovery ES*	968	784	184	19.0%
Pinebrook ES*	908	870	38	4.2%
<b>Middle Schools</b>				
Mercer MS	1321	1255	66	5.0%
Stone Hill MS	1283	1340	-57	-4.4%
Eagle Ridge MS*	1175	1267	-92	-7.8%
J. Michael Lunsford MS*	1395	1470	-75	-5.4%
<b>High Schools</b>				
Freedom HS	1660	1454	206	12.4%
Rock Ridge HS	1929	798	1131	58.6%
Briar Woods HS*	1855	1751	104	5.6%
John Champe HS*	1861	1251	610	32.8%
*Denotes schools serving the Dulles Community located outside the Dulles Community Boundary.				

The Loudoun County Department of Parks, Recreation and Community Services offers two youth programs at County public 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 and is available at Mercer and Eagle Ridge Middle School ([www.loudoun.gov/prcs](http://www.loudoun.gov/prcs)).

The nearest higher education facilities are located outside of the Dulles Community generally along Route 7 in Ashburn, in Chantilly along Route 28 and along the Dulles Toll Road.

## Fire and Rescue

Fire and Rescue Services for the Dulles Community is currently provided by three first responding facilities. The Dulles South Public Safety Center (Fire Station 19) provides Fire and Rescue services for the Southern part of the community and along Route 606. The Arcola Volunteer Fire Department (Fire Station 9) provides services to the Brambleton Area. The Moorefield Fire and Rescue Station (Fire Station 23) serves a small portion of the northeast corner of the Dulles Community.

### Existing Facilities

#### **Dulles South Public Safety Center**

The Dulles South Public Safety Center began operation on May 7, 2007. It is the first of its kind for Loudoun County with both fire and rescue facilities and a Sheriff's Substation. It is located at 25216 Loudoun County Parkway. The response time goal for Dulles South Fire Station #19 is 14 minutes for Basic Life Support (BLS), Advanced Life Support (ALS) and fire related calls. Between January 1, 2014 and August 31, 2014, Dulles South Fire Station #19 was dispatched total of 1271 incidents in their first due response area. Of those incidents, 876 were Emergency Medical Service related and 395 were fire related incidents. Overall, Dulles South's response times were met 92% of the time.



#### **Brambleton Public Safety Center**

In April 2014, the Arcola Fire Department (Fire Station #9) moved from the facility at 24300 Gum Spring Road to a new location at 23675 Belmont Ridge Rd. This new location is the Brambleton Public Safety Center. The original location along Gum Spring Road had been in operation since the station opened in 1957. The original location is still used as an Annex to store supplies and equipment. The response time goal for Brambleton Station #9 on BLS and fire related calls is 14 minutes and 15 minutes for ALS calls. During the period of January 1 to August 31, 2014, Station #9 responded to 310 Emergency Medical Service calls and 142 fire related calls and met response time goals between 97% of the time.

#### **Moorefield Fire and Rescue Station**

The 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. The Moorefield Fire and Rescue station serves a limited portion of northeast corner of the Dulles Community.



## Future Facilities

### Kirkpatrick West Fire Station

The County anticipates that a new fire station will be operational in approximately 2018. The fire station is planned to be located site proffered as part of the Kirkpatrick West rezoning. The station which will be located along Braddock Road west of the Dulles Community is expected to provide 4 apparatus bays and 18,500 square feet of space for future Fire and Rescue operations.

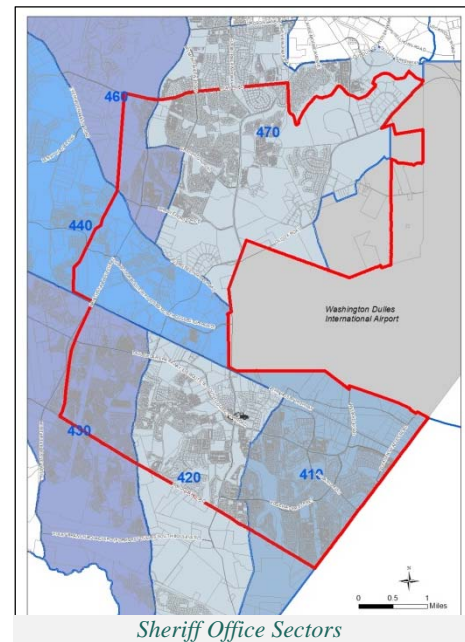
## Sheriff

The entire Dulles Community is served by the Loudoun County Sheriff's Office and more specifically the Dulles South Station. The Dulles South Station has 7 patrol sectors of which 6 have portions located in the Dulles Community; 410, 420, 430, 440, 460, and 470. There are 116 square miles covered by this station with 38 assigned patrol staff as of April 2014. The Dulles South Station includes a station commander, an assistant station commander, a criminal information records specialist, an administrative assistant, and customer services assistant.

According to the Sheriff Office's records, the top reported crimes in the Dulles South Station area for the period of January 1, 2014 to August 31, 2014 were: (1) larceny, (2) destruction of property, (3) simple assault, and (4) narcotics related crimes.

Figure 33 provides specific information for all crimes in each of the sectors located in the Dulles Community.

The Loudoun County Sheriff's Office strives to continuously improve safety and law enforcement services to all members of the community and employs a wide variety of initiatives to work with other law enforcement agencies and the public. Programs and initiatives currently in place to inform the public include the Community Policing Program, Alert Loudoun System, press releases, daily crime reports, online crime mapping, quarterly meetings at the stations, and attendance at Homeowner Association meetings.



**Figure 33. Dulles Area Crime Statistics**

Part 1 Crimes for Dulles South Service Area January 1, 2014 to August 31, 2014								
Sectors	Homicide	Assault	Robbery	Rape	Larceny	Auto Theft	Burglary	Total
410	0	2	0	0	42	1	5	50
420	0	4	2	1	77	3	5	92
430	1	1	0	1	85	2	4	94
440	0	2	0	0	36	2	3	43
460	0	2	0	0	14	1	1	18
470	0	2	1	1	54	4	7	69



Part 2 Crimes for Dulles South Service Area January 1, 2014 to August 31, 2014												
Sectors	Simple Assault	Dest. Of Prop.	DUI	DIP	Narc. Related	Liquor Law Viol.	Peeping Tom	Sex Assault	Weapon Viol.	Dis. Conduct	Runaway	Total
410	18	21	9	1	8	0	0	0	1	2	0	60
420	35	23	7	3	18	3	1	3	2	1	5	101
430	25	30	10	5	3	2	0	1	0	1	6	83
440	4	7	1	1	2	1	0	0	1	0	2	19
460	3	9	4	1	6	3	0	0	0	0	0	26
470	40	66	7	12	21	5	1	0	1	2	15	170

The Sheriff's office also teaches classes at the Dulles South Station and throughout the community on Bike safety, Neighborhood Watch, Substance Abuse Prevention, Cyber Security / Protecting children in the Community, Traffic Safety, and Crime Prevention. In addition, the Sheriff's office has a strong partnership with Loudoun County Public Schools to focus on child safety, security, and traffic concerns around schools.

## Healthcare

The Dulles community is home to several healthcare facilities including the recently constructed Stone Springs Emergency Center, urgent care facilities, a rehabilitation hospital, and several doctor's offices. The full service Stone Springs Hospital Center is also scheduled to open in December 2015 bringing 124 hospital beds and 243,000 square feet of medical office space to the community. In general, all of these facilities are concentrated along the Route 50 Corridor. In addition, the county operates two mental health residential facilities in the Dulles Community.

## Recreational Uses

### Parks

There are currently 4 county owned parks in the Dulles Community that are open and several more parks planned. These include Broad Run Stream Valley Park, Byrne's Ridge Park, Conklin Park, and the South Riding Park along Nations Street. Appendix 16, a map of Public Facilities and County Properties, shows the locations of these parks. The Hal & Berni Hansen Regional Park is planned to be open in approximately 2018. Each of these facilities and the amenities they include are shown in Figure 34. There are currently 5 rectangular fields and 3 baseball diamonds in the Dulles Community.

Figure 35 provides the full inventory of athletic fields within the Dulles and Ashburn subareas.<sup>29</sup> The Ashburn and Dulles Subareas include the Dulles Community and adjacent areas. Figure 35 also shows that there are 24 fields approved for construction in the future including those at Hal and Bernie Hanson Park.

<sup>29</sup> The County plans for new and existing facilities using subarea boundaries.

**Figure 34. Dulles Community Recreation Facilities**

Facility Name	Status	Description
Broad Run Stream Valley Park	Open	131-acres along Broad Run stream valley corridor with nature trails, open space and interpretive signs
Byrne's Ridge Park	Open	26-acre active park in Stone Ridge, three large soccer fields, one large baseball field, two softball fields and an asphalt trail.
Conklin Park	Open	30-acre passive and active park site with basketball courts, three tennis courts, a sand volleyball court, two soccer fields, a pond and parking facilities.
Hal & Berni Hansen Regional Park	2018	9 large rectangle fields, 2 large turf rectangle fields, 1 small rectangle field, 2 baseball fields, 2 softball fields, nature center, picnic pavilions, basketball court, playground, splash pad, off-leash dog area, disc golf, fishing pier/boardwalk, skate park, pedestrian trails, mountain bike trails, equestrian trails and amphitheater.
South Riding Nations Street Park Site	Open	Volleyball Court and Basketball Court
Dulles South Multipurpose Center Phase 1	Open	Learning room, multipurpose room, conference room, Skate Park and Playground
Dulles South Multipurpose Center Phase 2	2015	65,000 square foot addition with gym, fitness areas, indoor track, competition pool and leisure pool, dedicated senior center

**Figure 35. Athletic Field Inventory for Dulles Community and Surrounding Areas**

Park Name	Ex. Lighted Fields	Approved/ Funded Lighted Fields	Election District	Planning Sub area	Small Diamond	Large Diamond	Total Diamond	Rectangle Large	Rectangle Small	Total Rectangle	Cricket Field
Bles Park			Algonkian	Ashburn				4		4	
Brambleton Community Park East		3	Dulles	Dulles				3		3	
Brambleton Community Park West		6	Blue Ridge	Dulles	2	4	6				
Byrne's Ridge Park		6	Dulles	Dulles	2	1	3	3		3	
Chick Ford and Ryan Bickle Field	2		Ashburn	Ashburn	2		2				
Conklin Community Park			Dulles	Dulles				2		2	
Edgar Tillet Memorial Park	4		Blue Ridge	Ashburn	2	2	4				
Hampshire Park			Broad Run	Ashburn				1	1	2	
Lyndora Park			Dulles	Ashburn	1		1	1		1	
Old Arcola Community Center			Blue Ridge	Dulles		1	1	1		1	
Greg Crittenden Memorial Park			Ashburn	Ashburn	3		3				
Ray Muth Park			Broad Run	Ashburn				1	2	3	
Trailside Park	3		Ashburn	Ashburn	2	1	3				
Total	9	15			14	9	23	16	3	19	0
<b>Total Existing Fields 42</b>											
Future Fields Planned	Ex. Lighted	To Be Lighted	Election District	Planning Sub area	Small Diamond	Large Diamond	Total Diamond	Rectangle Large	Rectangle Small	Total Rectangle	Cricket Field
Hal and Bernie Hanson		16	Blue Ridge	Dulles	2	2	4	11	1	12	1
Moorefield Community Park			Ashburn	Dulles		1	1	2		2	
One Loudoun Spots Park			Broad Run	Ashburn	1		1	2	1	3	
Total		16			3	3	6	15	2	17	1
<b>Total Future Approved Fields 24</b>											



### **Dulles South Multipurpose Center**

The Dulles South Multi-purpose center is an indoor recreational area which is being built in two phases. Currently only Phase 1 is open. As shown in Figure 34, when complete, the Dulles South Multi-purpose Center will include a learning room, multipurpose room, conference room, Skate Park and playground, gym, fitness areas, indoor track, competition pool, leisure pool, and a dedicated senior center.



### **Trails**

The Dulles Community does not have any County owned or maintained recreational trails. However, the Department of Parks, Recreation, and Community Services is currently working on development of a natural recreational trail system that will serve to link people to the area's natural, recreational, cultural, and commercial resources. A section of the planned trail will be located in the Dulles Community along the Broad Run in the Broad Run Stream Valley Park shown in Figure 34. Additional sections are planned to be developed at Conklin Park, Byrne's Ridge Park and the future Hal and Bernie Hanson Regional Park.

### **Other Recreational Uses**

One additional facility not listed in Figure 34 is the old Arcola Community Center. With the exception of some sports fields and a recycling center, this facility is currently vacant. The County is evaluating options for reuse of the facility, considering public/private partnerships for a new facility, or sale of the existing vacant facility and constructing a new facility in another area.

Homeowner Associations (HOAs) operate additional recreational facilities located in individual communities, including community centers and pools, playgrounds, recreational courts and fields, and walking trails. The HOAs include a full complement of recreational amenities and gathering areas for their residents. Major HOAs in the Dulles Community include Brambleton, East Gate, South Riding, and Stone Ridge.

### **Athletic Field Utilization**

In general, all athletic fields are in heavy use and demand during the spring and fall. In many instances, there is a shortage of fields and fulfilling requests for fields from leagues is not always possible. However, recent efforts to provide field lighting at some facilities, most notably Byrne's Ridge, has resulted in expanded game and practice times which has helped to address the situation. In addition, the future Hal and Bernie Hanson Regional Park will provide a significant number of new fields to provide for additional short-term relief. The County's long-term plans for parks and other facilities are guided by the Capital Needs Assessment (CNA) which uses Ashburn and Dulles Planning Subarea geographies which have somewhat different boundaries than the Dulles Community Boundary. Figure 36 provides a listing of new athletic fields the CNA calls for in the Ashburn and Dulles subareas. In total, the CNA identifies the need for an additional 59 fields in the Ashburn and Dulles subareas whereas only 42 athletic fields currently exist. In addition to these

42 existing fields, as shown in Figure 35, there are 24 new fields with approved funding that will be located at Hal and Bernie Hanson Regional Park, Moorefield Community Park, and One Loudoun Sports Park.

**Figure 36. Athletic Fields, CNA (2017-2026) Ashburn/Dulles Planning Sub Area**

Diamond Fields	Rectangle Fields	Cricket Fields	Total Field Need
40	18	1	59

## Library Services

The Gum Spring Library is located at 24600 Millstream Drive in Stone Ridge. The library leases space in an office building in the Stone Ridge development. From the period of July 1, 2013 to June 30, 2014, the Gum Spring Library tallied 297,238 visits and circulated 1,175,916 books and audiovisual materials. The library held 1237 programs attended by 57,188 residents. The library also has three community meeting rooms accommodating, 150, 50, and 15 people respectively. These rooms had more than 418 bookings attended by 6765 meeting participants.

