

2024-2029 Capital Improvement Plan

Frederick County, VA

Adopted by the Frederick County Board of Supervisors March 13, 2024



Contents

CAPITAL IMPROVEMENT PLAN FREDERICK COUNTY FY 2024-2029	
INTRODUCTION	
PROJECT RECOMMENDATIONS	
THE CIP TABLES – CONTENT DESCRIPTIONS	g
PROJECT FUNDING	
FREDERICK COUNTY PUBLIC SCHOOLS PROJECT PRIORITY LIST	
PRIORITY 1 - FOURTH HIGH SCHOOL PRIORITY 2 - MIDDLETOWN ELEMENTARY SCHOOL EXPANSION	15
PRIORITY 3 - JORDAN SPRINGS ELEMENTARY SCHOOL EXPANSION	
PARKS & RECREATION DEPARTMENT PROJECT PRIORITY LIST	
PRIORITY 1 - RECREATION CENTER PRIORITY 2 - SPRAY GROUNDS PRIORITY 3 - SHERANDO PARK NORTH - SOFTBALL COMPLEX PRIORITY 4 - SHERANDO PARK AREA 3 DEVELOPMENT	
PRIORITY 5 - ABRAMS CREEK TRAIL	
HANDLEY REGIONAL LIBRARY PROJECT PRIORITY LIST	22
PRIORITY 1 - Frederick County Library Branch - Gainesboro	22
COUNTY ADMINISTRATION AND PUBLIC WORKS PROJECT PRIORITY LIST	24
PRIORITY 1 - COUNTY OFFICE ANNEX (FORMER SUNNYSIDE PLAZA SHOPPING CENTER)	24
PRIORITY 2 - GENERAL GOVERNMENT CAPITAL EXPENDITURES	24
FIRE & RESCUE PROJECT PRIORITY LIST	26
PRIORITY 1 - Frederick County Fire & Rescue Station 22	26
PRIORITY 1A - AMBULANCE 22, ENGINE 22, & TANKER 22	
PRIORITY 2 - STATION RENOVATIONS	
PRIORITY 3 – Station 23	
PRIORITY 3A - STATION 23 APPARATUS.	
PRIORITY 4 - WILDLAND URBAN INTERFACE VEHICLE 1 & 2	

SHERIFF'S OFFICE & PUBLIC SAFETY COMMUNICATIONS PROJECT PRIORITY LIST	30
PRIORITY 1 – Replace Underwater Search and Recovery Vehicle. PRIORITY 2 – 8 Bay Steel Building for Large Vehicles. PRIORITY 1 – Project 25 Public Safety Radio Network.	31
TRANSPORTATION COMMITTEE PROJECT PRIORITY LIST	35
PRIORITY 1 - EXIT 313 BRIDGE REPLACEMENT AND CAPACITY IMPROVEMENTS PRIORITY 2 - RENAISSANCE DRIVE, PHASE 2 PRIORITY 3 - ROUTE 277 RIGHT TURN LANE EXTENSION AT WARRIOR DRIVE PRIORITY 4 - ROUTE 7 STARS STUDY PROJECT PRIORITY 5 - EXIT 317 INTERCHANGE RAMP REALIGNMENT PROJECT. PRIORITY 6 - ROUTE 11 AT OLD CHARLESTOWN ROAD ROUNDABOUT INSTALLATION PRIORITY 7 - REDBUD ROAD REALIGNMENT PRIORITY 8 - GAINESBORO ROAD AT ROUTE 522 INTERSECTION UPGRADE PRIORITY 9 - EXIT 317 INTERCHANGE IMPROVEMENTS, DIVERGING DIAMOND INSTALLATION PRIORITY 10 - INTERSECTION UPGRADE, ROUTE 522 AT COSTELLO DRIVE	35 36 36 36 36 37 37
WINCHESTER REGIONAL AIRPORT PROJECT PRIORITY LIST	39
PRIORITY 1 - New Airport Terminal PRIORITY 2 – Taxiway "A" Relocation PRIORITY 3 – Acquire Land/Easements PRIORITY 4 – Northside Site Prep. PRIORITY 5 – BIL Eligible Projects PRIORITY 6 – Master Plan Update.	39 39 40 40
PRIORITY 7 – REHABILITATE RUNWAY 14/32	

CAPITAL IMPROVEMENT PLAN FREDERICK COUNTY FY 2024-2029

INTRODUCTION

Section §15.2-2239 of the Code of Virginia assigns the responsibility for preparation of plans for capital outlays to the local Planning Commissions. The Capital Improvement Plan (CIP) consists of a schedule for major capital expenditures for the County for the ensuing five years.

The CIP is updated annually. Projects are removed from the plans as they are completed or as priorities change. The plan is intended to assist the Board of Supervisors in preparation of the County budget. In addition to determining priorities for capital expenditures, the County must also ensure that projects contained within the CIP conform to the Comprehensive Plan. Specifically, the projects are reviewed with considerations regarding the health, safety, and general welfare of the public, and the policies of the Comprehensive Plan. Once the CIP is adopted, it becomes a component of the Comprehensive Plan and provides a link between the documents and potential proffered contributions made with future rezoning projects. Furthermore, the listing of a given project in the CIP, and the CIP becoming a component of the Comprehensive Plan, is intended to satisfy the Code of Virginia § 15.2-2232.

In developing the CIP, a variety of adopted policies are considered:

- Comprehensive Plan Debt Management Policies
- Capital and Reserve Fund Policies
- Frederick County Public Schools New School Planning

Additionally, the development of the CIP is a collaborative process that involves a variety of County Departments and Frederick County Public Schools (FCPS). Each County Department and FCPS prepare their requests and the Department of Planning and Development compiles those requests for review by the County Administrator. The Finance Department and Treasurer's office assist in evaluating debt capacity against proposed projects to determine whether the proposals can be funded in the initial five-year period in compliance with the Board's debt management policies.

PROJECT RECOMMENDATIONS

Frederick County Public Schools

Frederick County Public Schools (FCPS) continues to commence and complete capital projects that have been priorities from previous years. This year's request from FCPS is more focused on immediate and pressing needs faced by the school system. The first priority is the construction of a fourth High School. An expansion to Middletown Elementary and Jordan Springs Elementary are the second and third priority, respectively.

Parks & Recreation

The top capital improvement priority for Parks & Recreation is establishing an indoor recreation center. In addition to that project, the department has prioritized spray grounds at existing parks, the completion of Old Charlestown Road Park, developing area 3 of the Sherando Park master plan, and construction of the Abrams Creek Trail. The department's priorities are largely informed by the Parks & Recreation Community Survey.

Handley Regional Library

The Handley Regional Library's top priority is a new library branch in the Gainesboro area. This would likely be achieved via the purchase and rehabilitation of an existing structure, and would be a small branch envisioned to provide an extension of services to this area rather than a standalone full service branch.

County Administration

There is one request from Public Works for the Double Toll Gate Convenience Site, which is currently funded and progressing towards construction. County Administration's top priority project continues to be the County Office Annex (Former Sunnyside

Plaza Shopping Center), which is shown midway through the plan timeframe for initial demolition work. General Government Capital Expenditures are also included. This item addresses those general government capital expenditures that may fall below the established \$100,000 departmental threshold.

