

**VI. PUBLIC FACILITIES**



## **PUBLIC FACILITIES**

### **INTRODUCTION**

The purpose of the Public Facilities Chapter is to plan for future public facilities and infrastructure needed to serve existing and planned population growth through the efficient, safe, and accessible delivery of public services. The planning and siting of public facilities should be in a manner that will efficiently and economically serve the greatest number of residents. New facilities should be located within the County's Urban Development Area (UDA), where future growth is desired; such facilities shall also generally be included in the Capital Improvement Plan (CIP).

Collaboration between County agencies should continue to be a priority goal in order to ensure that the investment made in the County's community facilities will continue to provide the best possible environment for positive and vibrant community growth. Multiple use/satellite public facilities should be developed wherever such facilities would make the delivery of services more efficient.

The Public Facilities Chapter is divided into several sections based on the department responsible for providing that facility or service. The sections are:

- **FREDERICK COUNTY GOVERNMENT SERVICES**
- **FREDERICK COUNTY PUBLIC SCHOOLS (FCPS)**
- **FREDERICK COUNTY PARKS AND RECREATION**
- **HANDLEY REGIONAL LIBRARY**
- **FREDERICK COUNTY EMERGENCY SERVICES**
- **WINCHESTER REGIONAL AIRPORT**
- **FREDERICK WATER**
- **BROADBAND AND TELECOMMUNICATIONS**

## **FREDERICK COUNTY GOVERNMENT SERVICES**

### **CURRENT CONDITIONS**

Many of the County's departments are located in the County Administration Building at 107 North Kent Street, Winchester; public safety agencies are located at the Frederick County Public Safety Center at 1080 Coverstone Drive, Winchester. The County has also recently acquired the former Sunnyside Plaza Shopping Center. This facility is planned to help meet the need for increased office space, meeting space, and governmental services in an accessible location.

### **FOCUS FOR THE FUTURE**

Frederick County government shall continue to provide accessible, effective, and high-quality government services to its citizens, business owners, and community partners. Community facilities providing administrative and judicial services shall be located in urban areas which may include the County's Urban Development Area, Sewer and Water Service Area, and/or areas identified as future Urban Centers.

The County should strive to improve access to government services through a variety of creative and proactive approaches. Advances in technology should be embraced to further to advance the availability of government services. Projects aimed at enhancing the County's ability to provide accessible, effective, and high-quality services, either by Frederick County or through partnerships with private entities should also be considered.

### **COMMUNITY BENEFITS**

Proper planning and land use policies enable the County to identify where future growth should be accommodated. By planning for this growth, we are better able to identify and provide for infrastructure and services in areas where they can reach the majority of the population.

### **GOALS/STRATEGIES**

**GOAL: IMPROVE SERVICES TO CITIZENS THROUGH EFFICIENT PROVISIONS FOR COMMUNITY FACILITIES.**

**STRATEGIES:**

- County government facilities should be provided in a manner that ensures that all citizens, business owners, and community partners have accessible services.
- Community facilities should generally be located within urban areas such as the County's Urban Development Area, Sewer and Water Service Area, and/or areas identified as future Urban Centers.

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- Community facilities should serve as community focal points.
- Collaboration between County agencies should be a priority, to ensure that the County can provide the best possible environment for positive and vibrant community growth. Multiple use/satellite public facilities should be developed wherever such facilities would make the delivery of services more efficient.
- Encourage collaboration with the private sector to provide integrated infrastructure in the most efficient way possible.

## **FREDERICK COUNTY PUBLIC SCHOOLS (FCPS)**

### **CURRENT CONDITIONS**

Frederick County Public Schools (FCPS) is the 20th largest of 132 school systems in the Commonwealth of Virginia, serving over 13,600 students in the 2020-2021 school year. With over 2,300 full time employees, Frederick County Public Schools (FCPS) is one of the largest employers in the Winchester-Frederick County area. The school district has 12 elementary schools, 4 middle schools, 3 high schools, 1 career & technical center, and participates in Northwest Regional Educational Programs, an alternative education center. Support facilities include the administration building, the maintenance/warehouse facility, the Transportation Facility, and Support Facilities West. There are a total of 25 schools and support facilities operated by FCPS. In the past ten years, FCPS has constructed 3 new schools plus the Transportation Facility and 4 school additions/renovations.

Residential growth continues to impact the school system as additional homes are built throughout the County. During the past several decades, the total student enrollment in the school division has increased steadily. Student enrollment has grown by 490 students in the past ten years. Seventy-four percent of the class of 2020 planned to continue their education. FCPS on-time graduation rate for the 2019-2020 school year was 93%, compared to the state's 92.3%.

### **FOCUS FOR THE FUTURE**

The establishment of new community facilities creates opportunities to improve the quality of the surrounding community. Schools in particular through the incorporation of Neighborhood Design can serve as the focal point for Neighborhood Villages and Urban Centers within the UDA and Rural Community Centers in the Rural Areas. Opportunities to co-locate schools with other community facilities should be sought. Several schools currently have Parks & Recreation Basic Rec programs within them. This program should be considered for new schools. Other Parks & Recreation programs could be co-located with schools.

Schools should be located in existing or future neighborhoods, within walking distance and be accessible to residents. They act as neighborhood anchors and community centers. Well planned school sites, by encouraging walking and bicycling, can improve student health and academic performance and reduce traffic around schools. A good example of community-centered school planning can be found around Greenwood Mill Elementary School, the County's 11<sup>th</sup> elementary school.

### **COMMUNITY BENEFITS**

Frederick County Public Schools' (FCPS) vision is to be an innovate community where caring relationships and authentic learning inspire all students. The Frederick County Public Schools community nurtures all learners to realize their dreams and aspirations through:

- Meaningful and engaging learning experiences

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- A collective responsibility for continuous growth
- Embracing a culture of diversity and inclusiveness
- Fostering and supporting innovative ideas that challenge conventional thinking
- A commitment to forward-thinking learning environments

FCPS promises each and every student learning experience grounded in high expectations, personalized to student needs and interests, tailored to inspire passion and challenge thinking, and backed by necessary learning supports today, so that each and every student is ready to pursue the dreams and opportunities of tomorrow.

FCPS is a learning organization where students and staff thrive in safe, supportive, nurturing environments, motivated by a culture of continuous growth so that each and every student becomes a contributing citizen in our global society.

FCPS will support students and staff through meaningful, authentic learning experiences and a focus on overall well-being by cultivating strategic, purposeful partnerships with community members, organizations, and families.