The library also provides access to 62 computers for public use and held more than 50,000 internet sessions and 37,000 WIFI sessions. The library is planning additional space for creative “makers” and users of technology and digital media

## Houses of Worship

The Dulles Community is also home to several places of worship. Some of the largest facilities within the community boundary include Pleasant Valley Methodist Church, Grace Fellowship Church, Community Baptist Church, Corpus Christi Catholic Church, Arcola United Methodist Church, Shirdi Sai Mandir, and Brambleton Presbyterian Church. It is also noted that the Diocese of Arlington owns a large tract of land on the south side of Braddock Road and that there is a possibility of relocating Paul VI Catholic High School and other facilities to this area.



Places of worship just outside the community boundary include All Nations Dream Church, Casa Firme Iglesia Christiana, Dulles Community Church, Chinmaya Somnath, Shepard Gate Church, Chantilly Bible Church, Rajadhani Mandir, and Sant Nirankari Mission.

## Circulation and Transportation

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The road network in the Dulles 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 (Refer to the Countywide Transportation Plan Map, Appendix 17). 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 the Federal Highway Administration (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 Dulles Community, are maintained by the Virginia Department of Transportation (VDOT).

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

Principal Arterials - roads that primarily serve regional and intrastate traffic, with access from minor arterials and major collectors. Route 50, Loudoun County Parkway, and Old Ox Road are principal arterials.

Minor Arterials - roads that primarily serve commuter traffic, with access from major and minor collectors. Northstar Boulevard (from Belmont Ridge Road just south of Croson Lane to Braddock Road) is a minor arterial.

Major Collectors - roads that carry traffic through the County, providing connections between arterials. Arcola Boulevard, Braddock Road, Claiborne Parkway, a portion of Evergreen Mills Road, Glascock Boulevard/Dulles South Parkway (Route 50 North Collector Road), Gum Spring Road (south of Route 50), a portion of Ryan Road, Shreveport Drive, Tall Cedars Parkway, Quarry Road (Route 50 North Collector Road), and Willard Road are major collectors.

Minor Collectors - roads that carry traffic from local subdivision streets to major collectors and/or arterials. Belmont Ridge Road, Creighton Road, East Gate View Drive, Edgewater Street, a portion of Evergreen Mills Road, Pleasant Valley Road, Poland Road, a portion of Ryan Road, and South Riding Boulevard are minor collectors.

The balance of the public road network is made up of local or secondary roads. 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 AADT<sup>30</sup>), the roadway that carried, on average, the most daily traffic in the Dulles Community in 2012 was Route 50, followed by Loudoun County Parkway and Old Ox Road (Refer to Figure 37) (Virginia Department of Transportation, 2013).

**Figure 37. Annual Average Daily Traffic (AADT) on Heavily Traveled Roads: Dulles Community, 2013**

Roadway	AADT
Route 50 (from Route 15 to Fairfax County Line)	15,000 – 38,000
Loudoun County Parkway (from Braddock Rd. to Arcola Rd.)	13,000 – 30,000
Old Ox Road (from Arcola Rd. to Dulles Greenway)	19,000 – 24,000
Evergreen Mills Road (from Loudoun County Parkway to Ryan Rd.)	6,600 – 19,000
Gum Spring Road (from Braddock Rd. to Evergreen Mills Rd.)	7,900 – 16,000
Belmont Ridge Road (from Evergreen Mills Rd. to Ryan Rd.)	12,000
Ryan Road (from Evergreen Mills Rd. to Loudoun County Parkway)	4,900 – 7,900
Braddock Road (from Northstar Blvd. to Fairfax County Line)	2,200 – 7,000
South Riding Boulevard (from Tall Cedars Parkway to Route 50)	6,400
Tall Cedars Parkway (from Loudoun County Parkway to Route 50)	3,900 – 6,100
Pleasant Valley Road (from Fairfax County Line to Washington Dulles International Airport)	2,000 – 5,800
Poland Road (from Fairfax County Line to Route 50)	5,300
Edgewater Street (from Loudoun County Pkwy to Poland Rd)	3,600 – 3,800
Creighton Road (from Belmont Ridge Rd. to Evergreen Ridge Dr.)	2,800
Willard Road (from Route 50 to Washington Dulles International Airport)	1,200

*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 (2013). Daily Traffic Volume Estimates. Jurisdiction Report 53 (Loudoun County).*

## Road Network

Many road improvement projects remain to be completed in the Dulles Community, both on existing roadways and new corridor alignments. Among the most significant and future planned roadways are the following:

<sup>30</sup> 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.



**Route 50 (John Mosby Highway)**

Route 50 is currently a four-to six-lane divided facility through the Dulles Community, from the location of future Northstar Boulevard (Route 659 Relocated) east to the Fairfax County line. The entirety of Route 50 within the Dulles Community is planned to be widened to a six-lane, limited-access freeway with interchanges at Northstar Boulevard (Route 659 Relocated), Arcola Boulevard/Gum Spring Road Relocated (West Spine Road/Route 606 Extended), Loudoun County Parkway (Route 606), South Riding Boulevard (Route 2201), and Tall Cedars Parkway (Route 2200)/Willard Road (Route 639 Relocated). VDOT is currently widening Route 50 to six-lanes from Poland Road (Route 742) east into Fairfax County with an estimated November 2015 completion date. When this widening is complete, Route 50 will be a continuous six-lane facility from Loudoun County Parkway (Route 606) east to Fairfax County. Additionally, the third eastbound lane of Route 50 has been constructed by Stone Ridge between Stone Springs Boulevard and Loudoun County Parkway and is open to traffic. Portions of the third westbound lane of Route 50 from Loudoun County Parkway to Stone Springs Boulevard are currently being constructed by adjacent properties (Dulles Landing, Arcola Center, Stone Ridge).

**Route 50 Parallel Roads (Quarry Rd, Glascock Blvd/Dulles South Pkwy, & Tall Cedars Pkwy)**

Once Route 50 becomes a limited-access facility, access to developments along the Route 50 Corridor will be provided via the parallel roads. Each parallel road is planned as a four-lane roadway with the exception of Glascock Boulevard between Loudoun County Parkway and Northstar Boulevard (Route 659 Relocated), which is planned to be six-lanes due to forecasted volumes warranting additional capacity. The only existing segment of the Route 50 North Collector Road (Glascock Boulevard/Dulles South Parkway) is the portion west of Loudoun County Parkway to future Arcola Boulevard constructed in conjunction with the Dulles Landing and Arcola Center developments. The portion of the Route 50 North Collector Road (Glascock Boulevard/Dulles South Parkway) west of Arcola Boulevard to Northstar Boulevard is planned in the County's Capital Improvements Program (CIP) to be constructed in 2019-2020. The County is currently constructing the missing four-lane segment of Tall Cedars Parkway between Pinebrook Road and Gum Spring Road and the two-lane section from Riding Center Drive to Pinebrook Road. Once this project is completed Tall Cedars Parkway will be constructed to its ultimate, four-lane section from Route 50 south and west to Northstar Boulevard. East Gate View Drive (between Tall Cedars Parkway and Pleasant Valley Road) and portion of Poland Road (between Tall Cedars Parkway and South Riding Boulevard) also function as part of the Route 50 South Collector Road.

**Old Ox Road (Route 606)**

Old Ox Road through the Dulles Community is planned as a six-lane limited access median divided principal arterial with grade-separated interchanges at the Dulles Greenway (Route 267), Westwind Drive, and Loudoun County Parkway (Route 607). Opportunities for parallel or frontage roads along this corridor will need to be explored in order to facilitate local access once the roadway is converted to a limited-access facility. At present much of the roadway is a two-lane facility which carries significant traffic volumes around Dulles Airport. The roadway is currently congested in both directions during peak hours. Old Ox Road is planned to be widened from two to four lanes from the Dulles Greenway to Evergreen Mills Road (Route 621) through joint funding from the County, the Metropolitan Washington Airports Authority (MWAA), and VDOT. Construction is scheduled to begin in early 2015 with a final completion scheduled for September 2017. With the completion of the widening to four lanes, Old Ox Road will be constructed to its interim four-lane condition from Route 50 to the Dulles Greenway.

**Loudoun County Parkway (Route 607/Route 606)**

Loudoun County Parkway from Ryan Road south to the future Arcola Boulevard/Old Ox Road intersection is planned as a six-lane principal arterial. Currently there are missing portions of this road segment including access across the Broad Run. The Brambleton and Loudoun Valley Estates II developments are currently constructing the four-lane portion of Loudoun County Parkway from Evergreen Ridge Drive south to Old Ox Road, with VDOT constructing the Loudoun County Parkway/Old Ox Road/Arcola Boulevard intersection. Loudoun County Parkway south of the future Arcola Boulevard/Old Ox Road intersection to Route 50 is planned as an eight-lane, limited-access principal arterial with grade-separated interchanges at Old Ox Road and Route 50. Additional grade-separated options will be explored at other intersections along the segment. Loudoun County Parkway continues south of Route 50 to Braddock Road where it is planned to be widened from its existing four lanes to a six-lane principal arterial. South of Braddock Road, Loudoun County Parkway is planned to continue as an ultimate six-lane roadway through the Transition Policy Area to the Fairfax County line.

**Arcola Boulevard/Gum Spring Road (Route 606 Extended/West Spine Road)**

Arcola Boulevard is a planned new roadway corridor running between the future Old Ox Road/Loudoun County Parkway intersection south to join the existing alignment of Gum Spring Road at Route 50. Existing Gum Spring Road extends south of Route 50 to Braddock Road and into the Transition Policy Area and Prince William County. North of Route 50, this roadway (Arcola Boulevard) is ultimately planned to be a six-lane major collector. The portion north of Route 50 is anticipated to be completed in conjunction with the Arcola Center and Brambleton developments (part of this segment between Route 50 and Evergreen Mills Road is also included in the County's adopted CIP and is anticipated to be constructed by 2019). South of Route 50, Gum Spring Road is planned as a four-lane major collector. From Route 50 south to Braddock Road, Gum Spring Road has been widened to a four-lane section by private sector proffers.

West of the Arcola Boulevard alignment and north of Route 50, Stone Springs Boulevard is being constructed in the vicinity of the StoneSprings Hospital Center. Once completed, traffic will be diverted from existing Gum Spring Road north of Route 50 to a new intersection opposite existing Stone Springs Boulevard in Stone Ridge. Anticipated completion is Spring 2015.

**Northstar Boulevard (Route 659 Relocated)**

Northstar Boulevard, a new north-south corridor along the western edge of the Dulles Community is planned to run from the northern edge of the Brambleton development (just south of Croson Lane in the Ashburn Community) south to Braddock Road and continuing south into the Transition Policy Area and Prince William County. This roadway is planned as an ultimate six-lane minor arterial. A four-lane section of this roadway (from its northern terminus at Belmont Ridge Road south to Shreveport Drive in the Brambleton development) has been constructed. A two-lane section between Tall Cedars Parkway and Braddock Road has also been constructed. The remaining two lanes of the four-lane section from Tall Cedars Parkway to Braddock Road is planned in the CIP to be constructed by 2020. The four-lane section from Shreveport Drive south to Tall Cedars Parkway is planned in the CIP to be constructed by 2018. When the section from Shreveport Drive south to Tall Cedars Parkway is completed Northstar Boulevard will be a continuous segment through the Dulles Community.

### **Belmont Ridge Road (Route 659)**

Belmont Ridge Road between the northern terminus of Northstar Boulevard (within the Ashburn Community) and Evergreen Mills Road west of Arcola is planned to be a continuous four-lane minor collector providing access through the Brambleton development and adjacent areas. The segment of roadway through Brambleton to just south of Shreveport Drive has been constructed to its ultimate four-lane configuration. The widening of the remaining segment south to Evergreen Mills Road is anticipated to be completed in conjunction with future development.

### **Shreveport Drive (Route 621 Relocated)**

Shreveport Drive is planned as an east-west roadway traversing the southern part of the Brambleton development from Evergreen Mills Road east to Loudoun County Parkway, providing an alternate route for traffic around the Village of Arcola. Construction of this four-lane major collector is anticipated to be completed in conjunction with the Brambleton development by Spring 2017.

### **Evergreen Mills Road (Route 621)**

Evergreen Mills Road is planned to be widened from its existing condition to a four-lane minor collector from Loudoun County Parkway to Belmont Ridge Road and a four-lane major collector from Shreveport Drive northwest to Battlefield Parkway in the Town of Leesburg.

### **Westwind Drive/Ladbrook Drive (Route 645 Extended)**

Westwind Drive/Ladbrook Drive will provide an additional road connection across the Broad Run between Loudoun County Parkway (in the Ashburn Community) and the Route 606 Corridor. Future construction of this four-lane major collector and bridge crossing has been proffered as part of the approved Moorefield Station development (in the Ashburn Community).

### **Braddock Road (Route 620)**

Braddock Road forms the dividing line between the Dulles Community to the north and the Transition Policy Area to the south. Braddock Road is currently built to its interim two-lane section from the Fairfax County line west to Northstar Boulevard. The entirety of Braddock Road within the Dulles Community is planned as a four-lane major collector. VDOT is currently constructing a roundabout at the intersection of Braddock Road and Pleasant Valley Road in Fairfax County. The roundabout will provide additional capacity for forecasted traffic volumes and improve safety at this location. The project is estimated to be completed by Spring 2016.

## **Ongoing Projects and Studies**

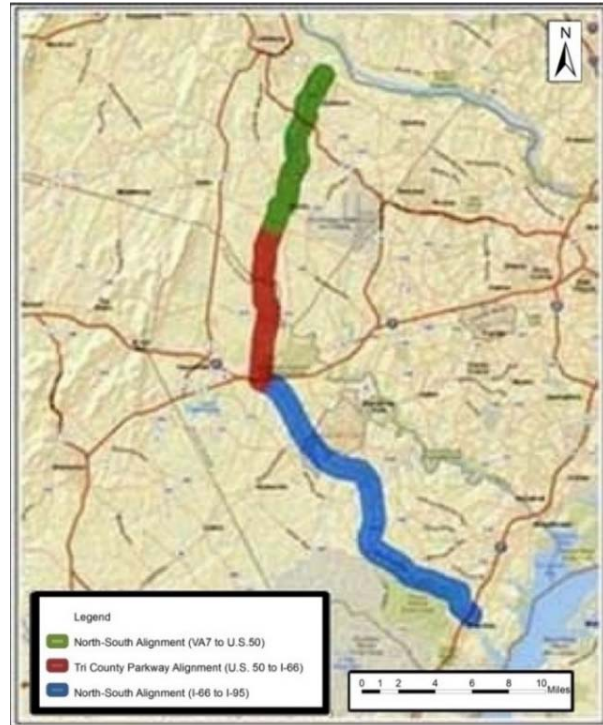
### **Northern Virginia North-South Corridor**

On May 18, 2011 the Commonwealth Transportation Board (CTB) designated the Northern Virginia North-South Corridor as a “Corridor of Statewide Significance”. The North-South Corridor is defined generally as the area east and west of the Route 234/Prince William Parkway and the approved location of the Bi-County Parkway between I-66 and Route 50, and northern connections to the Dulles Greenway and Route 7 along Northstar Boulevard (Route 659 Relocated) and Belmont Ridge Road (Route 659).