Fire & Rescue

The top project for Fire & Rescue is the construction of Fire & Rescue Station 22, a new facility located in the vicinity of Route 277, along with the apparatus needed for this facility. Additionally, a new Station 23 and the associated apparatus is planned for the Fort Collier area, and the continued renovations to existing stations is included.

Sheriff's Office

The Sheriff's Office top priority is the construction of an eight-bay steel building for housing of large, specialized vehicles that require coverage.

Public Safety Communications

The Project 25 Public Safety Radio Network is the top public safety & communications priority. This project includes the purchase, construction, and deployment of Association of Public-Safety Communications Officials (APCO) International Project 25 (P25) radio communications system to support mission-critical public safety communications within the County. This system will provide radio and paging communications for the Frederick County Sheriff's Department, Frederick County Fire & Rescue, volunteer Fire & Rescue companies, and the Department of Public Safety Communications. This project is currently underway.

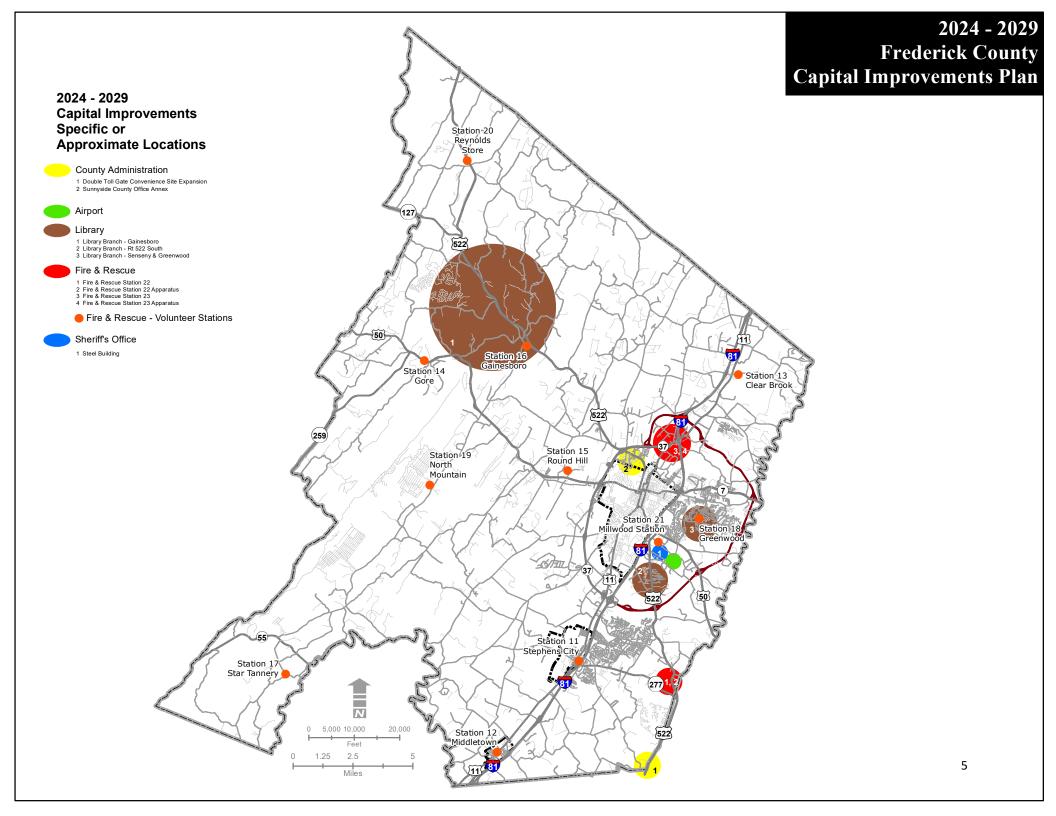
<u>Transportation Committee</u>

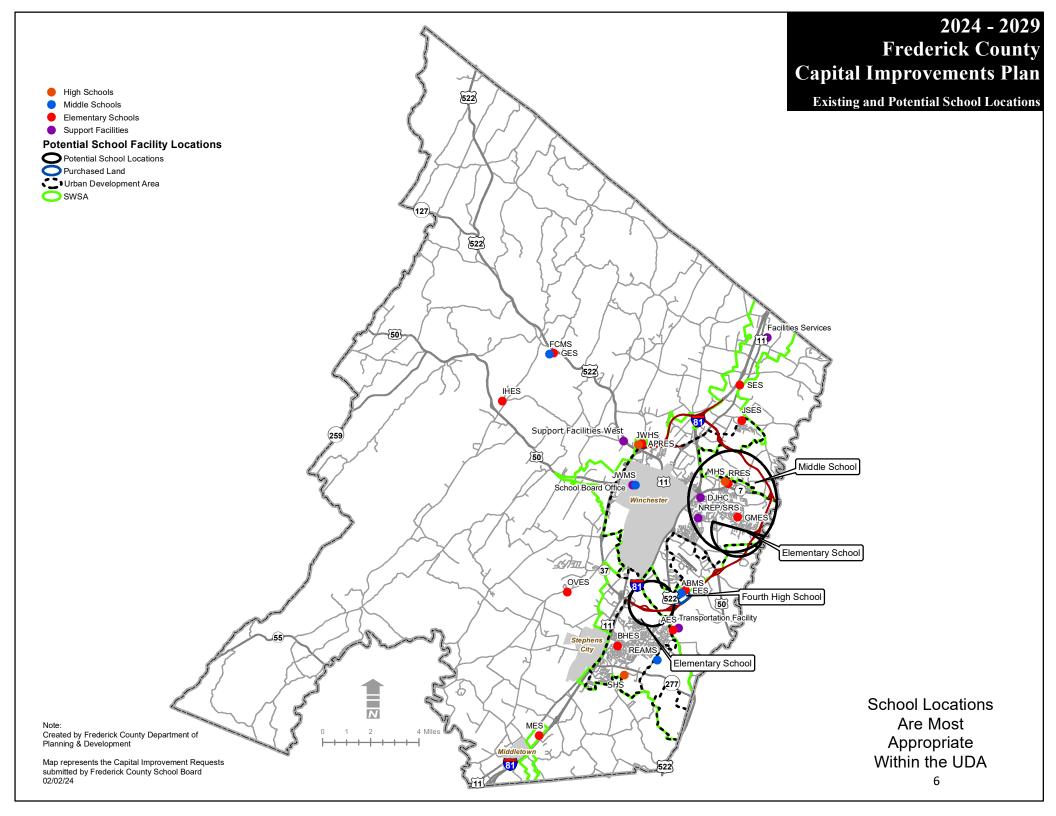
The Transportation Committee continues to provide project requests for the CIP. Virginia State Code allows for transportation projects to be included within a locality's CIP. Funding for transportation project requests typically come from a combination of state funds, developers, revenue sharing, various other revenue programs, and funds used to leverage those funding sources.