FCPS will be recognized as the preferred school community for individuals who are high achieving, compassionate, committed to continuous improvement, and who are inspired and inspire others.

### **GOALS/STRATEGIES**

Each local school board in Virginia is required by State Code to adopt a division wide comprehensive plan. Accordingly, the Frederick County Public Schools Division Comprehensive Plan, Inspire 2020, A Promise for Progress, is the document that governs the future direction of FCPS. Long-range school planning documents that are developed under the umbrella of the Division Comprehensive Plan include curriculum improvement plans, school improvement plans, a technology plan, enrollment projections, a capital improvement plan, and a staffing projection plan.

**GOALS:        CONSIDER THE SURROUNDING NEIGHBORHOOD VILLAGES, URBAN CENTERS, AND RURAL COMMUNITIES; SITE LOCATION, SITE SUITABILITY, PROGRAM DESIGN, AND THE NEEDS OF OTHER AGENCIES IN LOCATING NEW FACILITIES.**

### **STRATEGIES:**

- In evaluating potential school facility locations, consider the role of the site in building diverse, walkable communities in the UDA.
- In evaluating potential school facility locations, consider each location relative to arterial roads, planned roadways, the SWSA, the UDA, surrounding neighborhoods, floodplains, Civil War battlefields, and Agricultural and Forestal Districts. Also consider surrounding land uses, and potential environmental hazards.

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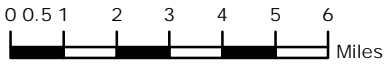
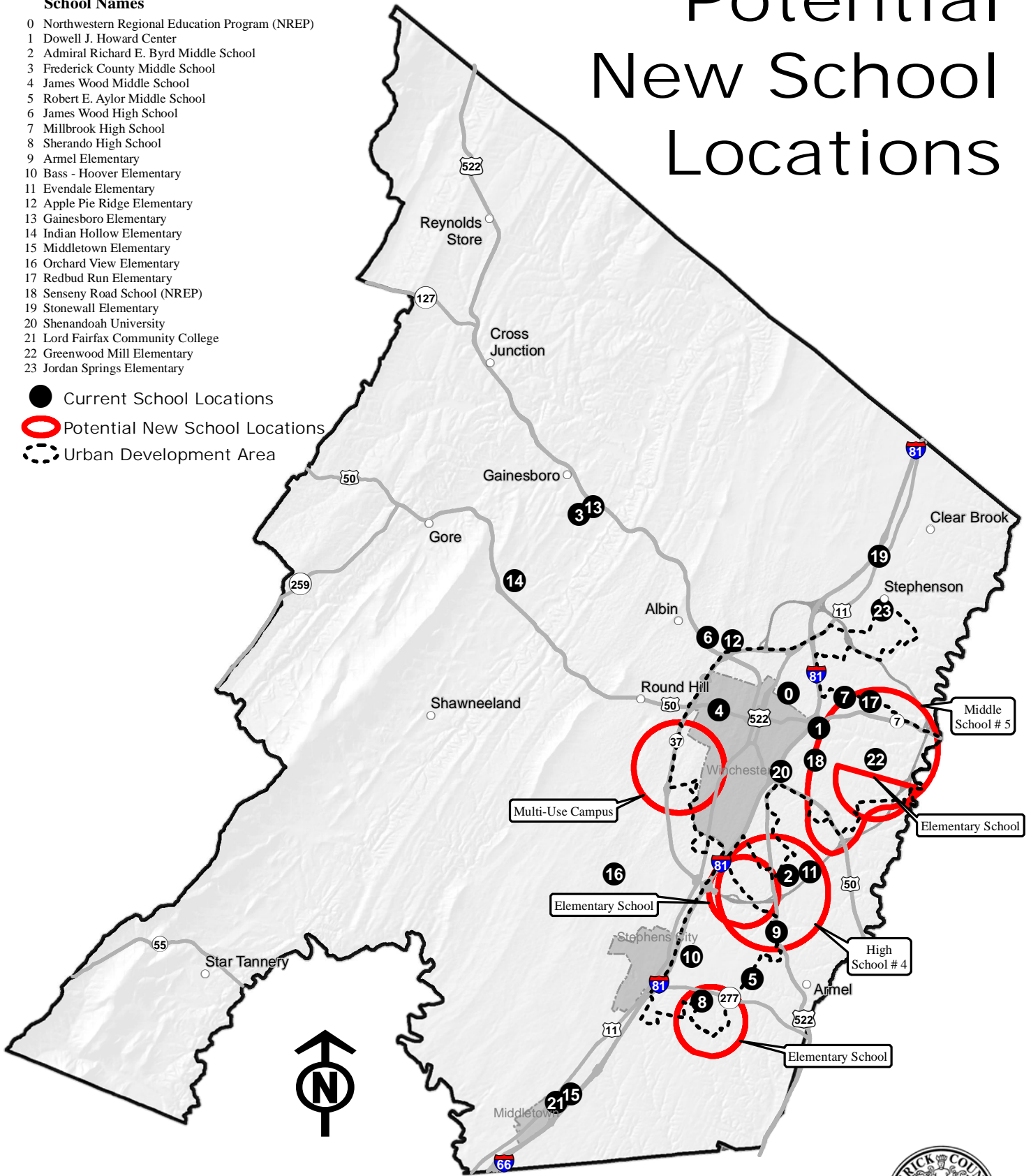
- In evaluating individual candidate sites, consider each site's zoning, planned land use, topography relative to program requirements, historical features, water features, wetlands, potential environmental hazards, geology, soil suitability, and tree cover. Also consider constraints contained in the site's deed and plat and the potential for the presence of rare, threatened, and endangered species.
- Purchase sites that are suitable for co-locating school facilities with facilities other agencies have identified in their CIP or other studies if doing so does not interfere with FCPS' educational mission and is a responsible use of public funds. Future school sites have the potential to be collocated with future fire and rescue stations, parks, community centers, libraries, convenience sites, and satellite offices for several County Departments. Additionally, future school sites could become part of the network of properties needed to execute the Eastern Road Plan.

