



Capital Improvement Program Administration

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Administration

Capital Improvement Program										
Administration and Information Technology										
Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Projects										
Backup Emergency Communications Center	-	-	-	1,348	3,092	3,395	-	7,835	-	7,835
Enterprise Data Warehouse	-	-	1,500	1,545	1,591	-	-	4,636	-	4,636
Data Center and Fiber Plant Relocation	1,765	-	-	721	-	-	-	721	-	2,486
Fiber Backbone Replacement/I-Net	-	930	-	-	-	-	-	930	-	930
Land Acquisition – County Projects	119,915	1,011	1,050	1,103	1,158	1,216	1,277	6,815	20,000	146,730
Land Acquisition – School Projects	136,517	-	5,275	9,740	5,870	19,510	6,535	46,930	66,990	250,437
Major Computer Systems – IT Contingency	1,303	1,545	1,591	1,639	1,688	1,739	1,791	9,993	7,718	19,014
Major Computer Systems – LMIS	10,162	3,169	-	-	-	-	-	3,169	-	13,331
Major Computer Systems – Oracle Upgrade	2,500	5,000	3,000	3,000	-	-	-	11,000	-	13,500
Public Safety – 911 Phone Switch Replacement	-	-	-	3,101	-	-	-	3,101	-	3,101
Public Safety – Handheld Radio Replacements	-	-	10,721	-	-	-	-	10,721	-	10,721
Public Safety – Radio Tower Expansion Program	2,000	405	2,830	-	3,002	-	3,185	9,422	6,964	18,386
Public Safety – Redundant Master/Prime Site	3,075	-	1,008	-	-	-	-	1,008	-	4,083
Public Safety – School Radio Coverage Program	1,100	660	1,100	1,100	1,100	-	-	3,960	-	5,060
Remote Site Connectivity	-	-	191	2,178	950	1,491	-	4,810	-	4,810
Total Cost	278,337	12,720	28,266	25,475	18,451	27,351	12,788	125,051	101,672	505,061
Funding Source										
Local Tax Funding	266,070	12,709	22,991	15,735	12,581	7,841	12,788	84,645	77,162	427,877
Local Tax Funding Roads	-	-	-	-	-	-	-	-	-	-
General Obligation Bonds	-	-	-	-	-	-	-	-	-	-
Lease Revenue Financing	12,267	-	5,275	9,740	5,870	19,510	-	40,395	24,510	77,172
Cash Proffers	-	11	-	-	-	-	-	11	-	11
Total Financing	278,337	12,720	28,266	25,475	18,451	27,351	12,788	125,051	101,672	505,061



Administration

Backup Emergency Communications Center

Details:

Project Number: n/a

Election District: Countywide

Square Feet: n/a

Location: n/a

Estimated Completion Year: FY 2025

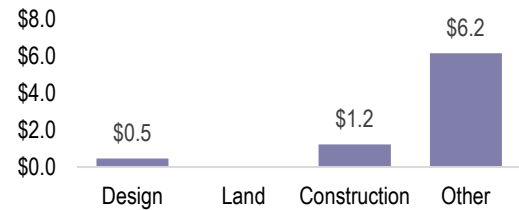
Referendum: n/a

Background:

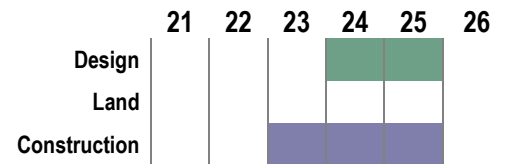
This project provides funding for relocating the Backup Emergency Communications Center (ECC) to a modern, technically redundant, and secure facility. This migration could be a step whereby the technology and operations are moved to a data center.