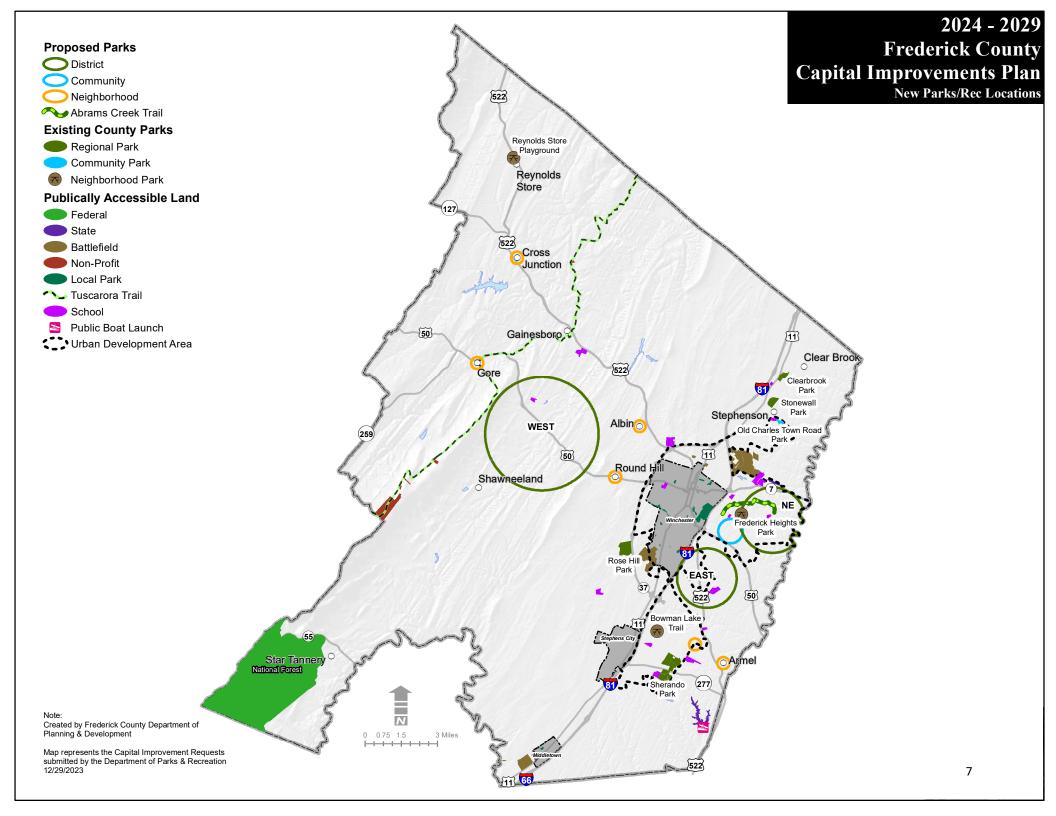
The Transportation Committee has included 10 funded projects. As projects and applications are developed, they could include all or a key portion of a prioritized project. The top three most imminent of the funded priorities include Exit 313 Bridge Replacement and Capacity Improvements, Renaissance Drive (Phase 2), and the Route 277 turn lane extension at Warrior Drive. The inclusion of the Eastern Road Plan Improvements item at number 32 once again emphasizes the connection between the CIP and potential proffered contributions made with rezoning projects which are aimed at mitigating potential transportation impacts identified in the Comprehensive Plan.

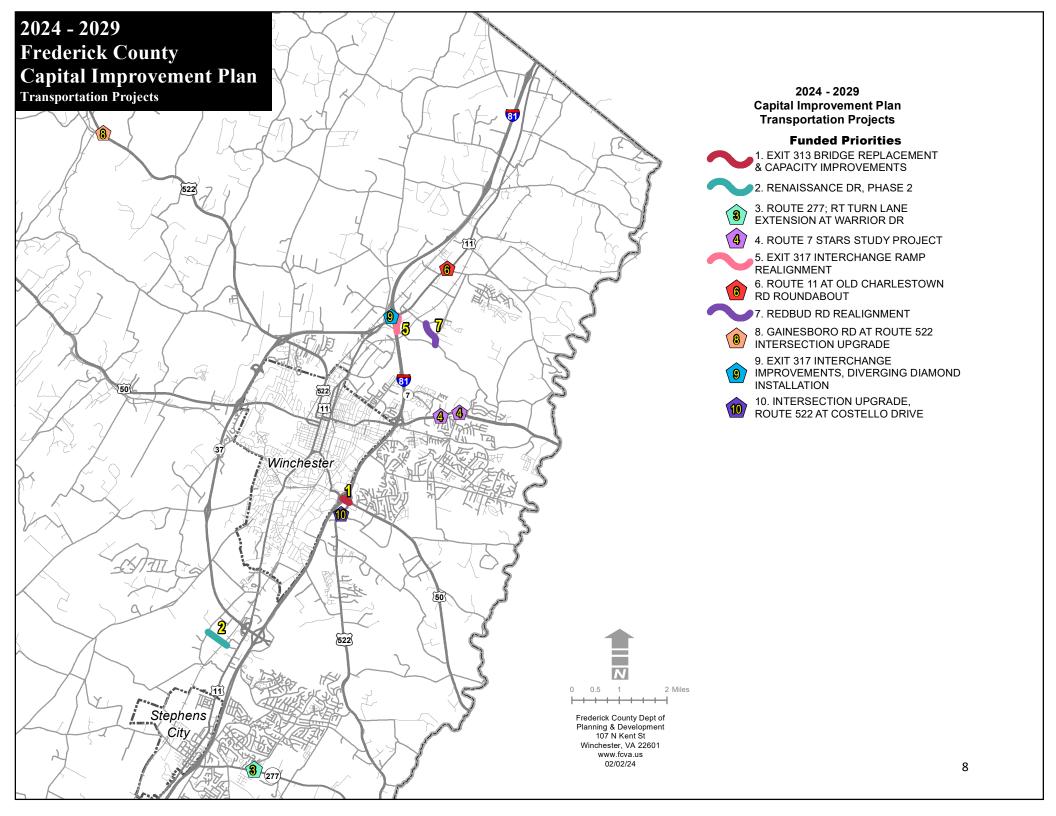
Winchester Regional Airport

Funding for airport projects is derived through a complex formula where the federal and state governments contribute a majority of the funding, with Frederick County and the other jurisdictions providing the remaining funding. The construction of a new aviation terminal to support future airport operations continues to be the number one priority in the CIP (underway), followed by the Taxiway "A" Relocation (design/construction). Other projects focus on land and easement acquisition in support of airport development to meet Federal Aviation requirements. The vast majority of the funding for these improvements comes from the Federal Aviation (FAA) and the VA Department of Aviation (VDA).









THE CIP TABLES – CONTENT DESCRIPTIONS

The Capital Improvement Plan tables, on the following four pages, contain a list of the capital improvement projects proposed for the ensuing five years. This year's plan has been amended greatly from past years to only focus on projects that, if approved, would expend funds within the next five years.

PROJECT FUNDING

The projects included in Table 1 have a total projected cost to the County of \$246,459,512 over the ensuing five year period. This figure excludes Airport requests and transportation projects as these are primarily funded through other sources.

- School projects are funded through a combination of loans from the Virginia Public School Authority and the Virginia Literary Fund.
- Funding for Parks & Recreation Department projects will come from the unreserved fund balance of the County. The
 Parks & Recreation Commission actively seeks grants and private sources of funding for projects not funded by the
 County.
- The inclusion of transportation projects to the CIP is in no way an indication that Frederick County will be undertaking these projects. Funding projects will continue to come from a combination of local, state, and federal funds, and developer contributions.
- Airport projects will be funded by contributions from the federal, state, and local governments. The local portion may include contributions from Frederick, Clarke, Shenandoah, and Warren Counties, as well as the City of Winchester.