# Potential New School Locations

## School Names

- 0 Northwestern Regional Education Program (NREP)
- 1 Dowell J. Howard Center
- 2 Admiral Richard E. Byrd Middle School
- 3 Frederick County Middle School
- 4 James Wood Middle School
- 5 Robert E. Aylor Middle School
- 6 James Wood High School
- 7 Millbrook High School
- 8 Sherando High School
- 9 Armel Elementary
- 10 Bass - Hoover Elementary
- 11 Evendale Elementary
- 12 Apple Pie Ridge Elementary
- 13 Gainesboro Elementary
- 14 Indian Hollow Elementary
- 15 Middletown Elementary
- 16 Orchard View Elementary
- 17 Redbud Run Elementary
- 18 Senseny Road School (NREP)
- 19 Stonewall Elementary
- 20 Shenandoah University
- 21 Lord Fairfax Community College
- 22 Greenwood Mill Elementary
- 23 Jordan Springs Elementary

- Current School Locations
- Potential New School Locations
- ⋯ Urban Development Area





## **FREDERICK COUNTY PARKS AND RECREATION**

### **CURRENT CONDITIONS**

#### *Facilities*

Frederick County has four classifications of parks including Greenways (linear parks), Neighborhood, Community, and District Parks. The classification depends on the size, service area, purpose, character, and location of the property. The County currently has two district, two community, and three neighborhood parks. Additionally, a community park is planned on 25 acres on Old Charlestown Road in the Stonewall District and the County is beginning development of a Greenway trail along Abrams Creek in the eastern part of the County.

The two district parks, Clearbrook and Sherando, currently serve the County's population with active and passive recreational programs and facilities. Clearbrook Park is located five miles north of Winchester on Route 11 and encompasses 44 acres of land surrounding a 3.5-acre lake. Sherando Park, located two miles east of Stephens City on Route 277, includes 334 acres of varied open and forested land and a diverse array of recreation facilities. Community parks include Rose Hill Park in the Back Creek District and Stonewall Park in the Stonewall District. Rose Hill Park is located 1/3 mile south of the intersection of Cedar Creek Grade and Jones Road offering visitors the opportunity to enjoy the historic and scenic features of the Museum of the Shenandoah Valley's Rose Hill Farm. Stonewall Park on Stephenson Road is developed for active recreation and has five diamond ball fields for use. The three neighborhood parks include space at the Reynolds Store Fire Company, Frederick Heights Park near Senseny Road, and County owned property behind the Bowman Library where the department has constructed a walking trail around a lake and has plans to develop an amphitheater for community use. Master development plans were adopted for both Clearbrook and Sherando Parks establishing a development vision for each park based on identified recreational needs.

#### *Parks and Recreation Master Plan*

The Parks and Recreation Master Plan was adopted in 2018 and outlines both long- and medium-term goals and strategies. Master Plan goals align with the Comprehensive Plan goals listed above and provide strategies and action steps for the department to pursue. The Parks and Recreation Master Plan is available on the Parks and Recreation website for reference.

### **FOCUS FOR THE FUTURE**

To meet the future service demands on the County's two district parks, the Parks and Recreation Department intends to continue implementing the improvements adopted in the park Master Plans and in the Capital Improvement Plan. Additionally, new Neighborhood or Community Parks and usable open spaces should be located within the Urban Development Area (UDA), located near areas planned for future residential land uses, Neighborhood Villages

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and Urban Centers or within designated Rural Community Centers. The construction of additional trails throughout the community is also important. Trails are highly desired recreation facilities for county residents and provide the ability to travel safely from homes to schools, stores, work, or recreation areas without having to share roadways with vehicle traffic.

Frederick County is fortunate to have multiple entities providing publicly accessible land citizens can use for recreation and leisure purposes. Frederick County currently manages 430 acres of park land and 340 acres of other school and county owned properties. While new park land locations are identified, there is significant development potential on existing County owned park areas as almost half of these acres are yet to be developed for recreation purposes. Frederick County is fortunate to have within its jurisdictional boundary thousands of acres of publicly accessible land provided by Federal, State, school system and non-profit entities. Additionally, adjoining jurisdictions allow Frederick County residents the use of their facilities. In combination the County and other publicly accessible lands and facilities provide the array of current conditions from which remaining needs are determined.

### **COMMUNITY BENEFITS**

The Frederick County Parks and Recreation Department is building a sense of community through people, parks, and recreational opportunities benefitting all residents. Parks and recreation activities stimulate economic activity and property values are increased by proximity to parks and through the added quality of life and sense of community. Families and organizations alike look to Frederick County Parks and Recreation to meet their leisure needs. Approximately 1.5 million recreational contact hours for youth, senior, and family programs are provided through programs offered by or facilitated through Frederick County Parks and Recreation with nearly two-thirds of Frederick County households reporting they use Parks and Recreation services and facilities. Nearly ½ million visits are counted at the two District Parks alone on an annual basis.

### **GOALS/STRATEGIES**

**GOAL:      CONTRIBUTE TO THE PHYSICAL, MENTAL, AND CULTURAL NEEDS OF THE COMMUNITY; ITS ECONOMIC AND SOCIAL WELL-BEING, AND ITS SENSE OF CIVIC PRIDE AND SOCIAL RESPONSIBILITY THROUGH THE IMPLEMENTATION OF AN INTEGRATED PLAN FOR RECREATION PROGRAMS AND PARK FACILITIES.**

#### **STRATEGIES:**

- Maintain a County-wide recreation plan which identifies recreational, park, trail, bikeway, and open space needs.
- Identify recreation needs associated with the Rural Community Centers.

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- Continue to utilize State and Federal grants and as needed pursue voter-approved bond financing for capital projects approved in the Capital Improvement Plan.
- Continue to expand our cooperative relationship with the Frederick County School Board in jointly meeting identified County recreational needs.
- Review land development regulations to ensure that appropriate standards are provided for open space recreational facilities in new developments.




**GOAL: TO HAVE EVERY RESIDENT OF FREDERICK COUNTY’S URBAN DEVELOPMENT AREA (UDA) WITHIN WALKING OR BIKING DISTANCE OF A RECREATION AREA.**

**STRATEGIES:**

- Inventory the County’s natural and environmental resources to identify appropriate locations for greenways, community and neighborhood ~~and mini~~ parks including connectivity consistent with the 2014 Metropolitan Planning Organization (MPO) Bicycle and Pedestrian Plan.
- Strategically locate parks in or near Neighborhood Villages and Urban Centers to meet population-based needs. Parks should be carefully planned to respect and take advantage of natural and historic resources as well as to enhance the natural, scenic, and cultural value of the urban areas of the County.
- Ensure recreation and open space requirements for residential developments are adequate.
- Actively pursue parkland in areas where publicly accessible land does not or is not anticipated to meet citizen needs.