The existing ECC facility is aging and has been identified, on the County's Technology Roadmap, as a key backup facility that must be migrated to a modern data center due to the critical nature of the work performed in the facility.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Professional Services	-	-	-	-	225	232	-	457	-	457
Construction	-	-	-	1,225	-	-	-	1,225	-	1,225
Furniture, Fixtures & Equip	-	-	-	-	2,586	2,854	-	5,440	-	5,440
Contingency	-	-	-	123	281	309	-	713	-	713
Total Cost	-	-	-	1,348	3,092	3,395	-	7,835	-	7,835
Local Tax Funding	-	-	-	1,348	3,092	3,395	-	7,835	-	7,835
Total Financing	-	-	-	1,348	3,092	3,395	-	7,835	-	7,835

Operating Impact (\$ in 1000s)	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
O&M	-	-	202	270	286	-	-
Total Impact	-	-	202	270	286	-	-



Administration

Data Center and Fiber Plant Relocation

Details:

Project Number: C02246

Election District: Countywide

Square Feet: n/a

Location: Countywide

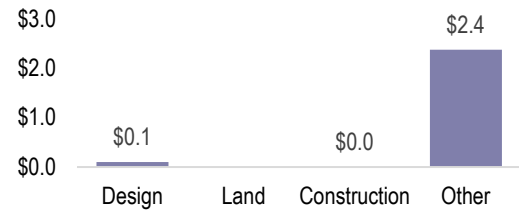
Estimated Completion Year: FY 2023

Referendum: n/a

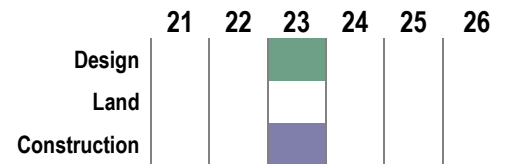
Background:

Existing data center facilities are aging and present a significant risk to continuity of operations. This project begins the process to migrate the County's data center facilities to a private, fit-for-purpose data center within Loudoun County. This will allow DIT to collapse the existing, aging data center facilities into a primary fit-for-purpose location.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Professional Services	-	-	-	109	-	-	-	109	-	109
Furniture, Fixtures & Equip	1,765	-	-	546	-	-	-	546	-	2,311
Contingency	-	-	-	66	-	-	-	66	-	66
Total Cost	1,765	-	-	721	-	-	-	721	-	2,486
Local Tax Funding	1,765	-	-	721	-	-	-	721	-	2,486
Total Financing	1,765	-	-	721	-	-	-	721	-	2,486



Administration

Enterprise Data Warehouse

Details:

Project Number: n/a

Election District: Countywide

Square Feet: n/a

Location: Countywide

Estimated Completion Year: FY 2025

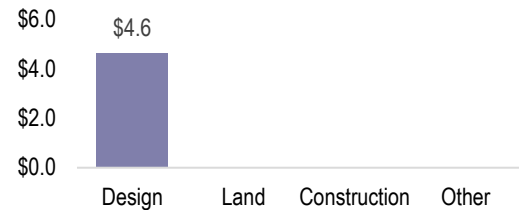
Referendum: n/a

Background:

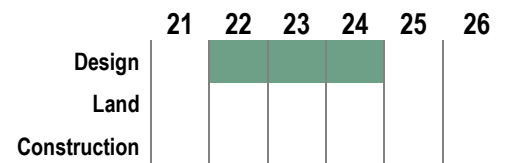
This project provides funding for establishing and implementing modern data management practices, and the resultant infrastructure and tools that are necessary to utilize the data. Key activities include establishing data governance that clearly establishes authoritative sources of data and data stewards; strengthening data security, privacy, and confidentiality models; cataloging and consolidating data repositories across the County; and applying advanced analytics to an integrated data environment to extract insights to support County leadership for policy and decision support. The outcome is to enhance citizen-centric services while concurrently enhancing operational efficiency and effectiveness.