Table 1 - 2024-2029 Capital Improvement Plan Requests Contribution Per Fiscal Year									
	Projects - Ranked by Department	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Total Cost 5 Year Plan	Beyond FY29 Expenses	
Department		Ensuing Fiscal Year	Year 2	Year 3	Year 4	Year 5			
Public Schools									
	Fourth High School	\$9,600,000	\$30,000,000	\$67,200,000	\$38,100,000	\$7,500,000	\$152,400,000		
	Middletown Elementary School Expansion	\$1,100,000				. , ,	\$19,200,000		
	Jordan Springs Elementary School Expansion	\$700,000	\$9,700,000	\$1,600,000			\$12,000,000		
	Total	\$11,400,000	\$54,700,000	\$71,900,000	\$38,100,000	\$7,500,000	\$183,600,000	\$	
Parks & Recreation									
raiks & Necleation	Recreation Center	\$1,100,000		\$12,060,000			\$13,160,000		
	Spray Grounds	\$641,000		ψ12,000,000	\$698,690		\$1,339,690		
	Old Charlestown Road Park	\$4,590,000			4000,000		\$4,590,000		
	Sherando Park Area 3 Development	* 1,000,000	\$514,022	\$3,626,430			\$4,140,452		
	Abrams Creek Trail			\$190,750		\$2,060,000			
	Total	\$6,331,000	\$514,022	\$15,877,180	\$698,690	\$2,060,000	\$25,480,892	\$	
		40,001,000	V ,	· · · · · · · · · · · · · · · · · · ·	¥300,000	V =,000,000		,	
Regional Library	Gainesboro Library		\$44,903	\$700,000	\$150,000	\$75,000	\$969,903		
	Total	\$0	\$44,903	\$700,000	\$150,000	\$75,000	\$969,903	\$	
County Administration									
	County Office Annex (Sunnyside)			\$1,000,000			\$1,000,000	TBD	
	General Government Capital Expenditures	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000			
	Double Toll Gate - Convenience Center	\$750,000					\$750,000		
	Total	\$950,000	\$200,000	\$1,200,000	\$200,000	\$200,000	\$2,750,000	\$	

	Contribution Per Fiscal Year							
	Projects - Ranked by Department		2025-2026		2027-2028	2028-2029	Total Cost 5 Year Plan	Beyond FY29 Expenses
	Public Safety - Fire and	Rescue, Sheriff's Of	fice and Comm	unications				
Fire & Rescue								
	Fire & Rescue Station 22 Station 22 Apparatus		\$7,500,000	\$1,825,000			\$7,500,000 \$1,825,000	\$8,000,000
	Fire and Rescue Station 23				\$2,000,000	\$2,000,000	\$4,000,000	\$3,000,000
	Station 23 Apparatus Station Renovations		\$1,000,000	\$1,000,000	\$4,500,000 \$1,000,000		\$4,500,000 \$4,000,000	
	Wildland Urban Interface Vehicle 1&2				\$1,000,000		\$1,000,000	
	Total	\$0	\$8,500,000	\$2,825,000	\$8,500,000	\$3,000,000	\$22,825,000	12,000,000
Sheriffs Office	Storage/Training Building		\$380,000				\$380,000	
	Replace URST Vehicle		\$450,000				\$450,000	
	Total	\$0	\$830,000	\$0	\$0	\$0	\$830,000	0
Communications	Project 25 Public Safety Radio Network	\$10,003,717					\$10,003,717	
Communications	Total	\$10,003,717	\$0	\$0	\$0	\$0	\$10,003,717	\$0
	Total of All Categories	\$28,684,717	\$64,788,925	\$92,502,180	\$47,648,690	\$12,835,000	\$246,459,512	\$12,000,000

Table 2 - Transportation Projects - CIP Requests									
	Contribution Per Fiscal Year								
	Projects - Ranked by Agency	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029+	Notes	Total Project Costs
		Ensuing					Beyond		
		Fiscal Year	Year 2	Year 3	Year 4	Year 5	Year 6+		
Funded & Proposed Priorities									
	Exit 313 Bridge Replacement and Capacity Improvements	\$17,044,000	\$9,479,000	\$9,269,000	\$800,000		\$18,063,000		\$54,655,000
	Rennaisance Drive, Phase 2	\$4,655,857						E	\$4,655,857
	Route 277 right turn extension Warrior Drive	\$500,850							\$500,850
	Route 7 STARS Study Project	\$1,239,000							\$1,239,000
	Exit 317 Interchange Ramp Realignment	\$6,944,000							\$6,944,000
	Route 11 @ Old Charlestown Road Roundabout	\$6,357,000						E	\$6,357,000
	Redbud Road Realignment	\$5,420,000		\$153,000			\$415,000	E	\$5,988,000
	Gainsboro Road Intersection with Route 522 upgrade (design)	\$4,000,000							\$4,000,000
	Exit 317 Interchange Upgrade	\$4,277,548	\$3,255,993	\$3,750,000	\$11,049,000	\$15,265,000			\$37,597,541
	Intersection Upgrade Rt 522 and Costello Drive	\$1,129,180	\$606,380	\$1,000,000	\$1,292,000	\$2,747,000			\$6,774,560
	Warrior Drive Pedestrian Upgrades						\$2,194,598		\$2,194,598
	Valley Mill Road Pedestrian Upgrades						\$879,513		\$879,513
	Inverlee Way Pedestrian Upgrades Route 11 S Widening and Intersection Improvements from						\$701,247		\$701,247
	Winchester City Limits to Opequon Church Lane						\$4,255,889		\$4,255,889
	Warrior Drive Extension (south)including Brandy Lane upgrade						\$6,515,527		\$6,515,527
Total		\$51,567,435	\$13,341,373	\$14,172,000	\$13,141,000	\$18,012,000	\$33,024,774		\$143,258,582

Other Funding Sources: E= Partial funding anticipated through development & revenue sources

The inclusion of transportation projects to the CIP is in no way an indication that Frederick County will be undertaking these projects. Funding projects will continue to come from a combination of state and federal funds, developer contributions, and revenue sharing

Table 3 - Winchester Reginal Airport CIP Requests										
Projects - Ranked by Agency	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Notes	Total Project Costs			
	Ensuing									
	Fiscal Year	Year 2	Year 3	Year 4	Year 5					
New Terminal	\$11,500,000					A,B,C	\$11,500,000			
Taxiway "A" Relocation	\$5,685,393	\$6,000,000	\$12,500,000			A,B,C	\$24,185,393			
Acquire Land/Easements	\$327,778	\$450,000	\$450,000			A,B,C	\$1,227,778			
Northside Site Prep	\$328,000		\$1,800,000			A,B,C	\$2,128,000			
BIL Eligible Projects		\$622,800	\$622,800			A,B,C	\$1,245,600			
Master Plan Update				\$800,000		A,B,C	\$800,000			
Rehabilitate Runway 14/32					\$7,000,000	A,B,C	\$7,000,000			
Total	\$17,841,171	\$7,072,800	\$15,372,800	\$800,000	\$7,000,000		\$48,086,771			

A= Partial funding from VA Dept. of Aviation

The local portion may include contributions from Frederick, Clarke, Shenandoah, and Warren Counties, and the City of Winchester.

