

Proposed Capital Improvement Plan (CIP)

FY 2025 – FY 2034

Submission of a 10-Year Plan
for the Department of
Technology Services



An aerial view of a modern city featuring a wide river, a large concrete bridge with a white van and a black car, and several futuristic glass skyscrapers with greenery integrated into their designs. The sky is blue with scattered white clouds.

Department of Technology Services (DTS) Overview

- Continuation of existing projects and commitments
- Keeping up with program replacement cycles (State of Good Repair)
- Alignment to the Digital Strategy

Major CIP Projects 2025 - 2034

- Revenue & Collection System Upgrade
- Real Estate Assessment System Modernization
- Undergrounding & strengthening fiber connections at Schools
- Data Center Consolidation
- Constituent Single Sign-On

Program Accomplishments



Network

- Network Edge Refresh Project: Upgraded 165 network switches across the County.
- Wireless Access Point (WAP) Refresh Project: Updated all ten Fire Stations, the Fairlington Community Center and Bozman with new WAPs.
- DNA Center Implementation Project: Connected 336 devices, enhancing network security and compliance.



PC Replacement

- Laptops: Total Units: 1,080
 - Refreshed Units: 407 (38%)
 - New Issuances: 538 (50%)
 - Break-Fix: 135 (12%)
- Desktops: Total Units: 283
 - Refreshed Units: 229 (81%)
 - New Issuances: 32 (11%)
 - Break-Fix: 22 (8%)



ConnectArlington (CA)

- Completed the undergrounding of aerial fiber at N Glebe Rd/Chesterbrook intersection.
- Finished the core installation of fiber in the Green Valley neighborhood along Shirlington Rd. (Art Bus Operations and Maintenance Facility)



Unified Communications

- Telephone System Modernization
 - Migrated nine depts & two constitutional offices to the new system
 - 809 users transitioned to the new phone system
 - Migrated all seventeen call centers to the new system within 120 days
 - 414 agents transitioned to the new call center system



Life Cycle Refresh

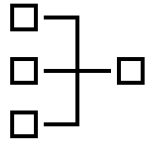
- Migrated six eGov applications to the public cloud
- Enterprise Payment System (EPS)
 - DES Outdoor Café Seating – Oct 2023
 - Police False Alarm Invoice – Dec 2023
 - Sheriff's Office FOIA – Dec 2023
 - DES Recycling Program Fee – Dec 2023
 - ACFD Inspections & Permits – Feb 2024
 - TRE CAPP online payments – Apr 2024



Server & Storage

- Updated key systems including the backups for enhanced data protection
- Enhanced DES Traffic Engineering servers for better camera management
- Created a new video data storage system for Environmental Services

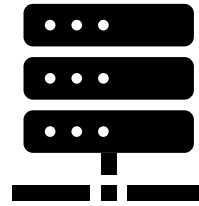
Asset Inventory: Hardware & Software



Core Network
Equipment
Core Switches: 2
5 Year Lifecycle



Distribution Network
(Hub-Sites)
Switches: 17
5 Year Lifecycle



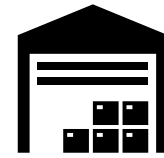
Access Network
(In-Building)
Switches: 165
5 Year Lifecycle



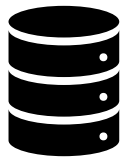
Wi-Fi
*WAPs: 983
3-5 Year Lifecycle
Refreshes 20% each year



Power Systems
*UPS: 137
*PDUs: 122
5 Year Lifecycle



Data Center
Infrastructure
Switches: 83
5 Year Lifecycle



Servers: 5
Hosts: 34
5 Year Lifecycle
Refresh = Rolling
by End-of-Life



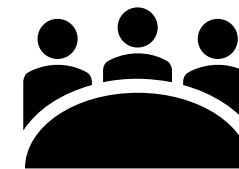
Desktop PCs
Desktops: 946
4 Year Lifecycle
Rolling Replacement



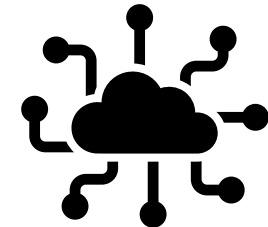
Laptop PCs
Laptops: 2,695
3.5 Year Lifecycle
Rolling Replacement