The effort will culminate in the establishment of the first Loudoun County Data Warehouse in an appropriately structured, protected, high quality environment for all County departments to access and analyze according to established security and privacy policies.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Professional Services	-	-	1,500	1,545	1,591	-	-	4,636	-	4,636
Total Cost	-	-	1,500	1,545	1,591	-	-	4,636	-	4,636
Local Tax Funding	-	-	1,500	1,545	1,591	-	-	4,636	-	4,636
Total Financing	-	-	1,500	1,545	1,591	-	-	4,636	-	4,636



Administration

Fiber Backbone Replacement/I-Net

Details:

Project Number: n/a

Election District: Countywide

Square Feet: n/a

Location: Countywide

Estimated Completion Year: FY 2021

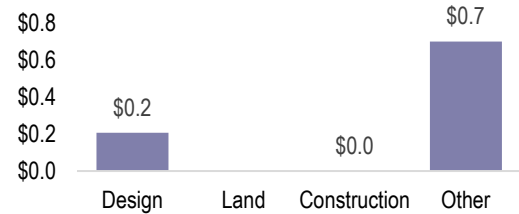
Referendum: n/a

Background:

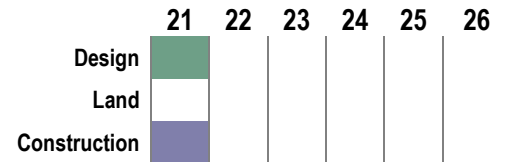
This project provides funding for replacing the current Comcast I-Net fiber network around Leesburg. Funding will replace this 20-plus year-old fiber with leased fiber.

The Loudoun County fiber backbone provides connectivity to approximately 20 sites in the Leesburg area, including the Government Center, Shenandoah Office Building, Emergency Communications Center (ECC), Backup ECC, Emergency Operations Center (EOC), and the Courts Complex.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Professional Services	-	206	-	-	-	-	-	206	-	206
Furniture, Fixtures & Equip	-	639	-	-	-	-	-	639	-	639
Contingency	-	85	-	-	-	-	-	85	-	85
Total Cost	-	930	-	-	-	-	-	930	-	930
Local Tax Funding	-	930	-	-	-	-	-	930	-	930
Total Financing	-	930	-	-	-	-	-	930	-	930



Administration

Land Acquisition Fund

Details:

Project Number: n/a

Election District: Countywide

Location: Countywide

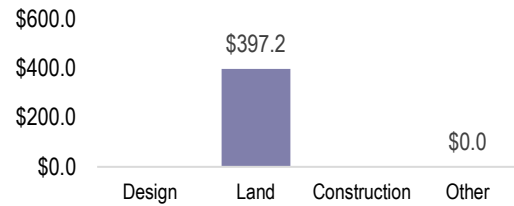
Estimated Completion Year: n/a

Referendum: n/a

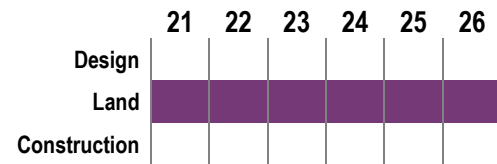
Background:

To develop the facilities in the Capital Plan, the County uses land sites already owned by the County and the Loudoun County School Board, proffered land sites to be dedicated to the County, and sites that need to be acquired.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Land	256,432	1,000	6,325	10,843	7,028	20,726	7,812	53,734	86,990	397,156
Personnel	-	11	-	-	-	-	-	11	-	11
Total Cost	256,432	1,011	6,325	10,843	7,028	20,726	7,812	53,745	86,990	397,167
Local Tax Funding	252,527	1,000	1,050	1,103	1,158	1,216	7,812	13,339	62,480	328,346
Cash Proffers	-	11	-	-	-	-	-	11	-	11
Lease Revenue Financing	3,905	-	5,275	9,740	5,870	19,510	-	40,395	24,510	68,810
Total Financing	256,432	1,011	5,275	9,740	5,870	19,510	6,535	53,745	86,990	397,167

Operating Impact (\$ in 1000s)	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Debt Service	-	132	766	1,616	2,500	3,886	8,899
Total Impact	-	132	766	1,616	2,500	3,886	8,899



Administration

Major Computer Systems

Details:

Project Number: n/a

Election District: Countywide

Square Feet: n/a

Location: Countywide

Estimated Completion Year: Ongoing

Referendum: n/a

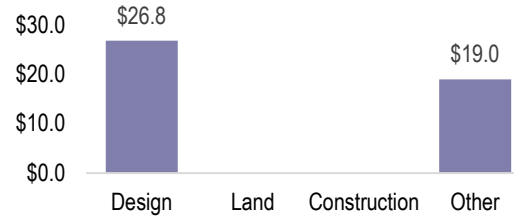
Background:

This program plans for the acquisition or replacement of major computer systems that cost more than \$500,000 per system, and includes a contingency fund for information technology (IT) projects. Planned major computer systems acquisitions include costs related to:

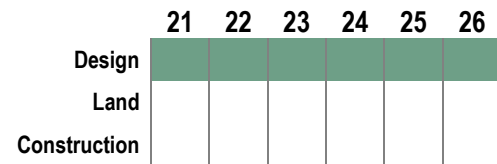
FY 2021 funding includes the Land Management Information System replacement, Oracle system upgrades for module integration, and the IT contingency account.

The annual cost for incremental operations and maintenance, because of these projects, will be incorporated into the Department of Information Technology's base operating budget.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Professional Services	12,662	8,169	3,000	3,000	-	-	-	14,169	-	26,831
Contingency	1,303	1,545	1,591	1,639	1,688	1,739	1,791	9,993	7,718	19,014
Total Cost	13,965	9,714	4,591	4,639	1,688	1,739	1,791	24,162	7,718	45,845
Local Tax Funding	5,603	9,714	4,591	4,639	1,688	1,739	1,791	24,162	7,718	37,483
Lease Revenue Financing	8,362	-	-	-	-	-	-	-	-	8,362
Total Financing	13,965	9,714	4,591	4,639	1,688	1,739	1,791	24,162	7,718	45,845



Administration

Public Safety - 911 Phone Switch Replacement

Details:

Project Number: n/a

Election District: Countywide

Square Feet: n/a

Location: Countywide

Estimated Completion Year: FY 2023

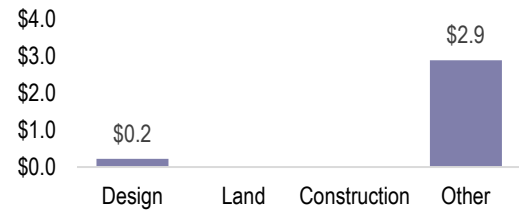
Referendum: n/a

Background:

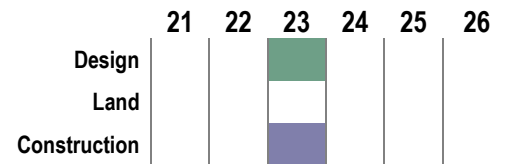
This project will replace the County's current E-911 phone switch in FY 2023. All emergency communications in the County occur through this switch, and it is vital to the health and safety of Loudoun's citizens.

The current E-911 phone switch was installed in the Emergency Communications Center and became fully operational in July 2015. The existing switch is Next-Gen 911-compatible. The estimated lifespan for this mission-critical system is seven years.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Professional Services	-	-	-	219	-	-	-	219	-	219
Furniture, Fixtures & Equip	-	-	-	2,600	-	-	-	2,600	-	2,600
Contingency	-	-	-	282	-	-	-	282	-	282
Total Cost	-	-	-	3,101	-	-	-	3,101	-	3,101
Local Tax Funding	-	-	-	3,101	-	-	-	3,101	-	3,101
Total Financing	-	-	-	3,101	-	-	-	3,101	-	3,101



Administration

Public Safety - Handheld Radio Replacements

Details:

Project Number: n/a

Election District: Countywide

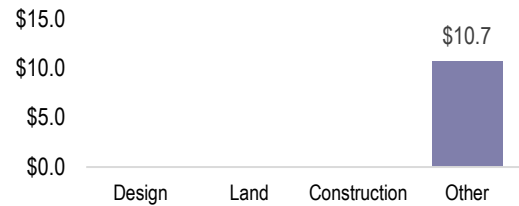
Square Feet: n/a

Location: Countywide

Estimated Completion Year: FY 2022

Referendum: n/a

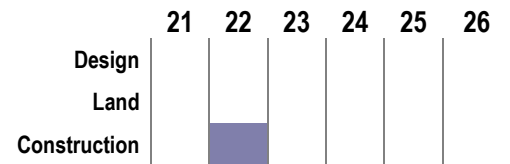
Phase Costs in Millions



Background:

This project will replace approximately 1,600 handheld radios, including the replacement of 115 radios for the Town of Leesburg, and 800-plus battery chargers currently in use by Fire and Rescue and the Sheriff's Office. Handheld radios have an estimated lifespan of seven years; the replacement of the battery chargers is due to technology updates requiring replacement in FY 2022.

Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Furniture, Fixtures & Equip	-	-	10,210	-	-	-	-	10,210	-	10,210
Contingency	-	-	511	-	-	-	-	511	-	511
Total Cost	-	-	10,721	-	-	-	-	10,721	-	10,721
Local Tax Funding	-	-	10,721	-	-	-	-	10,721	-	10,721
Total Financing	-	-	10,721	-	-	-	-	10,721	-	10,721



Administration

Public Safety - Radio Tower Expansion Program

Details:

Project Number: C02218

Election District: Countywide

Square Feet: n/a

Location: Countywide

Estimated Completion Year: Ongoing

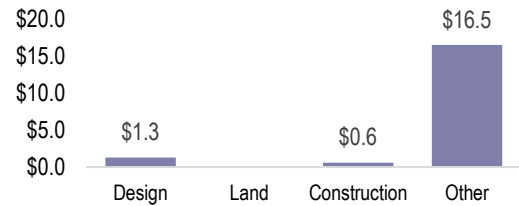
Referendum: n/a

Background:

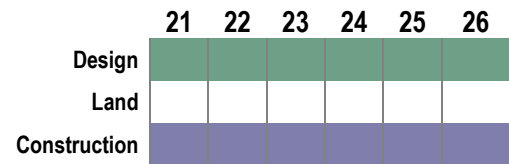
Due to population growth within the County, it is expected that additional public safety radio towers are needed to provide the required radio coverage for first responders. The Phase I coverage study identified that nine additional towers are needed in various locations in the County.

Phase II: Installation of the new towers as identified in the coverage study starting in FY 2021 and every two years after that. Future funding for this program will be re-evaluated based on updated requirements.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Professional Services	-	386	159	-	169	-	179	893	392	1,285
Construction	600	-	-	-	-	-	-	-	-	600
Furniture, Fixtures & Equip	1,400	-	2,536	-	2,690	-	2,854	8,080	6,240	15,720
Contingency	-	19	135	-	143	-	152	449	332	781
Total Cost	2,000	405	2,830	-	3,002	-	3,185	9,422	6,964	18,386
Local Tax Funding	2,000	405	2,830	-	3,002	-	3,185	9,422	6,964	18,386
Total Financing	2,000	405	2,830	-	3,002	-	3,185	9,422	6,964	18,386



Administration

Public Safety Redundant Master/Prime Site

Details:

Project Number: C02174
Election District: Countywide
Square Feet: n/a
Location: Countywide
Completion Year: FY 2022
Referendum: n/a

Background:

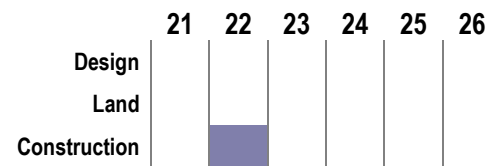
In 2016, the County's public safety radio system experienced a system failure caused by an external electrical malfunction that destroyed critical infrastructure.

In an effort to ensure similar failures are minimized and mitigated in the future, this project provided \$1.625 million in local tax funding from the Major Equipment Replacement Fund in FY 2018, and \$1.450 million in lease revenue financing in the Capital Projects Fund in FY 2019 to build a geographically-redundant master/prime site. This work will allow the radio system to operate normally in the event of a failure at a single master/prime site. A new location for a redundant site is recommended in leased commercial data center space, which is an operating expense included in DIT's base budget.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Furniture, Fixtures & Equip	3,075	-	1,008	-	-	-	-	1,008	-	4,083
Total Cost	3,075	-	1,008	-	-	-	-	1,008	-	4,083
Local Tax Funding	3,075	-	1,008	-	-	-	-	1,008	-	4,083
Total Financing	3,075	-	1,008	-	-	-	-	1,008	-	4,083