The North-South Corridor is envisioned as an integrated, multimodal network of transportation facilities that connects major centers of activity within and through the Commonwealth and promotes the movement of people and goods essential to the economic prosperity of the state.

The Board has adopted a resolution of support for the state's efforts to construct a North-South Corridor from Washington Dulles International Airport to Interstate 66 in order to support the passenger and cargo growth at Washington Dulles International Airport and to further encourage the economic growth and job creation this will bring to Loudoun County and Virginia.

The Northern Virginia North-South Corridor Master Plan, completed in April 2013, built from regional and local transportation and economic development plans to develop a long-range transportation study to help achieve the vision and goals for the North-South Corridor. Ongoing project studies within the North-South Corridor, within the Dulles Community include the Bi-County Parkway Location Study and Improving Access to Washington Dulles International Airport which support the vision and goals of the North-South Corridor Master Plan.



### **Bi-County Parkway**

The study for a new north-south limited-access link connecting Prince William and Loudoun Counties began in 2001. Three informational meetings were held in 2002 and three public hearings were held in 2005. In November 2005, the Commonwealth Transportation Board (CTB) approved the West Two Alternative studied in the Draft Environmental Impact Statement (EIS) as the preferred location. The new 10.4 mile Bi-County Parkway is proposed to be the middle portion of the proposed North-South Corridor, located north of I-66, from the I-66 and Route 234 interchange, to Route 50 in Loudoun. The new roadway will relocate existing Route 234 (Sudley Road) 2.5 miles west and expand it to four lanes. The new alignment and expansion of Route 234 is planned to reduce congestion and increase mobility in the region, as well as in and around Manassas National Battlefield Park. Next steps are to complete the Draft EIS Reevaluation; finalize Section 106 for historic preservation (including the Programmatic Agreement); respond to comments received on the Draft EIS; and finalize the EIS and submit to FHWA for approval. The Final EIS is followed by a Record of Decision (ROD) by FHWA. The timing for completion of the Environmental Study is yet to be determined. Based on recently approved state legislation (House Bill 2), VDOT will have to prioritize studies and projects delaying VDOT from being able to take their recommended alternative and the Loudoun County recommended alternative to the CTB.

### **Access to Washington Dulles International Airport**

VDOT has explored options for a limited-access roadway west of Washington Dulles International Airport to enhance the movement of people, passenger services, and air cargo traffic to Washington Dulles International Airport and the future Metrorail Station. The proposed project is intended to reduce congestion and improve capacity on the existing road network in the Dulles Community. In 2013, VDOT initiated an Environmental Assessment (EA) for the Dulles Air Cargo, Passenger,



and Metro Access Highway proposed to extend from the planned Northstar Boulevard/Route 50 interchange to a new entrance into the western portion of Washington Dulles International Airport. The EA looked at five alternatives, including the no build alternative. The VDOT study did not include the build out of the Loudoun County CTP, which includes additional missing transportation links in the study area. VDOT held its Location Public Hearing on April 22, 2014. However, the timing for completion of the Environmental Study is yet to be determined. Based on recently approved state legislation (House Bill 2), VDOT will have to prioritize studies and projects delaying VDOT from being able to take their recommended alternative and the Loudoun County recommended alternative to the CTB.

On June 18, 2014, the Board of Supervisors directed Staff to engage the services of a consultant to model a set of scenarios that would include the CTP roadways missing from the VDOT study. The County study is referred to as the Western Dulles Access Study. The County hired Kimley Horn and Associates, Inc. (KHA) to prepare an independent evaluation of up to nine scenarios, including the no-build and CTP scenarios as well as VDOT Alternatives 2 and 3C. The findings from the consultant's study is planned to be presented to the Board in the Spring of 2015.

## Transit Services

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The Loudoun County Transit Development Plan (TDP) was endorsed by the Board of Supervisors on November 2, 2011 for Fiscal Years 2012-2017. The TDP is a six-year service and funding plan designed to help the Virginia Department of Rail and Public Transportation (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 does include limited bus service planning for integration with future Metro stations. The TDP is updated annually and submitted to the DRPT in December of each year. The update reflects service plan and funding needs, which substantiates grant applications. The 2014 update expands on bus service planning to Metro stations, such as the recently opened Wiehle-Reston East Metro station as well as local fixed-route bus service in the eastern part of the County. In September 2014, the County took over the local, fixed-route bus service working with MV Transportation as a contractor to Loudoun County Transit. The Virginia Regional Transit (VRT) continues to provide service in the western part of the County. The County will develop a new TDP to be presented to the Board in December 2015 for Fiscal Years 2016-2021 to prepare for the future Metro stations in Loudoun County.

At present, commuter bus service is provided from the Dulles South and Brambleton park and ride lots. Local, fixed-route service is planned for the Dulles Community beginning in January 2015.

## 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 two park and ride lots served by the County's commuter buses within the Dulles Community:

- ◇ Dulles South – Stone Ridge Park & Ride Lot – 350 spaces
- ◇ Brambleton Park & Ride Lot –100 spaces

The Dulles South – Stone Ridge Park & Ride Lot serves commuters in Stone Ridge, South Riding, and neighboring developments, while the Brambleton Park & Ride Lot serves commuters in Brambleton and neighboring developments. Two additional park and ride lots are planned for the Dulles Community, East Gate and Arcola Center. The East Gate Park & Ride Lot is planned to open in June 2015 with 220 spaces. The Arcola Center Park & Ride Lot, proffered with the Arcola Center development (ZMAP 2006-0015) will consist of 200 spaces to be provided prior to the issuance of the 651<sup>st</sup> residential zoning permit for the property. A temporary 300 space, gravel park and ride lot is also being designed and constructed on a County-owned five-acre site proffered with the Stone Ridge development. The Stone Ridge Temporary Park & Ride Lot, expected to be completed in Spring/Summer 2015, will help to alleviate over-crowding at the current Dulles South/Stone Ridge Park & Ride Lot.

Commuter buses from these locations provide service to Rosslyn, the Pentagon, Crystal City, and Washington, D.C. In addition, the Dulles North Transit Center, located outside of the community boundary at the intersection of Moran Road and Lockridge Road, also serves the residents of the Dulles Community providing service to and from the Wiehle-Reston East Metro Station.

Ridership rates in the Dulles Community (including the Dulles North Transit Center) continue to maintain high participation rates with a monthly average of over 1,304 AM riders since November 2013 (Ridership Numbers – November 2013 to October 2014, Department of Transportation and Capital Infrastructure) (Refer to Figure 38).

**Figure 38. Ridership Rates for Routes in the Dulles/Ashburn Area: November 2013 – October 2014**

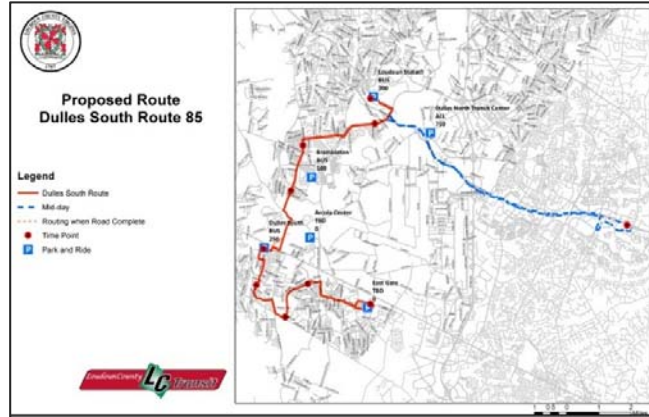
Month	Dulles South	Dulles North	Brambleton	Total Riders
November	369	856	134	1,359
December	365	860	116	1,341
January	361	825	121	1,307
February	355	826	127	1,308
March	353	832	125	1,310
April	390	848	130	1,368
May	377	810	137	1,324
June	406	812	139	1,357
July	388	790	137	1,315
August	370	668	124	1,162
September	380	747	134	1,261
October	374	722	139	1,235
<b>Total</b>	<b>4,488</b>	<b>9,596</b>	<b>1,563</b>	<b>15,647</b>
<b>Monthly Average</b>	<b>374</b>	<b>800</b>	<b>130</b>	<b>1,304</b>

*Note: The DC route numbers include the Dulles North Transit Center park and ride lot, the Dulles South – Stone Ridge park and ride lot, and the Brambleton park and ride lot.*

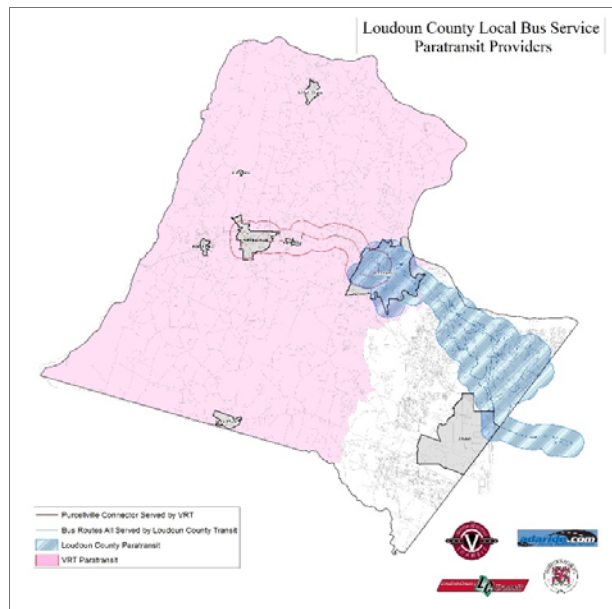


## Local Bus Service

During the TDP update in 2013, DRPT agreed to fund a consultant-led analysis of the Loudoun County local fixed-route transit operations and make recommendations for service delivery for Board consideration to be implemented in FY 2015 until the arrival of Metrorail. At the December 4, 2013 Board Business Meeting, Staff was directed to conduct a survey of households in the Dulles South area (this area differs from the Dulles Community boundary).<sup>31</sup> The Board also directed Staff to include funding for a fixed-route to serve the target area. The survey results and proposed bus route were presented to the Board at their November 5, 2014 Business Meeting. The Board approved the Proposed Dulles South Route 85, which will provide service beginning in January 2015 to activity centers within the Dulles Community (East Gate Marketplace, South Riding Town Center, South Riding Marketplace, Stone Ridge Village Center, Dulles South Park and Ride, Legacy Park, and Loudoun Station). The connection to the Loudoun Station Park and Ride provides access to and from the Silver Line via the Wiehle-Reston East Metro station. In the mid-day the local fixed-route bus service will connect directly to the Wiehle-Reston East Metro station. Once the East Gate Park & Ride Lot is completed in June 2015, buses from this location will provide a direct connection to the Silver Line.



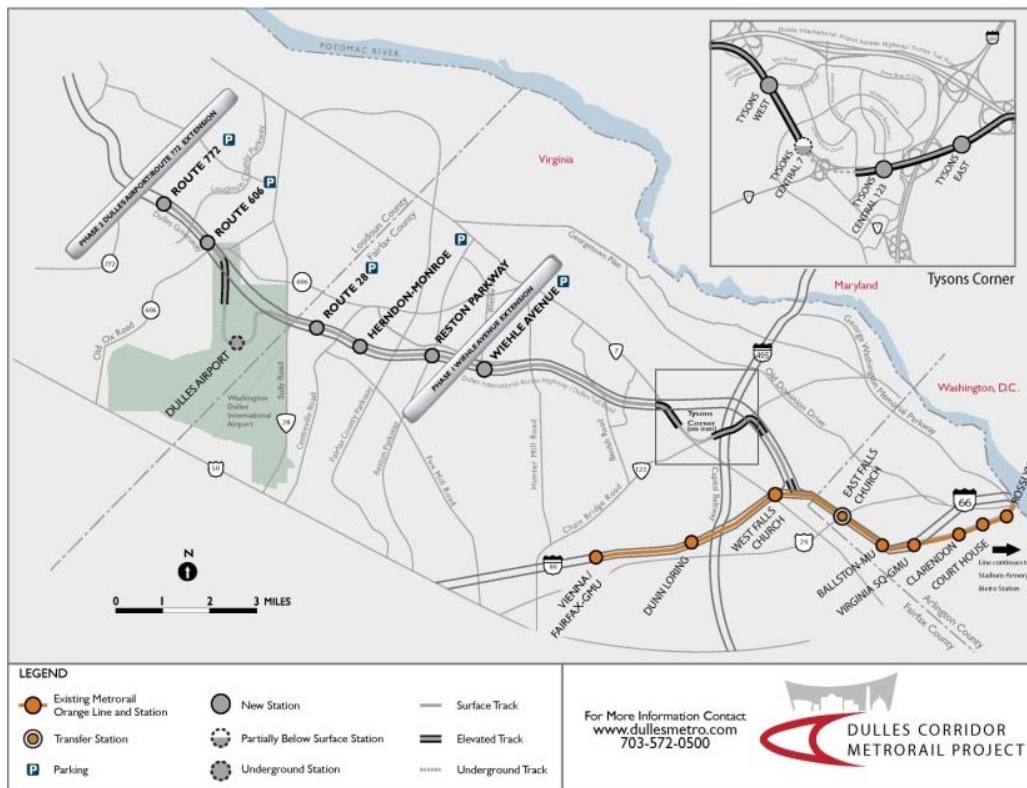
The Dulles Community lost demand-response service in September 2014 when the County took over local service from Virginia Regional Transit (VRT). The County adheres to the federal guidelines for paratransit service, only requiring service to be provided within  $\frac{3}{4}$  mile of a fixed-route service. Currently, the County only provides paratransit service from Leesburg to the eastern portions of the County shown in blue on the map. VRT continues to provide service to the western parts of the County. However, as stated above, beginning in January 2015, the Dulles Community will have a local service and therefore, will again provide paratransit service to those with a disability that cannot use or access transit service.