Fiber Optic Cables
70+ Miles
Refresh/Replace
As Needed



Audio Visual Equipment
Conference Rooms: 112
Courtrooms: 10
Refresh = Rolling
By End-of-Life



Applications
Enterprise: 136
Dept/Agency: 317
Refresh = Rolling
By End-of-Life

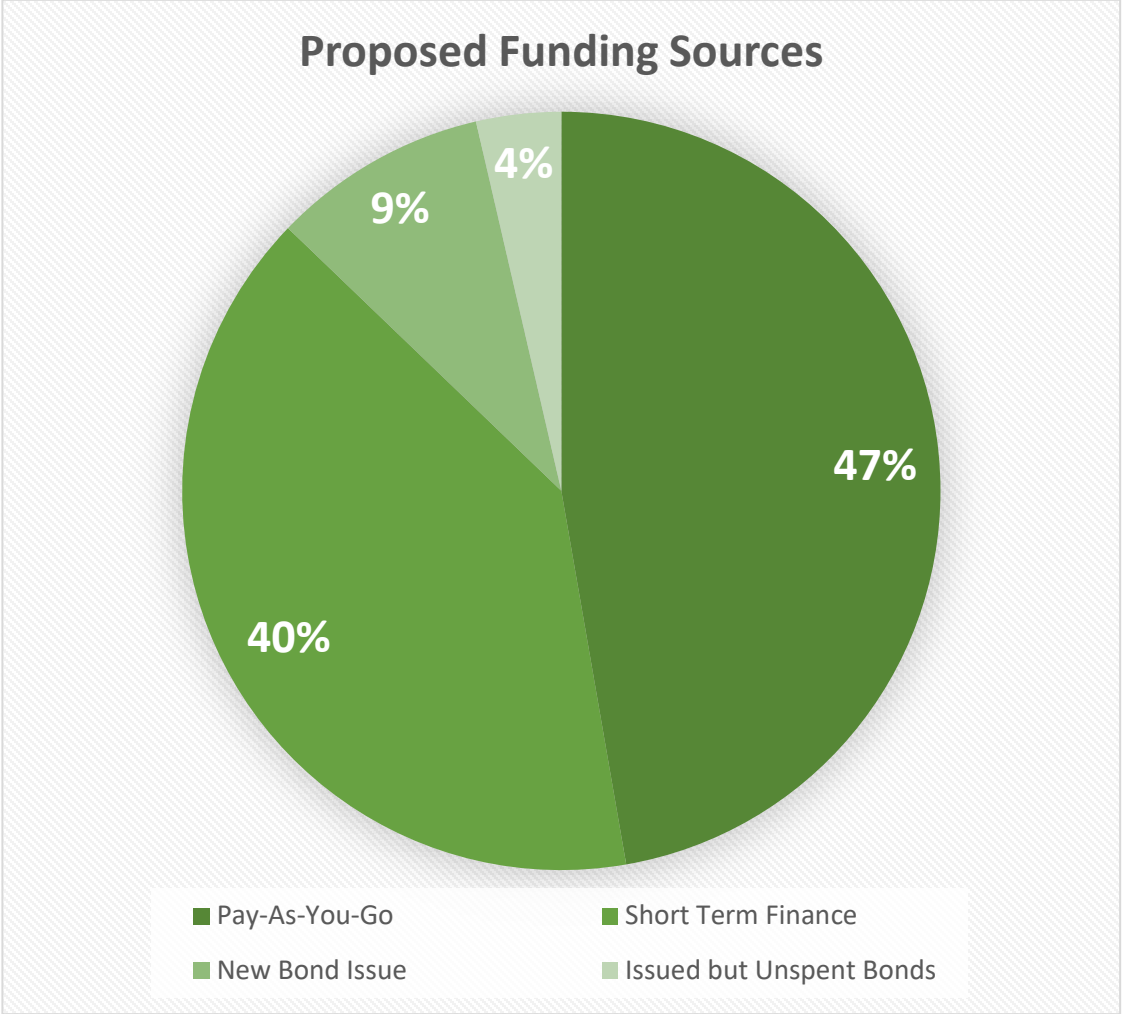
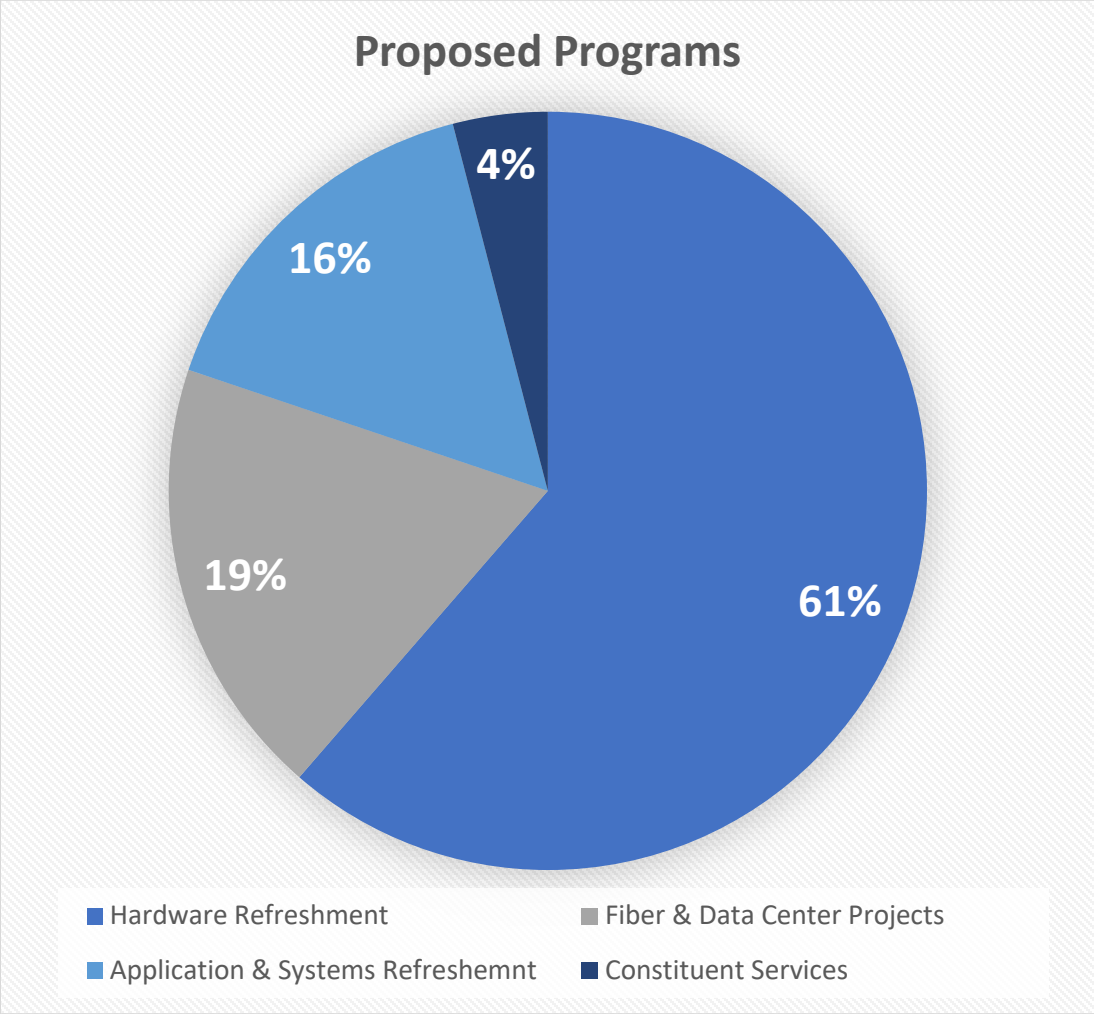
FY 2025 – 2034 Proposed CIP Summary