# Potential New County Park Locations





## Existing County Parks

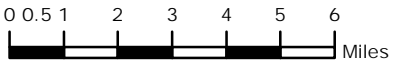
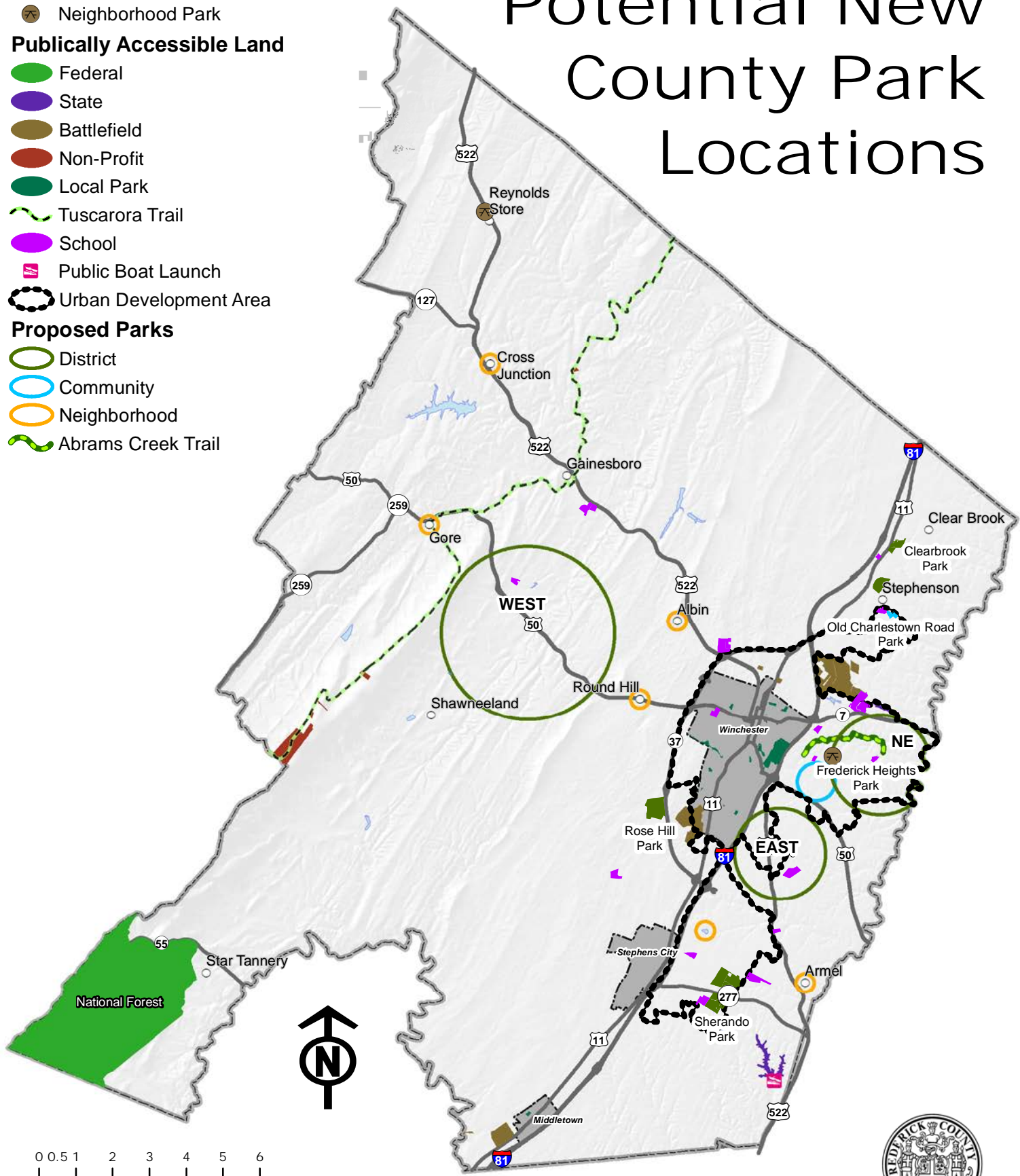
-  District Park
-  Community Park
-  Neighborhood Park

## Publicly Accessible Land

-  Federal
-  State
-  Battlefield
-  Non-Profit
-  Local Park
-  Tuscarora Trail
-  School
-  Public Boat Launch
-  Urban Development Area

## Proposed Parks

-  District
-  Community
-  Neighborhood
-  Abrams Creek Trail



## **HANDLEY LIBRARY**

### **CURRENT CONDITIONS**

The goal of the Handley Regional Library System is to be a resource to the communities they serve by creating connections to information and entertainment and being the center of learning. Currently the Handley Regional Library System has one library in each jurisdiction served. As population grows in Frederick County, the demand for library services also continues to increase. Each library in the Handley Regional Library system functions as a community center, a search engine, and a place that welcomes everyone to lifelong learning. Frederick County's larger population and land area mean that there are portions of the County that are not well served by the Winchester or Stephens City branches.

### **FOCUS FOR THE FUTURE**

As the residential population in Frederick County continues to grow the Library System has plans for opening new facilities. The Library Board plans for future libraries to open in the Gainesboro area, Senseny/Greenwood area and the Route 522/Justus Drive area. The inclusion of small library branches that can offer delivery of materials from anywhere in the system as well as providing information and training to customers about new online services should also be considered.

### **COMMUNITY BENEFIT**

With easy access to computer workstations, libraries are a primary source of technology services and resources to County residents, especially those who may lack such access in their homes. Ideal locations for new libraries would be within close proximity to residential uses, schools and commercial uses.

### **GOALS/STRATEGIES**

**GOAL: PROVIDE ADEQUATE LIBRARY SERVICES TO MEET THE NEEDS OF THE CURRENT AND FUTURE RESIDENTS.**

#### **STRATEGIES:**

- The Handley Regional Library Board will review and update its long-range plan for facilities growth, using the criteria of cost, need, safety, and proximity to the greatest number of residents.
- Continue to monitor the growth throughout the County to determine where new library facilities are needed.

## **FREDERICK COUNTY EMERGENCY SERVICES**

### **CURRENT CONDITIONS**

As residential and commercial developments continue to locate and expand in Frederick County, there will be an increased need for emergency services to provide services to protect the citizens and transient population. Emergency services are provided by The Frederick County Fire and Rescue Department, The Sheriff's Office, and the Department of Public Safety Communications. These three departments are located at the Frederick County Public Safety Center.

The goal of the fire and rescue system is to provide the most efficient fire and rescue services Countywide. Responses include, but are not limited to, emergency medical services, fire suppression, rescue, hazardous-materials, special services and emergency management. The Department is made up of the Operations Division, Training Division, Fire and Life Safety Division, Emergency Management Division, and the Fire Marshal's Office.