<sup>31</sup> Dulles South survey area bound on the north by the Greenway; Belmont Ridge/Northstar Boulevard alignment to the west; Washington Dulles International Airport and Fairfax County boundary to the east; and the Prince William County boundary to the south.

## 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. Phase 1 of the two phased project opened in July 2014 providing service through Tysons Corner (4 stops), Virginia's largest employment center, to Wiehle Avenue (1 stop in Reston). Phase 2, anticipated to be completed in 2018 will extend Metrorail from the Reston-Herndon area, the state's second largest employment area, to Dulles Airport and into eastern Loudoun County. Service 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.



On October 16, 2013, the Board of Supervisors initiated a Silver Line/Metrorail Tax District Comprehensive Plan Amendment (CPAM) to evaluate the development potential of the Dulles Metrorail Service Districts which were previously adopted in December of 2012. The purpose of the CPAM is to evaluate the existing planned land uses around the future Metrorail stations and to ensure that they strike the desired balance between (1) prompt realization of tax revenues to support future Metrorail operations, (2) maximizing future employment generation, (3) achieving the desired land use pattern, and (4) minimizing demands on the County's transportation infrastructure. While the stations are located outside of the Dulles Community, access to Metrorail will have an

impact on the area. The Route 606 and Route 772 stations will include approximately 2,750 and 3,300 parking spaces, respectively, in support of regional commuters.

## Bicycle and Pedestrian Facilities

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There are numerous bicycle and pedestrian facilities within the Dulles Community, primarily south of Route 50 along the existing CTP road network as well as through and connecting existing neighborhoods (Refer to the Bicycle and Pedestrian Circulation Map, Appendix 18). North of Route 50 the overall bicycle and pedestrian network remains incomplete; however, as the road network builds out so will the bicycle and pedestrian network. The County's Bicycle and Pedestrian Mobility Master Plan, adopted by the Board of Supervisors in 2003 as well as the 2010 Countywide Transportation Plan, provides the basis for County policy on non-motorized transportation.

In 2013, the County received a grant from the Metropolitan Washington Council of Governments to study bicycle and pedestrian connectivity around the future Route 772 and Route 606 Metrorail Stations. The study was completed in June 2014 and presented to the Board's Transportation/Land Use Committee (TLUC) on October 17, 2014 as part of an item that discussed existing and future bicycle and pedestrian facilities around the future Metrorail Stations. The TLUC forwarded the discussion to the Board of Supervisors, recommending the Board direct Staff to develop a plan to ensure bicycle and pedestrian connectivity is in place both in and around the station locations by their opening. The Plan should also include bicycle lockers at the stations. The item is expected to go before the Board in early 2015.

Bicycle and pedestrian facilities are being constructed in conjunction with the VDOT Loudoun County/Old Ox Road (Route 606) widening project. As discussed previously, Route 606 is being widened from its existing two-lane configuration to four lanes between Evergreen Mills Road and the Dulles Greenway. This project includes a 10-foot wide trail along the northern/western side of Route 606. Completion of the project is scheduled for September 2017. Just outside the Dulles Community in the Ashburn Community, a 10-foot wide shared use path will be constructed by VDOT along the north side of Ryan Road between Old Ryan Road and Belmont Ridge Road. At present a start date has not been determined for this project.

# Appendices

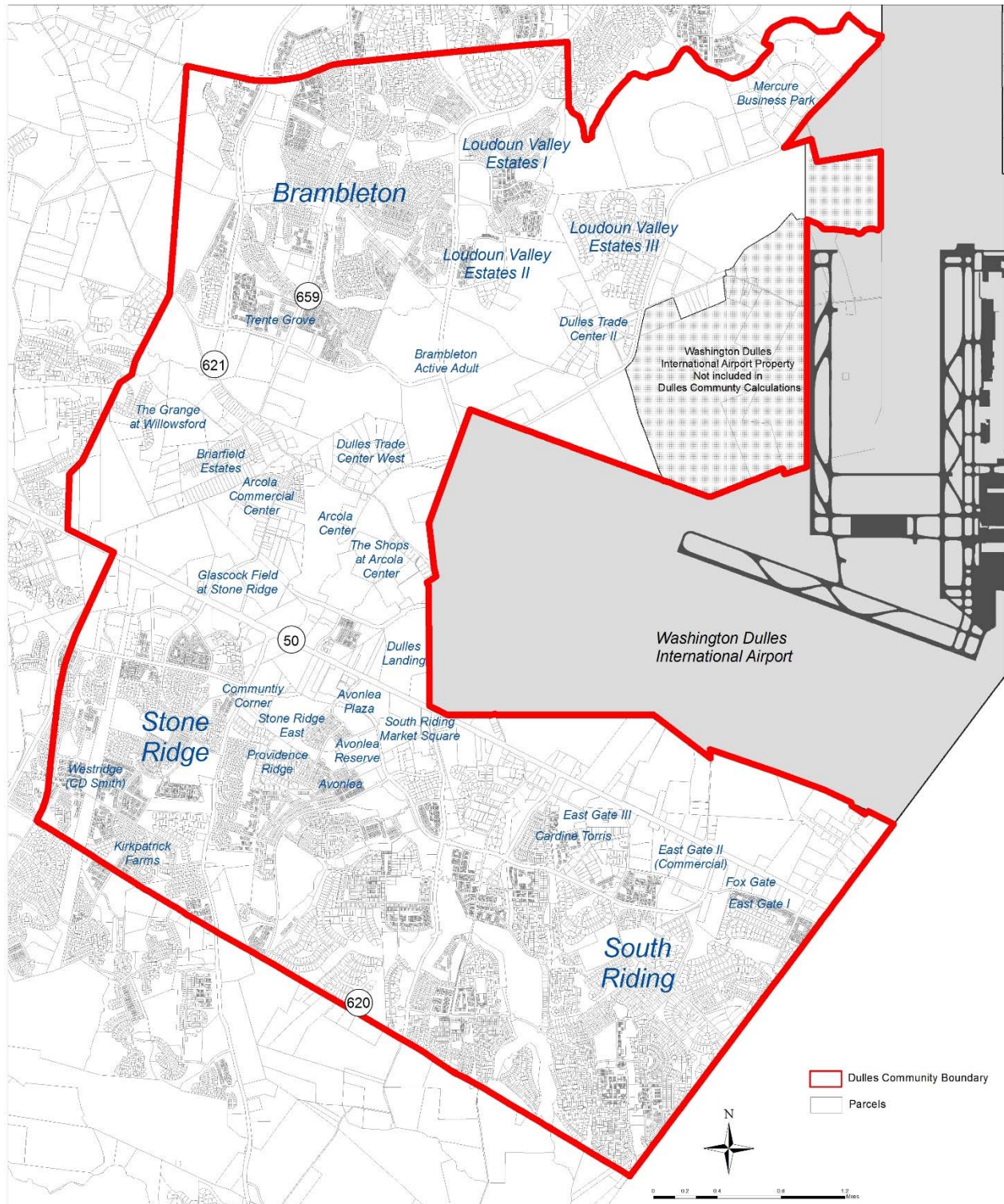
*Dulles Community Outreach Project*





# Dulles Community

## Vicinity Map

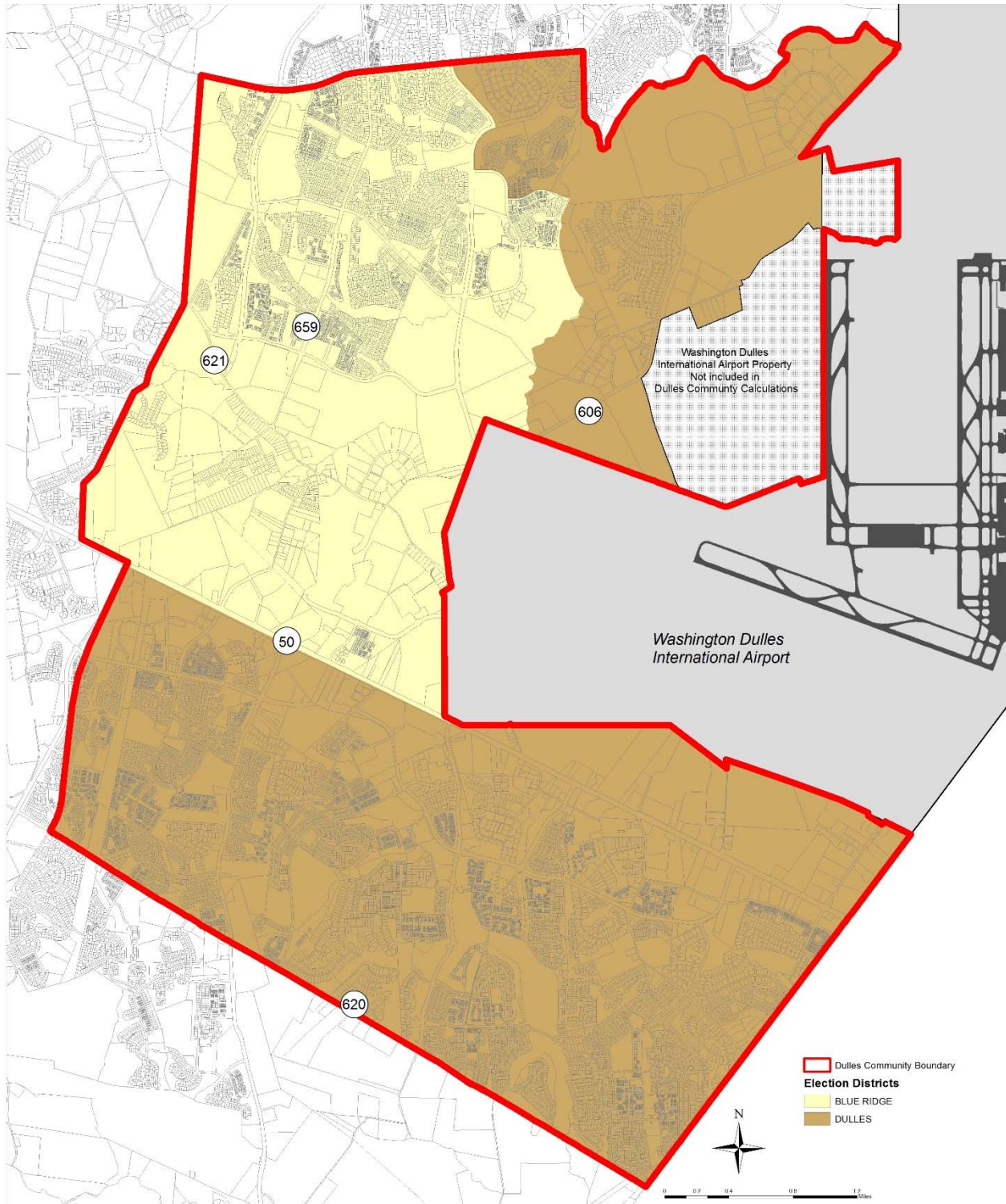


Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.





# Dulles Community Election Districts

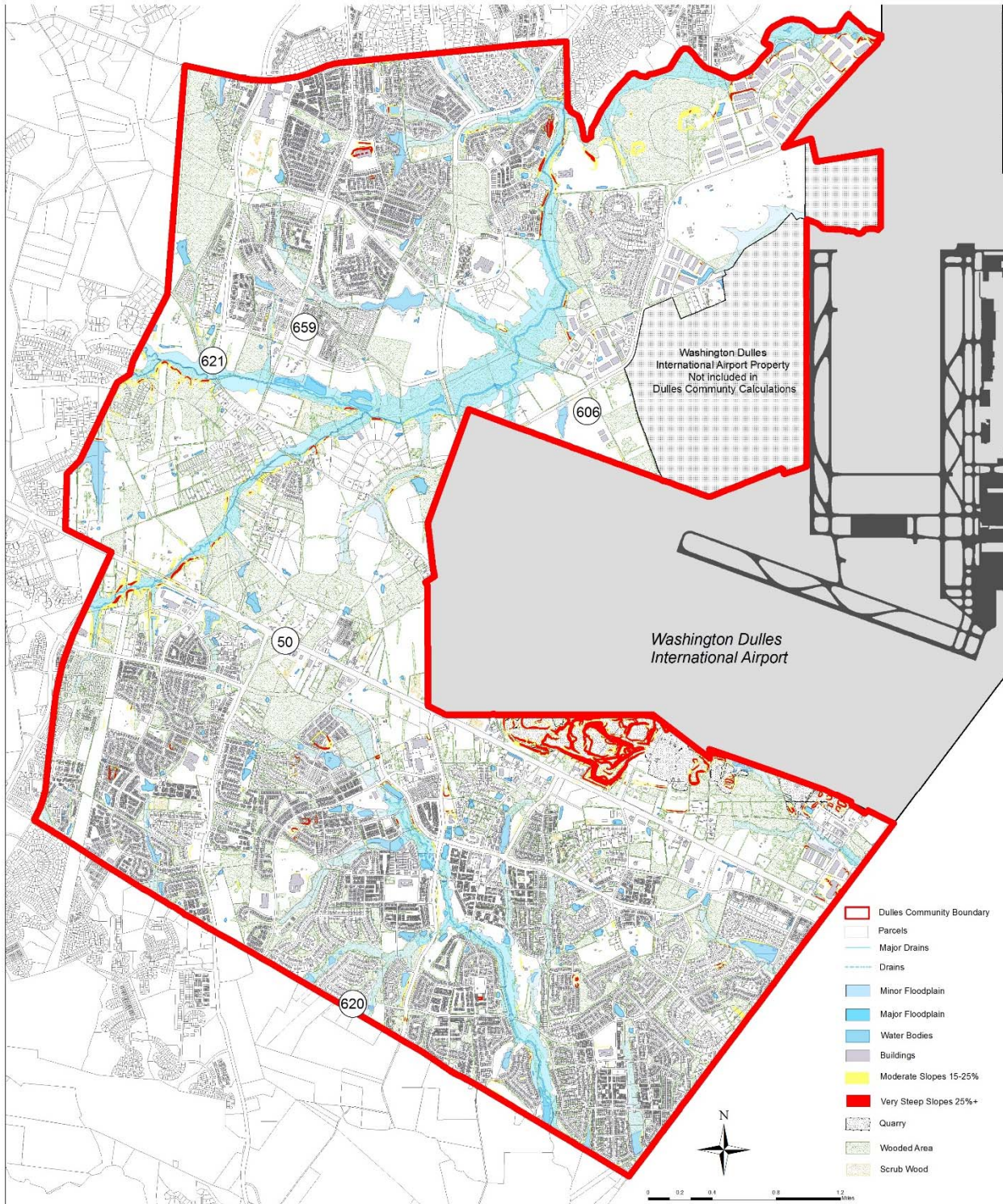


Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.



