DATE: November 30, 2018

TO: Planning Commission

FROM: Alaina D. Ray, AICP, Director of Planning & Zoning
      Dan Galindo, AICP, Community Planning Manager

SUBJECT: December 6, 2018 Planning Commission Special Work Session

The anticipated order of the Loudoun 2040 Comprehensive Plan discussion for the December 6, 2018 Planning Commission Work Session is provided below, and this packet contains the materials for these discussions.

- Data Centers in the Urban Transit Center Place Type (see below)
- Public Comments and Requests for Specific Properties (see below)
- Revised Chapter 6
- Revised Towns & JLMA Section of Chapter 2
- Revised Transition Policy Area Section of Chapter 2
- Transfer of Development Rights & Purchase of Development Rights

**Data Centers in the Urban Transit Center Place Type**

Due to the proximity of the Urban Transit Center Place Type to the Washington Dulles International Airport and “Data Center Alley,” the Planning Commission Chair requested at the November 10th Work Session that further consideration be given to the potential for new data center development in a limited portion of the Place Type. Data centers are currently not listed as a predominant or secondary use because their form and function does not implement the vision and sense of place the Urban Transit Center envisions; however, the noise associated with flight traffic in and out of Dulles near the Loudoun Gateway Metrorail Station presents practical barriers to meeting this vision as well. Therefore, staff has developed draft policy that would support the development of data centers in a limited portion of the Urban Transit Center. The proposed policy statement would be directly connected to only the Urban Transit Center Place Type and state something similar to the following: “Data Centers would be an appropriate use for any parcel that intersects with the Washington Dulles International Airport’s 65 Ldn (day-night average noise level) noise contours.”
Data centers within the Urban Transit Center Place Type would also have guidelines that achieve the following aims:

1. More vertically built, at least three stories
2. Screening and buffering, implemented with living walls, murals, and other privacy mechanisms that still allow for the envisioned public realm

Note that the exact policy statement and guidelines are still subject to final wording. Staff believes the policy statement reflects an opportunity to allow for economic development in the area around Loudoun Gateway where residential development would not be permitted. The guidelines are based off of a recent white paper ([https://www.flipsnack.com/mcdean/vertical-data-centers-white-paper.html](https://www.flipsnack.com/mcdean/vertical-data-centers-white-paper.html)) that studied the design, use of land, space, and cost per acre and per watt of data centers. The finding was a three-story data center was the “sweet spot” for design economics, offering the best balance between cost and future flexibility. Note that even this height is less than what would be otherwise expected in the Urban Transit Center Place Type.

Public Comments and Requests for Specific Properties
Among the many public comments that the Planning Commission received at the November 7 Public Hearing or via written correspondence, there were a selection of comments specific to particular properties which are identified below. These will be presented at the December 6 Work Session for the Commission’s consideration and possible discussion. Staff will be prepared to provide recommendations related to these specific comments at the Commission’s request.

1. Request to redesignate parcel 034-38-9287 (Waterside) from the Suburban Mixed Use Place type to the Suburban Employment place type to allow for data center development.
2. Request to apply a text change or overlay to allow data center development on parcel 090-48-5422 (Loudoun County Parkway at Dulles Greenway).
3. Request to redesignate Land Bay B of the Transition Policy to a place type allowing greater residential density than specified in latest version of the Draft Loudoun 2040 General Plan.
4. Request to redesignate three parcels abutting Route 50 and Dulles West Boulevard (PINS 163-35-8042, 163-36-0133, and 163-25-3779) to a place type that allows data center and flex industrial uses.
5. Request to redesignate parcel 058-20-9286 (One Loudoun Land Bay B-72) from Suburban Employment to Compact Residential.
6. Request to expand the area designated for the Transition Light Industrial place type in the vicinity of Gulick Mill Road in the Lower Sycolin subarea of the TPA.
7. Request to modify the Round Hill Joint Land Management Area (JLMA) boundary to align with the Town of Round Hill utility service area.
8. Request to eliminate the JLMA in areas surrounding Purcellville where development has already occurred, specifically the Wright Farm and Brown’s Farm subdivisions north and south of town.

If the Planning Commission would like to discuss additional property-specific comments that have not been identified, please notify staff prior to the Work Session.
# Chapter 6 - Fiscal Management & Public Infrastructure

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Chapter 6 - Fiscal Management & Public Infrastructure

Vision
Provide high quality, efficient, and environmentally sensitive infrastructure systems supporting growth management goals and delivering innovative services to the community.

Introduction
Sustained growth since 2000 requires Loudoun County meet a significant demand for new public facilities, such as parks and recreation, fire and rescue, and schools. While the County has maintained a reputation for quality facilities and services and exceptional sound fiscal management, funding and competing priorities have led to a shortfall or delay in certain public facilities. As the County has grown, the increasing scarcity of land and the diversity of facility and service needs has further affected the County’s efforts to meet demands. Service providers have employed various measures to adapt to these challenges. Schools are being designed to fit on smaller parcels. Libraries are sharing commercial space in Brambleton and Stone Ridge. The Sheriff substations collocate with Fire and Rescue stations. The Loudoun 2040 Plan supports continued innovation, particularly in collocation and site design to not only facilitate new facilities but to better adapt to changing community design, particularly in compact mixed use and transit-oriented developments.

Loudoun County’s success also lies in establishing a close connection between land use and fiscal planning. Similarly, managing utilities, principally sewer and water, has had a direct influence in where new development occurs. Consistent policies and close collaboration with Loudoun Water has allowed the County to maintain an urban growth boundary and to subsequently focus other investments in roads and public facilities in eastern Loudoun. Loudoun Water’s strategy for a long-term water supply and its investment in high-quality water and sewer treatment has provided the County with a strong basis for growth decisions. Loudoun 2040 does not address the fiscal management and operational priorities of other companies and authorities that are independent of the County, but operate key utilities serving County residents. Nonetheless, the cooperative relationship between the County Board of Supervisors (Board), Loudoun Water, the Virginia Department of Health (VDH), and other entities continues to ensure a close connection between infrastructure and land use planning.

Loudoun County maintains a strong commitment to preserving open space and agricultural land and protecting natural and heritage resources. As such, the County established the Conservation Easement Stewardship Program to work with owners of property with conservation easements to ensure that the terms of the easements continue to be met. Over 72,000 acres of land throughout the County are protected through conservation easements.

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Loudoun 2040 does not address the fiscal management and operational priorities of the companies and authorities that are independent of the County but operate key utilities serving County residents. Nonetheless, the cooperative relationship between the County Board of Supervisors (Board), Loudoun Water, the Virginia Department of Health (VDH), and others continues to ensure a close connection between infrastructure and land use planning.

Loudoun County’s innovative fiscal planning and budgeting strategy integrates land use planning, fiscal management, and facilities planning. The County’s fiscal program requires the Board to adopt a ten-year Capital Needs Assessment (CNA) every two years following a recommendation by the Planning Commission on consistency with the Comprehensive Plan, and adopt a six-year Capital Improvement Program (CIP) annually during the Board’s budget deliberations. The annual CIP funding plan and budget then align annual capital expenditures with County fiscal policy. The County has relied on the authority granted by the State to accept proffers to mitigate capital and transportation costs. That funding mechanism has proven less effective in recent years due to State imposed constraints on use of proffers as well as a changing development environment. The Loudoun 2040 Plan supports continued use of proffers and proposes changes to the capital cost calculation to address transportation needs, and expanding the proffer process to the Transition Policy Area. The Plan also encourages the Board to seek legislation authorizing a reasonable impact fee program that would apply to all residential building permits throughout the County.

Since the 1990s, the County’s fiscal management strategy has evolved, enabling the County to anticipate and accommodate consistently high demand for services and facilities. This strategy helps ensure that Loudoun County retains a high quality of life and an economic balance that allows an affordable tax rate. Loudoun County maintains a strong commitment to preserving open space and agricultural land and protecting natural and heritage resources. Over 72,000 acres of land throughout the County are protected through conservation easements. Approximately 26,000 acres of the easements are held by the County. Over the years, emphasis has been placed on preserving open space in its natural setting, undisturbed, to protect the environmental value of the space. The Loudoun 2040 Plan recognizes the community desire and economic value to expanding public access to and enjoyment of the open spaces through trails and recreational uses. A key objective is to create a connected network of parks, trails, and natural areas, which can offer expanded environmental, design, and recreational benefits.

Public Facilities

The County’s fiscal management strategy is designed to anticipate and accommodate the impacts of increased demand for public services and facilities. As discussed in the Fiscal Management section of this chapter, careful development forecasting – including its location, type, and timing – is essential to anticipating facility needs. The County projects the capital needs associated with development proposals to determine expected impacts on public facilities and to calculate anticipated contributions to mitigate a project’s “fair share” of those impacts. Major components of the land use picture in Loudoun are public schools, parks and recreation, libraries, and emergency services. Each typically requires land in proximity of new development and are important elements of the community fabric.
**Loudoun County Public Library** (LCPL) is the information center of the community, providing free and equal access to innovative technologies and a full range of library resources to enhance the quality of life and meet the informational, educational, and cultural interests of the entire community. LCPL provides library materials, programs, technology, and services. It promotes the joy of reading and lifelong learning through early literacy programs, teen initiatives, humanities and arts events, technology training, and other educational opportunities.

LCPL currently has nine branches ranging in size from 4,000 square feet to 42,000 square feet. The Ashburn, Cascades, Lovettsville, Middleburg, Purcellville, and Rust branches are standalone facilities, while Gum Spring, Law Library, Brambleton, and Sterling share structures with businesses or other Loudoun County facilities. LCPL Administration shares space in Leesburg with the Leesburg Senior Center.

<table>
<thead>
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<th>Branch</th>
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<tr>
<td></td>
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<tr>
<td>Ashburn</td>
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<td>Brambleton</td>
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<td>Gum Spring</td>
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<td>Law Library</td>
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<td>Lovettsville</td>
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<tr>
<td>Middleburg</td>
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<td>Sterling</td>
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<tr>
<td><strong>TOTAL S.F.</strong></td>
<td><strong>170,060</strong></td>
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</tbody>
</table>

LCPL continues to evolve to meet the needs and growing expectations of the community. The Library is expanding language learning services to non-native speakers. It also offers more Science, Technology, Engineering, and Math (STEM) programs, which are complemented by “maker spaces” that include 3D printers, robotics, recording studios, design software, computer labs, and other equipment for creating and learning. High-speed wireless internet access is essential to customers and is available at every facility. In addition, demand for conference and study rooms continues to rise; thus the need for large, multi-purpose rooms is an essential component for current and future branches. Also, as the number of residents without personal transportation increases, locations that offer ease of access through public transportation is critical.
LCPL recognizes the need to locate in high community activity areas and adapt to the County’s changing development patterns. For example, in recent years LCPL has opened facilities in commercial space in Brambleton’s town center and in Stone Ridge. Libraries have also located with or near senior centers, parks, and schools. Library programming is similarly evolving to accommodate community activities and educational programs that meet new needs of area residents.

The Department of Parks, Recreation, and Community Services (PRCS) operates a system of County-owned or maintained facilities that includes over 1,700 acres of open space, more than 60 miles of trails, 200 athletic fields, 27 parks (including three regional parks), 18 playgrounds, 10 community centers, six sports complexes, two indoor and two outdoor swimming pools, four historic/heritage sites, three adult day centers, three senior centers. PRCS also operates a senior activity center, a recreation center, a nature preserve, a nature center, a performing and visual arts center, an industrial catering kitchen, and administrative offices.

PRCS and Loudoun County Public Schools cooperatively offer activities at County school sites. Programs and services encompass childcare, preschool, after-school care, sports and recreation, community outreach, aging services, youth services, adaptive recreation, summer camp, health and fitness, planning and development, facility maintenance, customer service, and environmental stewardship. Offerings include sports activities for youth and adults, instructional and interpretive classes, programs for senior citizens, visual and performing arts, child care, preschool, after school activities, trips, camps, special events, volunteer opportunities, educational and prevention programs for youth, and programs for individuals with disabilities. In 2018, annual park visits for special events totaled 875,000. Over 55,000 children participated on sports teams and over 156,460 meals were served to senior residents.

PRCS faces significant challenges securing additional parks and trails to meet the service demands of the County’s growing population. A lack of available land in eastern Loudoun, where the facilities are needed most, complicates the County’s ability to provide the desired facilities. A decreasing supply of land also means rising land values, which affects landowner’s contributions of land for parks facilities. Changing development patterns in eastern Loudoun, such as the urban development around the Metrorail stations and other high-density developments, will require new recreation concepts, and changing demographics will likewise demand new types of facilities. For example, the population of residents 55 years and older increased nearly 50 percent from 2010 to 2016, resulting in higher numbers of older adults seeking not only recreational programs but also other support services. PRCS offers community outreach events and increasingly serves as a conduit for a variety of services to the senior population.
Loudoun County Public Schools (LCPS) is the third largest school division in the Commonwealth of Virginia. Each year, approximately 2,500 new students enroll and one to three new school facilities are opened to accommodate them. In 2018, LCPS served more than 83,000 students in 92 facilities including 15 high schools, 16 middle schools, 57 elementary schools, and four special purpose schools (Academy of Engineering and Technology, Academy of Science, C.S. Monroe Technology Center, and Douglass School).

The LCPS student Class of 2017 had an on-time graduation rate of 95.5 percent and earned more than $54.7 million in scholarships. The Virginia Department of Education reports that 100 percent of LCPS schools were fully accredited in 2017. The student body is ethnically and economically diverse, with 52 percent of the population reporting as African American, Asian, Hispanic, or multi-racial. Approximately 19 percent of the student population is identified as economically disadvantaged. This cultural and economic diversity raises the need for a variety of academic and extracurricular programs to assist students, particularly in elementary schools, which have the highest percentage of economically challenged students.

Increasing demand for services is placing significant pressure on the school system, which each year must hire hundreds of additional classroom teachers and staff, expand support systems, and open multiple new schools. Families continue to endure shifting school boundaries as new students are assimilated into the school system. Securing building sites for new schools that are cost-effective but that also reflect their important social and civic functions in terms of location and design is an ongoing challenge. Changing development patterns in eastern Loudoun further complicate these issues. In the past, the County has relied on the donation and timely delivery of proffered school sites from the development sector. However, the supply of sites has not kept up with demand or with the LCPS construction timetable.

Urban development around the Metrorail stations and other high-density developments will require innovative designs for new school facilities using less land and more vertical designs. Alternative school configurations that established urban communities have used successfully, such as shared space and public/private facilities, will become increasingly important.

As the population increases and continues to diversify, schools will likely continue to play a larger community role, such as accommodating a variety of non-school activities, sharing recreational facilities with the public, co-locating with compatible uses such as libraries, affordable housing and other services, and opening classrooms and space to other organizations.
Loudoun County Fire and Rescue (LCFR) delivers essential emergency and non-emergency Fire and Emergency Medical Services (EMS) from 19 stations, responding to more than 29,000 incidents annually. The Department, as part of the Loudoun County Combined Fire and Rescue System (LC-CFRS), provides administrative, operational, and logistical support to the County’s 15 volunteer fire-rescue companies, the LC-CFRS Executive Committee, and its governance structure. Through the Oliver Robert Dubé Training Academy, LCFR coordinates the delivery of certification and continuing education programs for all System members. LCFR functions as the Public Safety Answering Point (PSAP) for the County’s 9-1-1 system and operates the County’s emergency communications system. The Fire Marshal’s Office (FMO) has a multi-faceted mission that includes fire prevention, fire lane plans review, life safety education, community risk reduction, investigation of fires, explosions, hazardous materials releases, and an oversight of the bomb squad.