The Fire and Rescue Department consists of eleven volunteer fire and rescue companies. The Department has career personnel assigned to all eleven stations, which are staffed 24 hours a day. Volunteer personnel staff their stations when available.

### **FOCUS FOR THE FUTURE**

Future challenges for the Fire and Rescue Department include developing additional fire and rescue stations to meet future growth within the County and keeping up with the staffing needs to continue to provide quality and timely service.

Planning for future fire and rescue station locations and equipment needs must be accomplished by developing a five-year strategic plan. This plan will identify future fire and rescue station sites and equipment needs based on projected service demands and response times. The plan will encourage the dedication of sites for new fire and rescue stations within the identified areas during the rezoning process.

Non-residential areas such as retail, office, and industrial areas require increased fire protection because specialized equipment is necessary to ensure safety for these land uses. Other land uses identified as target hazards continue to grow. These include land uses such as schools, nursing homes, daycare centers, and industrial facilities. These land uses have a higher risk of injury due to the specific demographics of person utilizing these facilities.

Existing road conditions, primarily those with gravel or dirt surfaces and horizontal and vertical curvatures, located outside of the county's Urban Development Area (UDA) create longer response times. The greatest factor contributing to the need for new fire and rescue stations is the rapid population growth and increases in dwelling units within the County.

### **COMMUNITY BENEFITS**

The development of new fire and rescue stations could provide an opportunity to extend satellite services provided by other County Departments and agencies. Allocation of space could be created within new fire and rescue stations for community services provided by the Sheriff's Office, the Treasurer's Office, the Voter Registrar's Office, and the Commission of the Revenue's Office, to provide the residents of Frederick County more accessible options for government services. Locations for future facilities are encouraged within the UDA and Rural Community Centers.

### **GOALS/STRATEGIES**

**GOAL:        WHEN PLANNING NEW FACILITIES, CONSIDER SITE LOCATION, SITE SUITABILITY, BUILDING DESIGN, AND CONSTRUCTION TIMING.**

**STRATEGIES:**

- Co-locate fire and rescue stations with other County facilities and agencies for maximum efficiency.
- Construct fire and rescue stations at strategic locations throughout the County to help achieve desired response times to all emergency calls and increase the level of service. Locate fire and rescue stations with easy access to a major arterial or at an intersection of two major arteries to gain both east-west and north-south access.
- Locate fire and rescue stations on sites of between two and five acres to allow for future expansion. Sites may be smaller when developed as part of a Neighborhood Design in an Urban Center or Neighborhood Village.
- Select and design sites to minimize the adverse impact of sirens and other noise on residential areas.
- Investigate the need for a Regional Public Safety Training Center as the demands for public safety related training increase and existing facilities age.
- Continue working towards replacing the County's public safety communication system.

## **WINCHESTER REGIONAL AIRPORT**

### **CURRENT CONDITIONS**

The Winchester Regional Airport is recognized as an important component of the County's Business Development efforts. Therefore, the Plan designates an Airport Support Area for the Winchester Regional Airport. Commercial, and industrial uses should be the primary land uses in the Airport Support Area; these planned land uses are further outlined in Appendix I.

The Airport Support Area is an area in which further residential rezonings will be prohibited. Conflicts between airports and residential development can be significant in growing communities. Residents of areas in the vicinity of the airport tend to oppose airport operations and the expansion of such operations because of concern for noise increased aircraft activity. The Airport Support Area was also established to ensure the continued operational viability of the airport support future airport expansion and facilitate implementation of the Comprehensive Plan and Airport Master Plan.

### **FOCUS FOR THE FUTURE**

There is a need to continue to implement the Airport Support Area expectations. Commercial and industrial uses should be the primary uses in the airport support area; residential rezoning's will be prohibited.

The Capital Improvement Plan will continue to be a key tool that will facilitate the growth and development of the airport. Key capital projects include the acquisition property and easements necessary to protect the approach and departure surfaces of the runway and future growth, relocation of the primary parallel taxiway, replacement of the main aircraft parking apron, development of the north side of the runway, and replacement of the terminal building.

### **COMMUNITY BENEFITS**

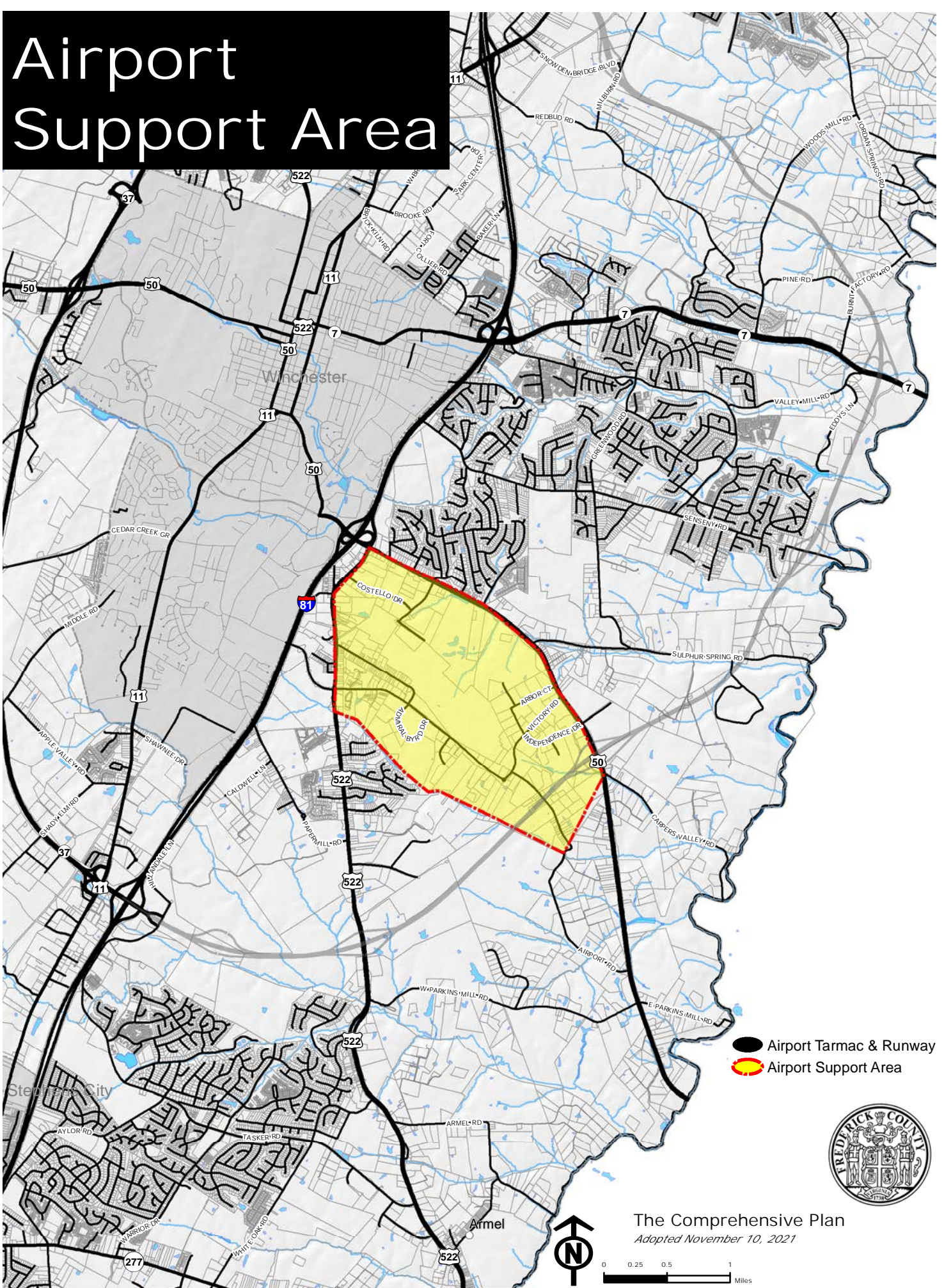
Through the support of the Winchester Regional Airport Authority's member jurisdictions, the Airport will continue to be a modern, first-class air transportation facility that accommodates a multitude of aeronautical functions that serve the public good, supports local employers, and attracts new businesses to the region.