# Dulles Community

## Existing Conditions



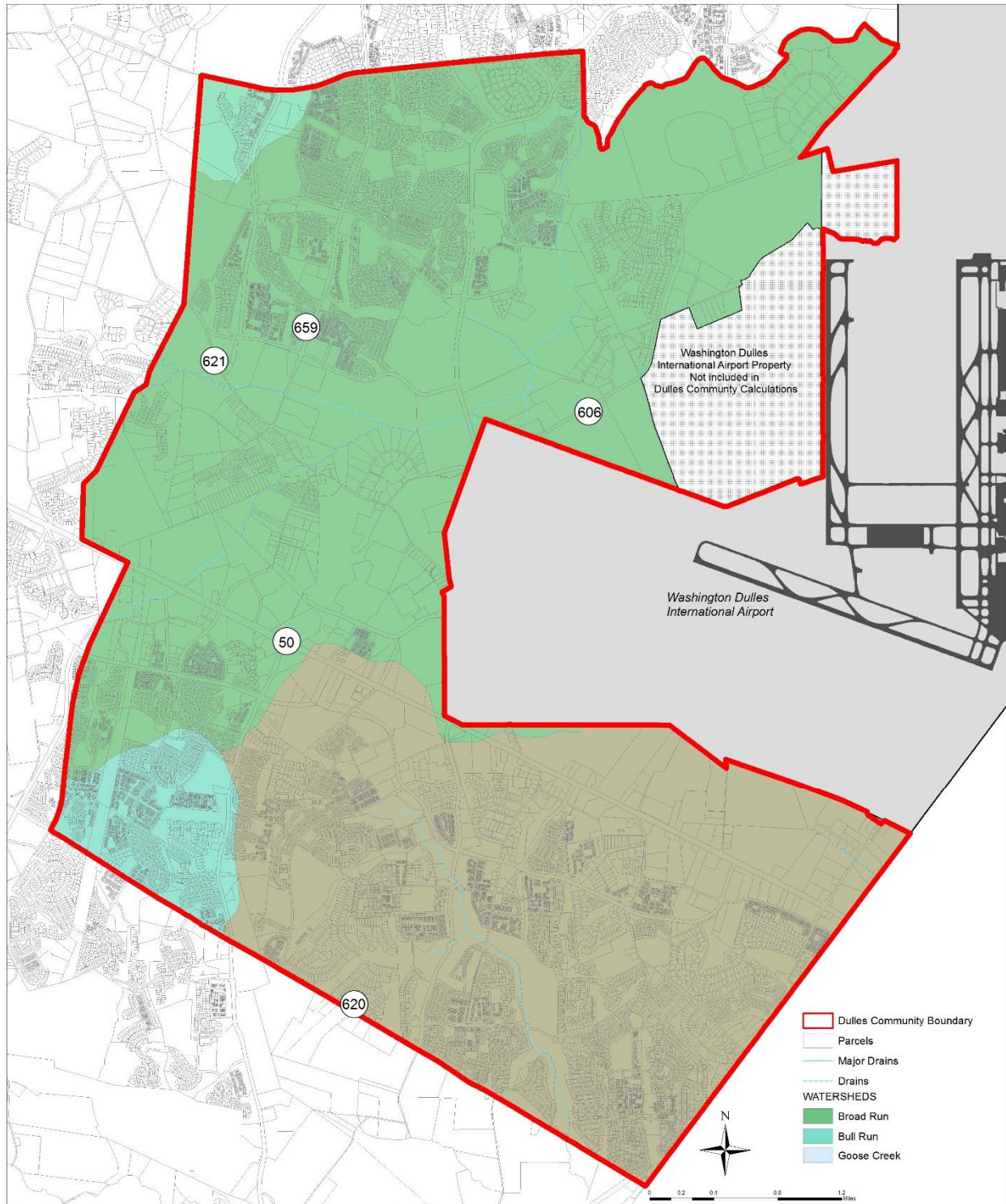
Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.





# Dulles Community

## Major Watersheds



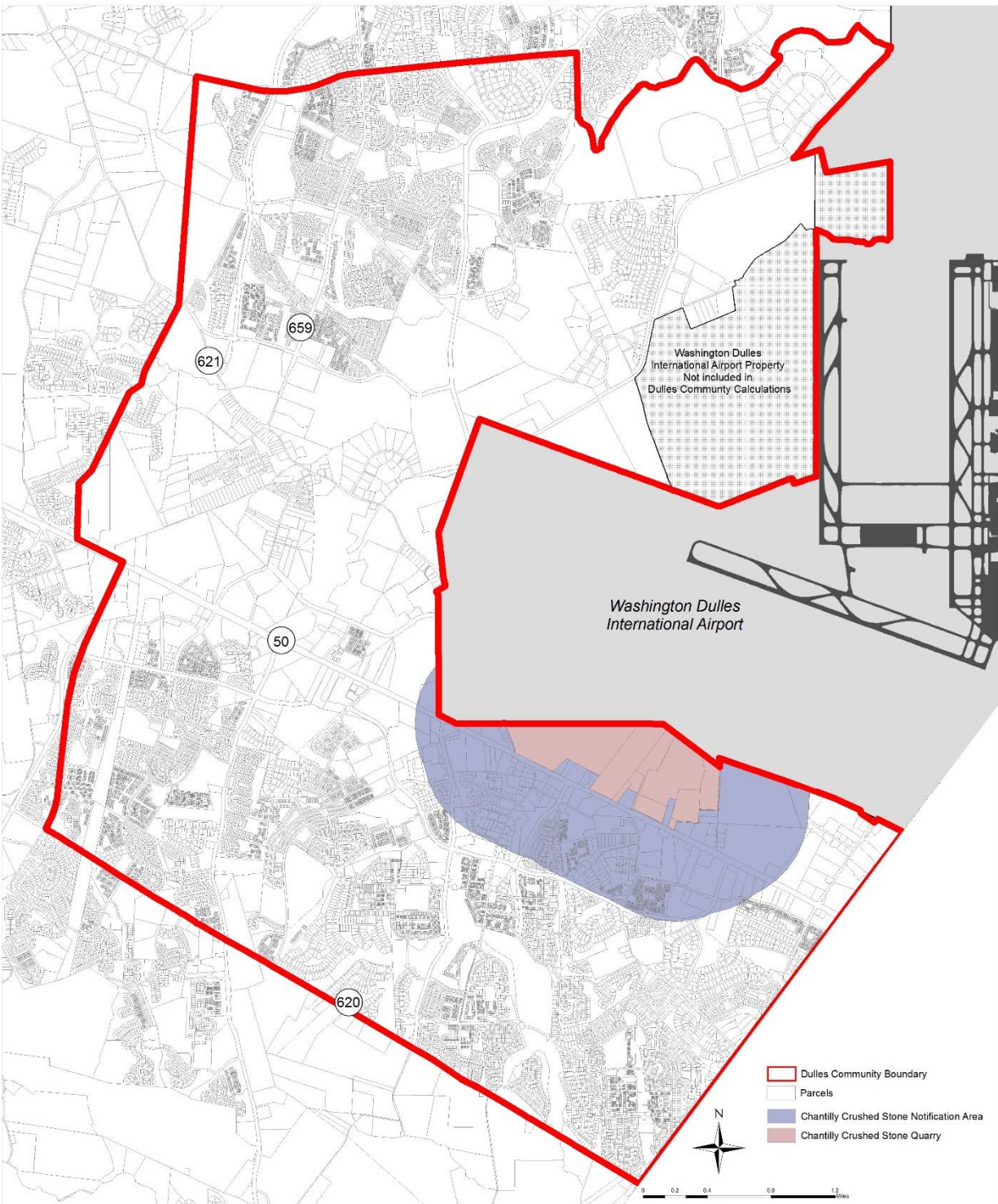
Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.





# Dulles Community

## Quarry Overlay District



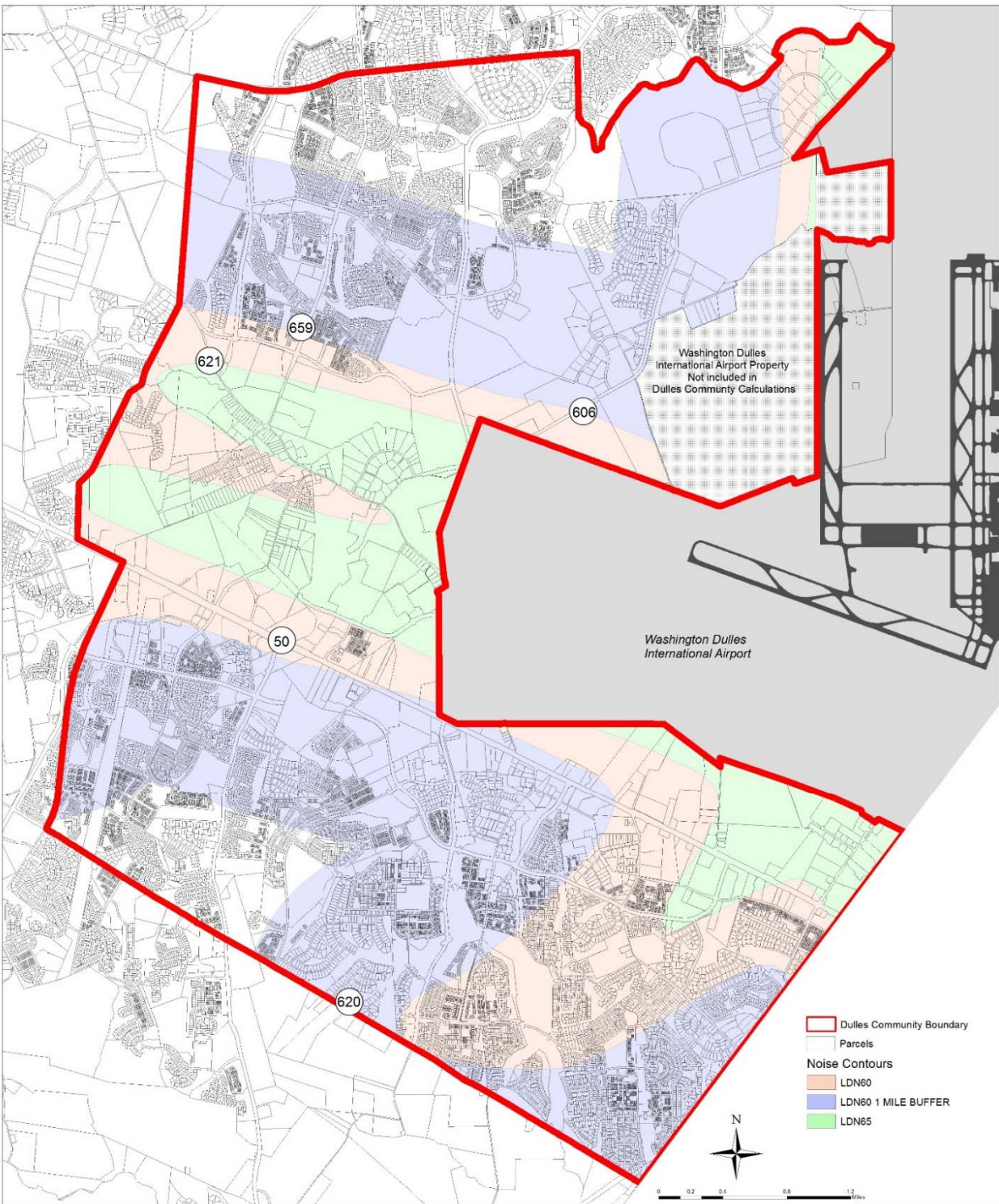
Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.





# Dulles Community

## Airport Noise Contours



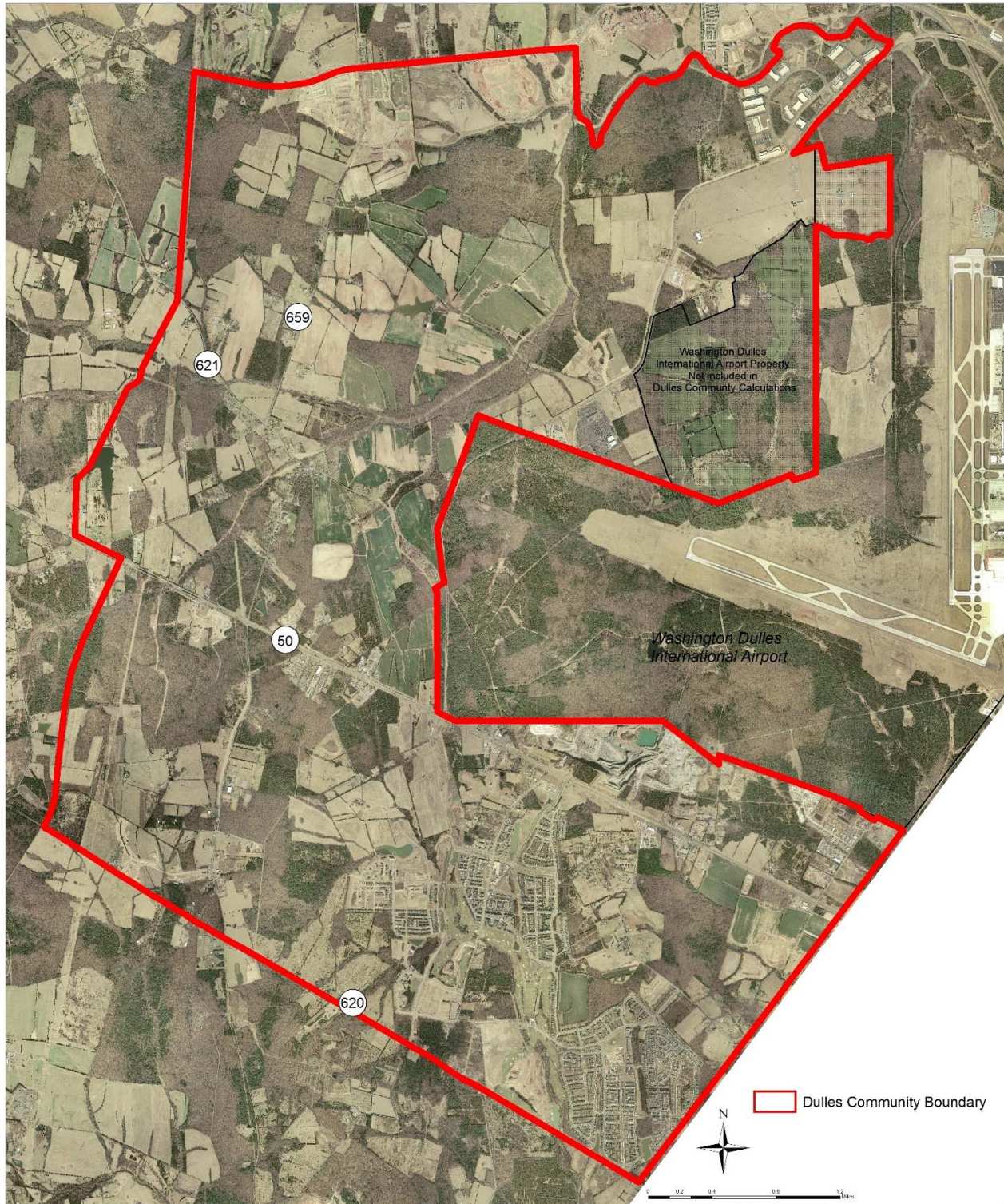
Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.