LCFR has been in a consistent state of transition as the County has grown, moving from an all-volunteer system to a combined system, serving an increasingly suburban environment, and responding to growing service demands. As areas of the County transition to a more urban development pattern, the Department will continue to adapt to different demands and environments. Compact and higher density development and the introduction of Metrorail will affect emergency response times and equipment and training needs, and introduce other new challenges. In rural Loudoun, ongoing areas of attention will include updating existing stations and meeting service demands associated with growth in the rural economy.

Open Space Assets
Open space assets as defined in this chapter include linear parks, trails, recreational areas, and passive open space. These assets make up much of the County’s network of natural resources and may be held in private or public ownership. The County and individual property owners manage these elements through the regulation of protective buffers, donation of open space easements, Purchase of Development Rights (PDR), and performance standards.

The Board established the PDR Program in 2000 as a tool to protect Loudoun County’s open space and its cultural, natural, and agricultural resources. The PDR Program, which is voluntary in Virginia, is intended to financially compensate willing landowners for not developing their land; a landowner enters into an agreement to sell the development potential of qualifying property to the County while maintaining the right to continue to own and use the property. However, funding of the program was eliminated in 2004.

The open space assets addressed by this Chapter are aimed at maintaining, enhancing, and
encouraging public interaction with the County’s network of natural resources through:

a. A network of linear parks and other recreational resources along or extending from the banks of the Goose Creek, Broad Run, Bull Run, Catoctin Creek, Potomac River, and other river and stream corridors to form an interconnected system of linear open space.

b. Linear linkages—Trails within and among communities that offer potential for walking and bicycling, and connecting neighborhoods to parks, schools, and other community destinations.

c. Forested areas along public rights-of-way, within neighborhoods, and elsewhere to filter air pollutants, provide shade, screen uses, and define communities and places.

d. A network of active and passive parks of various sizes and functions throughout each community to beautify neighborhoods and offer opportunities for recreation.

Utilities & Infrastructure

**Sewer and Water (See also Chapter 2, Towns and JLMA)**

On May 27, 1959, the Board took action to create the Loudoun County Sanitation Authority as a public body politic and corporate under the provisions of the Virginia Water and Waste Authorities Act. This body, now known as Loudoun Water, is chartered by the State Corporation Commission and is responsible for providing water and wastewater service to the unincorporated area of Loudoun County. As a political subdivision of the State, Loudoun Water is not a department of the County government and receives no tax money from the County. All Loudoun Water income is received from customers as payment for water and sewer service or as connection (tap) fees from land developers. Loudoun Water is governed by a Board of Directors consisting of nine members, each appointed by the County Board. Members of the Loudoun Water Board of Directors serve four-year terms and can be reappointed.
Loudoun Water owns and operates water and wastewater treatment facilities and systems and has purchased capacity for wholesale water supply from Fairfax Water and wastewater treatment from DC Water. These water and wastewater systems serve the eastern region of Loudoun County. The Potomac River is the primary source of water for Loudoun County and the greater Washington, D.C. Metropolitan Area. Loudoun Water further benefits from using the Goose Creek, Beaverdam Creek Reservoir, and may use reservoirs created from retired rock quarries for storage in the future. With numerous water supply sources and local reservoirs, Loudoun Water has a resilient system to meet the demand for safe and healthy drinking water. To ensure the overall environmental quality of the water supply (watersheds and aquifers), Loudoun Water supports broad-based source water protection, management, and stewardship programs.

In the western region of Loudoun County, Loudoun Water currently owns and/or operates over 40 smaller water and wastewater treatment systems. Community water and wastewater systems are freestanding systems usually serving residential developments that were installed by developers and are now operated by—and the responsibility of Loudoun Water. In April 2016, the Loudoun Water Board adopted a single rate for all county customers; that is, those served by central facilities as well as stand-alone community systems, the costs for which are materially greater to install and operate. Land use policies going forward need to recognize the added cost burden central system customers bear when water and wastewater services are provided by stand-alone community systems.

In the case of several small towns, water may be supplied to a rural village or hamlet by its own community wells and wastewater may be treated in a packaged treatment facility. These include systems the County has sponsored due to health hazard conditions, developer-initiated systems, and contract operations at systems throughout Loudoun. Towns in the County operate their own municipal water and sewer systems. Water is drawn from springs or wells and, in the case of Leesburg, also drawn from the Potomac River. Leesburg, Hamilton, and Round Hill have extended utilities into the surrounding Joint Land Management Areas (JLMA). The Loudoun 2040 Plan continues to rely on the town systems to serve development in the JLMA both to encourage future annexation into the town and to encourage a development pattern similar to the town. The Plan also supports extending municipal systems into the adjacent rural areas, but only to resolve public health issues in existing communities.

Loudoun Water’s Capital Improvement Plan is a 10-year roadmap for creating, maintaining, and funding present and future infrastructure needs. The Loudoun Water CIP is approved by the Loudoun Water Board of Directors. Capital water and wastewater improvements are complex and

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1 The Loudoun Water Capital Improvement Plan can be accessed at www.loudounwater.org.
interrelated and often require a great deal of planning over many years to define their extent, location, and cost. The underlying strategy of the CIP is to plan for facilities necessary for the safe and efficient delivery of water, wastewater, and reclaimed water services in accordance with policies, goals, and objectives adopted by Loudoun Water. A critical element of a balanced Capital Improvement Plan is to preserve and enhance existing facilities as well as provide new assets to respond to growth of the community and changing service needs as outlined in *Loudoun 2040* and other Board policies.

**Waste Management**

The County operates the County Landfill and provides recycling opportunities for residents and businesses. Landfill operations are fee-supported. The County also offers recycling drop-off centers, household hazardous waste collection events, collection of seven materials for recycling or diversion at the landfill, and educational programs. The County anticipates continuing operations at the Evergreen Mills Road landfill site and relying on continued recycling and commercial facilities to redirect a significant amount of waste material. International demand for recycled material is, however, a key factor in the success of recycling success. Continued review and updating the County’s Solid Waste Management Plan will provide the more detailed management and planning necessary to meet State requirements to anticipate future needs.

**Energy and Communication**

Electrical and communication services are provided under the purview of State and Federal agencies. This limits the County’s ability to mitigate certain impacts. For example, the County regulates the location of electrical substations but not the transmission lines to and from the substations. Similarly, the County may review the location of cell towers and monopoles for impacts on surrounding properties, but cannot prescribe locations and therefore cannot require broadband or communication service in underserved areas. The County does, however, work with the providers to encourage improved service and locations.

Electrical demand in the County has grown dramatically in recent years with the development of data centers in eastern Loudoun. Demand is expected to continue to grow with new data center construction, the operation of the Silver Line Metrorail, and other land development. Changes in data center technology have resulted in electrical use increasing from 100 watts to 150 watts per square foot and in a few cases up to 300 watts per square foot. In 2018, 13.32 million square feet (msf) of data center has been constructed, 1.69 msf is under construction, and another 6.25 msf has or is expected to receive permits in 2018. Demand for data center development within the County is anticipated to be strong for the foreseeable future.

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Rather than a centralized, regional substation to serve the County’s growing electrical demands, smaller substations have been constructed for individual providers. As demand for electrical power continues, consideration should be given to the appearance of substations and power lines and adequate screening of these facilities to reduce the visual impact upon the community.

Broadband internet service is an increasingly important asset to business in Loudoun as e-commerce grows throughout the nation. The lack of broadband service in western Loudoun is cited as a major constraint on the rural economy. It also puts western households and students in particular at a disadvantage. County efforts to extend broadband service have included regulatory changes to support new technologies. With limited control over market factors and federal regulation, the County will encourage landowners to put in place the conduits and other infrastructure to help minimize the cost of extending the service, and will explore other incentives to encourage network expansion.

**Fiscal Management**

Loudoun County uses an innovative integrated approach to land use and fiscal planning. This approach uses economic and demographic forecasting models, as well as service and facility standards, to help determine current and future capital facilities needs in the County. The Board established Loudoun County’s Fiscal Impact Committee (Committee) in 1992. This advisory committee reviews assumptions about future growth and capital facility needs. The Committee provides recommendations to the Board on four key documents that the County uses to coordinate land use and financial planning: 1) long-range forecasts and demographic, economic, and financial information included in the Fiscal Impact Committee Guidelines; 2) Capital Facility Standards (CFS); 3) Capital Needs Assessment (CNA); and 4) Capital Intensity Factors (CIF).

The capital facility planning and budgeting processes are distinctly different, but completely interrelated. CFS, CNA, and CIF are the three main aspects of the capital facility planning process that shape the CIP budget. The capital planning processes are integral in the development of:

1. Capital facility related cash, land, and in-kind proffer dedications to the County as a result of land use applications;
2. The development of the type, timing, and geographical placement of capital projects to be considered for funding in the CIP; and
3. The programmed use of proffers for capital facility development in the CIP.

**Capital Needs Assessment**

The CNA divides the County into ten planning subareas and uses the County’s forecasted population growth and adopted CFS to identify the type and quantity of facilities needed in each subarea. The CNA time period extends for ten years beyond the most recent CIP period. Using the population standards set by the CFS and factoring in facilities that already exist or are funded in the CIP, the CNA determines which facilities are needed to meet the adopted CFS standards. The CNA is generally updated every two years.

The population within each subarea drives the demand for facilities. In this way the County can identify more accurately where the demand is greatest and plan accordingly. The subareas define
broad communities such as Leesburg and its environs or the three western towns along Route 7. However, the boundaries are based on Traffic Analysis Zones (similar to census tracts), which sometimes divide smaller communities. Furthermore, while the CNA is based on population, it does not account for the diversity of Loudoun’s population and the associated variations in facility needs and community desires. For these reasons, the Planning Commission, during their review of the FY 2020-2030 CNA, recommended the Board investigate a more community-driven planning approach that could address demographic differences, development constraints, and community expectations.

**Capital Facilities Standards**
The CFS determines the size and scope of facilities by establishing a maximum land use (in acreage) and construction footprint (in floor area). County Departments provide information on what standards to use for each of their facilities. The CFS also establishes a population threshold (“trigger”) for each type of facility. The 2020-2030 CAN estimates a need for approximately 2,100 acres of land throughout the County for additional facilities by 2030.

*Example:* The CFS determines a need for one fire station for every 25,000 persons in the Ashburn planning subarea. The current population forecast for Ashburn is 83,000 persons in 2017 and is projected to increase to 125,000 persons by 2023. As of 2017, the current need for fire stations is 3.32 (83,000 divided by 25,000). There are currently three fire stations existing in Ashburn and another one funded in the CIP (for a total of 4.0). The total need for fire stations will increase to 5.0 (125,000) by 2023, therefore, the CNA would identify one additional fire station by 2023.
Capital Intensity Factor

The CIF translates the anticipated capital cost and land requirements derived from the CFS into a per-housing-unit cost. The calculation determines costs per capita and costs per student, which then helps estimate the cost associated with different housing unit types based on average household sizes. The resulting cost per housing unit is valuable during development review to estimate impacts of individual applications and in proffer negotiations to determine a developer’s capital facility contributions.

1993 Choices and Changes General Plan

standardized County’s the use of a CIF to estimate capital facilities proffers. The County, by policy, anticipated a landowner contribution of 25 percent of the anticipated capital impact of each residential unit over a base density of 1.6 units per acre. At that time, the CIF was a countywide number. With the adoption of the 2001 Revised General Plan, County proffer policy called for landowners to mitigate 100 percent of the capital impact for each unit above a base density established by current zoning or one unit per acre, whichever was lower. The County also developed a separate CIF for each policy subarea. The refinement acknowledged notable differences in land costs and other differences associated with constructing facilities in each subarea. The Board has also incorporated a separate CIF for age-restricted housing and additional housing types. Recognizing a pressing the need for certain transportation improvements, the County also allows landowners to redirect capital facilities money to transportation infrastructure in certain situations.

Capital Improvement Program

The six-year CIP refines the County’s CNA-forecasted future capital facility growth and provides a six-year program of the County’s general government and public schools’ land, facility, and equipment needs, with a financing plan to implement each need. The CIP schedules land acquisition, design, construction, and capital equipment procurement for each project. Potential projects are evaluated in relation to each other to ensure that the highest priority projects receive public funding, with essential improvements planned in a manner commensurate with the County's ability to pay.

The CIP is developed biennially, with the six-year period moving out an additional two years every other fiscal year. The CIP is a multi-year plan that does not constitute or require an appropriation
of funds beyond those for the current fiscal year. Funding decisions concerning the CIP are made in conjunction with decisions regarding the County's operating budget. Most new facilities require an ongoing commitment in operating funds for new employees, heat, light, and other costs.

Going forward, the County will pursue additional refinements to the proffer guidelines to accommodate urban development concepts and more diverse housing into the CIF. In light of State legislation adopted in 2016 that limits the use of proffers, the County will also explore other mechanisms to diversify funding opportunities, including impact fees. Impact fees would apply equally to all residential units, whether permitted by rezonings or administrative approvals. Additional State enabling authority would be necessary to effectively use impact fee; existing legislation is limited in scope and imposes difficult implementation requirements, leading very few localities to take advantage of this tool.

As part of its strategic planning efforts on growth management, the County will consider expanding discussion of net impacts, including the capital needs and costs of individual projects on countywide infrastructure and the economic and revenue benefits of new development. As such, the County would evaluate 1) the impact of a rezoning application on the local transportation network and public facilities, 2) what the application is or is not doing to mitigate the impact, and 3) what facilities exist and/or are funded to serve the subject property and surrounding area during the development review process. Additionally, the County is developing an analysis model to assist with evaluating the fiscal impact of future development.

**Policies, Strategies, and Actions**

Unless otherwise specified, the following policies, strategies, and actions apply Countywide. All of the Policies, Strategies, and Actions set forth in all of the following paragraphs of Chapter 6 shall apply and be applied by the County only subject to and in compliance with the limitations established by Virginia Code Section 15.2-2303.4 as applicable. In its consideration and acceptance of all proffers, the County will apply the standards of Virginia Code Sections 15.2-2297, 15.2-2303, and 15.2-2303.4, as applicable, to evaluate the reasonableness of proffered conditions, and for those applications subject to Section 15.2-2303.4, the County shall accept only those proffers permitted or deemed reasonable under Virginia Code Section 15.2-2297 and not deemed unreasonable under Section 15.2-2303.4.