B= Partial funding from FAA

C = Partial local funding (% split between Frederick County and Winchester based on Weldon Cooper figures)

^{*}Airport projects will be funded by contributions from the federal, state, and local governments.

Frederick County Public Schools



Frederick County Public Schools Project Priority List

PRIORITY 1 - Fourth High School

Description: This new high school is proposed to serve students in grades 9-12 with a program capacity of 1,250 students, and will address overcrowding and anticipated growth in high school student enrollment in the school division. The site is located at the end of Justes Drive behind Admiral Byrd MS. This school will be designed for collaborative education, similar to Aylor MS, with a variety of learning spaces to meet the needs of different learning styles and to impart skills necessary for today's working world.

Capital Cost: \$152,400,000

Justification: This project will address overcrowding and projected growth in high school student enrollment in the school

division for more than ten years.

Construction Schedule: It is anticipated this project could be completed in five years.

PRIORITY 2 - Middletown Elementary School Expansion

Description: Middletown ES opened in 1989 and has served continuously as a K-5 elementary school since that time. The school contains 70,281 square feet and has a program capacity of 527 students. As of December 8, 2023, the school has 595 students. Thirteen classrooms will be added to Middletown ES, to accommodate the additional growth in the southeast area of the County. An attendance zone rezoning will accompany this expansion to address capacity issues at Armel ES and Bass-Hoover ES.

Capital Cost: \$19,200,000

Justification: Middletown ES is in good condition, however growth in the southeast area of the County will need to be

addressed through the addition of classrooms to the facility and an attendance zone rezoning.

Construction Schedule: It is anticipated this project could be completed in three years.

PRIORITY 3 - Jordan Springs Elementary School Expansion

Description: Jordan Springs ES opened in 2020 and serves as a K-5 elementary school. The school contains 84,375 square feet and has a program capacity of 500 students. As of December 8, 2023, the school has 617 students. Proposed additions include 10 classrooms and a gym expansion.

Capital Cost: \$12,000,000

Justification: Both recent and expected growth in the attendance zone will need to be addressed through two strategies, including the addition of classrooms to the facility and an attendance zone rezoning. Neither strategy alone is sufficient to address enrollment growth at Jordan Springs ES.

Construction Schedule: It is anticipated this project could be completed in three years.

Parks & Recreation



Parks & Recreation Department Project Priority List

PRIORITY 1 - Recreation Center

Description: The Recreation Center would be approximately 44,000 square feet and include an indoor area large enough to accommodate a minimum of two basketball courts and an indoor turf field. The court area would also be designed for utilization by indoor soccer, baseball, softball, wrestling, volleyball, pickleball, and badminton with the installation of in-floor sleeves and drop curtains or partitions. This area could also be used for special events such as dances, proms, music events, or craft shows, thus providing a flexible facility for a multitude of activities to take place at one time. The facility would also house a fitness equipment room, multi-purpose rooms, office, storage, and locker rooms.

Capital Cost: \$13,160,000

Justification: Since its inception, the Parks & Recreation Department has relied significantly on the use of the county public schools to house recreation programs. This arrangement adequately addressed Recreation Center needs for a time, however the department currently offers over 250 sections of programs, creating a situation where the department is limited in its ability to meet the programming and facility needs of the county residents. A Recreation Center facility will facilitate the department to meet citizen programming demands and provide the area with a facility to attract new businesses to the community. This facility would be available to all area residents.

Construction Schedule: It is anticipated this project could be completed in three years.

PRIORITY 2 - Spray Grounds

Description: Spray-ground additions to Clearbrook and Sherando Parks are envisioned as 10-15 feature pads. Intended to supplement existing playgrounds and other recreation-based activities at the parks, the spray-grounds would similarly be free to the public. Location at the parks would be separate from the existing pools and dictated by infrastructure availability including but not limited to, parking, water, sewer, and electricity.

Capital Cost: \$1,339,690 (grant funding anticipated)

Justification: Spray-grounds are a popular summer activity for all ages, and are particularly well-suited for youth. Visitors to the parks have expressed an interest in additional activities and spray-grounds are identified as a need in the Parks and Recreation Community Survey. This facility would be available to all area residents.

Construction Schedule: It is anticipated this project could be completed for both parks in four years.

PRIORITY 3 - Sherando Park North - Softball Complex

Description: Old Charlestown Road Park, situated on land proffered by the Snowden Bridge development provides land for the provision of an active recreation park. The park is to include athletic fields suitable for league play. Fields, restroom, playground, hard surface courts, and parking are part of the park concept.

Capital Cost: \$4,590,000

Justification: The overall park design is informed by the Snowden Bridge (formerly Stephenson Village) rezoning proffer of 2003 and public input sessions in 2020. Plans are to provide rectangular fields and hard surface courts at this location. There are no public rectangular fields in the northern area of the County.

Construction Schedule: It is anticipated this project will take one year to complete.

PRIORITY 4- Sherando Park Area 3 Development

Description: This project completes the development vision for the SW area of Sherando Park located north of Route 277. This vision is outlined in the 2016 North Sherando Park Master Plan update. Included are rectangular play fields, a shared use trail segment, roadway and parking, playground, and a restroom. The project also includes completion of the Sherando Park Softball Complex.

Capital Cost: \$4,140,452

Justification: This facility would provide recreational opportunities for the entire Frederick County area and allow separation between youth and adult sport participants who often currently play in close proximity. These additional fields are needed to meet current demand and the completion of the softball complex will allow for tournament use.

Construction Schedule: It is anticipated this project could be completed in four years.

PRIORITY 5 - Abrams Creek Trail

Description: 10' wide, asphalt, shared-use trail along Abrams Creek from Senseny Road to Channing Drive. It is estimated the trail will have six bridge stream crossings and will be approximately 3 miles in length. As outlined below, the project is envisioned in three phases of approximately 1 mile each. Each phase will have logical beginning and ending points and be usable trail sections in themselves. Phase 1 from Senseny Road to Woodstock Lane is funded and underway. Phase 2 from Woodstock Lane to Woody's

Place, and Phase 3 from Woody's Place to Channing Drive need to be planned and constructed.

Capital Cost: \$4,750,750

Justification: This facility would provide recreational opportunities for residents and provide an alternate means of entering and exiting the City of Winchester from Eastern Frederick County. This project is intended to meet the needs of the community as identified in the 2022 Frederick County Parks and Recreation Community Survey, and the 2012 Virginia Outdoors Plan Survey.

Construction Schedule: The construction schedule will follow VDOT funding. Design for Phase II is anticipated to take two years, construction to take one year.

Handley Regional Library



Handley Regional Library Project Priority List

PRIORITY 1 - Frederick County Library Branch - Gainesboro

Description: This document is regarding the lease/purchase and rehabilitation of a 2,000 to 4,000 square foot library. Two currently vacant properties have been researched in the Gainesboro area that could be rehabilitated into a small free standing library. Initial parking should be for at least 10 vehicles. The proposed location would be on Route 50 or on Route 522 in the Gainesboro district.

Capital Cost: \$969,903

Justification: This branch would serve citizens living in an area that has been underserved by the Handley Library system.