Proposed Programs/Projects (In '000s)	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	10 Year Total
Cloud Migration (eGov)	625	631									1,256
ConnectArlington	1,150	1,270	1,225	1,405	980	985	1,065	1,200	1,240	1,340	11,860
Constituent Digital Services		379	379	399	404	428	433	483	484	489	3,878
Constituent Single Sign-On		700									700
County Audio Visual Replacement	300	342	921	859	549	806	1,041	420	1,012	439	6,689
Data Center Consolidation	3,779		939	3,242	973	530					9,463
Enterprise Records Mgmt. System							1,343				1,343
Human Resource & Financial System		202	208	214	221	227	234	241	248	256	2,051
Land Records System					540					1,104	1,644
Network Equipment and Power Systems	1,732	1,544	2,121	2,096	3,889	3,182	1,919	2,449	2,550	4,495	25,977
Real Estate Assessment System		1,010									1,010
Revenue & Collection System	4,500				1,250	3,295				1,569	10,614
Server Hardware & Data Storage	780	586	603	621	640	659	679	699	720	742	6,729
Workforce Device Modernization	2,166	3,458	2,579	2,509	2,922	3,045	3,175	3,313	3,458	3,611	30,236
Total Recommendation	15,032	10,122	8,975	11,345	12,368	13,157	9,889	8,805	9,712	14,045	113,450