**Fiscal Policy 1: Provide public facilities to meet identified needs.**

**Strategy**

1.1 Use the CNA Program to plan and coordinate facility needs and location criteria to ensure

| 17 PUBLIC SAFETY PROJECTS |
| 41 ROAD AND 13 PEDESTRIAN/BICYCLIST PROJECTS |
| 14 PARKS AND LIBRARY IMPROVEMENTS |
| 4 TRANSIT PROJECTS |
| 45 SCHOOL PROJECTS |

The FY 2019 – 2014 Adopted Capital Improvement Program includes over $1.9 billion in County capital projects and almost $500 million in School capital projects.
adequate dispersal and timely availability of County facilities.

**Actions**

A. Expedite the approval of public facilities by establishing performance standards that would eliminate the need for legislative review.

B. Support LCSB acquisition of needed sites through the fiscal planning and land development processes.

C. Co-locate public safety and other facilities whenever it will improve service efficiencies.

D. **Design-Make** school-related open space and athletic fields and make them available for joint use by PRCS.

E. Evaluate Commission Permit applications for County facilities on the character and extent of the maximum development potential of the site in order to permit future expansion and co-location without requiring additional Commission approval under Code of Virginia Section 15.2-2232.

F. Combine public open space and parks with public **facilities** and civic buildings, community centers, town centers, and other gathering places and include amenities such as seating areas, public art, playgrounds, gardens, etc.

G. Design public facilities to be a distinguishing feature of the community using sustainable materials, context-sensitive design, and architectural features.

H. Design new public facilities to be functional and efficient to persons with diverse abilities, to reflect the physical character of the surrounding community, and to maximize the broader social and cultural role the facility can play in the community.

I. Establish an expansion plan for the Fire and Rescue Training Academy based on a needs assessment of the existing campus as the needs of LCFR and the County increase. Ensure the requirements of Fire and Rescue training remain a priority during the development of surrounding areas.

**Strategy**

1.2 Support continued use of existing public facilities through ongoing capital asset replacement, renovation, and modernization, particularly where facilities play an important role in social and economic activity of the local community or are historically significant.

**Action**

A. Maintain and modernize existing County facilities to meet current resource demands and customer needs; for example, improve library space for collaborative, hands-on learning (maker spaces) with computer labs and large, multi-purpose rooms to meet the growing community demand for spaces to host community events.

**Strategy**
1.3 Strategically locate facilities where they can serve the community efficiently and effectively.

**Actions**

A. Locate new facilities on sites that can accommodate future expansions and allow colocation with other public safety agencies with similar activities or clients when possible. Use the expansion space around new facilities for parks, commuter parking, and other interim uses that are compatible with the new facility until expansion is required.

B. Investigate co-locating County facilities with complementary uses that would create a mutually beneficial relationship; for example, locate schools with affordable housing or libraries with parks.

C. Locate Fire and Rescue and Sheriff’s Office facilities in accordance with adopted response time goals and at the most strategic point in a proposed service area.

D. Locate libraries and other high traffic uses in highly visible, accessible locations with adequate automobile and pedestrian access; examples of such locations include mixed-use centers, towns, and villages.

E. Integrate housing, human services facilities, and other services for special needs populations in the Urban, Suburban, and Transition Policy Areas, Towns, and JLMAs to provide ease of access to associated commercial services, jobs, and amenities.

F. Link new facilities to adjacent neighborhoods by sidewalks, greenways, and trails.

G. Locate new public facilities in western Loudoun in close proximity to the Towns and JLMAs when suitable land is available and locations can meet response time and other service standards.

H. Continue to make the Town of Leesburg the principal location of County Government offices and the County seat.

I. Establish and maintain effective levels of public open space in all residential and mixed-use communities.

J. LCSB will determine the need for new public school sites and facilities in Loudoun County. The County will coordinate with LCSB to identify suitable sites based on the *Loudoun 2040 Comprehensive Plan* and its land use and growth policies in concert with LCSB’s standards and levels of service as adopted by the Board of Supervisors.

K. The County will acquire school sites in advance of LCSB’s recognized short and long-term future needs to minimize school transportation costs and to structure future planned growth.

**Strategy**

1.4 Encourage partnerships that contribute toward significant, meaningful, shared public facilities.

**Actions**
A. Support and encourage partnerships that develop sustainable housing for special needs populations, including the elderly, the mentally and physically handicapped, low income persons, and the homeless.

B. Support the acquisition of land and development of facilities such as the Potomac Heritage National Scenic Trail.

C. Work with the United States Department of the Interior, the Virginia Tech Conservation Management Institute, the Virginia Department of Historic Resources, NOVA Parks, and other local, regional, and state organizations and the incorporated Towns to define and recommend areas for open space preservation and development of a trail network that links the County’s natural, historic, and recreational resources.

D. Work with homeowners’ associations (HOA) and other property owner associations (POA) to encourage greater public access to association open space and facilities.

E. Collaborate with Loudoun Water and NOVA Parks so that water supply reservoirs can support safe, compatible public access and recreation.

F. In subdivision plans for villages and clusters in the Rural Policy Area, include a plan outlining the proposed use of associated open space and suitability for rural economy uses.

G. Coordinate recreation-planning efforts with the Towns to prevent duplication of services.

H. Identify opportunities, such as public/private partnerships and co-location, to work with the private sector to provide public facilities.

I. Locate telecommunications facilities and equipment associated with public safety agencies in accordance with communication utility standards and the Comprehensive Plan.
Emergency Services Development Standards

Fiscal Policy 2: Enhance efficient and effective public safety and emergency services response through the implementation of appropriate development standards.

Strategy
2.1 Ensure adequate fire suppression for residential uses that are not served by an on-site water source and/or are located outside minimum response times of existing stations.

Actions
A. Create and maintain development regulations that require an adequate water supply, such as dry hydrants or tanks, for new residential subdivisions of more than five dwelling units when an alternative water source is not available on site.
B. Support adoption of State legislation enabling the County to adopt regulations requiring sprinklers for all new residential construction.
C. Encourage and offer incentives to voluntarily provide sprinklers in new residential construction.
D. Higher densities proposed in compact and mixed-use communities, and design concepts such as narrower streets, reduced yards and less space between buildings should be contingent on installation of sprinkler systems in all buildings.
E. As part of residential rezoning applications in areas that are subject to approved small area plans or approved Metrorail service districts, recommend that sprinklers be installed in all new residential construction that is located outside of the recommended emergency services response times established in agency services plans.

Strategy
2.2 Ensure adequate and efficient access for emergency vehicles.

Actions
A. Eliminate non-contiguous street names, duplicate street names, and sound-alike street names, and ensure that addresses reflect the access location.
B. Coordinate with Virginia Department of Transportation (VDOT) to ensure that all new traffic signals are equipped with signal preemption equipment to provide priority access to emergency vehicles responding to a call.
C. Establish a program that retrofits existing traffic signals, subject to VDOT approval, with signal preemption equipment to provide priority access to emergency vehicles responding to a call.
D. Require development applications to demonstrate adequate access for emergency apparatus.
E. Ensure that development regulations address the installation and maintenance of emergency apparatus access roads for fire and rescue resources.

F. Discourage the use of “emergency access only” gates and other roadway barriers.

**Open Space (see also Chapter 3, Natural and Heritage Resources)**

**Fiscal Policy 3:** Retain the County’s unique combination of urban, suburban, and rural communities by using open space to protect natural resources and habitat, to create a network of high-quality active and passive recreation spaces, and to delineate our built environments.

**Strategy**

3.1 Use contiguous linear parks, connected trails, and natural open space corridors to improve public access to open space, encourage healthy lifestyles, and link destinations throughout the County.

**Actions**

A. Build on and encourage links to current planned trails and park areas, placing greater emphasis on quality—connected, publicly usable, and accessible open space and identify desired locations and connections of future trails and parks to facilitate acquisition and development.

B. Establish programs and regulatory mechanisms to increase publicly accessible open space through easements, land dedications, and purchase; ensure that such programs and mechanisms are consistent with County facilities plans.

C. Incorporate open space amenities into the design of stormwater facilities and link such facilities by trails to create a network of water-based parks and greens.

D. Ensure that new developments extend publicly-accessible trails and linear parks into and through their projects with the intent of creating a network of public trails that is consistent with the County plans.

E. Language in HOA/POA bylaws should allow public access to some or all linear parks and trails, particularly those connecting to public facilities and to outside trails or parks.

F. Establish and maintain desirable levels of usable, public open space in all residential and mixed-use communities.

G. Increase the number of access points to key trail systems from adjacent neighborhoods and destinations.

H. Seek through public purchase, proffer, donation, or third-party open space easement, the preservation of natural areas and the development of linear parks, recreation space, and trails.

H.1. Continue the Open Space Preservation Program, to the extent permitted by Virginia Code Section 15.2-2303.4, linking the loss of open space directly associated with...
with low-density residential land use and the demand for recreation and open spaces to the provision of open space easements or funds towards the purchase of open space easements that provide publicly accessible and usable open space as follows:

i. In the Suburban Policy Area, residential neighborhoods or land bays proposing densities less than 6 dwelling units per acre or floor area ratios of less than 0.4 less than the planned minimum number of dwelling units per acre should be associated with augment required open space with voluntary participation in the Open Space Preservation Program providing:
   a. The equivalent of 50–40 percent public open space in the Suburban Neighborhood place type and 20 percent in the Suburban Compact Neighborhood and Suburban Mixed Use place types, consisting of on-site open space required by development regulations and additional on or off-site useable and publicly accessible open space, or
   b. A cash contribution, equivalent to the value of the additional open space easements in the same policy area, towards the Open Space Preservation Program.

ii. In the Urban Policy Area, residential or mixed use neighborhoods or land bays proposing densities less than 12 or over 24 dwelling units per acre or floor area ratios of less than 0.6 should be associated with augment required open space with voluntary participation in the Open Space Preservation Program providing:
   a. The equivalent of 50–20 percent open space consisting of on-site open space required by the Zoning Ordinance and additional on or off-site useable and publicly accessible open space, or
   b. A cash contribution, equivalent to the value of the additional open space easements in the same policy area, towards the Open Space Preservation Program.

iii. Link modifications reducing on-site open space, buffer, or landscaping requirements with the provision of an equivalent or greater amount of open space or an equivalent or greater cash contribution towards the Open Space Preservation Program.

iv. Use open space easements or funding provided by projects in the Urban, and Suburban, and Transition Policy Areas through the Open Space Preservation Program to extend existing public trails, provide active and passive parks, or to protect priority sites (see 3.1.J., below), unless otherwise directed by the Board.

I.J. Institute a program whereby the County facilitates acquisition of conservation easements by others by providing assistance such as a revolving loan program to reduce or defer the landowner cost of establishing conservation easements. The
program should emphasize protecting the priority open space areas that are identified in this Plan that are not otherwise protected.

J.K. Encourage protection of the following priority open space areas through conservation easements acquired by the County or others, participation in the Open Space Preservation Program, development design, and other means:

i. Key green infrastructure features not already protected from development by conservation easements or regulation;

ii. Rural areas immediately adjacent to the Towns, JLMAs, and Villages that help form greenbelts and gateway buffers;

iii. Areas adjacent to the Potomac, Catoctin, Bull Run, Goose Creek, and Broad Run floodplains, to protect water quality;

iv. Properties on or eligible to be listed on the State or National Registers of Historic Places and within local historic districts;

v. Corridors and sites identified for trails and parks and additions to existing parks; and

vi. Other areas of local natural, historic, or cultural significance including but not limited to designated scenic rivers and roads, ridgetops, and battlefields.

K.L. Amend the development regulations as needed to permit a percentage of the open space required on an individual site to be met through off-site permanent open space that creates a more usable, desirable, or environmentally significant open space (see 3.1.J, above) that is conveniently accessible to the same community.
Sewer and Water (see also Chapter 2, Towns and JLMA)

Fiscal Policy 4: The County will work with Loudoun Water, and the Health Department, to ensure timely provision of central, shared community, or on-site sewer and water in accordance with the land use policies of this Plan.

Countywide Strategies

Strategy

4.1 Implement strategies to resolve sewer and water issues in existing communities.

Action

A. Pursue funding sources to rehabilitate homes that currently lack adequate sewer and water systems.

Strategy

4.2 Define specific service areas for utility systems to protect the viability of County land use goals.

Actions

A. Establish the geographic limits of standards-based utility service and the capacity of the service, and ensure adequate environmental capacity and supply safeguards through the Commission Permit process prior to expanding existing service boundaries, or adding new boundaries in the case of the Rural Policy Area.

B. Prohibit connection to the water distribution and wastewater collection systems that require crossing land outside a defined water or sewer service area. Establish permanent easements along such lines.

Strategy

4.3 Prohibit the use of any stand-alone or community system(s) that do not ensure long-term safe, sustainable, and environmentally sound water supply and wastewater treatment.

Actions

A. Permit pump-and-haul operations only as a last resort and temporary wastewater disposal method to address a proven, public health emergency.

B.A. Ensure development proposals outside of those areas served by central system facilities can-must provide a safe, adequate, and long-term sustainable potable water supply and sewage treatment capacity in accordance with the land use policies of this Plan.

C.B. Encourage concentrating development away from water supply reservoirs and water supply sources.

C. Implement a pollution prevention and mitigation program to protect and improve the County’s surface water quality.

D. Permit pump-and-haul operations only as a last resort and temporary wastewater disposal method and only to address a proven, public health issue.
Urban, Suburban & Transition Policy Areas – Central Sewer and Water Strategy

4.4 Loudoun Water will be responsible for the provision of central water and sewer service in the Urban, Suburban, and Transition Policy Areas.

Actions

A. Collaborate with Loudoun Water to ensure safe and adequate long-term water supply and wastewater treatment systems to meet County development goals.

B. Facilitate development and efficient operation of retired quarries as water supply reservoirs and protect reservoirs by establishing effective and sustainable watershed protection measures.

C. Collaborate with Loudoun Water and NOVA Parks so that water supply reservoirs can support safe, compatible public access and recreation.

D. Support Expand the use of Loudoun Water’s reclaimed water and/or gray water network.

E. Encourage clustering development away from water supply reservoirs and water supply sources.

F. Require new development in the Urban, Suburban, and Transition Policy Areas to connect to Loudoun Water’s central water supply and wastewater treatment systems.

G. Encourage existing residences and communities served by on-site or shared community facilities to connect to central water or sewer facilities when such facilities become available via long-term financing or other incentives.

H. Assist existing communities or residences to connect to a nearby public water or sewer system if on-site water supply or waste treatment capability has deteriorated to a point where there is a potential public health risk.

I. Construct new central wastewater and water lines and facilities in a manner that causes the least environmental risk and visual disruption. Identify and implement appropriate solutions such as upgrading or replacing failing systems, and where appropriate, installing shared systems.

J. Encourage existing communities or residences in the Urban, Suburban, and Transition Policy Areas to connect to a nearby central or municipal water or sewer system where there is a potential public health risk.

K. Examine ways to assist in extending sewer lines into existing communities or residences once development has brought trunk sewers to the edges of these communities.
Rural Policy Area – On site and SharedCommunity Systems

Strategy
4.5 Protect the rural character of western Loudoun by considering the ability of an area to support on-site or sharedCommunity water and wastewater systems for any areas proposed for development.