# Dulles Community

## 2002 Aerial

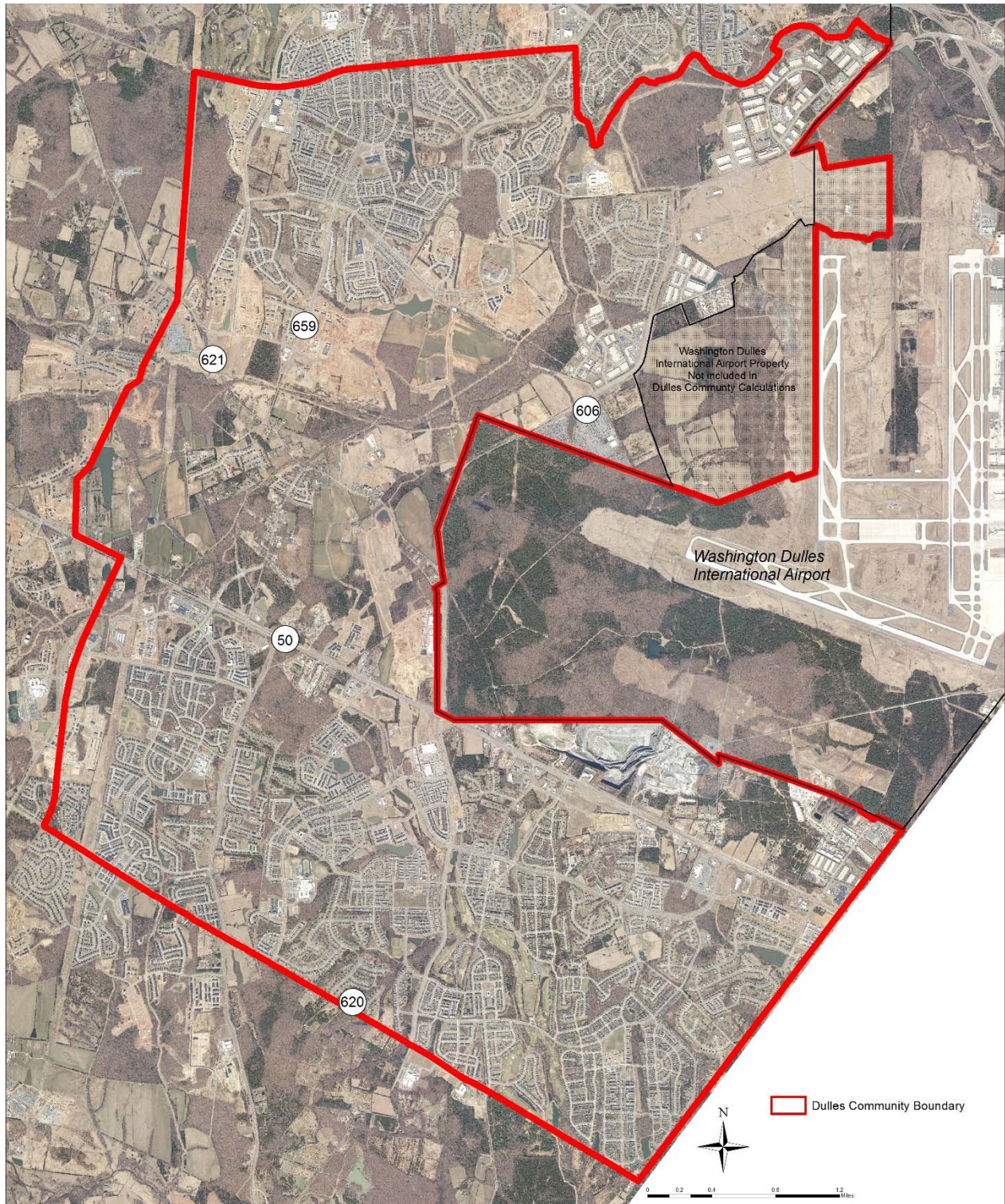


Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.



# Dulles Community

## 2014 Aerial

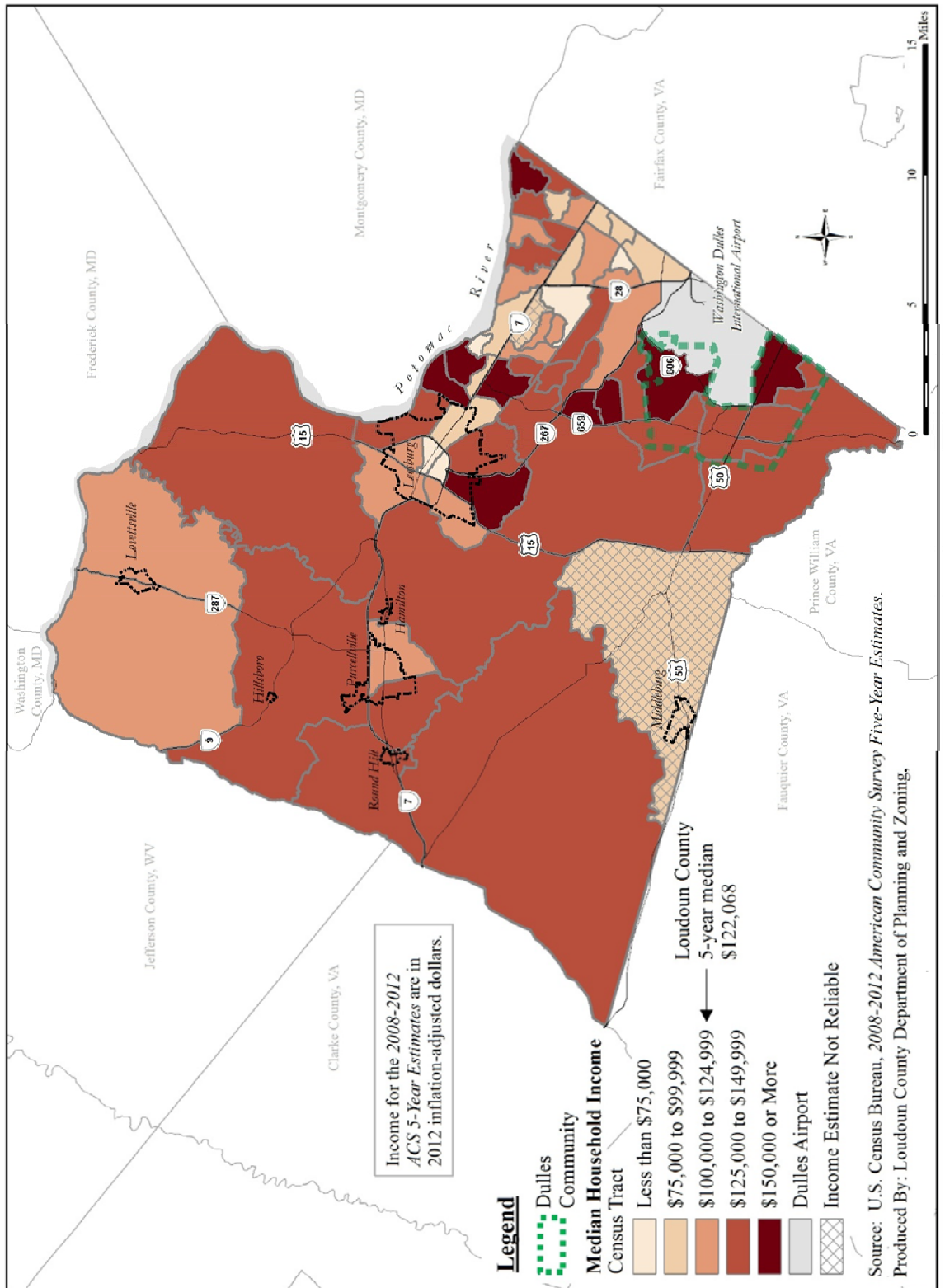


Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.



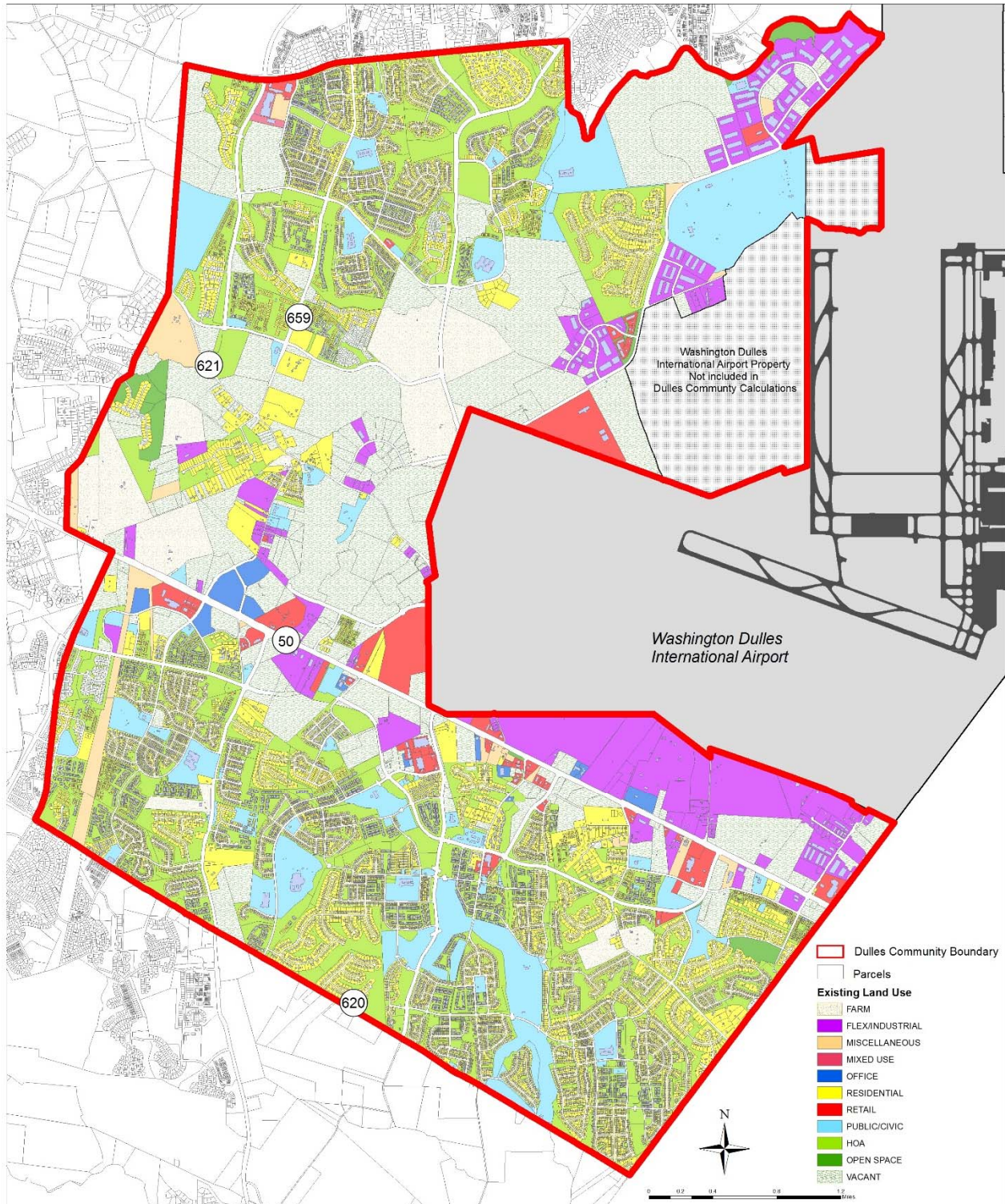
# Median Household Income, Loudoun County

2008-2012 American Community Survey 5-Year Census Tract Estimates



# Dulles Community

## Existing Land Use

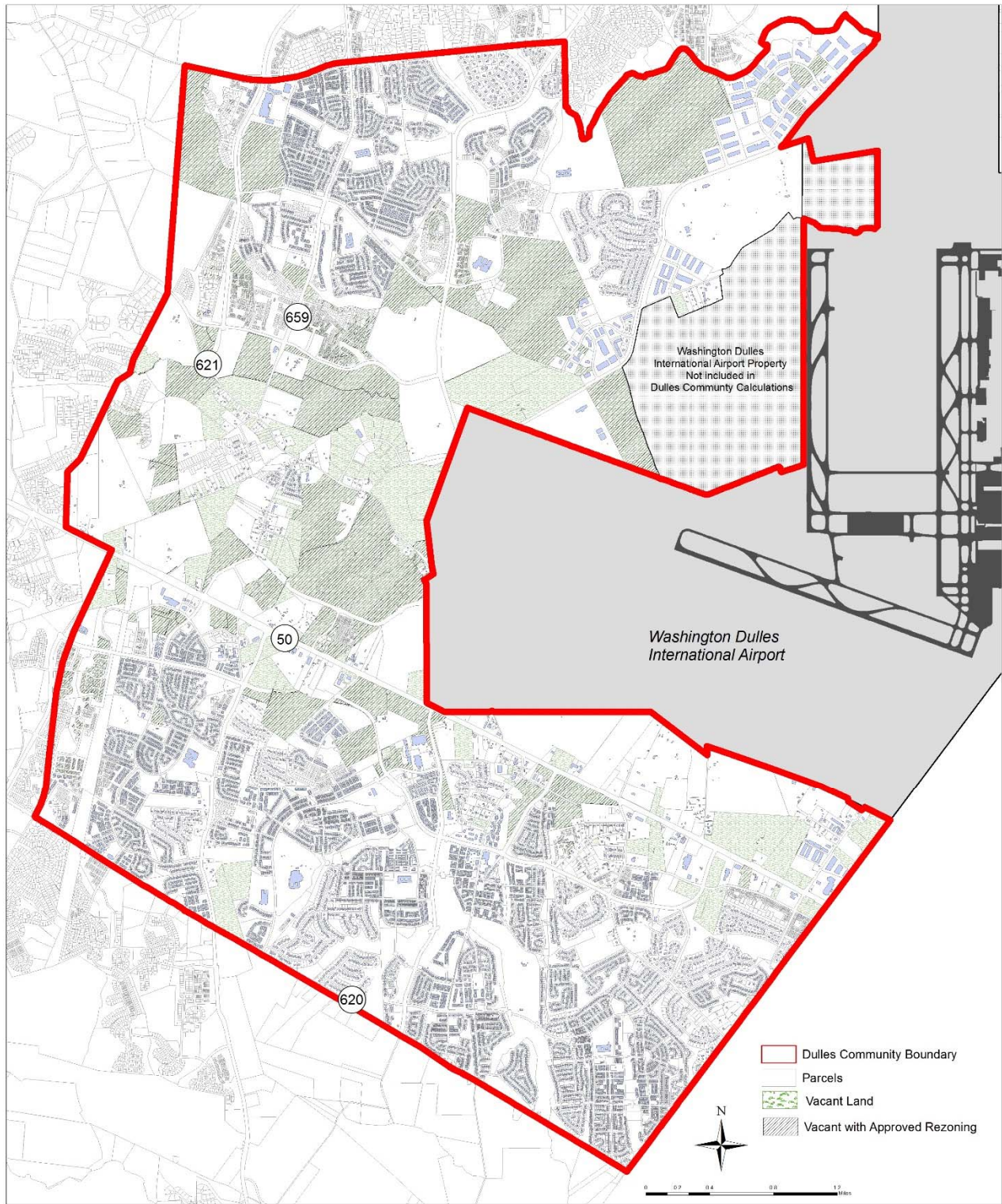


Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.