FY 2025 – 2034 Proposed CIP Funding Sources

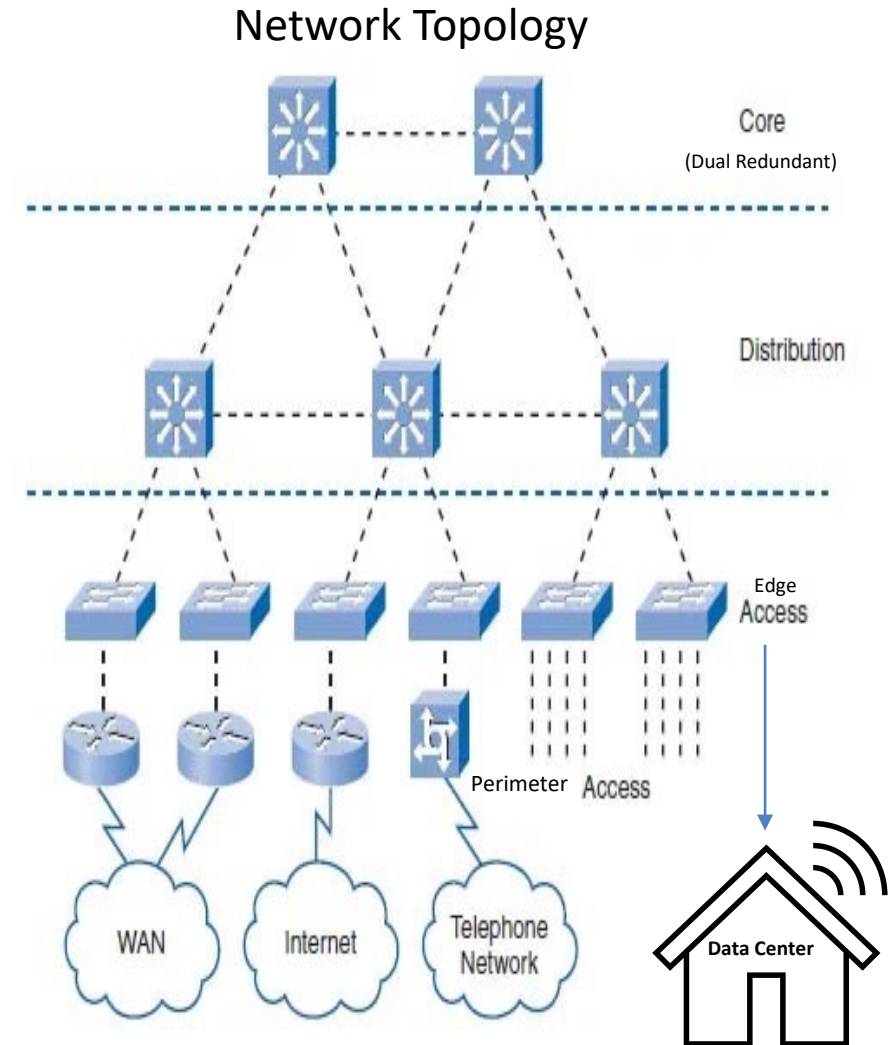
Funding Sources (In '000s)	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	10 Year Total
New Funding											
Federal Funding											
State Funding											
Developer Contributions											
PAYG	4,941	7,308	4,690	4,602	4,736	5,165	5,562	5,156	5,922	5,537	53,619
Short Term Finance	6,262	1,544	3,060	5,338	6,652	7,007	3,262	2,449	2,550	7,168	45,292
New Bond Issue		995	1,225	1,405	980	985	1,065	1,200	1,240	1,340	10,435
Other Funding											
Subtotal New Funding	11,203	9,847	8,975	11,345	12,368	13,157	9,889	8,805	9,712	14,045	109,346
Previously Approved Funding											
Authorized but Unissued Bonds											
Issued but Unspent Bonds	3,829	275									4,104
Other Previously Approved Funds											
Subtotal Previously Approved Funding	3,829	275									4,104
Total Funding Sources	15,032	10,122	8,975	11,345	12,368	13,157	9,889	8,805	9,712	14,045	113,450