Actions
A. Prohibit extension of central water and wastewater service into the Rural Policy Area, except as allowed herein to address a public health threat.
B. Institute a wellhead protection program in all areas not served by central system facilities to ensure adequate water quality.
C. Discourage the use of groundwater for nonagricultural irrigation such as automated lawn sprinklers and swimming pools and other nonessential purposes.
D. Recommend monitoring groundwater and surface water in the Limestone Overlay District and report any negative changes to the Board for appropriate action.
E. Require potable water supplies in any portions of the limestone overlay district and/or where subsurface karst geology exists to install membrane water treatment technology meeting the greater of a 4-log or higher standard of virus removal as a condition of approval.
F. Implement an inspection and maintenance program for conventional on-site sewage disposal systems and provide homeowner educational materials on this and related well and septic safety for residents in the Rural Policy Area, particularly in the Limestone Overlay District.

Strategy
4.6 Collaborate with Loudoun Water and the Health Department to identify viable alternative wastewater treatment methods to individual septic and drainfield-based systems, including sharedCommunity treatment plants and on-site treatment to support clustered residential development.

Actions
A. Implement wastewater treatment and disposal standards for alternative systems that protect water quality.
B. Allow sharedCommunity water and wastewater systems in the Rural Policy Area:
   i. To serve rural economy uses and residential clusters as defined in this Plan,
   ii. To solve potential public health risks, and
   iii. To serve public facilities.
C. Support construction of shared community systems for existing rural communities facing a potential public health risk. In such cases, the shared community system may be available to vacant lots within the existing community to support development that extends the viability of the community and is consistent with the scale, density, and character of the community.

D. Require Loudoun Water to own and operate all shared community water and wastewater systems with more than 15 connections.

E. Require a Commission Permit, establishing a defined service area, prior to the construction of any shared community water or wastewater system.

F. Support merging or connecting shared systems operated by Loudoun Water to address potential public health risks. A Commission Permit is not required where the merger or connection includes no change to previously approved service boundaries.

G. Permit the extension of municipal (town) sewer and water into the Rural Policy Area to serve public facilities or to address a potential public health risk.

Solid Waste Management

Fiscal Policy 5: Continue to implement an integrated solid waste management strategy that prioritizes reduction, reuse, and recycling of solid waste above resource recovery, incineration, and disposal into landfills.

Strategy
5.1 The County Solid Waste Management Plan will identify the type and level of service to be provided in the community.

Actions
A. Continue to ensure that the County always has an acceptable means of local waste disposal through the County landfill operations, should other waste disposal alternatives fail or become ineffective.

B. Continue to seek private sector support for the provision of current and future Solid Waste Management Services.

C. Develop a hazardous waste education program and increase residential access to the safe disposal of hazardous waste to protect groundwater resources.

D. Reduce landfill waste by promoting recycling and composting.

Electrical

Fiscal Policy 6: Support expanded electrical capacity through generation facilities that use clean burning and environmentally sound fuel sources and energy efficient design.

Strategy
6.1 Encourage local electrical generation in appropriate locations throughout the County.
Actions
A. Establish zoning standards that permit alternative electrical generation such as wind and solar generation by and for individual users.

B. Require the grouping and burying of utility lines and facilities to the extent permitted by law.

C. Work with electrical providers to locate new transmission lines and substations away from key travel corridors, sensitive cultural and historic resources, and residential communities or to place transmission lines underground when approaching such areas; and to minimize the number of substations by consolidating on existing sites, or locating regional facilities at key locations.

D. Encourage the use of stealth design techniques for electrical substations that are proposed adjacent to major travel corridors and residential communities.

E. Continue to monitor and minimize energy use in County facilities and create a program that would encourage benchmarking energy use in private buildings.

Communication
Fiscal Policy 7: The County supports the development of a high-quality wired and wireless telecommunications network to serve businesses, residents, and visitors.

Strategy
7.1 The County’s Strategic Land Use Plan for Telecommunication Facilities and other regulations and standards will be regularly updated to address emerging technologies, to create an environment attractive to businesses, and provide high-quality services to meet the demands of the County.

Actions
A. Review and update the County’s Strategic Land Use Plan for Telecommunication Facilities to facilitate the expansion of fiber and broadband service throughout the County.

B. Adopt zoning regulations and design standards requiring open access conduit to all development projects to facilitate future broadband extensions.

C. Establish performance standards for wireless communication facilities to minimize the need for legislative action.

D. Incorporate the capacity to locate broadband and wireless facilities into the design, approval, and construction of all public facilities.
**Fiscal Management**

Fiscal Policy 8: The County will link the goals of the Board of Supervisors’ adopted Fiscal Policy and the County’s Comprehensive Plan.

**Strategy**

8.1 Maintain a diversified and stable revenue structure by balancing residential and non-residential development.

**Actions**

A. Seek further revenue diversification to increase fiscal stability and thereby mitigate tax burdens on Loudoun County taxpayers.

B. Direct the majority of public investments into currently developed communities, Towns and non-residential areas of the County where development is planned according to the Comprehensive Plan and give priority to the redevelopment and enhancement of existing infrastructure, capital facilities, and services.

C. Where permitted, continue to seek private sector support for improvements or provision of current and future public facilities and sites, including proposals of cash and in-kind assistance for public facilities in addition to the timely provision of dedicated sites.

D. Seek authority from the state legislature to establish impact fees and a reasonable implementation process applicable in areas of the County where rezonings are not anticipated or where the provision of improvements and facilities through proffers associated with rezonings for new residential development is restricted by State legislation.

**Strategy**

8.2 Capital facility planning and budgeting will reflect anticipated needs based on forecasted development.

**Actions**

A. Update a series of financial and planning tools regularly to evaluate long-term land use, fiscal, and demographic issues under the oversight of the Board and its advisory committee, the Fiscal Impact Committee.

B. **Develop** Maintain long-range forecasts of residential and non-residential development, population, households, and employment.

C. Develop demographic, economic, and financial data that are used as inputs to demographic forecasts and for fiscal impact modeling.

D. Develop and regularly update the CIF – the dollar amount of the capital facilities impact measured by unit type or unit characteristics and geographic location that is calculated using County CFS and demographic inputs. The County uses the CIF to assess the capital facilities impacts of new residential development and provides a guideline for proffer negotiations during residential rezonings.

1. Calculate the CIF using the following formula:
E. **Develop and Regularly refine CFS** – the type, acreage, and size of future capital facilities, along with “triggers” based on population, population characteristics, or other community factors.

F. **Develop and Regularly refine the CNA** – the type and number of capital facilities needed over a ten-year planning period beginning at the end of the current six-year CIP.

G. Where permitted, ensure that the users or beneficiaries of a development will finance an equitable portion of public facility and infrastructure development costs that are directly attributable to a particular development project.

H. Evaluate, consistent with the Virginia Code Sec. 15.2-2283 and 15.2-2284, the adequacy of existing and planned public facilities and services when reviewing impacts of any legislative application for more intensive use or density. To fairly implement and apply this policy, the County will consider the following:
   i. existing facilities;
   ii. facilities included in the CIP;
   iii. the ability of the County to finance facilities under debt ratios and limits established by its fiscal policies;
   iv. **CFS** and the effect of existing and approved development, and the proposed development, on those standards;
   v. service levels of the existing transportation system – the effect of existing and approved development and the proposed development on those service levels and the effect of proposed roads which are funded for construction;
   vi. commitments to phase the proposed development to the availability of adequate services and facilities;
   vii. the availability of non-profit or HOA facilities to provide equivalent public access and programming; and
   viii. other mechanisms or analyses as the County may employ that measure the adequacy of such services and facilities for various areas or that measure the County’s ability to establish adequate services and facilities.

**Strategy**

8.3 Until such time as the General Assembly grants authority for other options, the County will consider landowner proposals of cash and in-kind assistance to mitigate capital facilities costs associated with new development, subject to the limitations established by Virginia Code 15.2-2303.4.

**Actions**

A. Consider proposals of the timely dedication of land, cash, and in-kind assistance from a landowner through proffered conditions submitted in accord with Virginia Code
Sections 15.2-2303 and 15.2-2297, as applicable, in the provision of public facilities identified in the CIP or CNA.

i. The County expects that such proposals of public facility and utility assistance by developers will occur in conjunction with any rezoning request seeking approval of densities above the existing zoning.

B. Ensure that an equitable and a proportionate share of public capital facility and infrastructure development costs that are directly attributable to a particular development project are financed by the users or beneficiaries.

C. Apply all of the proffer policies and actions and guidelines set forth in this document only subject to and in compliance with the limitations established by Virginia Code Section 15.2-2303.4 as applicable. In its consideration and acceptance of all proffers, the County will apply the standards of Virginia Code Sections 15.2-2297, 15.2-2303, and 15.2-2303.4, as applicable, to evaluate the reasonableness of proffered conditions.

D. For those land development applications subject to Virginia Code Section 15.2-2303.4, the County shall accept only those proffers permitted or deemed reasonable under Section 15.2-2297 and not deemed unreasonable under Section 15.2-2303.4.

E. Where and to the extent permitted by law, the County will structure residential proffer guidelines based upon the respective levels of public cost of capital facilities generated by the various types of dwelling units.

F. To assist the County in an equitable and uniform evaluation of developer proffers and other proposals, for proposed densities above the specified base density for each planning policy area, which otherwise conform with the policies of this Plan, the County anticipates developer assistance valued at 100 percent of capital facility costs associated with such increased densities.

G. Through the CNA, the County will consider differentiating between conventional suburban housing and other types of housing such as age-restricted, accessory, and micro units, and consider commitments to small unit sizes or affordability in estimating the capital facility needs and CIF.

H. Review the Capital Policy subarea boundaries to ensure, to the extent feasible, that they do not divide existing communities and consider service standards that provide flexibility to respond to demographics, land availability, and other characteristics of specific communities.

I. Consider developing capital standards for roads to incorporate into the CIF or providing credit against the anticipated capital facilities proffers for transportation proffers that exceed the anticipated transportation impact mitigation of the proposed development.

J. Establish the boundaries for Small Area Plans, authorized under Code of Virginia Section 15.2-2303.4, encompassing the Urban, Suburban, Transition and Leesburg JLMA policy areas, and the three Silver Line Metrorail Stations within the County. The planned land use within these Small Area Plan boundaries will reflect the land uses developed in the Loudoun 2040 Comprehensive Plan for each policy area until such time as the Board adopts more detailed plans.
Strategy

8.4 Use the following capital facilities proffer guidelines to evaluate proposed capital facility proffers subject to and in compliance with the limitations established by Virginia Code Section 15.2-2303.4 as applicable.

Actions

A. Use the following definition of “Capital Facility Proffer” to evaluate proffers: “A contribution consistent with County policies and service needs, in cash or in kind (land or improvement), that benefits County residents at large and is agreed to as a condition of a rezoning.”

B. To be considered a proffer based on this definition, the following criteria shall apply:
   i. The proffered facility is dedicated to the County or to a local, state, federal, or regional authority or otherwise satisfies a need identified in the CFS, CNA, and/or CIP;
   ii. The measure of credit will be determined on a case-by-case basis and may not exceed what the County would expect to supply given the CFS and the population served at the date of official acceptance of the application or at the date of reactivation of an inactive application;
   iii. The contribution has a quantifiable value;
   iv. The value of land contributed for public use or use as a public facility site is recognized as a capital facility proffer;
   v. Land for County facilities should be conveyed to the County or its designee;
   vi. The contribution would not be required under existing statutes or ordinances; and
   vii. The proffer is irrevocable.

C. Seek annual adjustments for proffers involving cash contributions based on the Consumer Price Index (CPI).

D. Base density thresholds beyond which capital facilities proffers will be anticipated are specified by planning policy areas as follows:
   i. Rural Policy Area: The planned density for the Rural Policy Area is implemented by the existing zoning pattern and zoning amendments are not anticipated. However, for zoning map amendment applications within existing villages and other similar applications, include capital facility contributions for units above the density permitted by current zoning.
   ii. Transition Policy Area: Evaluate capital facilities proffers against the base density permitted by current zoning.
   iii. Suburban and Urban Policy Areas: Evaluate capital facilities proffers against the base density permitted by the current zoning or a base density of 1.0 dwelling unit per acre, whichever is lower.
   iv. Joint Land Management Areas: Evaluate capital facilities proffers against
the base density permitted by the current zoning or a base density of 1.0 dwelling unit per acre, whichever is lower.

**E.D.** To evaluate proffers for public use sites, determine the per-acre value of unimproved land by a market appraisal of the site compared to properties with the same densities proposed by the applicant. The appraisal shall be conducted by an appraiser agreed to by the County, paid for by the developer, and the results provided to the County. For improved sites, consideration will be given as applicable to:

i. Site-preparation including clearing and grubbing, grading, erosion control, and related engineering and permitting costs.

ii. Project infrastructure such as stormwater management ponds, sanitary sewer lines, and major off-site and on-site roadways serving the site.

iii. A proportional share of improvements directly related to providing access to the site (pedestrian underpasses, construction of adjacent streets, trails, and sidewalks).

**Reference Maps**

Existing Facilities (Map #2018-147)

Small Area Plan Boundaries: 2018 (Map #2018-154)

Trails and Parks (Map #2018-157)

Water/Sewer Service Areas: 2018 (Map #2018-158)
Towns and JLMAs

Vision
The western Towns will continue to be hubs of economic and cultural activity in western Loudoun.

Introduction
In 2016, approximately 596,000 Loudoun residents lived in Loudoun’s incorporated Towns. The seven incorporated Towns in Loudoun County offer a window to the County’s past and are a key component of Loudoun’s unique character today. Leesburg serves as the County seat and is the largest of the Towns. Hamilton, Purcellville, and Round Hill are in proximity along the western Route 7 corridor. Middleburg is the southernmost Town and is located astride Route 50. Lovettsville is in the northern portion of the County along Route 287 and Hillsboro, the smallest incorporated Town in the County, is in the northwest section of the County on Route 9. All have existed as independent incorporated entities for more than a century, first as agricultural business centers providing markets for farm products, and supplying the necessary goods and services for rural residents. They were also distribution points linked by railroad to markets to the east. While still influenced by their agricultural tradition, the Towns play a larger economic and cultural role that includes retail and service-based businesses, educational opportunities, medical centers, and industrial centers. What was once a railway link has become an important regional trail link still tying the Towns to each other and communities to the east.