# Dulles Community

## Vacant Land



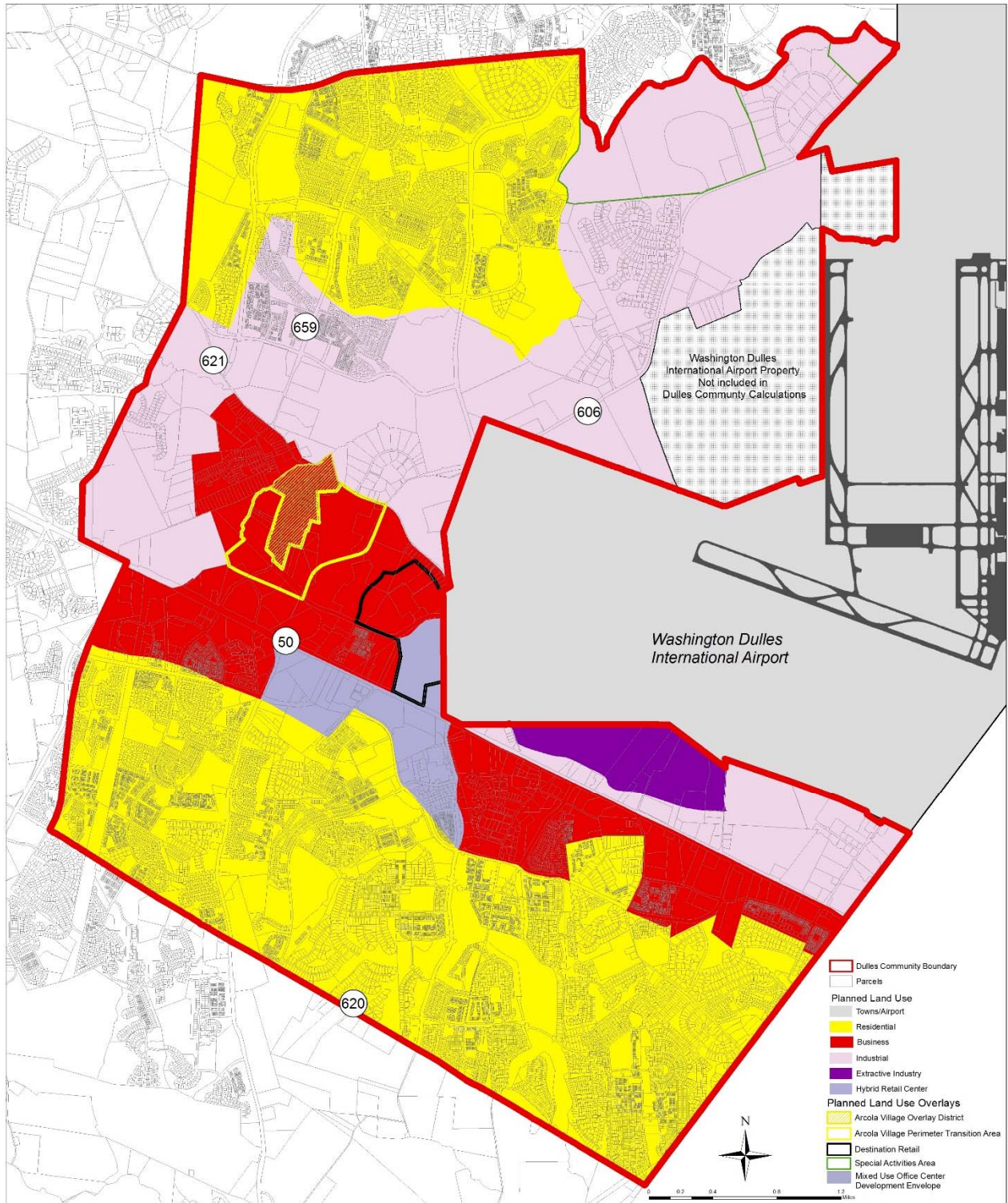
Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.





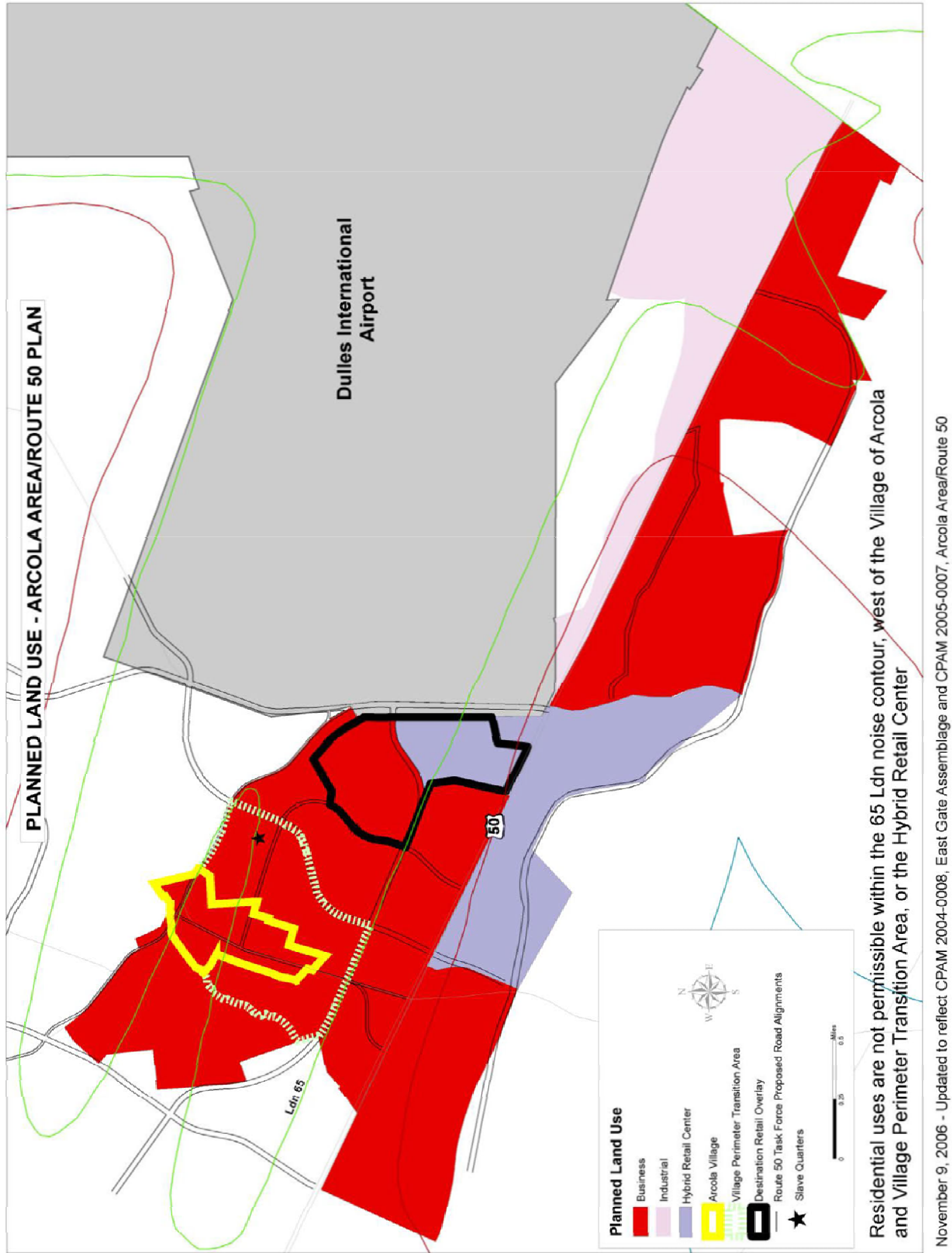
# Dulles Community

## Planned Land Use



Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.