FY 2025 - 2034 Proposed Funding Summary



Proposed Hardware Refreshment FY25-34

- **Workforce Device Modernization:** **\$30,236,000**
 - Refreshment of Laptops, Desktops, Peripherals Kits (Monitor, Mouse, Keyboard).
 - Supports automation, tracking, and reporting for County IT-related work.
- **Network Equipment and Power Systems:** **\$25,977,000**
 - Refreshment of cores (connectivity), distribution switches (routes traffic), edge switches & wireless access points (access), & perimeter (security) layers.
 - Refreshment of security devices like firewalls as well as power systems like uninterruptible power supplies & data center switches.
- **Server Hardware & Data Systems:** **\$6,729,000**
 - Refreshment of servers, hosts & backup storage units.
- **County Audio Visual Replacement:** **\$6,689,000**
 - 112 Conference Rooms
 - 10 Courtrooms



Proposed Fiber & Data Center Projects

- **Connect Arlington (CA) ~ FY25–34** **\$11,860,000**
 - Replenish fiber inventory & underground aerial fiber to protect it from damage
 - Finalize connections for missing links of the fiber ring to provide redundant paths
 - Proposed projects include:

FY2025 Projects

Project	Phase
Underground S Glebe & Richmond Hwy	Construction
Alternative Path to Sequoia Plaza 1	Construction
Build to meet Alexandria E911	Construction
✂ Connect Fiber Ring Little Falls Rd	Planning & Engineer

FY2026 Projects

Project	Phase
✂ Connect Fiber Ring Little Falls Rd	Construction
✂ Underground Jamestown ES	Engineering & Construction
✂ Underground Taylor ES	Engineering & Construction
Connect Fiber Ring Military Rd	Planning & Engineer

FY2027 Projects

Project	Phase
✂ Underground Randolph ES	Engineering & Construction
✂ Underground Abingdon ES	Engineering & Construction
Underground Columbia Pk & Four Mile	Engineering & Construction
Connect Fiber Ring Military Rd	Construction