<table>
<thead>
<tr>
<th>Town</th>
<th>Population</th>
<th>Housing Units</th>
<th>Approximate Town Area (acres)</th>
<th>Approximate JLMA Area (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamilton</td>
<td>448</td>
<td>193</td>
<td>135</td>
<td>630</td>
</tr>
<tr>
<td>Hillsboro</td>
<td>98</td>
<td>44</td>
<td>170</td>
<td>NA</td>
</tr>
<tr>
<td>Leesburg</td>
<td>49,401</td>
<td>17,202</td>
<td>8,000</td>
<td>4,300</td>
</tr>
<tr>
<td>Lovettsville</td>
<td>2,096</td>
<td>694</td>
<td>570</td>
<td>NA</td>
</tr>
<tr>
<td>Middleburg</td>
<td>656</td>
<td>429</td>
<td>680</td>
<td>NA</td>
</tr>
<tr>
<td>Purcellville</td>
<td>8,914</td>
<td>2,725</td>
<td>2,200</td>
<td>2,200</td>
</tr>
<tr>
<td>Round Hill</td>
<td>570</td>
<td>222</td>
<td>240</td>
<td>1,450</td>
</tr>
<tr>
<td>Totals</td>
<td>62,183</td>
<td>21,509</td>
<td>12,000</td>
<td>8,580</td>
</tr>
<tr>
<td>Loudoun County</td>
<td>362,435</td>
<td>122,490</td>
<td>333,558</td>
<td>17,160</td>
</tr>
</tbody>
</table>

Source: 2016 American Community Survey

The Loudoun 2040 Plan recognizes the economic importance of these individual towns maintaining their historic character. The Plan continues the Joint Land Management Areas (JLMA) concept, in place since 1991, which intends to accommodate the outward expansion of the Towns; permitting moderate growth until the Towns chose to annex property at densities and designs suitable to the Towns. However, implementation of the JLMA policies has not created the development pattern that reflects the historic town character. Loudoun 2040 The 2040 Plan recommends future action to review and modify the concept. Loudoun 2040 The 2040 Plan also
recognizes that, where possible, the remaining “hard edge” distinguishing the towns and rural area be maintained, and enhanced with an effort to create “gateway” corridors leading to each town.

The JLMA zoning regulations offer a range of densities, design guidelines, and utility requirements. While Leesburg, Round Hill, Purcellville, and Hamilton have seen extensive development in the JLMA, such development has not always reflected the design and historic character of the Towns. Lovettsville, Middleburg, and Hillsboro have over time chosen not to have a JLMA because of utility constraints, concerns about growth, or a desire to concentrate inside their existing limits. Leesburg’s JLMA has a distinct suburban pattern with predominantly residential development north of Route 7 and business and employment uses south of Route 7.

Place Types

As described in the beginning of this chapter, the following Place Types have been designated for specific locations as displayed on the accompanying map. The Place Types will work in concert with the Design Guidelines and Policies, Strategies, and Actions of the JLMAs to fulfill the land use patterns and community characteristics intended for these areas.
Policies, Strategies, and Actions

Town Policy 1: The County will collaborate with the Towns on matters of common interest to preserve the identity of each Town and their role as economic and social centers.

Strategy

1.1 Work with the Towns to develop and implement a shared vision for the Towns and their environs.

Actions

A. Continue to rely on jointly approved area management plans and refer to applicable Town policies on matters within the JLMA.

B. Grant authority over subdivision applications within 1 mile of its corporate limits, upon request of a Town and in accord with County regulations.

C. Establish a regular coordination program with Towns to anticipate, monitor, and address development and planning matters.

D. Undertake joint planning efforts in the JLMA.

E. Support the towns in their negotiations with VDOT and other agencies for safety improvements and traffic calming, particularly along Routes 15, 50, 7, 9, and 287 in proximity to the Towns, and other changes in roads and/or transportation services that are consistent with both the Town’s and the County’s development goals and priorities.

F. Assess the effectiveness of the JLMA approach and associated zoning in protecting town character, maintaining a "hard edge" between the town and the rural areas, and/or as a tool for expanding economic development objectives.

G. Add provisions to the rural and JLMA zoning districts specific to roadway corridors leading into each town that would establish deeper building setbacks variable building and lot configuration and orientation, “hedgerow” landscaping and buffering along the road, and other measures that retain or create a traditional rural or natural appearance leading into the town.

H. The County will work with the Towns and interested groups to identify open-space and agricultural-preservation strategies such as: donation of conservation easements, fee-simple purchase, clustering, and the possible creation of a conservation service district and/or nonprofit foundation to promote and implement open-space preservation around the Towns.

Strategy

1.2 Encourage new development to locate within the Towns before moving into the JLMAs or surrounding area.
Actions

A. Encourage the maintenance, improvement, or adaptive reuse of existing building stock in a manner that supports social and economic diversity within the community.

B. Promote the commercial areas within the Towns as the preferred location of retail and service businesses, office development, and public and civic uses.

C. Work with the Towns to enhance their economic base and maintain viable commercial areas through marketing, capital investments, and business attraction.

D. Support annexations by the Towns when water and sewer extend into a JLMA in accordance with the annexation guidelines in this section and to resolve jurisdictional questions for property owners.

E. Encourage development in the JLMA to extend the existing and planned development patterns of the Town.

Strategy

1.3 Continue to recognize the Towns as the preferred location of public facilities in western Loudoun County when consistent with Town policies and when suitable land and services are available.

Actions

A. Encourage the continued use of existing public facilities located in the Towns and JLMAs and seek to maintain existing community-based schools as an important social and economic component of the communities.

B. Cooperate with the Town Councils of those communities providing local law enforcement to ensure a coordinated enforcement strategy within the Town JLMAs.

C. Support development of sidewalks and recreational, multi-use, and equine trails connecting the Towns to each other, to regional trail networks such as the W&OD and C&O Canal, and to area destinations.

Hamilton

First settled in the 1730’s and incorporated in 1875, the Town of Hamilton is located along business Route 7 between Leesburg and Purcellville. Hamilton served as a commercial and tourism hub after the railroad was extended west of Leesburg, though by the mid-1900’s had become primarily a residential community. Hamilton’s population of 640 residents represents an increase of approximately 25 percent since 2010\(^1\). The existing JLMA around Hamilton and the adjacent RPA along the north side of its boundaries have also developed with residential uses. While Hamilton has extended utilities outside of its boundaries and has water facilities in the JLMA, it

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does not foresee expansion of the JLMA. An existing school and school support facilities on the western edge of the JLMA serve to separate the community from Purcellville.

The Town of Hamilton Comprehensive Plan for the Town of Hamilton and JLMA serve as Loudoun County’s planning document for the Hamilton JLMA. The Comprehensive Plan for the Town and JLMA was jointly adopted by Loudoun County and the Town of Hamilton and planned for a period through 2020. The Policies, Strategies, and Actions specific to Hamilton address the continued coordination between the Town and County regarding future updates to Hamilton’s Comprehensive Plan.

The Town of Hamilton supports the Town’s ability to annex land within its JLMA. The Town believes such annexations provide “win-win” scenarios that enable the Town to provide better and additional services to property owners, while the County still receives applicable tax revenue from these areas.

The Town of Hamilton also supports collaboration between Loudoun County and the Town regarding development issues near the Town, especially to the west and east along Business Route 7/Colonial Highway.

Hamilton’s wells are vital to the continued provision of potable water to County and Town residents. As such, Hamilton supports Policies, Strategies, and Actions regarding the location and depth of private wells to protect municipal wells that provide water to thousands of people throughout Loudoun County.

The Town of Hamilton supports an emphasis on affordable housing and supports increased efforts to provide housing that is affordable to the workforce, seniors, teachers, firefighters, police, and others who allow Loudoun County to function as a community.

**Strategy**

1.4 Development within the Hamilton JLMA will comply with the comprehensive plan for the Town of Hamilton and the adjacent area in the Joint Land Management Area.

**Actions**

A. Maintain the Town of Hamilton authority over subdivision applications within 1 mile of its corporate limits.

B. Work with the Town of Hamilton to update the Comprehensive Plan for the Town and JLMA after the adoption of the 2040 Plan.

C. Support the Town of Hamilton efforts to develop an identifiable town center to serve as a community focal point for the Town of Hamilton and the JLMA.

D. Seek to improve street connectivity as the redevelopment and infill development occur in the JLMA and connect to the existing streets in the Town of Hamilton, where feasible, with roads that are compatible with traditional town designs.

E. Work with the Town of Hamilton to effectively manage transportation systems around the Town and to explore methods of traffic calming on Business Route 7 through town including the possible use of a traffic circle at Route 7 and St. Paul Street.
F. Maintain a distinct identity for the greater Hamilton community separate from the adjacent rural areas by establishing a greenbelt around the Town of Hamilton and the JLMA using conservation easements, passive and active parks and other means.

G. Work with the Town of Hamilton to achieve a balanced land use pattern that will retain Hamilton’s historic small-town character in a rural setting and maintain its unique sense of place.

H. Support continued operation of Hamilton Elementary school at its present site.

**Hillsboro**

Established in 1752 in the narrow gap of the Short Hill Mountains and known simply as “The Gap” until incorporated as Hillsborough in 1802, today’s Town of Hillsboro is among the best preserved 18th/19th-century rural villages in the Commonwealth. Although a 2016 boundary line adjustment nearly doubled the Town’s area, with a population of approximately 100 residents, Hillsboro remains the fourth smallest town in Virginia.

First placed on the National Register of Historic Places in 1977, the Hillsboro Historic District was expanded in 2010 to encompass 152 acres with 52 contributing structures dating primarily from the 18th and mid-19th centuries. The compact linear village is bounded on its south by Catoctin Creek and South Short Hill, and the North Short Hill on the north, and is bisected by Historic Charles Town Pike (Va. Route 9), which has become a major commuter route connecting Northern Virginia to West Virginia and Maryland and carrying more than 17,000 vehicle trips daily.

Hillsboro successfully supported a Traffic-Calming and Congestion Mitigation project with the intent to reduce delays during peak hours, control speeds via dual roundabouts and traffic-calming features and create a safe pedestrian/multi-modal environment with the addition of sidewalks, raised crosswalks, and a series of multi-modal trails. Utilizing context-sensitive materials, streetscaping, and burial of overhead utilities, this project preserves Hillsboro’s historic character and enhances its sense of place. With safe parking and pedestrian access allowing appropriate small-scale enterprises, Hillsboro looks to regain its historical role as the hub of a robust agricultural region, which has also become a major tourist destination with an expanding array of vineyards, breweries, and recreational activities – including Virginia’s newest state park.

In addition to Hillsboro’s Traffic-Calming project, the complete overhaul of the Town’s drinking water system and installation of a low pressure sanitary sewer force main, in anticipation of a community wastewater treatment facility, will serve the community for years to come.

With its transformative infrastructure projects, Hillsboro’s Comprehensive Plan and Zoning Ordinance will be updated to better reflect the potential for appropriate economic development within the existing built environment that is consistent and complementary to historic preservation and provides a broader tax base to ensure long-term viability. The Town will continue the

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2 2012-2016 American Community Survey 5-Year Estimates.
repurposing of its landmarks, Old Stone School and Gap Stage, into a regional venue for the arts in addition to serving as Hillsboro’s Town Hall and community/visitor center.

As the traditional “home town” for a nearly 50-square mile rural region in Northwest Loudoun, the Town of Hillsboro has taken a leadership role in unifying and “branding” the area. The Town supported and facilitated the conversion of the Hillsboro Elementary School into Loudoun’s second public charter school in 2016, led a successful effort in 2017 to reestablish an official Hillsboro postal identity for this area, and fostered the creation of the Greater Hillsboro Business Alliance.

With more than a dozen vineyards, numerous specialty farm operations and Loudoun’s greatest concentration of bed and breakfasts within five minutes of the Town’s center, Hillsboro is the gateway to one of Virginia’s most dynamic rural economies. As such, the Town has an existential stake in the preservation of the farmlands and open spaces, mountainside forests and ridge lines that surround it. Hillsboro’s historic integrity as a rural village situated on the 18th-century “Great Road” – Charles Town Pike – is largely defined by the still existent swaths of farmlands on its east and west approaches. As Hillsboro’s National Register of Historic Places nomination describes: “The majority of the buildings in Hillsboro are nestled along Charles Town Pike. The nominal setback of these buildings contributes to Hillsboro’s sense of time and place, as the uniformity and integrity of the building stock has been maintained…. The buildings share a commonality in their setback, maintaining Hillsboro’s integrity of location and feeling. The rural character of Hillsboro is further increased by the size of the outlying properties.”

Hillsboro’s uniquely unspoiled rural and historic character – despite its location within one of the nation’s most economically dynamic, fastest-growing and wealthiest counties – makes the Town and its environs assets that will only become more valuable with the urbanization of eastern Loudoun. Proactive preservation of farmland in the RPA through private permanent conservation easements and full utilization of the County’s Purchase of Development Rights (PDR) program is essential.

The renaissance that Hillsboro is currently experiencing will serve as a catalyst to ensuring the long-term viability of a strong recreational/agritourism economy in Northwest Loudoun. In partnership with Loudoun County, the Town is committed to forging policies that protect and preserve the vital rural assets that contribute to economic vitality and quality of life for all Loudoun residents.

**Strategy**

1.5 Enhance the role of Hillsboro as a gateway into the County from the west.

**Actions**

A. Maintain the distinct identity for the Hillsboro community, separate from the adjacent rural areas, by encouraging establishment of a greenbelt around the Town using conservation easements, development design techniques and other means to help maintain the distinct edge to the Town of Hillsboro.
B. Support the development of entry features into the town, to enhance the identity of the Town of Hillsboro as a gateway community.

C. Encourage rural economy business development in the Hillsboro Area to provide local goods, services and jobs to residents and visitors.

D. Encourage the preservation of those resources which contribute to the identity of Hillsboro.

E. Oppose any increase in density and development outside of the Town of Hillsboro that is not consistent with the traditional rural character of western Loudoun County.

F. Work with the Town of Hillsboro and with VDOT to identify short and long-term solutions for improving the safety of Route 9 in western Loudoun and through Hillsboro that do not compromise the rural character of Hillsboro.

G. Promote safety measures for pedestrian movement along and across Route 9.

H. Work with the Town of Hillsboro to establish a safe and adequate water supply.

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Leesburg

Leesburg, the largest and most populous of the incorporated towns with a population of approximately 49,000 residents, has the added distinction of serving as the seat of the County government. By its location, it functions and appears to be a commercial hub at the junction between suburban areas to the east and rural areas to the west. The pressures for growth in Leesburg are the result of the robust regional economy that will continue to draw more businesses, government jobs, and residents. Town character is of paramount importance to Leesburg. The Old and Historic District is the basis of Leesburg’s identity. It is a compact, mix of land uses; its blocks and buildings are human scaled; a resurgence in entertainment retail uses and downtown residential development have brought new development interest to the community. Other portions of the Town have a different, more suburban character where more uniform uses and large lots, curved streets, and cul-de-sacs dominate the landscape. Between 2001 and 2016, Leesburg added 5.5 million square feet of retail, commercial, office, and institutional development, and approximately 4,300 residential units.

The Town’s planning vision for the foreseeable future is to continue the diversity in economic and housing opportunities in a manner that reflects the best and essential qualities of the old and historic downtown. Leesburg will maintain a high quality of life by providing a full range of community facilities and services and diverse economic opportunities, protecting natural and heritage resources, and protecting against negative environmental impacts. The Town of Leesburg is approximately 90 percent built out and, like other towns, has limited land area for new government facility development. County strategies recognize the fiscal impact of public facilities on a Town with limited land resources and has added more flexibility to locating such facilities in and around towns.

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3 2012-2016 American Community Survey 5-Year Estimates.
Leesburg’s JLMA is situated almost entirely to the south and east of the corporate limits and contains approximately 7,000 acres. The northeast portion of Leesburg's JLMA has developed in the manner recommended by Town and County plans with a distinct suburban residential pattern, while other areas of the JLMA are planned for non-residential uses.