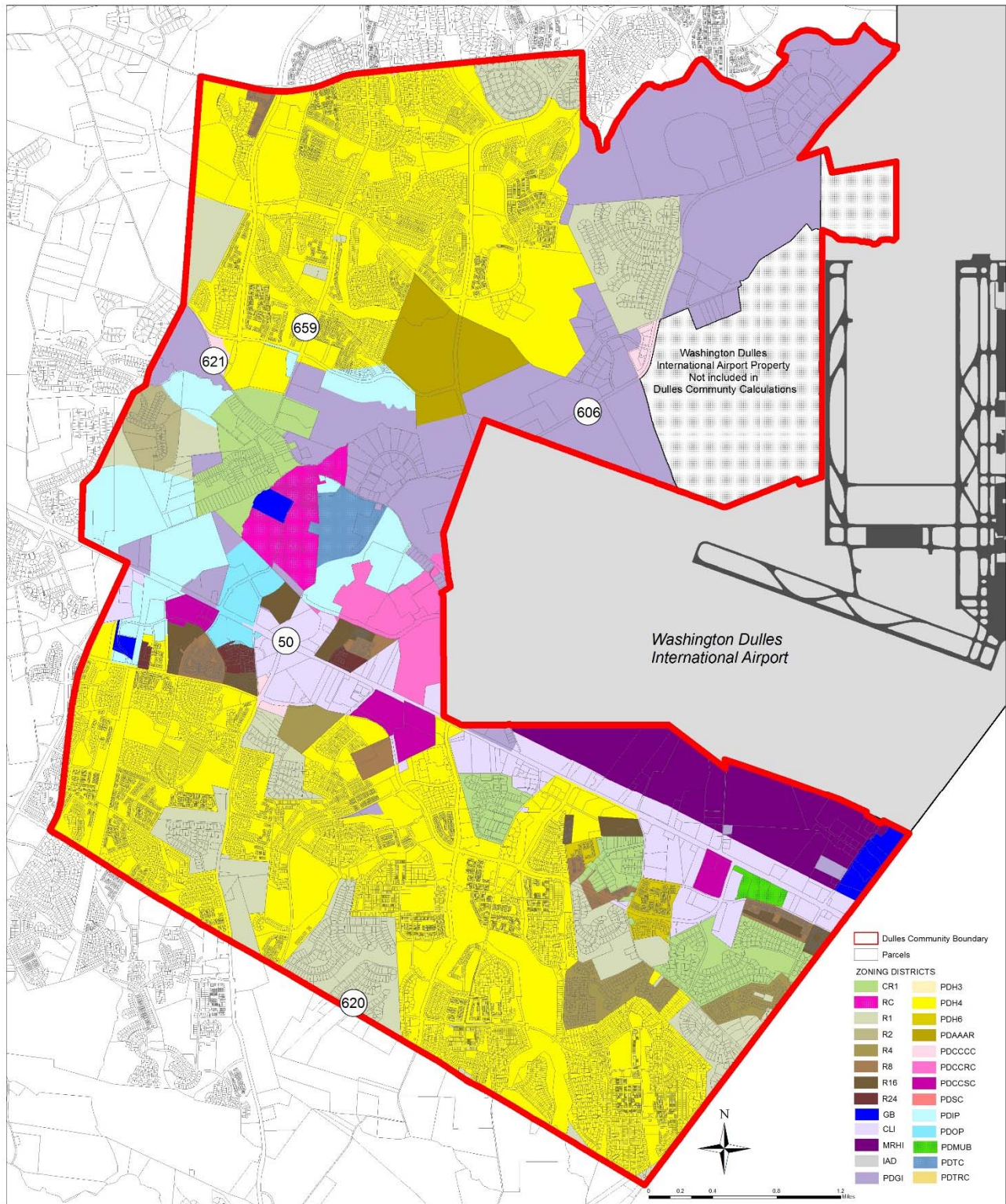






# Dulles Community

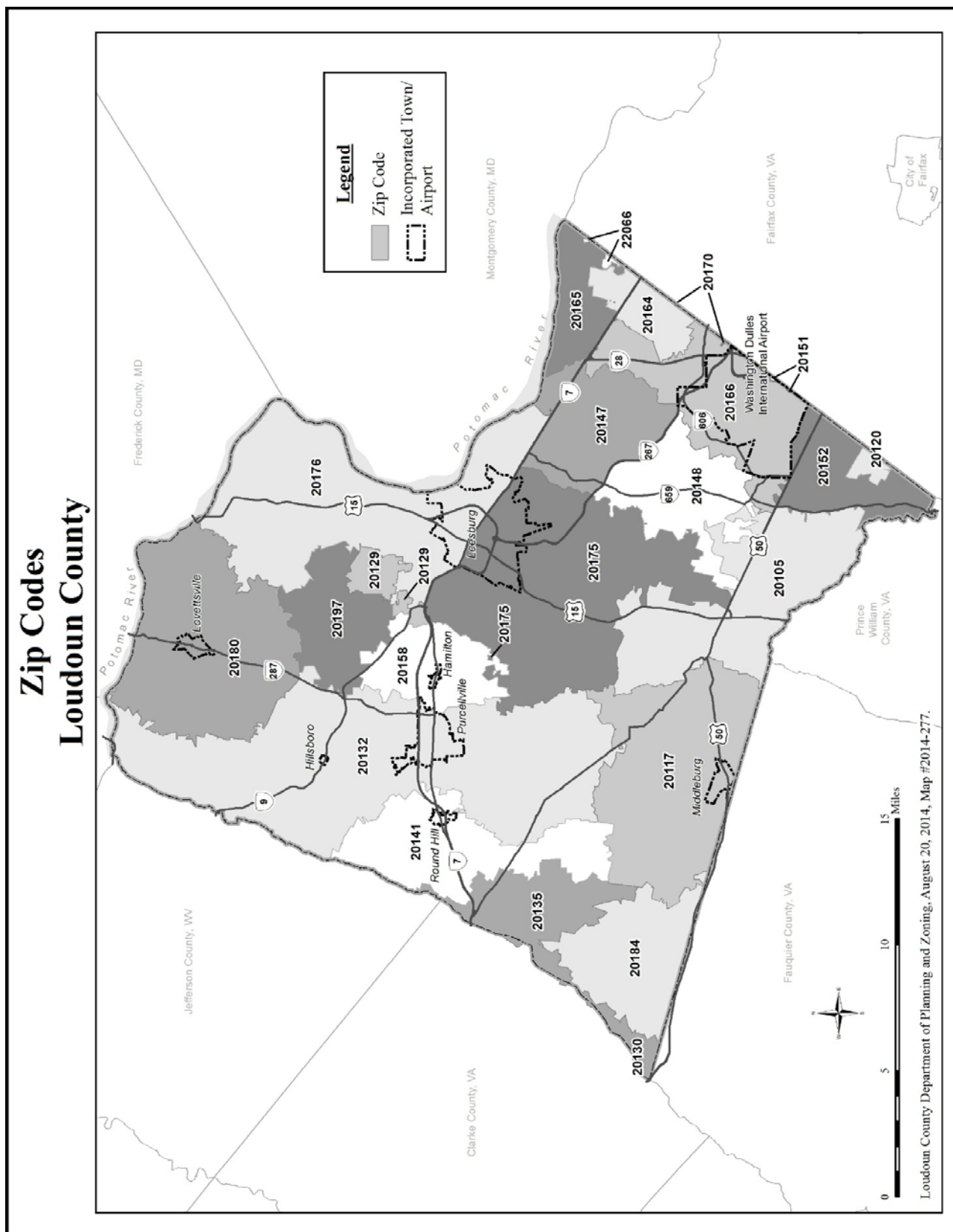
## Existing Zoning



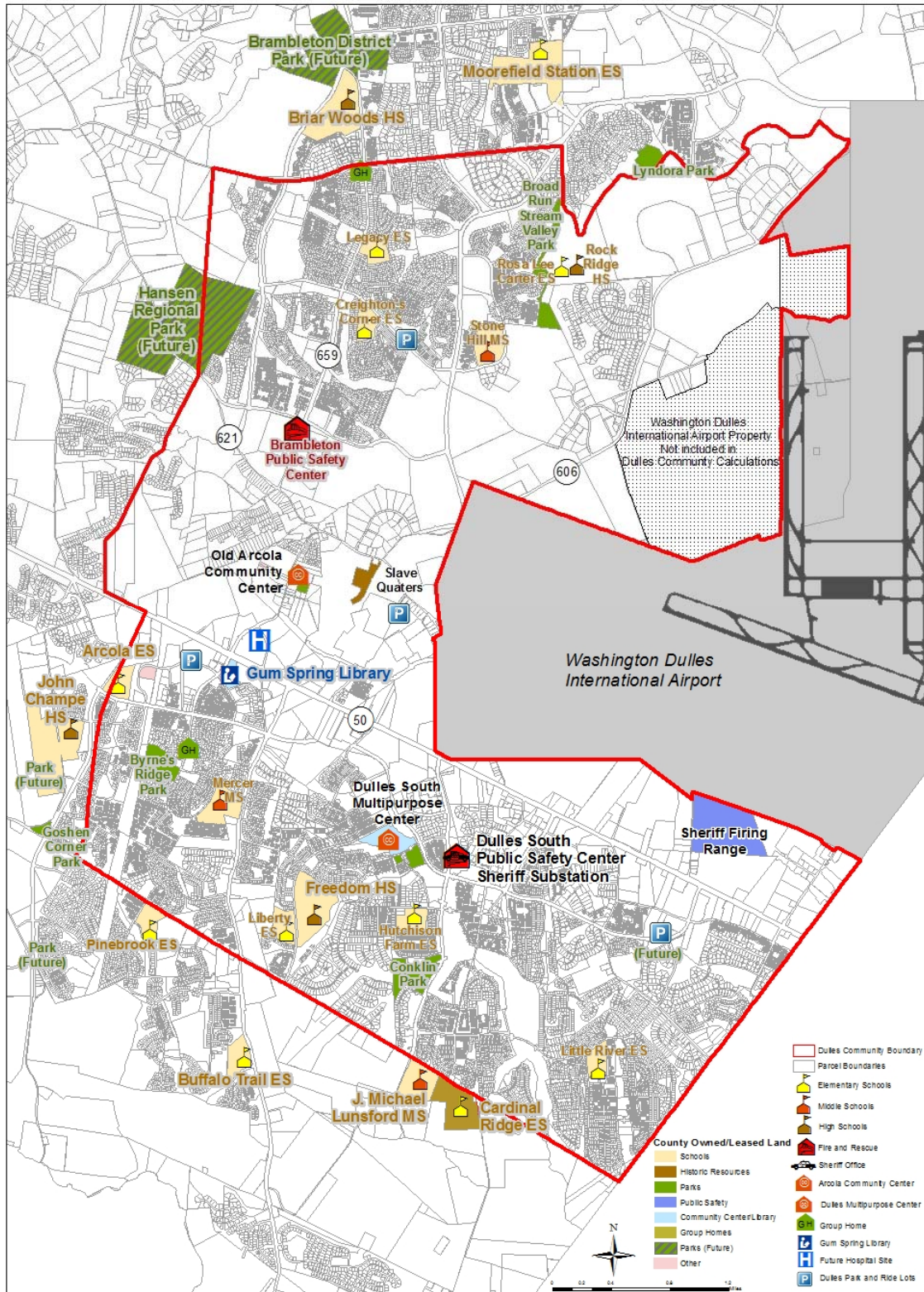
Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.







## Dulles Community Public Facilities and County Properties

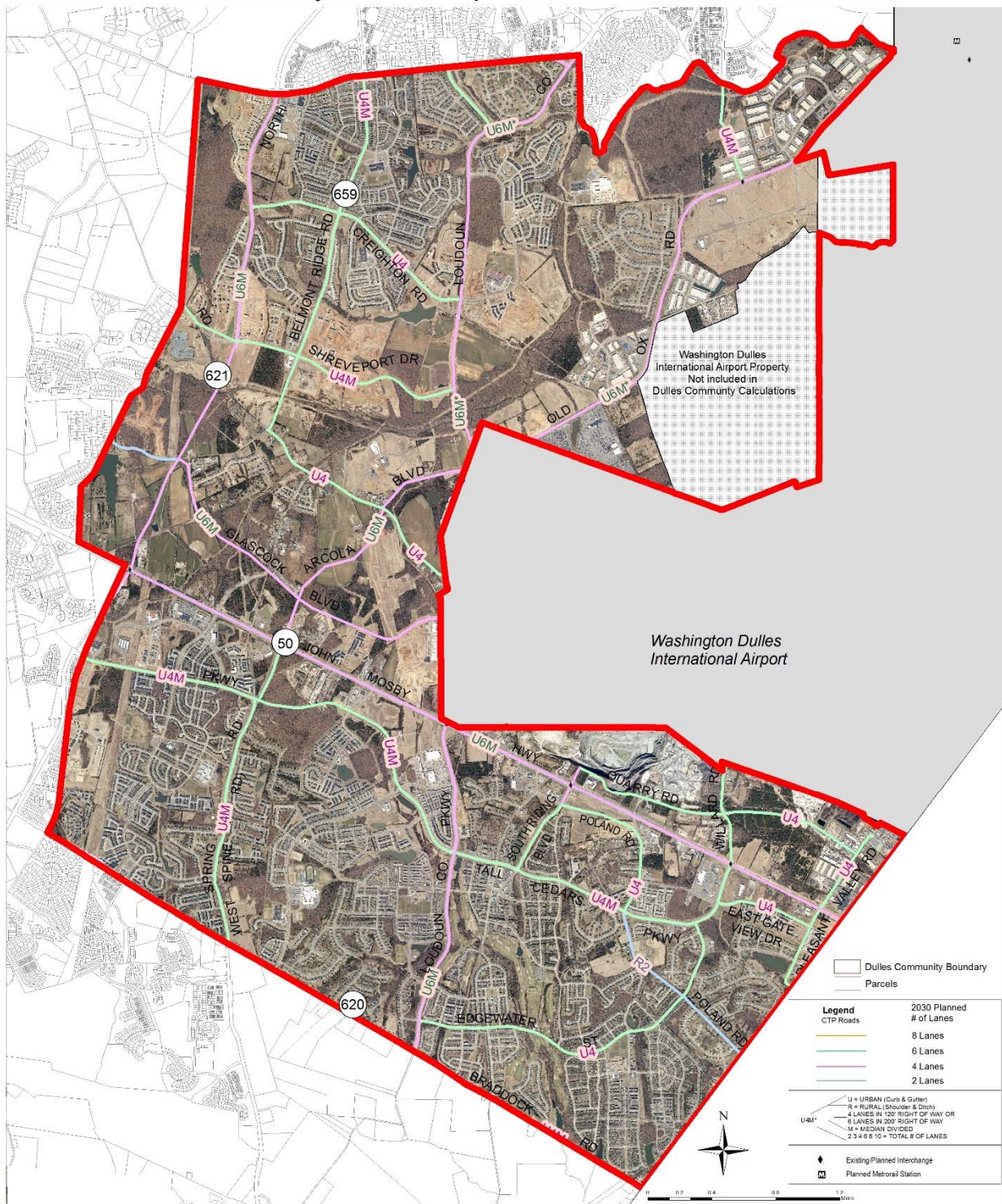


Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.



# Dulles Community

## Countywide Transportation Planned Roads

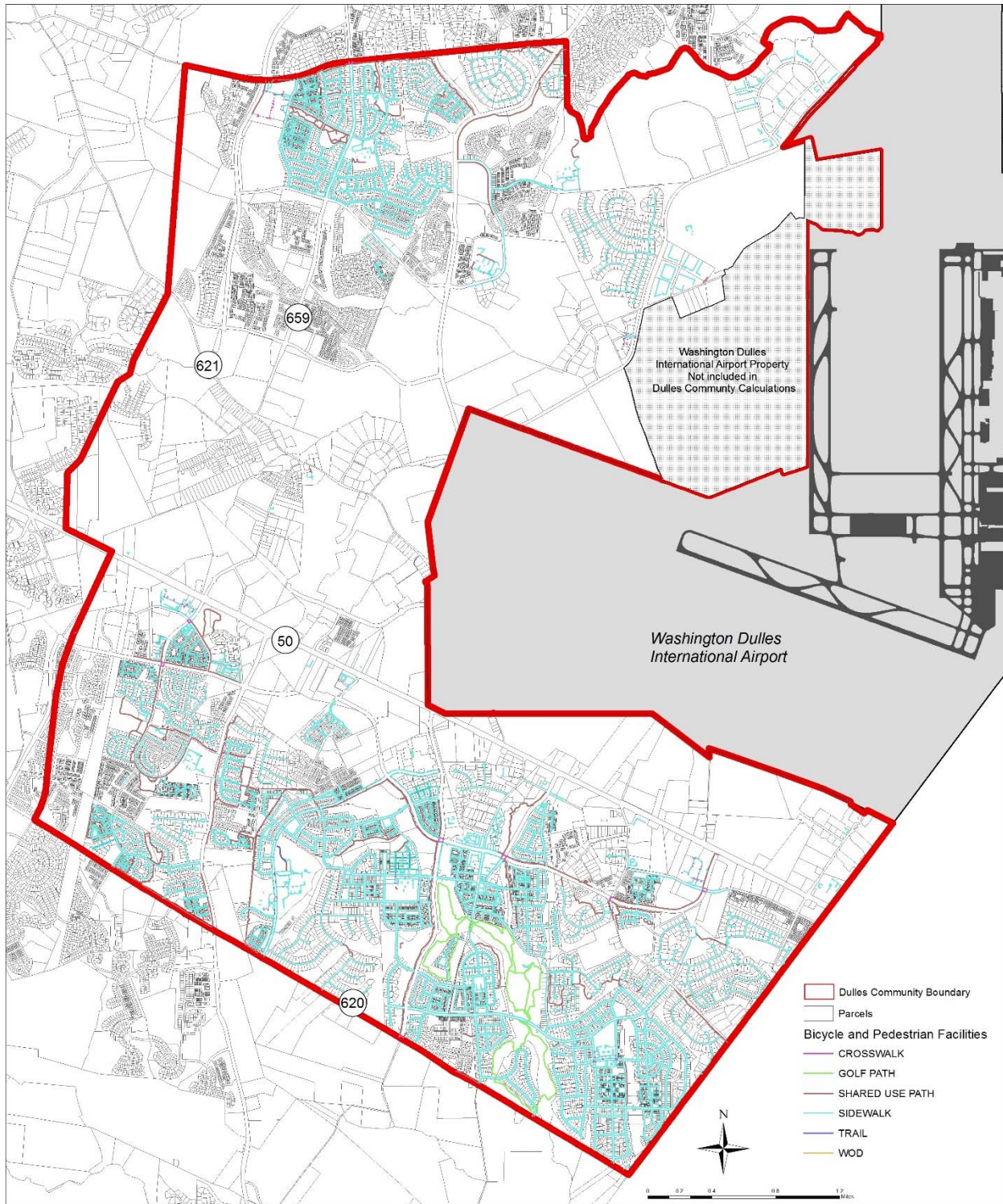


Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.



# Dulles Community

## Bicycle & Pedestrian Circulation



Source: Loudoun County Department of Planning and Zoning, December 2014. All boundaries are approximate.