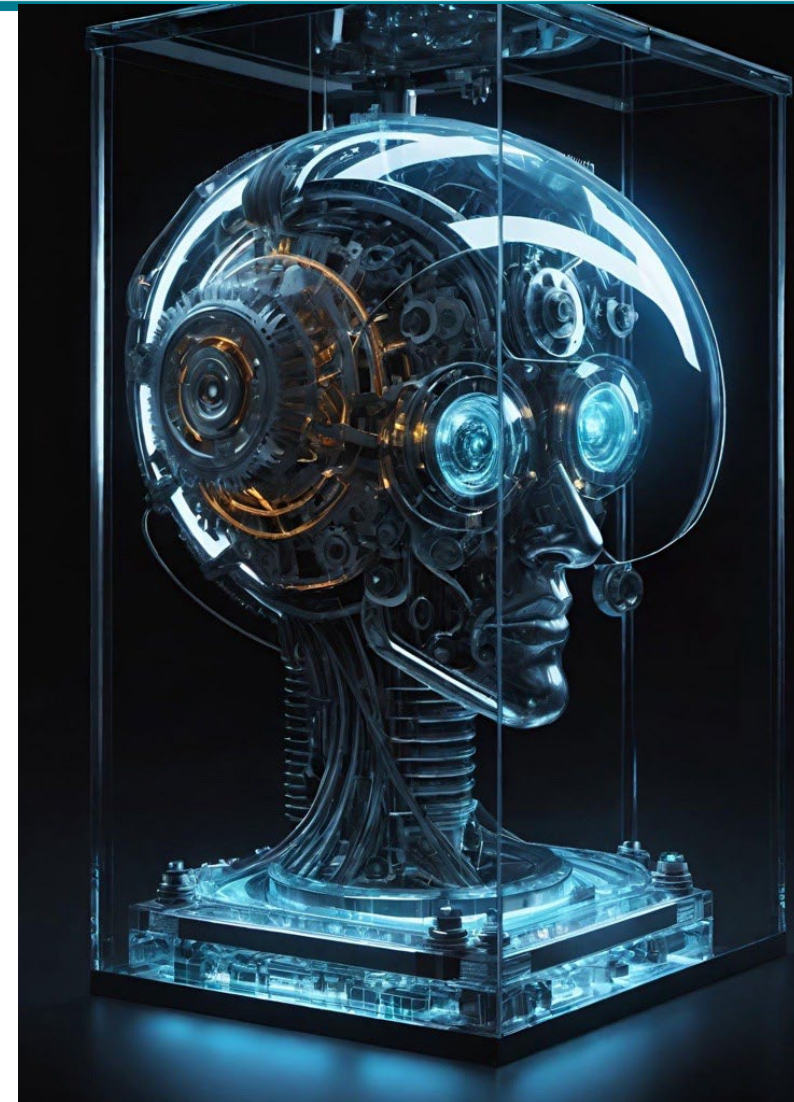
- **Data Center Consolidation ~ FY25, FY27–30** **\$9,463,000**
 - Phase I, which is set to begin in FY25, includes the reduction/relocation of Network Operation Center (NOC) One
 - Phase II, which is set to begin in FY27, includes the reduction/relocation of Network Operation Center (NOC) Two

Proposed Application & Systems Refreshment

- **Revenue & Collection System (ACE & CAPP):** \$10,614,000
 - Revenue management & public payment portals for the County
 - 5-year maintenance cycle
 - FY24-25, FY29-30, FY34
- **Land Records System:** \$1,644,000
 - Recording & maintaining of real property titles for the County and City of Falls Church
 - 5-year maintenance cycle
 - FY29, FY34
- **Enterprise Records Mgmt. System (ERMS):** \$1,343,000
 - Records repository for the County
 - 7-seven maintenance cycle
 - FY31
- **Human Resource & Financial System (PRISM+):** \$2,051,000
 - Manages finance, HR, & business operations (accounting, timekeeping, payroll, etc.)
 - Implementation of select modules released quarterly
 - FY26-34
- **eGovernment Suite of Applications:** \$1,256,000
 - Custom on-premise applications & systems (property search, legislative tracking, housing permits, etc.)
 - Migrate 15+ applications to the cloud
 - FY25-26
- **Real Estate Assessment System:** \$1,010,000
 - Commercial & personal property value assessment
 - Finalize the modernization of the new system
 - FY26

Proposed Constituent Services Projects

- **Constituent Single Sign-On ~ FY26** **\$700,000**
 - Solution to provide implementation and a core framework for constituents with one password for all Arlington County accounts
 - Priority for constitutional officers
 - Enhanced Security
- **Constituent Digital Services ~ FY26-34** **\$3,878,000**
 - Solution to streamline department operations and constituent digital services via:
 - Business Process Automation (BPA)
 - Leveraging technology to streamline and optimize constituent-facing processes.
 - Artificial Intelligence (AI)
 - Implementing AI-powered solutions to enhance the constituent experience.
 - Machine Learning (ML)
 - Utilizing ML algorithms to personalize and improve constituent services.
 - Initial Departments to deliver benefits to constituents and visitors:
 - Public Safety (all), DHS, CMO/CBO, AED



Summary & Conclusion

Summary – Keeping an eye on the future

- **Infrastructure and Technology Modernization:** Investment in network, server, and AV improvements for long-term efficiency and reduced downtime.
- **System Upgrades and Cloud Migration:** Investment in application upgrades and cloud migration, aiming for improved resilience and enhanced customer experience.
- **Sustainable IT Development:** Investment in data center consolidation and fiber network balanced by long-term environmental and economies of scale benefits.

Challenges

- CAPEX to OPEX
- Cost of doing business
- Pricing volatility
- Extended delivery times (supply chains)
- Keeping up with emerging technologies



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