The Town views the main purpose of JLMA land uses between Route 7 and the Greenway to serve as an expansion of economic development goals by focusing on employment uses. JLMA planned land uses reflect Leesburg’s Comprehensive Plan and no major changes to land use are proposed.

On the south, west, and north sides of Leesburg there is no JLMA; instead, policies support a greenbelt and a “hard edge” adjacent to the Town. *Loudoun 2040* implements the greenbelt by maintaining a rural zoning up to the Town boundary and proposing specific development guidelines along the major roads leading to the Town to preserve distinctly rural development pattern.

**Strategy**

1.6 Ensure development within the Joint Land Management Area complies with the Leesburg Area Management Plan, the Annexation Area Development Policies as amended, and the Leesburg Town Plan.

**Actions**

A. Continue to make Leesburg the County seat, and the principal location of County Government offices, and collaborate with the Town of Leesburg on locating new facilities in the Town or JLMA.

B. Maintain the planned land use of the JLMA consistent with Town of Leesburg land use policies; maintaining an emphasis on employment uses south of Route 7 and residential to the north of Route 7.

C. Prohibit power generation plants in the Leesburg JLMA.

D. Define the Town of Leesburg and JLMA as a distinct community separate from the Suburban and Rural Policy Areas by retaining rural policies and zoning to the north and south of the Town boundary and west of Evergreen Mills Road, and protecting the Goose Creek and Sycolin Creek floodplains to the east and south of the JLMA.

E. Preserve the rural character of the viewsheds along Route 15 as it approaches the Town of Leesburg from the north and south by encouraging additional conservation easements and instituting design guidelines.

F. Cooperate with the Town of Leesburg to complete the Heritage Trail and conserve open space along the Potomac River.

G. Coordinate with the Town of Leesburg and VDOT on the feasibility of planning and building Edwards Ferry Road as a two-lane facility with a bike path. The County will work with the Town and VDOT to designate the road as a scenic by-way.
H. Protect the viability of the Leesburg Airport by ensuring development in the JLMA does not impede Airport operations by continuing to prohibit residential development inside the 65 Ldn noise contour.

Lovettsville

Lovettsville, originally known as the German Settlement, is a small town with historical roots that go back to 1732. The Town served as a thriving commercial center for the surrounding farming areas for over one-hundred years. This function was eventually eclipsed during the post-World War II period by other, larger communities in Loudoun County, Northern Virginia, and nearby Maryland, which is about three miles from the Town.

Since 2005, Lovettsville has experienced a rapid increase in population and housing associated with growth of single-family detached residences. The population influx consists of people who are attracted to the traditional main street character of Lovettsville set in the larger context of the (mostly) rural northern Loudoun Valley.

Lovettsville continues to focus on development inside its existing boundaries and prefers a “hard edge” between its boundaries and the surrounding rural landscape. Lovettsville has made significant investments in streetscape improvements and trails. Commercial development has also occurred at the Town Center and along East Broad Way (Route 673). Lovettsville supports continued County cooperation on transportation and public facilities, with a strong interest in developing multi-use County trails that connect the town to the W&OD and C&O Canal trails.

Significant land use changes have occurred within the Town. Most notably the evolution of the Lovettsville Town Center from its initial concepts to a nearly-completed, neo-traditional community centered on a pedestrian-friendly and centrally-located business district having wide sidewalks, decorative streetlamps, and ample public gathering spaces. This development, residential subdivisions on infill properties, redevelopment of properties in the “Old Town” for modern commercial uses, and implementation of streetscape projects throughout, has contributed to Lovettsville’s growth from a population of 853 in the year 2000 to approximately 2,300 residents in 2018. Several large properties within the Town limits are available for future development, although much less land is available for new residential development compared to 18 years ago.

The County has not established a JLMA around Lovettsville, consistent with the Town’s desire to focus development inside the existing boundaries. The Town has identified several limited areas outside of its corporate limits that may be candidates for annexation for the purposes of supporting existing and developing future civic, commercial, or employment uses, and achieving the Town’s economic development goals. Future annexation of these areas will be considered on a case-by-case basis and is dependent on the capacity of Town water and wastewater services to accommodate the future development of these properties, something that the Town evaluates through its Water and Sewer Master Plan.

The County is actively improving and constructing public facilities in and around the Town including the Lovettsville Community Center, Lovettsville Community Park, Lovettsville

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Volunteer Fire and Rescue Station, and Lovettsville Elementary School. Coordination is critical to providing utilities and access to these facilities and to planned future development, which may require access through the County to afford multiple points of connection to and from public streets. The Town also seeks continued County funding for streetscape enhancements and for pedestrian safety improvements and traffic calming on Town streets near County facilities.

**Strategy**

1.7 Support the Town of Lovettsville in efforts to consolidate development within its boundaries.

**Actions**

A. Retain and recruit businesses that serve the needs of Lovettsville and northern Loudoun County residents and align with Town plans.

B. Collaborate with the Town of Lovettsville in the planning and regulation of development along Route 287 north and south of Lovettsville to protect the scenic quality and the rural character of the road as it approaches the Town.

C. Link the County’s greenways and trails system with the Town of Lovettsville’s internal trail and bikeways network to link Lovettsville with the C&O Canal in Brunswick, Maryland, and the W&OD bike path in Purcellville.

D. Plan the location and design of County facilities within Lovettsville, in consultation with the Town of Lovettsville.

E. The County will collaborate with the Town of Lovettsville and VDOT on transportation planning in and around Lovettsville to improve traffic safety in the Town of Lovettsville and to improve regional road networks and access to employment centers.

F. Cooperate with the Town of Lovettsville, pursuant to County Annexation Guidelines, on boundary-line adjustments to resolve jurisdictional questions, to serve public and civic uses, and to support the Town of Lovettsville’s economic goals and priorities.

**Middleburg**

The Town of Middleburg, established in 1787, is the southernmost town in Loudoun County and retains a traditional village character that is treasured by its citizens and visitors. Middleburg is both the hub of a larger rural area and a major tourist destination. The character of Middleburg is irrevocably tied to the preservation of the farms, vistas, vineyards, open spaces, and forests that surround the Town, with equestrian facilities, estates, wineries, and associated businesses central to Middleburg’s way of life and tourism industry.

The commercial core of Middleburg contains both retail and service businesses that serve rural area residents and the tourism industry. Specialty and high-end accommodations, including the Salamander Resort opened in 2013, as well as retail, food, and beverage are cornerstones of the Town’s economy. The rural nature and character of its surroundings are critical to its continued success. Visitor dollars spent at restaurants, shops, and accommodations within Middleburg generate 75 percent of annual Town revenues.
The Town is home to 656 people and expects its population to increase modestly in the future. A significant portion of the Town has been placed on the National Register for Historic Places and the Town administers a local Historic District to carefully control the look and feel of new development. While undeveloped land is scarce within the Town limits, the Salamander Resort has plans for 109 new residential units, and a limited number of other infill and redevelopment opportunities exist.

To preserve the character of the Town and the rural area that surrounds it, Middleburg promotes a “hard edge” between in-town development and open and agricultural lands outside of town. The hard edge will be established by the uses and development pattern of the Southern Rural Place Type and by identifying the lands adjacent to the Town as priority open space areas for conservation easements. For this reason, a JLMA is not proposed and the public utilities will not be extended beyond the Town limits except as supported by the Town and consistent with the Sewer and Water policies of this section. A high priority for the community is to safeguard the protection of its historic character and to ensure the viability of its local and tourism economies. Town citizens and surrounding property owners are extremely concerned about the rate of growth in the County and want to protect the open space around the Town from rural residential and commercial encroachment through land use regulation and conservation programs.

Middleburg is bisected by U.S. Route 50, one of two major east-west routes through the County. The community remains concerned about the volume and speed of traffic on this route, which serves as the Town’s main commercial street within the corporate limits. Even with the success of a traffic calming project completed in late 2016, traffic congestion and safety issues remain high priorities and require the County and Town to work together to identify and implement additional traffic demand reduction and traffic calming measures aimed at mitigating local and pass-through traffic in the Town.

Cooperation and regular collaboration should continue between the County and Middleburg to address issues important to both jurisdictions, including issues of economy, rural preservation, and transportation.

Strategy
1.8 Maintain a “hard edge” at the Town of Middleburg’s boundary in lieu of a JLMA to clearly distinguish where the Town of Middleburg stops and the rural, undeveloped countryside begins.

Actions
A. Collaborate with the Town of Middleburg on zoning and development activities outside the Town but in its vicinity, with the goal of preserving the rural character of its gateways and surrounding environs.

B. Work with the Middleburg community and interested preservation groups to identify open-space and agricultural preservation approaches such as: conservation easements, land acquisition, and development standards to promote and implement open-space preservation around the Town of Middleburg to help establish a greenbelt and protect the rural appearance of roadways leading into the Town of Middleburg.
C. Protect rural roads and scenic views through measures such as revised state road improvement standards; scenic easements; historic corridor overlay zoning for John Mosby Highway (Route 50), Foxcroft Road (Route 626), and the Plains Road (Route 626); and development setbacks.

D. Assist, when requested, in the promotion of tourism, as a means of increasing public support for preservation of the scenic and historic Middleburg area.

E. Work with the Town of Middleburg to implement strategies that will preserve and enhance agriculture as the predominant use in the RPA around Middleburg.

F. Establish a “hard edge” by implementing the uses and development pattern of the Southern Rural Place Type and by identifying the lands adjacent to the Town of Middleburg as priority open space areas for conservation easements.

Purcellville

Purcellville was first settled in the mid-1700’s, given its official name in 1852, and incorporated in 1908. Purcellville has seen significant growth, with its population of 7,727 in 2010 growing to over 9,700 in 2017. Residents of Purcellville have expressed their support for maintaining the small town character of the Town as expressed by the traditional architecture of the older neighborhoods, the downtown, the repurposed farm buildings that serve as evidence of the Town’s rural past, the rural landscape, farmland, and green space that gives the community a sense of history. To maintain some of these factors requires cooperation between the Town and County to protect the rural nature of the land around the Town and to encourage continued economic development in the Town, which benefits western Loudoun residents.

Demand for housing in and around Purcellville is expected to increase. As Purcellville considers potential future growth demands, the Town’s preference is to focus on infill development within the Town limits and to protect surrounding rural landscapes. Purcellville does not anticipate extending utilities beyond the current Town boundaries. Any growth in or around Purcellville will increase the need for transportation improvements to be coordinated between the Town, County, and State, such as the Route 690 interchange and the Route 7 Bypass/Route 287 intersection.

Purcellville supports the protection of existing and the establishment of new open spaces in the JLMA along with trail connections, particularly between the W&OD Trail and Franklin Park. On the east and west sides of Purcellville the Town directly abuts the Rural Policy Area and there is no JLMA; however, the RPA provides for one dwelling unit per 10 acres. The Town supports a greenbelt extending to incorporate properties that fall within approximately one-quarter mile of the Town limits, with a “hard edge” within the RPA. The Town supports preservation and protection programs within these areas.

The Town also supports implementation of gateways protecting rural view sheds at the east, west, north, and south entrances to the Town. To this end, the Town and County dissolved the Purcellville Urban Growth Area Management Plan (PUGAMP) in 2013 and adopted a rural

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5 2017 Population estimates, United States Census Bureau.
The County encourages a low density, rural mix of residential and business uses around the Town that are distinguishable from the intensity and character of development in Purcellville.

**Strategy**

1.9 Support Town of Purcellville’s efforts to accommodate growth within the existing Town limits and to maintain its role as a hub of economic development in western Loudoun.

**Actions**

A. Establish a “hard edge” by implementing the uses and development pattern of the Southern Rural Place Type and by identifying the lands adjacent to the Town of Purcellville as priority open space areas for conservation easements.

B. The County will work with the Town of Purcellville to plan for a trail extension that connects the W&OD Trail with Franklin Park.

C. Include setbacks, height limitations, and landscaping standards for developments along Route 7, Route 287, and the Route 7 Bypass to establish and maintain a greenbelt or “hard edge” around the Town of Purcellville characterized by open space and tree-lined roadways.

D. The County will encourage the use of frontage roads, coordinated development plans, and other means of minimizing the number of driveways along Route 7 and Route 287 leading into Purcellville.

E. Encourage new commercial uses to locate in the Town of Purcellville before locating in the JLMA.

F. Encourage owners of historic projects in the JLMA to place properties into the Purcellville or County Historic District.

G. Protect historic structures in the context of their natural settings.

**Round Hill**

Round Hill first became a recognized community in the mid-1800’s, after the construction of the Leesburg and Snicker’s Gap Turnpike, now Route 7. Incorporated in 1900, Round Hill served as a destination for those looking for a holiday from Washington, D.C., benefiting from the Washington and Old Dominion Railroad and proximity to the Shenandoah River.

The population within the Town’s limits is approximately 668 residents. Growth potential within Round Hill’s boundaries is very limited with a projected buildout of only 20 additional residences. In contrast, the JLMA around Round Hill has experienced the addition of 1,200 new homes and approximately 3,000 residents over a 16-year period. Approximately 400 additional homes can be built in the JLMA. As development in the JLMA increases, Round Hill’s ability to balance revenue

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and costs will be a significant consideration in annexing these residences into Round Hill’s boundaries. The Town continues to seek commercial gateways at the east and west entrances to Town and is constrained downtown by the lack of space. Maintenance of the local roads is also a growth consideration. Maintenance is currently the responsibility of the Virginia Department of Transportation (VDOT) but would become a Town responsibility if the Town reaches a certain population through annexation.

There is a desire to expand public-use facilities and provide the community with additional amenities, such as a daycare, senior center, and community center. Round Hill also has an opportunity to become an Appalachian Trail community by taking advantage of its proximity to Bear’s Den and Blackburn trail stops.

**Strategy**

1.10 Support planning efforts to retain the small-town character of Round Hill and assist the Town of Round Hill in efforts to preserve the historic character and resources in and around the town.

**Actions**

A. Development within the Round Hill JLMA will comply with the Round Hill Area Management Plan and Round Hill Comprehensive Plan and adopted policies applicable to the Joint Land Management Area.

B. To that end new development should:
   i. Be of a density, lot pattern, street pattern, and scale which replicates existing development within the Town of Round Hill.
   ii. Become an extension of the existing town, forming logical and natural additions to the historic fabric and enhancing the existing town as the central focal point of the entire community.
   iii. Demonstrate that adequate water and sewer service will be available to serve the proposed development.
   iv. Support the clustering of residences as a method to obtain additional open space.
   v. Oppose development that proposes an average density greater than it would have been without clustering unless a rezoning is also involved.
   vi. Advocate for walkable neighborhoods in the JLMA using connected streets in a grid pattern and discourage the use of cul-de-sacs.

C. Encourage housing for the elderly that will allow residents to remain in the Town of Round Hill.

D. Encourage rural economy business development in the greater Round Hill Area to provide local goods, services and jobs to Town of Round Hill residents and visitors.