### **GOALS/STRATEGIES**

Specific Goals and Strategies relating to the Winchester Regional Airport are contained in Chapter 4 – Business Development.



# Airport Support Area



- Airport Tarmac & Runway
- Airport Support Area



The Comprehensive Plan  
Adopted November 10, 2021



0 0.25 0.5 1  
Miles

## **FREDERICK WATER**

### **CURRENT CONDITIONS**

The Sewer and Water Service Area (SWSA) is an important policy tool used by Frederick County to determine where public water and sewer service may be provided. The Board of Supervisors approves the location of the Urban Development Area (UDA) and SWSA boundaries through the adoption of the Comprehensive Plan and amendments thereto. As a result, properties located within the SWSA may enjoy access to public water and sewer.

Frederick Water has the primary responsibility to manage the provision of water and sewer services in Frederick County. Other public entities may serve properties within Frederick County, if approved by the Board of Supervisors; this is the case in some areas adjacent to the City of Winchester and in the vicinity of the Town of Middletown and the Town of Stephens City. The Middletown/Lord Fairfax and Middletown/Reliance Road Area Plans established the Sewer and Water Service Areas (SWSA) with the express stipulation that the Frederick Water will be the party responsible for providing water and sewer in this area. This may be done in cooperation with those adjacent public entities.

#### *Water and Sewer Services*

The location of public sewer and water lines within the Urban Development Area (UDA) and SWSA determines where urban development can occur. The UDA defines the general area in which more intensive forms of residential development can occur. Commercial, industrial, and institutional land uses are also encouraged within the UDA. The SWSA is consistent with the UDA in many locations. However, the SWSA may extend beyond the UDA to promote commercial, industrial, and institutional land uses in areas where residential land uses are not desirable.

It is the clear policy of the Comprehensive Plan that extensions of sewer and water service will be within the boundaries of the UDA and SWSA. The extension service into areas outside of those boundaries will require an amendment to the Comprehensive Plan. All sewer and water mains extended shall be publicly owned.

Frederick Water has the responsibility for the treatment, transmission, and distribution of potable water and the collection and conveyance of wastewater. Most of the sewer and water mains and laterals in the County are owned, operated, and maintained by Frederick Water.

Frederick County and Frederick Water have executed a Facilities Planning Agreement which sets forth procedures for the planning of sewer and water mains in the County. The agreement includes: provisions for adopting a water and sewer facilities plan as a part of the Comprehensive Plan; specifies the location of water and sewer mains over eight inches in size; provides for review and update of the plan and for including sewer and water facilities projects in the Frederick County Capital Improvements Plan.

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The City of Winchester owns and maintains sewer and water lines in portions of the County adjacent to the City corporate limits. Such lines have been extended into the County following a previous agreement between the City and the County, and often predate Frederick Water's ability to provide said services. The Frederick County Board of Supervisors prefer that all future water and sewer services in the County be provided by Frederick Water.

### *Wastewater Facilities*

The Frederick-Winchester Service Authority (FWSA) provides wastewater treatment service for Frederick Water and the City of Winchester. The FWSA currently owns the Opequon Water Reclamation Facility, the Parkins Mill Wastewater Treatment Plant and the Crooked Run Wastewater Treatment Plant and has operational agreements with the City and Frederick Water for wastewater treatment plant operations. The City operates and maintains the Opequon Facility while Frederick Water is responsible for operation and maintenance of the Parkins Mill and Crooked Run Facilities.

Treatment of wastewater generated from within the County's Sewer and Water Service Area (SWSA) is undertaken at all plants. The Opequon Service Area is comprised of the Abrams Creek drainage area which includes the City of Winchester and adjacent drainage areas located east, west and north of the City of Winchester. The Parkins Mill Wastewater Treatment Plant serves Frederick Water customers located in the upper Opequon Creek, Wrights Run, and Stephens Run drainage areas along with the Town of Stephens City. The Crooked Run Service Area services the Lake Frederick/Shenandoah Community in southeastern Frederick County.

The Opequon Water Reclamation Facility presently has a treatment capacity of 12.6 million gallons per day. The Parkins Mill Wastewater Treatment Plant which has a treatment capacity of 5.0 million gallons per day. The Crooked Run Wastewater Treatment Facility opened in support of the Lake Frederick development and has an ultimate capacity of 0.626 million gallons per day, with a current treatment capacity of 0.25 million gallons per day.

### *Water Facilities*

Frederick Water manages a system with a water capacity of 7.42 Million Gallons per Day (MGD), with an average daily use of 6.5 MGD. Various quarries provide the majority of the system's water supply, with an agreement with the City of Winchester supplementing the system with up to 2MGD.

Two water treatment facilities are owned and operated by Frederick Water. The James H. Diehl Water Filtration Plant, put into operation 1994, treats up to 3 million gallons of water per day. Additional pumps can increase this capacity to 5-MGD. The water sources include ground water pumped from Frederick Water owned quarries on the west side of Stephens City, and wells at Bartonsville and Orchard View Elementary School.