In 2022-23 the library system checked out 379,861 (traditional) and 92,959 (electronic) books for a total of 472,280 books to Frederick County residents. 28,028 Frederick County residents have active cards and averaged 67.33% of all materials checked out. As of June, 2023 there were 2,940 new Frederick County registrations for the year. The library began collecting statistics on the Electronic Retrieval of Information, including information and documents retrieved from online databases, such as historical documents and research articles from periodicals. For this past year, Frederick County card holders downloaded 80,028 documents. The population group in the Gainesboro district is not close to a library in the regional system. This new library would serve a sizeable population of Frederick County that is not being served. The Library would provide materials and programming for citizens from toddlers to seniors, provide recreational and educational materials, and be a prime source for homework help as it will be open nights and on weekends when school libraries are closed. The library would supply computer access via Wi-Fi, rental tablets and hotspots, via laptop computers for document processing and for Internet usage. A small meeting room is envisaged for local groups to use as well as for children's story times and events such as local history talks. The library system provides business and personal help for all via scan/fax machines, a "print me" capability where one can print from a smart phone or from a computer at home, notary services free to the public, as well as interlibrary loan where we borrow books from around the nation. The library staff is available to help job applicants apply online and provide job research and testing assistance. The library will be there to help with all traditional citizen needs.

Construction Schedule: It is anticipated this project could be completed in three years.



County Administration and Public Works Project Priority List

PRIORITY 1 - County Office Annex (Former Sunnyside Plaza Shopping Center)

Description: The project entails the demolition of the existing shopping center building containing 64,000 square feet located on approximately 10 acres with construction of a new building (size to be determined). This project will accommodate the relocation of certain county departments from the 107 N. Kent Street complex to address existing and future space needs of county departments.

Capital Cost: \$1,000,000

Justification: The inclusion of this capital facility will allow for more improvements to general governmental facilities and services for the benefit of the residents of Frederick County and will meet the increasing need for office space, meeting space, and government services in an accessible location.

Construction Schedule: TBD

PRIORITY 2 -General Government Capital Expenditures

Description: This project consists of a revolving fund in the amount of \$1,000,000 for the benefit of General Government Capital Expenditures. It is the intention of this capital expenditure fund to be for the purpose of purchasing capital equipment for governmental agencies and to allow for improvements to general governmental facilities. Such expenditures may be less than the established \$100,000 departmental threshold. It was determined that the inclusion of such a project would be beneficial in ensuring that this significant capital expense is identified in the County's capital planning and budget process. This project is for the benefit of County Governmental Entities participating in the CIP but does not include individual Volunteer Fire and Rescue Companies.

Capital Cost: \$1,000,000

Justification: The inclusion of this capital expenditure fund for the purpose of purchasing capital equipment for governmental agencies and to allow for improvements to general governmental facilities will enable the County to meet the requirements of the Code of Virginia with regards to the collection and disbursement of cash proffers accepted on behalf of the governmental entities.

Construction Schedule: TBD



Fire & Rescue



Fire & Rescue Project Priority List

PRIORITY 1 - Frederick County Fire & Rescue Station 22

Description: Fire Station 22 will be a three-bay drive through fire station that will house an Engine, Ambulance, and Tanker. It will also allow for the expansion of apparatus to include brush fire apparatus and other potential needed apparatus for the area as growth will determine. The fire station will provide 24-hour coverage and will require living quarters for up to 12 firefighters. The living quarters will provide a physical training area, laundry/decontamination facilities, kitchen/dining areas, private sleeping quarters, locker room, bathroom, and office areas. The fire station will also include designed areas and props for training inside and outside of the fire station. The future location of the fire station will be determined by utilization of time and distance travel models for the population densities of the area.

Capital Cost: \$7,500,000

Justification: This station will serve the Route 522/Route 277 area of Frederick County. This area of the County has seen rapid growth in the past five years. The travel distance from the closest county fire station is greater than the current recommended time and distance models from the Insurance Services Office (ISO), the National Fire Protection Association (NFPA), and other accepted fire department and emergency medical standards. The purpose of this station is to decrease the travel time it takes to get to the citizens of Frederick County in that area.

Construction Schedule: Completion in FY 25-26.

PRIORITY 1A - Ambulance 22, Engine 22, & Tanker 22

Description: This project will be a Type I Custom Advanced Life Support Ambulance, a NFPA 1901 approved fire engine, and a NFPA 1901 compliant Tanker with a commercial cab.

Capital Cost: \$1,100,000

Justification: See Station 22 Justification

Construction Schedule: Completion in FY 26-27.

PRIORITY 2 - Station Renovations

Description: As part of the Fire Rescue System 10-year planning process, preliminary survey and analysis was completed of each of the 9 volunteer fire stations. Based on the preliminary survey it was recommended that a place holder for \$1,000,000 in building renovations and repairs be placed in each fiscal year. More detailed analysis by station is underway to identify critical needs and to assign priority to each project.

Capital Cost: \$6,000,000

Justification: As part of the Fire Rescue System 10-year planning process, preliminary survey and analysis was completed of each of the 9 volunteer fire stations. None of the 9 volunteer stations were originally designed or constructed to house full-time staff 24-hours a day, 365 days a year. The volunteer companies have over the last 20 years made various renovations and additions as finances could allow to make accommodations for the minimum staffing levels. As the projected minimum staffing levels increase over the next 10 years, additional renovations will be required. Over the last two years, the Clear Brook and Greenwood Volunteer Fire Companies have renovated their living areas to accommodate additional staffing for between \$600,000 to \$1,300,000. Based on the preliminary survey, similar renovations will be necessary in the remaining stations as well as more comprehensive work on the basic infrastructure of the aging buildings and updating to current life, health, and safety standards for the facilities. The average cost of \$1,000,000 is used as a place holder for planning purposes until completion of the more detailed analysis is completed. As described earlier, volunteer companies may undertake all or a portion of the renovation projects as their individual finances allow in the absence of a comprehensive funding approach to the needed renovations.

Construction Schedule: Continuous for Plan timeframe

PRIORITY 3 – Station 23

Description: Fire Station 23 will be a three-bay drive through fire station that will house an Engine, two Ambulances, and aerial. It will also allow for the expansion of apparatus to include brush fire apparatus and other potentially needed apparatus for the area as growth will determine. The fire station will provide 24-hour coverage and will require living quarters for up to 12 firefighters. The living quarters will provide a physical training area, laundry/decontamination facilities, kitchen/dining areas, private sleeping quarters, locker room, bathroom, and office areas. The fire station will also include designed areas and props for training inside and outside of the fire station. The future location of the fire station will be determined by utilization of time and distance travel models for the population densities of the area.

Capital Cost: \$8,000,000

Justification: This station will serve the Fort Collier area of Frederick County. This area of the County has seen rapid growth in the past five years. The travel distance from the closest county fire station is greater than the current recommended time and distance

models from ISO, NFPA and other accepted fire department and emergency medical standards. The purpose of this station is to decrease the travel time it takes to get to the citizens of Frederick County in that area.

Construction Schedule: Station location, design, and land acquisition will be conducted in 2027/2028. Construction commences in 2028 and completed in 2029.

PRIORITY 3A - Station 23 Apparatus

Description: NFPA 1901 approved aerial device, a NFPA 1901 approved fire Engine, and Type I Custom Advanced Life Support

Ambulance.