E. Oppose any increase in density and development outside of the JLMA that is not consistent with the traditional rural character of Western Loudoun County.
F. Avoid high density development between the current boundaries of Purcellville and Round Hill and expand open space around Franklin Park to help maintain a greenbelt between communities.

G. Enhance the identity of the Town of Round Hill by developing gateway features into the town. Such features will be developed with the Town and may include measures to protect existing trees, hedgerows, viewsheds, and vistas; design guidelines for lot configuration to retain the rural lot pattern; new landscaping and entrance features and other techniques.

H. Support development of sidewalks, trails, and linear parks that connect civic and public facilities with residential and commercial neighborhoods in the Town of Round Hill and JLMA and extend to Franklin Park and the W&OD Trail.

I. Coordinate transportation planning with the Town of Round Hill to ensure that traffic generated from development within the County does not adversely affect Round Hill. The County will work with the Town of Round Hill on traffic calming measures.

**Towns and Joint Land Management Areas – Municipal Water and Sewer**

**Town Policy 2:** Town municipal systems will be given priority to provide utilities to surrounding Joint Land Management Areas. An alternative provider shall only be used when the Town, the County, and the Health Department agree.

**Strategy**

2.1. Serve all development in Joint Land Management Areas by municipal sewer and water when agreed to by the Towns.

**Actions**

A. Acquire written assurance from the Town of water and sewer service prior to approval of development in the JLMA beyond current zoning.

B. Protect Town wells from potential impacts of surrounding development on Town wells during the development review process.

C. Any future expansion of municipal (Town) sewer and water into the County JLMA will support development that is consistent with the goals and policies of County’s and Town adopted plans.

D. Retain the option to use shared or alternative sewer and water facilities to serve Town and County owned and operated public facilities upon agreement between the Town and the County.

E. Permit the extension of municipal sewer and water into the Rural Policy Area only to serve public facilities or to address a potential public health risk. (See also, Chapter 6, Fiscal Management and Public Infrastructure, Rural Sewer and Water)
Development Guidelines
The County supports a conservation design approach to development being proposed with onsite utilities. These guidelines will be reviewed concurrently and coordinated with Town guidelines or policies related to the JLMA area.

1. Support the preservation and protection of historic, cultural, and environmental resources in and around each Town.
2. Support development of distinct “gateways” into each community and protect rural viewsheds leading into the towns. **Gateway concepts will be developed with the Town and may include measures to protect existing trees, hedgerows, viewsheds, and vistas, design guidelines for lot configuration to continue the rural lot pattern, new landscaping, and entrance features, and other techniques.**
3. Protect the natural or rural scenic views along roads leading into the Towns through measures such as revised State Road Improvement Standards, scenic or conservation easements, the creation of historic corridor overlay zoning, and rural or conservation design concepts.
4. Encourage a variety of housing types and commercial development within the JLMA that are consistent with applicable Town and County policies, are compatible with the existing communities, and extend in a contiguous, rational and convenient manner from the Towns.
5. Encourage residential communities in the JLMA that propose to connect to municipal utilities to exhibit:
   a. A variety of lot sizes and, where permitted, a variety of unit types,
   b. A street network without cul-de-sacs and P-loop streets with numerous connections to existing streets,
   c. An interconnected block pattern with compact lots, shallow front and side-yard setbacks, and small block sizes,
   d. Sidewalks along all streets, providing access to the town or neighborhood center, public buildings, parks, and other destinations,
   e. A compatible mix of complementary residential and non-residential uses such as home-occupation businesses, churches, and schools,
   f. Parks, squares, or greens that provide a combination of natural and passive open spaces throughout the development, and
   g. A central public focal point consisting of any combination of a park (village green); a public facility such as a church or community center; natural features; or neighborhood commercial uses.

County/Town Annexation Agreement/Corporate Boundary Line Adjustment Guidelines
The County and the incorporated Towns will explore alternatives for entering into annexation agreements to facilitate the annexations of properties that are receiving Town sewer and water services. Agreements might include language based on the following recommendations:
1. It should be the intent of the County and of the Town that any property located within the Joint Land Management Area (as defined in the policies of this Plan) which is presently or would will be served by Town sewer and/or water in accordance with the utility policies included in this Plan, should, in the future, be annexed into the Town by annexation or corporate boundary line adjustments pursuant to the Code of Virginia.

2. The Town and the County should only honor requests for the extension of sewer and/or water services outside the Town’s corporate limits, within the designated JLMA when the beneficiaries of such service provide written acknowledgement of the right of the Town Council to annex the subject properties. If the Town should desire, this written acknowledgement may include the beneficiaries’ written agreement to join with the Town in a joint annexation petition.

3. Parcels located within the designated JLMA and contiguous to the corporate boundaries of the Town, which have agreed to annexation in exchange for Town sewer and/or water service, should be immediately annexed by the Town upon County approval of the rezoning and/or development proposal that requires water and/or sewer service.

4. Parcels located within the designated JLMA, which have agreed to annexation in exchange for Town sewer and/or water but which are not contiguous to the corporate boundaries of the Town, should enter into an agreement with the Town as follows: that annexation of these parcels should take place at such time as the subject parcels become contiguous with the corporate limits of the Town or five years from the date of County approval of the rezoning and/or land development proposal, which requires Town water and/or sewer service, whichever comes first. In the latter case, where parcels receiving Town sewer and water remain noncontiguous to the corporate limits of the Town, any parcels lying between the corporate limits of the Town and the noncontiguous parcel which is receiving Town sewer and water should be annexed at the end of the five-year period. However, these intervening parcels should not be required to hook into the Town sewer and/or water service unless desired by the property owner or necessary to maintain public health standards.

5. When the County approves the rezoning and/or development proposal of a property in the JLMA, which would require Town sewer and/or water service, such approval should constitute the County’s approval of such annexation. At the time of such approval, the County should also provide the Town with written consent of annexation.

6. All Towns The County and Towns may proceed with annexations or with corporate boundary line adjustments, pursuant to State Code requirements, irrespective of whether the Town has a JLMA. In cases where there is a need to make a minor adjustment to a corporate boundary, the Town and the County may process a corporate boundary line adjustment pursuant to the State Code provisions. For incorporation of property which is more expansive in size or which will have broader jurisdictional and land use implications for the Town as well as the County, an annexation proceeding is appropriate. The State Code provisions apply to annexations and the County will work with each Town on an annexation pursuant to state requirements.
Reference Maps

Policy Areas (Map #2018-155)
Priority Commercial Redevelopment Areas (Map #2018-156)
Urban Policy Areas Place Types (Map #2018-150)
Suburban Policy Area Place Types (Map #2018-151)
Transition Policy Area Place Types (Map #2018-148)
Rural Policy Area Place Types (Map #2018-152)
Conservation Easements in Rural Policy Area: 2018 (Map #2018-146)
JLMA Place Types (Map #2018-149)
Route 28 Tax District Area (Map #2018-312)
Transition Policy Area

Vision

The Transition Policy Area (TPA) is visually distinct from adjoining policy areas, providing expansive open space with recreational opportunities while accommodating a development pattern that promotes environmental protection, housing diversity, quality design, and economic growth.

Introduction

The TPA provides a distinct development pattern focused on retaining substantial open space to frame a unique built environment accommodating a variety of communities. The open spaces serve as dominant landscape, providing significant opportunities for public recreation and facilities within the context of an assortment of community designs. TPA communities range from rural estate developments to compact residential and mixed use centers that can provide a variety of housing options and protect natural and heritage resources. The 2040 Plan recognizes that in order to sustain a healthy economy and to provide an opportunity for reasonably affordable housing, the County must seek to accommodate a significant share of the anticipated regional housing demand. A part of that demand will be located in existing communities in the SPA and around the UPA. However, available land for single-family development in the SPA is both limited and under pressure from competing land uses, and while the Loudoun 2040 Plan proposes higher density development in existing neighborhoods and conversion of previously planned employment areas to mixed use or residential development, the capacity within the SPA will not, by itself, address the housing demand. The UPA, with high density development, will help meet the multi-family component of the housing demand. Neither will the Towns or the Rural Policy Area (RPA) meet the needed housing. Towns are constrained by infrastructure limits and community desires to maintain the small-town community character of each. The RPA has land, but is limited by the capacity of on-site wells and septic systems, country roads, and distance to services, and community desire to preserve the rural character of western Loudoun. The nature of rural living is not affordable or as attractive in today’s housing market. To address affordability, and maintain a strong economy, and to continue to protect the RPA, the Loudoun 2040 Plan proposes additional housing in the TPA. The Area offers several key benefits: central utilities, an improving transportation network, proximity to the SPA services and amenities, and the few remaining large tracts of land, that will allow for a range of housing products. It also offers a land use pattern that differs from the SPA that, having developed under previous Plan policies, will when combined with maintaining a hard utility boundary along the western edge of the TPA, may help contain higher density growth and avoid continued westward sprawl.

The TPA extends over an area of approximately 24,000 acres, constituting 7.1 percent of Loudoun County’s total area of 333,558 acres. It is an important resource area encompassing the Beaverdam and Goose Creek reservoirs, and the Bull Run, which feeds directly the Occoquon reservoir. The

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1 Includes 937 acres of land designated Rural Policy Area in previous comprehensive plans.
TPA also includes the headwaters of the Broad Run. Seams of diabase rock and poorly drained and clay soils have constrained development.

Between 1991 and 2001, the geographic area of what is now the TPA went through four iterations:

- In 1991, the area was planned for suburban development that was to be phased with ultimate development expected to occur by 1995.
- In 1993, the Dulles South Area Management Plan added Upper Broad Run to the Dulles South suburban area at densities between 3 and 6 units per acre and added the Upper and Lower Foley and Lower Bull Run areas at densities between 1 and 3 units per acre.
- In 1997, the Dulles South Plan reestablished a suburban development phasing boundary west of Northstar Boulevard. The phasing area was then subject to the policies of the Rural Policy Area until the County chose to expand the Suburban Policy Area.
- In 2001, the TPA became a distinct policy area in the Revised General Plan to serve as a buffer between the Suburban Policy Area (SPA) and Rural Policy Area (RPA). Six subareas of the TPA were established, each with density and open space requirements.
- In 2004, the Board of Supervisors amended the Revised General Plan and extended central utilities throughout the TPA, establishing the western edge of the TPA as the urban growth boundary.

In 2017, there were approximately 5,600 residential units, along with parks, schools, and commercial development on 16,600 acres in the TPA and approximately 6,200 acres remaining available for potential development. Although the TPA is predominantly residential, there are areas designated for industrial development in the northern portion of the TPA in close proximity to planned improvements to Sycolin Road and existing industrial land south of the Leesburg Joint Land Management Area (JLMA). Limited areas for retail commercial and mixed-use development are located along Route 50 and other retail space has been approved on Braddock Road. Agricultural uses are desired and encouraged as a productive use of the open spaces found throughout the TPA.

Important drinking water resources are located within the TPA, and watershed protection extends over significant portions of the Goose Creek and the Beaverdam Reservoir to help protect these resources. Conservation easements, proffered open space, and development setbacks provide the 300-foot buffer adjoining Goose Creek. Loudoun Water owns the land surrounding Beaverdam Reservoir, while the County and NOVA Parks own parkland adjacent to the reservoir.

Development Approach

While continuing to focus growth in the Urban Policy Area (UPA) and SPA to the east, Loudoun 2040 General Plan acknowledges the limited amount of land available for development in the SPA and proposes new approaches in the TPA to accommodate some of the County’s needs. These needs include accommodating high demands for housing to support the County’s economic development goals, ensuring a high quality of community design, preserving open space, and maintaining a quality of life that hinges on a healthy and vibrant natural environment. There are
several factors that enable the County to meet these needs accommodate new growth in the TPA while retaining protection for key environmental resources and, while also protecting the RPA from encroachment of suburban development.

A number of existing neighborhoods along the western side of the TPA and rural villages just west of the TPA have already established a low density development pattern with significant amounts of permanently protected open space, which provides a lower density development pattern along the western edge of the TPA. This existing buffer pattern helps deter suburban expansion westward and frames the remaining areas of the eastern TPA which allow buffering for a mix of development intensities to the east. These eastern TPA developments will still be required to preserve large open space areas that are a hallmark of the TPA’s character, thus providing a distinctly different development pattern from the SPA which requires preservation of much less open space. The open space requirement will require a more compact development pattern; smaller single family lots and a combination of detached and attached products.

Transportation projects in the eastern TPA, including improvements to Ryan Road and Sycolin Road, and the completion of Shreveport and Creighton Roads, will provide better connections to the east without necessarily adding to the congestion of Route 50. Loudoun 2040 proposes to concentrate future development proximate to existing and planned transportation improvements where capacity exists. Large tracts of undeveloped and underdeveloped land south of Braddock Road and east of Northstar Boulevard are in close proximity to the Suburban Policy Area immediately to the north, yet are separated by several miles from the Rural Policy Area further to the west. This southeast portion of the TPA is also directly adjacent to Prince William County across the Bull Run to the south and Fairfax County to the east. The principal constraining factor in this area is the current lack of traffic capacity on existing roads and, while major roads are planned, new development will need to be timed to occur in conjunction with the availability of additional road capacity.

Since 2005 central utilities have been allowed to extend into throughout the TPA. This enables more compact development than previously planned when the TPA was only served by wells and septic systems. Areas of higher intensity development interspersed among lower density projects and with substantial open spaces that offer screening, separation, and publicly accessible recreation can be compatible with existing development. The fundamental goal of this new development will be to accommodate smaller, more affordable, and more efficient residential units and neighborhoods. Evaluation of new development proposals will focus on community design concepts that create a distinct community character, utilize open space to protect and provide public access to existing natural and heritage resources, and create integrated civic and park spaces. Residential developments will be expected to support a continuum of housing options and affordability to match the County’s evolving demographics and market demands. Small, mixed-use commercial centers will offer local services and amenities so that the TPA will become a more self-sustaining community; thereby, reducing the need for residents to travel further east for these services.
Place Types
As described in the beginning of this chapter, the following Place Types have been designated for specific locations as displayed on the accompanying map. The Place Types will work in concert with the Design Guidelines and Policies, Strategies, and Actions of the TPA to fulfill the land use patterns and community characteristics intended for the area.
Policies, Strategies, and Actions

Unless otherwise specified, the following Policies, Strategies, and Actions apply only within the TPA.

**TPA Policy 1: Ensure that the Transition Policy Area retains the distinct visual character established by extensive natural open space by using compact development concepts with substantial open space requirements, and low profile construction to minimize visual intrusion into the natural environment.**

**Strategy**

1.1 Promote a conservation design approach to new communities that provides more affordable and innovative residential communities in compact development patterns, while preserving open space, natural and heritage resources, and other valued features that may exist on site.

**Actions**

A. Encourage a variety of housing within individual developments by permitting small and large lot single-family detached units, duplexes, semi-detached units, accessory units, townhouses, and other housing types that to expand housing options and thus affordability opportunities and support the lifestyle preferences of a diverse community.

B. Develop standards to accommodate mixed-use Transition Community Centers, Transition Compact Neighborhood, and Transition Small Lot Neighborhood Place Types to expand housing diversity and improve commercial viability.