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The James T. Anderson Treatment Plant, opened in 2002, has an initial capacity of 4 MGD expandable to 6 MGD. The water source is a quarry in Clearbrook and nearby wells.

In addition, the Authority has in operation two elevated tanks and three ground storage tanks with a total capacity of 10 million gallons of system water storage.

### **FOCUS FOR THE FUTURE**

The Frederick County Board of Supervisors establishes the framework for where development is to occur, and Frederick Water is tasked with accommodating and serving this new development.

The Comprehensive Plan utilizes the UDA and SWSA to designate those areas that are envisioned to be developed within the next 20 years. Therefore, areas within the SWSA should be provided public water and sewer service over the next 20 years as development advances. Those areas identified with future land uses but are not presently within the SWSA are expected to develop over the next 20-40 years; public water and sewer should be planned to serve these future areas. It is the role of Frederick Water to plan for and accommodate sewer and water service to these areas of anticipated new growth and development.

Historically, the County and Frederick Water have collaborated on long range planning efforts, and this has previously been reflected in the Comprehensive Plan. Continued cooperation and collaboration between Frederick Water and the Board of Supervisors is necessary in implementing the 2035 Comprehensive Plan.

In addition, Frederick Water should update its water and sanitary sewer master plans to reflect Frederick Water's current plans to service land inside the SWSA and to include an overview of their plans to service future land uses outside of the current SWSA boundary. Such master plans should build upon the future water and sewer needs of the County and the Town of Stephens City and guide the development and acquisition of water resources and wastewater treatment options. Frederick Water should proactively identify major capital projects aimed at increasing the County's water supply or implementing the anticipated future land use plan.

As noted in the Natural Resources Chapter of the Comprehensive Plan, water supply is critical to both the natural and built environment, and viable sources are essential for future economic development in the County. The future focus of Frederick Water and County should continue to be to protect the water supply and to identify and secure viable sources of water for the future growth and development of the County.

### **COMMUNITY BENEFIT**

Frederick Water is a non-profit organization whose mission statement is to provide affordable and reliable water and wastewater service to our customers while protecting public health and the environment. The ultimate benefit to the Community is significant and noted throughout this Plan.

**GOALS/STRATEGIES**

**GOAL:        PROTECT GROUNDWATER SOURCES AND THE AREAS THAT CONTRIBUTE RECHARGE TO ENSURE THAT ADEQUATE WATER SUPPLIES ARE MAINTAINED, AND WORK TOWARD DEVELOPING INCREASED WATER SUPPLIES TO MEET FUTURE NEEDS.**

**STRATEGIES:**

- Frederick County and Frederick Water should continue to coordinate the planning of sewer and water facilities following the procedures described by the Facilities Planning Agreement.
- The Frederick County Board of Supervisors, with the support Frederick Water should work with adjacent communities to evaluate regional water supply issues. As a result, a regional water supply partnership could be formed that would combine water resources and address water supply issues as one regional entity to ensure common goals.
- Water and sewer service should be provided to service areas in the UDA and SWSA through an orderly process following the Facilities Planning Agreement and using the Capital Improvements Plan.

**GOAL:        FACILITIES AND SERVICES SHOULD BE CAREFULLY PLANNED TO MEET PROJECTED NEEDS. APPROPRIATE SERVICES AND FACILITIES SHALL BE PROVIDED TO SERVE PLANNED LAND USES AND DEVELOPMENT.**

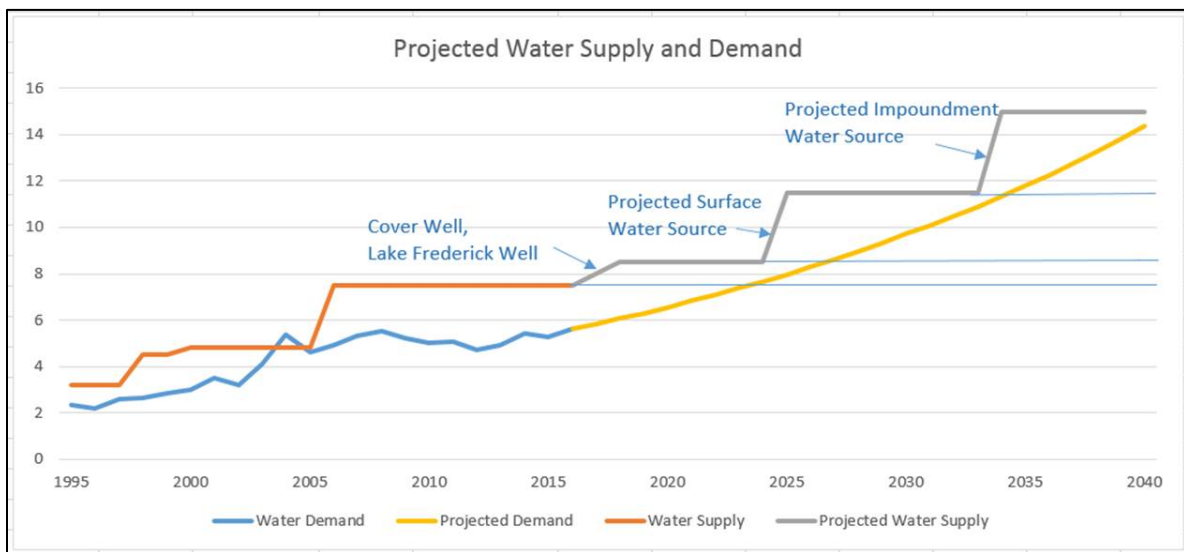
**STRATEGIES:**

- Carefully monitor sewer and water use and develop up-to-date improvement plans for sewer and water facilities.
- Develop and maintain formal and regular relationships and procedures between the County and providers of facilities and services, including Frederick Water, the City of Winchester, the Frederick-Winchester Service Authority, and the Towns of Middletown and Stephens City.
- Identify those areas in the SWSA that are better situated to be served with water and sewer and prioritize facility and infrastructure development to more effectively serve those areas and the SWSA.
- Any sewer or water main eight inches in diameter or larger, extended or existing within an area proposed for inclusion within the SWSA or UDA, should be dedicated as a public line to be owned and maintained by Frederick Water or City of Winchester when appropriate.