Capital Cost: \$4,500,000

Justification: See Station 23 justification **Construction Schedule:** FY 2027-2028

PRIORITY 4 - Wildland Urban Interface Vehicle 1 & 2

Description: This project will be a NFPA 1901 approved Wildland Urban Interface Vehicle. This vehicle will serve a special purpose in the fire and rescue system. This apparatus will be constructed on a commercial single axle vehicle with four-wheel drive capabilities. This apparatus will have a minimum 1000gpm pump with a minimum of 500 gallons of water and a class A foam system for fire suppression efforts. This apparatus will also carry the standard structural and wildland firefighting equipment to include fire hose, ladders, hand tools, and saws. This apparatus will be specially designed to respond to structural incidents and wildland incidents. The Fire and Rescue system has many areas across the County that are not easily accessible to regular fire apparatus. This apparatus will allow for a quicker and more efficient response to these incidents. These apparatuses also become very important during inclement weather.

Capital Cost: \$1,000,000

Justification: This apparatus will be specially designed to respond to structural incidents and wildland incidents. The Fire and Rescue system has many areas across the County that are not easily accessible to regular fire apparatus. This apparatus will allow us a quicker and more efficient response to these incidents. These apparatuses also become very important during inclement weather. **Construction Schedule:** This apparatus order would be placed in FY 28 and construction on the vehicle would not begin until FY28 and delivered during FY29. The current fire apparatus construction market is seeing 18 to 24 months for completion of orders due to back logs from supply chain and pandemic issues.



Sheriff's Office & Public Safety Communication

Sheriff's Office Project Priority List

PRIORITY 1 – Replace Underwater Search and Recovery Vehicle

Description: This project is to indicate projected cost for the replacement of the Underwater Search and Recovery Team's vehicle. The Frederick County Sheriff's Office's US&RT carries all of it's diving equipment and swift water rescue equipment in the vehicle to incidents. The US&RT has recovered human remains, evidence from crimes, vehicles and an airplane from bodies of water in Frederick County. US&RT members also have performed swift water rescue and the surrounding area. Members of the team are also swift water rescue technicians, swift water vehicle rescue technicians, and confined space operations. The current vehicle is an older rescue truck (1986 Hendrickson heavy walk-in rescue) that was acquired from a local Fire & Rescue department.

Capital Cost: \$450,000

Justification: Frederick County has several communities and recreational areas with large bodies of water used for recreational activities used for boating, swimming, and fishing. The communities of Lake Holiday, Shawneeland and have beaches for swimming. Lake Frederick is used for Boating and Fishing. The Cove and Camp Rock Enon has beaches for boating, fishing and swimming. There are also numerous bodies of water ranging from lakes, quarries, and waterways throughout the County within communities or rural areas. The Regency Lakes community has bodies of water where vehicles have been removed from due to motor vehicles accidents. The vehicle chassis and body is nearly four decades old. Finding replacement parts for repairs is becoming increasingly difficult. Parts have to be fabricated or found great distances away causing extended delays. The US&RT truck is the only dive team truck for law enforcement and rescue calls for service from the Maryland State line to Rockbridge County. Sheriff's Office divers are certified by PADI, Scuba Diving International, Underwater Criminal Investigators, Emergency Response Diving International, Virginia State Police, Virginia Department of Fire Programs, and trained to OSHA standards to handle these types of calls for service. Frederick County residents would have an extended amount of response time for the next available team to arrive to answer a call for service within Frederick County.

Construction Schedule: Completion in FY 24-25

PRIORITY 2 – 8 Bay Steel Building for Large Vehicles

Description: Construct an 8-bay steel building for housing of large, specialized vehicles that require coverage due to the large amount of equipment and specialized tools. This project does not require the purchase of land as it will be constructed on the property of the Frederick County Sheriff's Office. The building will allow for the maintenance, storage, security of all the large specialized vehicles that are required for the special operations teams, and year-round training. This building size will be 4,256 square feet and will require 13,500 square feet to build. This will be an 8-bay, 4 garage door equipment storage building with a 35x76 front concrete pad.

Capital Cost: \$380,000

Justification: This project will facilitate the required housing of vehicles that are used for the special purpose teams. These vehicles are required to be protected from the weather to ensure quick responses to emergencies. Protecting the vehicles will allow the longevity of the vehicle by reducing engine wear and exposure to fluctuating weather conditions. Due to these vehicles belonging to specialty teams, the vehicles house important and expensive equipment. This equipment allows personnel of each specialty team to conduct the mission at hand. Much of the equipment has to be maintained at certain temperatures. The Sheriff's Office can also use the building to do specialized training in for the deputies, such as SWAT, Civil Disturbance, Search and Rescue, Use of Force, etc.

Construction Schedule: Due to the simplicity of the building, style, materials and the availability of the land, this building can be completed in one year

Public Safety and Communications Project Priority List

PRIORITY 1 – Project 25 Public Safety Radio Network

Description: Purchase, construction, and deployment of Association of Public-Safety Communications Officials (APCO) International Project 25 (P25) radio communications system to support mission-critical public safety communications within the County. This system will provide radio and paging communications for the Frederick County Sheriff's Department, Frederick County Fire & Rescue, volunteer fire & rescue companies, and the Department of Public Safety Communications.

Capital Cost: \$20,981,973

Justification: Frederick County's current public safety radio system was originally designed as a mobile-only Public Works system approximately 40 years ago. Since that time, law enforcement, fire, and emergency medical services have expanded and in the late 1980s to early 1990s, the system was designated as the County' public safety radio system; however, the system was not redesigned for public safety use.

The County's public safety radio system today consists primarily of conventional very-high frequency (VHF) repeaters, base stations and voted receivers operating from six sites within the county. All repeaters operate in the narrowband analog mode. With each repeater operation on a separate conventional frequency, users must switch channels manually to access the appropriate repeater depending on their location within the county.

As a result of the current system, a lack of coverage and unreliable performance exist in many areas within the County. The existing system's design is insufficient to provide reliable public-safety-grade performance. Performance on the existing system can vary for different functional users (Law Enforcement/Fire) depending on location and which frequency and radio site with which they are affiliated. In addition, the system design includes single points of failure that can leave emergency responders with no reliable way to be dispatched or to communicate for an extended period if a failure occurs.

In early 2020, Frederick County issued a Request for Proposals seeking a new public safety radio system. After several delays and a legal challenge, Frederick County entered into a contract with EF Johnson in August 2021 for construction of a new Countywide P25 public safety radio system. Frederick County's new radio system will be P25 compliant and will replace the existing radio system. P25 is the current standard developed and accepted by the U.S. Department of Homeland Security to ensure emergency radio systems and equipment are capable of interoperability for public safety. P25 systems ensure the interoperability of emergency

communications equipment between local, state, and federal public safety professionals. It is important to note that the County's current public safety radio system does not meet the P25 standard.

The new radio system will be a 10-site system configured as a single simulcast cell providing coverage to the service areas and operating conditions for Frederick County, Winchester, and the I-81 corridor. Nine sites will be located within Frederick County and one site will be a co-located site located in Shenandoah County.

Construction Schedule: The contract award for this project was in August 2021. It is estimated to be completed by December 2024.