Administration

Public Safety – School Radio Coverage Program

Details:

Project Number: C02217

Election District: Countywide

Square Feet: n/a

Location: Countywide

Estimated Completion Year: FY 2024

Referendum: n/a

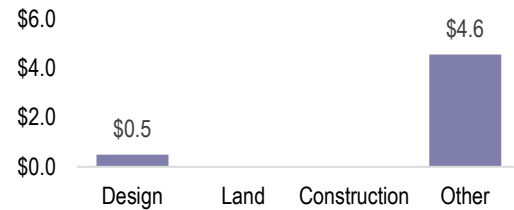
Background:

Bi-Directional Amplifiers (BDAs) in public school buildings provide public safety radio coverage for the school resource officers. The coverage study included in this project identified the location of schools needing boosters and determined the proper replacement schedule of existing BDAs.

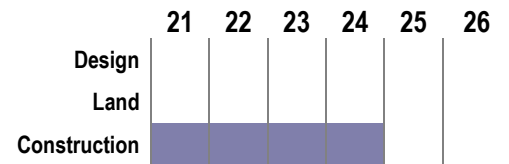
Phase II: Funding in FY 2020 and FY 2021 is for the initial installation and replacement of 12 BDAs as identified by LCPS.

Phase III: Installation and replacements of BDAs as identified in the Phase I study. Funding for this phase will be evaluated in a future CIP.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Professional Services	500	-	-	-	-	-	-	-	-	500
Furniture, Fixtures & Equip	600	600	1,000	1,000	1,000	-	-	3,600	-	4,200
Contingency	-	60	100	100	100	-	-	360	-	360
Total Cost	1,100	660	1,100	1,100	1,100	-	-	3,960	-	5,060
Local Tax Funding	1,100	660	1,100	1,100	1,100	-	-	3,960	-	5,060
Total Financing	1,100	660	1,100	1,100	1,100	-	-	3,960	-	5,060



Administration

Remote Site Connectivity

Details:

Project Number: n/a

Election District: Countywide

Square Feet: n/a

Location: Countywide

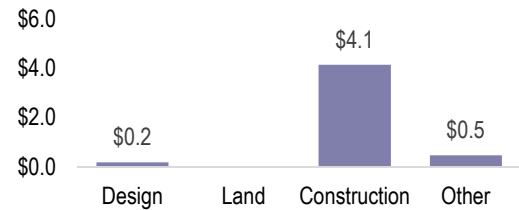
Estimated Completion Year: FY 2025

Referendum: n/a

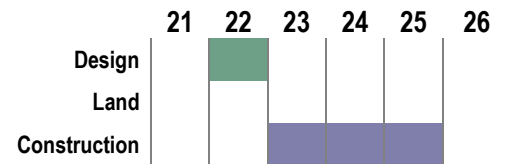
Background:

This project funding supports the County's Proposed Broadband Strategic Plan, which will increase broadband and cellular access in western Loudoun County by constructing fiber. This will provide broadband infrastructure connectivity to private carriers in western Loudoun County and to these specific locations: Bluemont Community Center; Philomont Community Center; Philomont Fire & Rescue; Loudoun Heights Fire & Rescue, and Loudoun Heights Public Safety Radio Tower.

Phase Costs in Millions



Project Phase Timeline by FY



Capital (\$ in 1000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	6 Year Total	Future FYs	Project Total
Professional Services	-	-	191	-	-	-	-	191	-	191
Construction	-	-	-	1,969	841	1,331	-	4,141	-	4,141
Furniture, Fixtures & Equip	-	-	-	11	23	24	-	58	-	58
Contingency	-	-	-	198	86	136	-	420	-	420
Total Cost	-	-	191	2,178	950	1,491	-	4,810	-	4,810
Local Tax Funding	-	-	191	2,178	950	1,491	-	4,810	-	4,810
Total Financing	-	-	191	2,178	950	1,491	-	4,810	-	4,810