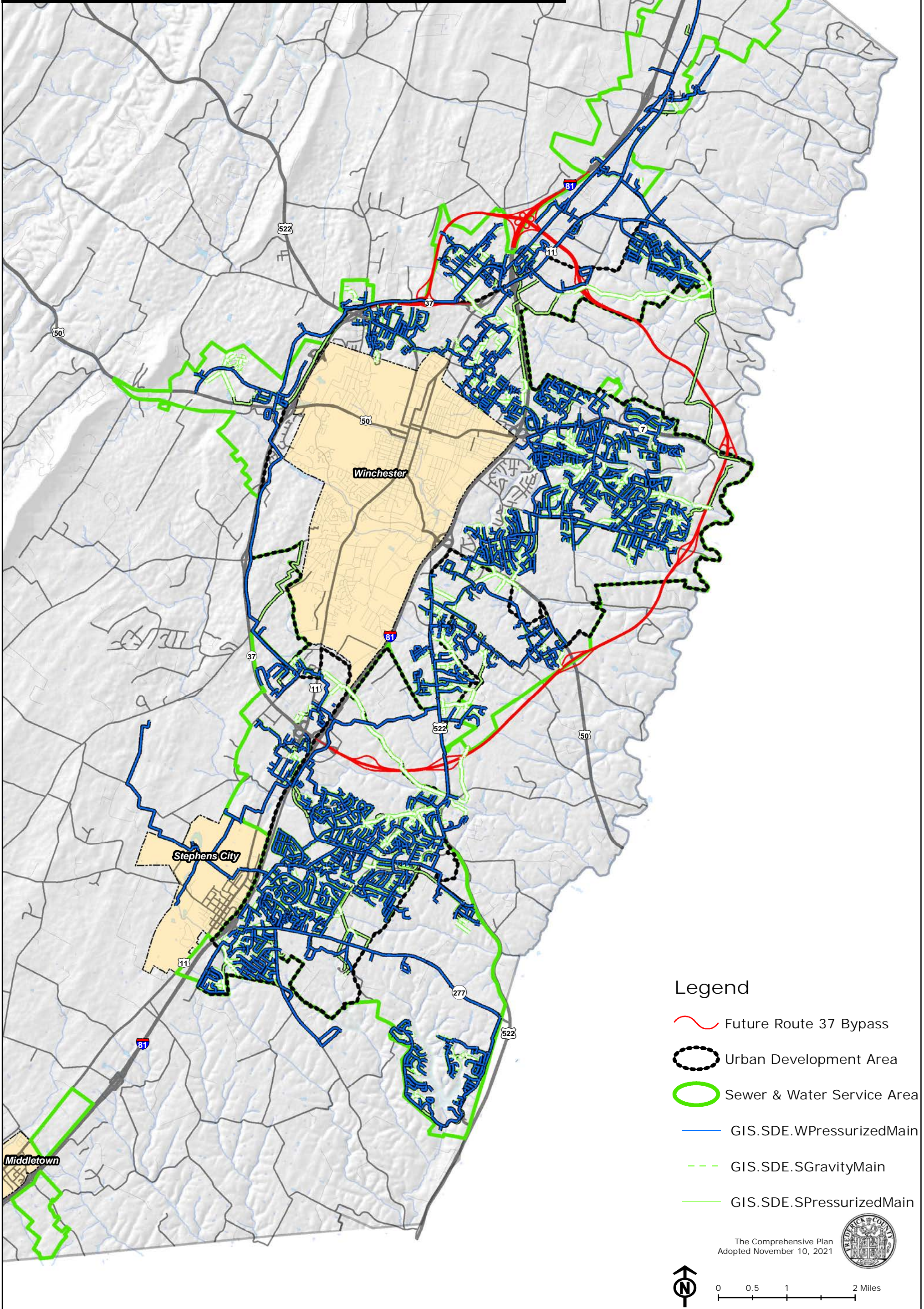
## PUBLIC FACILITIES

- Plans for new facilities should be based on demand projections as derived from population projections in the Comprehensive Plan and from future land use plans which depict the planned future land uses that will accommodate the anticipated community growth.
- Together with the County and the City, Frederick Water and the Frederick-Winchester Service Authority should carefully plan needed sewage treatment capacity based on trends in usage.





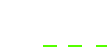

### PROJECTED WATER SUPPLY AND DEMAND CHART



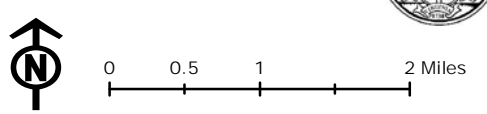
# Sewer and Water Service Area, Urban Development Area, & Water & Sewer Lines



## Legend

-  Future Route 37 Bypass
-  Urban Development Area
-  Sewer & Water Service Area
-  GIS.SDE.WPressurizedMain
-  GIS.SDE.SGravityMain
-  GIS.SDE.SPressurizedMain

The Comprehensive Plan  
Adopted November 10, 2021



### **BROADBAND AND TELECOMMUNICATIONS**

#### **CURRENT CONDITIONS**

Telecommunications continue to play a vital role in economic development and quality of life for residents of the County. The rural areas in particular have seen a shift towards greater demand from residents for access to internet service. While some areas of the County currently have access to fiber, cable, or powerline-based services, much of the County's rural areas are not served by broadband and must rely on satellite or tower-based providers.

#### **FOCUS FOR THE FUTURE**

The lack of broadband service can be a constraint on the rural economy and puts households and students at a disadvantage. There are numerous challenges to bringing high speed broadband services to the rural areas of Frederick County. With over 416 square miles, Frederick County has topographic conditions that range from mountainous areas to the rolling and flatter rural areas, posing problems for cell tower provision of services. The County should study ways to match demand for internet service with availability of service in rural or underserved areas.

#### **COMMUNITY BENEFITS**

Access to high-speed internet is important for a variety of reasons, accessibility for school age children, residents that operate home based businesses, cellular phone service and access for new public safety communication facilities.

#### **GOALS/STRATEGIES**

**GOAL:        PROMOTE THE DEVELOPMENT OF A HIGH-QUALITY WIRELESS TELECOMMUNICATIONS NETWORK THROUGHOUT THE COUNTY TO SERVE ITS RESIDENTS, WHILE PROTECTING THE COUNTY'S VISUAL LANDSCAPE, HISTORIC RESOURCES AND NATURAL RESOURCES.**

#### **STRATEGIES:**

- Monitor broadband service coverage to ensure that as the county grows, adequate broadband services are provided to meet the needs of future residents and businesses.
- Support and facilitate the development of high-speed wired and wireless telecommunication networks, including broadband technology, to support rural businesses and residents.
- Develop a broadband policy to reflect the County's need to have internet service speeds appropriate for educational, business, and residential purposes in all parts of the County.