Transportation Committee Project Priority List

PRIORITY 1 - Exit 313 Bridge Replacement and Capacity Improvements

Description: Replace the structurally deficient bridge at Exit 313 and add limited capacity improvements.

Capital Cost: \$38,422,650

Justification: The bridge on Route 17/50/522 (Millwood Pike) over Interstate 81 at Exit 313 is reaching the end of its service life and needs to be replaced. The new bridge will feature design elements that will accommodate future improvements to the Route 17/50/522 corridor and future improvements to I-81. The interchange configuration will not change with this project.

Construction Schedule: TBD

PRIORITY 2 - Renaissance Drive, Phase 2

Description: Construct a connector road and railroad crossing between Route 11 and Shady Elm Road...

Capital Cost: \$4,655,858

Justification: This is a transportation improvement that will address congestion at key points along Route 11 and Apple Valley

Road. This project is identified in Secondary Road Improvements Plan.

Construction Schedule: TBD

PRIORITY 3 - Route 277 right turn lane extension at Warrior Drive

Description: Extend right-turn lane for eastbound Route 277 at the intersection of Route 277 and Warrior Drive. Installation of

sidewalk for pedestrian safety and installation of pedestrian pedestal.

Capital Cost: \$500,858

Justification: This improvement would be a significant safety upgrade to this intersection.

Construction Schedule: TBD

PRIORITY 4 - Route 7 STARS Study Project

Description: Consolidate turning movements at Blossom Drive/Millbrook Drive and Route 7 as well as at First Woods

Drive/Greenwood Road and Route 7 to reduce conflicts and improve efficiency.

Capital Cost: \$1,050,000

Justification: This improvement would be a significant safety upgrade to these intersections.

Construction Schedule: TBD

PRIORITY 5 - Exit 317 Interchange Ramp Realignment Project

Description: Relocate the existing northbound exit ramp at I-81 Exit 317 and Route 11 to the current location of the Redbud Road intersection. This project will include turn lane upgrades on to the exit ramp from Route 11 North to I-81 northbound and removal of the signal that will be made redundant by the realignment.

Capital Cost: \$7,103,495

Justification: This improvement will upgrade traffic flow and safety through the interchange area.

Construction Schedule: TBD

PRIORITY 6 - Route 11 at Old Charlestown Road Roundabout installation

Description: Upgrade the temporary signal that is currently in place to the roundabout design that VDOT has identified for this intersection.

Capital Cost: \$5,426,108

Justification: This improvement will improve traffic flow and safety at this intersection while minimizing the impact to traffic

throughput north and south on Route 11.

Construction Schedule: TBD

PRIORITY 7 - Redbud Road Realignment

Description: The funding of the Exit 317 ramp realignment makes this realignment critical for trips that currently use Redbud Road which total nearly 3,000 vehicles per day. VDOT has made it a requirement for the ramp realignment to move forward.

Capital Cost: \$5,988,146

Justification: This project is required to be underway in conjunction with or prior to the Exit 317 ramp realignment and the Board

has submitted a revenue sharing application to move it forward. The application is currently under review.

Construction Schedule: TBD

PRIORITY 8 - Gainesboro Road at Route 522 Intersection Upgrade

Description: This project seeks to upgrade the entrance points into Frederick County Middle School and Gainesboro Elementary School where they access the state road system and improve the intersection of Gainesboro Road and Route 522 to accommodate the traffic shift that will be involved as the schools relocate their primary access point to Gainesboro Road.

Capital Cost: \$150,000

Justification: This project will improve safety for traffic in the vicinity of the schools as well as school traffic itself.

Construction Schedule: TBD

PRIORITY 9 - Exit 317 Interchange Improvements, Diverging Diamond Installation

Description: This project seeks to upgrade the existing interchange configuration from a traditional diamond interchange to a diverging diamond interchange. This project will work in coordination with Project 5 and Project 7 for the overall upgrades to the operations of Exit 317.

Capital Cost: \$37,597,541

Justification: This project will improve safety and improve overall traffic flow through increased capacity and reduced conflicts with left turning traffic accessing the interchange.

Construction Schedule: TBD

PRIORITY 10 - Intersection Upgrade, Route 522 at Costello Drive

Description: This project will implement a double left turn onto Costello Drive from Route 522 southbound as well as reduce conflicting movements from the hotel at that intersection.

Capital Cost: \$6,774,560

Justification: This project will increase capacity, reduce backups, and improve safety.

Construction Schedule: TBD

Winchester Regional Airport



Winchester Regional Airport Project Priority List

PRIORITY 1 - New Airport Terminal

Description: The Airport proposes design, bid, and construction of a new terminal building. The new facility will be constructed

south of the existing building. This project is underway.

Capital Cost: \$11,500,000

Justification: FAA airport design standards **Construction Schedule:** Completion in FY 24-25

PRIORITY 2 – Taxiway "A" Relocation

Description: The relocation of Taxiway A is part of the overall goal to meet Federal Aviation Administration (FAA) airport standards

to maintain CAT I Instrument Landing System (ILS) weather minimums and meet airport design criteria for Group III aircraft.

Capital Cost: \$24,185,292

Justification: This project improves the safety of airport operations and enhances our ability to accommodate large business

aircraft. Due to the complexity of relocating the entire 5,500' taxiway, the project will be completed in phases.

Construction Schedule: FY24: Construct Phase 2, Design/Bid Phase 3

FY25: Construct Phase 3, Design/Bid Phase 4

FY26: Construct Phase 4

PRIORITY 3 – Acquire Land/Easements

Description: Land required to facilitate the relocation of Taxiway A is part of the overall goal to meet Federal Aviation Administration (FAA) airport standards to maintain CAT I Instrument Landing System (ILS) weather minimums, and meet airport design criteria for Group III aircraft.

Capital Cost: \$1,287,778

Justification: This project improves the safety of airport operations and enhances our ability to accommodate large aircraft in a manner that is considerate of local land uses.

Construction Schedule: FY24-FY26: Acquire Parcel

PRIORITY 4 – Northside Site Prep

Description: Site preparation for 30 acre tract of land owned fee simple and zoned for aeronautical use.

Capital Cost: \$2,128,000

Justification: Area shown for development on airport master plan.

Construction Schedule: FY24: Environmental Assessment and Planning Study

FY26: Design and Construction

PRIORITY 5 – BIL Eligible Projects

Description: Eligible project under the Bipartisan Infrastructure Legislation (BIL) Airport Improvement Grant (AIG) program.

Capital Cost: \$1,245,600

Justification: Final project scope TBD, as there are several eligible projects that conform to the Master Planunder consideration.

Construction Schedule: FY25: Design and/or Construction

FY26: Design and/or Construction

PRIORITY 6 - Master Plan Update

Description: Master plan update to include future development, aviation forecasts, community impact, and needs assessment.

Capital Cost: \$800,000

Justification: Ensure continued compliance with comprehensive plan, regional development plans, and statewide aviation plan.

Construction Schedule: FY28: Planning and Final Report

PRIORITY 7 – Rehabilitate Runway 14/32

Description: Rehabilitation project for the airport's sole runway.

Capital Cost: \$7,000,000

Justification: Project ensures runway is rehabilitated prior to reaching the end of its useful life.

Construction Schedule: FY29: Design and Construction