C. Require new development to connect to Loudoun Water’s central water and wastewater systems and encourage existing development to connect.

D. Continue to define the TPA by six subareas to implement the existing Transition Large Lot Residential Neighborhood development pattern as identified on the Transition Policy Area Place Types Map.

E. Continue to define the western edge of the TPA as the hard edge of central sewer and water and the western edge of the urban growth boundary, pursuant to 15.2-2223.1.

**TPA Policy 2: Offer safe and accessible parks and recreation opportunities that provide diverse activities for all ages, interests, and abilities.**

**Strategy**

2.1 Provide a network of protected open space that maintains natural and heritage resources and reinforces the TPA’s unique character.

**Actions**

A. Develop a Master Plan for parks, open space, and trails in the TPA that: 1) builds on and links current planned trails and park areas, and 2) places greater emphasis on
quality, connected, usable, and publicly accessible open space.

B. Protect the drinking water resources of the Occoquan, Beaverdam, and Goose Creek Reservoirs with natural stream and reservoir buffers, improved stormwater management, and other means.

C. Retain 50 percent open space throughout the TPA, and seek to reserve publicly usable, accessible, and interconnected open space.

D. Establish programs and regulatory mechanisms to increase publicly accessible open space, consistent with County facilities plans, through easements, land dedications, and purchase.

E. Require Open Space Plans with individual development applications to illustrate proposed use, public accessibility, resource protection, and connection with other open space.

F. Take advantage of existing or planned parks, stormwater ponds, and stream valley corridors, particularly the Goose Creek and Bull Run corridors, to create a linear park network linking larger park facilities and destinations.

**TPA Policy 3: Target specific areas of the TPA for higher density residential and mixed use development that create affordable and diverse housing opportunities in compact communities recalling the historic pattern of villages and towns in Loudoun.**

**Strategy**

3.1 Establish guidelines to accommodate higher density residential and mixed use communities in specified areas to provide sustainable and affordable housing.

**Actions**

A. Support Transition Compact Neighborhoods in areas specified on the Transition Policy Area Place Types Map provided they comply with the Place Type standards and incorporate the following features:
   i. A combination of housing types, including detached, duplexes, zero-lot-line, semi-detached and/or attached.
   ii. Housing units that are smaller and more affordable than the County medians for each respective housing type.
   iii. Minor but discernible variations in lot shape and building setbacks along residential street frontages, in a manner reflective of traditional villages and towns, to visually distinguish individual residential structures.
   iv. Design concepts within units and neighborhoods that allow residents at different stages of their lives to remain in the community.
   v. A walkable community design with minimal use of cul-de-sac streets and easy access to parks, playgrounds and amenities.
vi. Public trails and parks internal to the neighborhood and connecting to adjacent communities and public facilities.

vii. Extensive buffers screening the intensity of the development from surrounding roads and communities through the use of dense vegetation, earthen berms, and/or natural topography.

B. Support Transition Community Centers in areas specified on the Transition Policy Area Place Types Map provided they are consistent with the Place Type standards and offer the following features:
   i. Small footprint retail uses and no “big box” commercial retailers with the exception of grocery or drug stores.
   ii. An attractive pedestrian shopping and entertainment environment with second-story residences and businesses and active streets featuring relationships between interior and outdoor spaces, sidewalk cafes, outdoor restaurant seating, and vendor shopping on the street, complementary ground floor uses (such as retail rather than offices) and a high level of transparency and window space.
   iii. Convenient and safe pedestrian connections to adjacent neighborhoods and public facilities.
   iv. Extensive landscaping, particularly at the perimeter to screen the project intensity from adjacent roads and communities.
   v. Outdoor activity and community space.
   vi. A residential component consisting of residences within the community center and an integrated Transition Compact Neighborhood as defined by this Loudoun 2040 General Plan.

TPA Policy 4: Non-residential uses will include uses that are compatible with desired development patterns and the rural landscape.

Strategy
4.1 Provide for development of commercial, employment, and public uses in areas specified on the Transition Policy Area Place Types Map that are compatible with the desired residential development patterns and the character of the TPA.

Actions
A. Require Industrial uses to:
   i. Be located only in locations consistent with the Place Types Map.
   ii. Be visually compatible concealed from adjacent roads and residential areas by siting buildings and uses to avoid ridgetops and high visibility areas and enclosing buildings and uses within a substantial, rural, undisturbed, vegetated environment perimeter.
   iii. Minimize the effects of noise, vibration, and odor.
   iv. Have access to adequate infrastructure and roads.
   v. Integrate Use conservation design techniques to identify and protect environmental features and similarly to follow, to the extent possible, the natural topography visually into the natural environment.
vi. Enhance water quality protection when near key water supply reservoirs and associated streams.

B. Continue to protect the extractive industry by maintaining a quarry notification overlay zoning district.

C. Establish regulations that ensure new development does not hinder the operation of quarries.

**Design Guidelines**

The Design Guidelines are to build upon our current development patterns in a manner that allows innovative design and new responses to the market. While the Design Guidelines are not regulatory requirements, the County prefers that all future developments comply with these guidelines. The Design Guidelines do not supersede or otherwise limit the application of adopted zoning regulations, ordinances, building codes, or any other design standards or regulations administered by Loudoun County.

When using the guidelines make sure Guidelines are intended to help to analyze the impact a potential development may have on the landscape, considering not only appearance, but practical considerations such as proximity to utilities, community amenities, jobs, and housing to maximize the use of existing infrastructure and limit travel distances. The Plan encourages new development to apply the following principles:

- Development should contribute to creating unique places within the TPA by working with existing topography and site features, responding to the local context, and reinforcing the landscape’s character, rather than simply attempting to place suburban design onto the rural landscape.

- Sustainability requires maximum consideration for using the landscape for benefits such as solar heat gain or shelter from wind.

- Buildings should be treated as parts of the landscape and attention given to their form and scale relative to their surrounding environment.

Avoid bulky designs by breaking down the mass into smaller elements that follow natural contours. The County encourages the adoption of a conservation design approach when planning development in the TPA so that natural and heritage resources are conserved and incorporated into the site design. Unless otherwise specified, the following guidelines apply only within the TPA:

1. A minimum of 50 percent of any development will be designated as open space that integrates buildings and parking into the existing natural landscape and provides useable space that is accessible to residents and the public, subject to the following:
   a. Perimeter open space screening from roads and other communities may be the predominant component of the 50 percent open space requirement,
   b. Distribute community greens, playgrounds, and gathering spaces within residential development,
   c. Link open space to surrounding neighborhoods and public facilities with pedestrian and bicycle networks,
d. Link open space to natural and heritage resources, unique site features, and open space in other communities,

e. Locate low intensity parks that emphasize undisturbed open space in highly visible areas or in conjunction with schools, churches, and neighborhood commercial centers where they can serve as a buffer for adjoining homes.

2. Ensure that open space within developments creates or enhances the following:
   a. The 300-foot buffer and 200-foot transitional area along the Bull Run in the Upper and Lower Foley and Lower Bull Run subareas,
   b. The 300-foot buffer and 1,000-foot voluntary open space area along the Goose Creek, Goose Creek Reservoir, and Beaverdam Reservoir in the Lower Sycolin and Middle Goose subareas,
   c. A contiguous network of green spaces to supplement the natural and heritage resources connecting communities and natural resource areas, and
   d. A public trail and park network to destinations throughout the area.

3. Locate development on areas of the site that afford the least disruption of views of the rural landscape.

4. Protect the historic context of nearby archaeological and historic sites and along scenic corridors.

5. In all development, provide trails and sidewalks that connect to adjacent neighborhoods and other destinations within and outside the project.

6. Ensure that clusters of residential units proposed in TPA communities are small and appropriate in scale and number of units to reflect a traditional hamlet scale with multiple clusters separated by open space areas and featuring:
   a. A variety of lot sizes with no minimum lot size requirement and minimal setbacks,
   b. A predominantly single-family detached residential development pattern,
   c. A network of publicly accessible trails and pedestrian sidewalks linking communities and amenities, and
   d. A network of tree-lined streets constructed at minimum required widths to merge into the open landscape and slow traffic.

7. Ensure that housing diversity and affordability are components of larger and higher density developments, such as Transition Compact Neighborhoods, and Transition Community Centers, by including a mixture of housing types, a range of building and lot sizes, and configurations.

8. Include varying densities in neighborhoods with higher densities generally in close proximity to community greens, civic uses, or small-scale retail uses.

9. Diversify housing size, unit types, lot sizes, and lot pattern along each street frontage and in the same blocks to reflect the design of traditional villages and towns.

10. Include pedestrian features, landscaping, short blocks, few dead ends, and traffic calming features.

11. Locate buildings close to the street but require some discernable variations in building setbacks along residential streets.
12. Avoid bulky designs by breaking down the mass into smaller elements that follow natural contours.

14-13. Address parking in Transition Compact Neighborhoods and Transition Community Centers through a combination of on-street and off-street choices designed and located to minimize their visual impact.

12-14. Develop employment uses at a scale that minimizes their intrusion into the rural and natural landscape and their impact on surrounding roads and communities by:
   a. Screening all outdoor storage and equipment parking areas from view of adjoining properties and roads,
   b. Minimizing the number of entrances from major collector or arterial roads;
   c. Ensuring adequate road and infrastructure capacity,
   d. Avoiding large expanses of blank building surfaces by using articulation, fenestration and façade treatments, especially when the facades are visible from public roads, and
   e. Separating industrial uses from residences by locating less-intensive uses adjacent to residential uses or using natural or manmade barriers between the uses.
County of Loudoun
Department of Planning & Zoning
MEMORANDUM

DATE: November 30, 2018

TO: Loudoun County Planning Commission

FROM: Randall Farren, AICP, Senior Planner
       Dan Galindo, AICP, Community Planning Manager
       Alaina Ray, AICP, Director, Department of Planning & Zoning

SUBJECT: Virginia TDR and PDR Programs Overview

Purchase of Development Rights

Purchase of Development Rights (PDR) programs allow localities to take a direct role in land conservation for a variety of purposes, including preservation of farms and other working lands, water resource or other environmental protection, and retention of scenic views and landscapes. Under a PDR program, localities acquire development rights related to a particular piece of property from a voluntary and willing private landowner. These rights are then extinguished via conservation easement, which may be held by the County, a county-established conservation easement authority, another public entity (e.g., USDA or Virginia Outdoors Foundation), or a non-profit land trust.

Virginia Code Section 15.2-1800, which grants localities general powers to purchase any interests in real property, provides the enabling authority for localities to enact PDR programs. 22 localities in the state currently have some form of PDR program. Localities generally have wide latitude over the implementation and funding of PDR. The terms of conservation easements may be flexible; landowners may retain rights to construct new farm buildings or limited housing on eased parcels. PDR funding mechanisms currently employed by Virginia counties include rollback taxes, special real estate levies, dedicated funding within county budgets, and special appropriations. Loudoun’s inactive program was financed through a portion of the County Transient Occupancy Tax.

Transfer of Development Rights

Transfer of Development Rights (TDR) programs allow for voluntary, market-based transfers of development density from areas identified for land conservation to targeted growth areas. Most TDR programs use some variation of the following process:

1. The community identifies areas where limits on growth and development are sought (“sending area”);
2. The community identifies areas where increased growth and density are desirable (“receiving area”);
3. Sending area property owners voluntarily seek to detach or “sever” development rights (DR) from their property for sale and transfer;
4. Developers or receiving area property owners pay for additional development rights, which are then generally applied to projects as by-right density bonuses;
5. Sending area property owners are compensated for detached rights at a market rate.

The Commonwealth of Virginia adopted enabling legislation for local TDR programs in 2006 (Virginia Code Sections 15.2-2316.1 and 15.2-2316.2) and amended the code several times between 2006 and 2017 for clarity and to increase flexibility of program implementation. The enabling legislation sets forth a number of requirements for local TDR programs:

1. The municipality must establish one or more sending areas and receiving areas in the ordinance/zoning map and revise the comprehensive plan accordingly;
2. DRs attached to receiving areas must be greater than or equal to development rights detached from sending areas; “transfer ratios” may vary by sending area;
3. TDR programs must allow for the purchase, sale, and/or exchange of DRs;
4. The municipality must place binding restrictions on future development of sending area parcels once DRs are detached, through the use of conservation easements, restrictive covenants, or other instruments;
5. The local ordinance must specify permitted uses and maximum allowable density transfers allowed in receiving areas;
6. Participation must be voluntary and can only be initiated by property owners or owners of DRs;
7. Localities cannot require property owners to detach or transfer DRs as a condition of development.

The enabling legislation also allows for optional features to allow localities to better cater their TDR programs to their community’s needs:

1. DRs may be “banked” or held until needed for a particular project. Detached rights may be held by the original property owner or the owner/developer of the receiving property. Many successful TDR programs also use a dedicated TDR bank run by a county agency or NGO to coordinate sale and transfer of DRs.
2. Programs may cross municipal boundaries (i.e., among counties or from a county to an independent city). Receiving areas may also be established within incorporated towns even when sending areas are under county jurisdiction.
3. Local ordinances may stipulate use restrictions on sending area lands where DRs have been severed.

**Summary of local TDR programs in Virginia**

**Frederick County** *(map of sending and receiving areas attached)*

- Established 2010
- Sending areas are areas zoned Agricultural and designated as rural in the Comprehensive Plan
  - 3 sending areas with different transfer ratios (1:2, 1:1.5, and 1:1) depending on location in designated Agricultural Districts and location of prime agricultural soils
- Receiving areas generally align with Urban Development Areas/Sewer and Water Service Areas
- Detached rights are extinguished via restrictive deed covenant with the county
- Nine sending area applications covering 19 parcels to date
  - 15 properties have detached rights and recorded restrictive covenants
  - 64 development rights have been applied to receiving area properties; 270 remain for transfer

**Stafford County (map of sending and receiving areas attached)**

- “Pilot program” established 2015
- Sending area targeted to lots surrounding Crow’s Nest Natural Area Preserve
- Receiving area located adjacent to designated growth and redevelopment areas
- 1:1 transfer ratio; 1 DR can also be used for 3,000 SF commercial floor area bonus
- Detached rights extinguished via conservation easement or restrictive deed covenant
- 13 sending area applications received
  - 1 processed to date; rights detached from one property
  - No DR transactions yet

**Arlington County**

- Established 2006
- Urbanized county; program diverges from traditional TDR
- Sending sites may be designated for Open Space, Historic Preservation, Affordable Housing, Community Amenities
- Receiving sites vary by sending area and the purpose of rights transfer
- Program encourages rights to be transferred from a specific sending site to a specific receiving site
FIGURE 3.8
Transfer of Development Rights
Sending and Receiving Areas
Stafford County Comprehensive Plan
Stafford County, Virginia
REVISED: June 20, 2017

Legend:
- TDR Receiving Area
- TDR Sending Area
- Agricultural/Rural
- Mining
- Federal
- Resource Protection
- Parks

Future Land Use:
- Planning Areas
- Suburban
- Business and Industry

Data layers are compiled from various sources and are not to be construed or used as a "legal description." Data layers are believed to be accurate, but accuracy is not guaranteed.

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