

BCIT Fiscal Year 2026 Capital Improvement Program

Thursday, January 16, 2025

Mission

Provide sustainable infrastructure and technology to support and enhance City agencies, communities, and businesses, to meet City and mayoral goals.

Vision

Over the next decade engage all City agencies, businesses, and residents to design, build, and implement technology that creates a safe, thriving, and smart City.

Values

- Innovation & Excellence
- Customer Focus
- Accountability & Credibility
- Respect & Inclusion
- Efficiency
- Safety



Public-Facing Services

- 311 call center
- Applications
- Broadband
- CitiWatch CCTV
- Data & Mapping (GIS)
- Digital equity
- Emergency comms & dispatch
- Open Baltimore
- Web services



Core IT Services

- Application development
- Cloud services
- Database management
- Fiber management
- Information security
- Mainframe computing



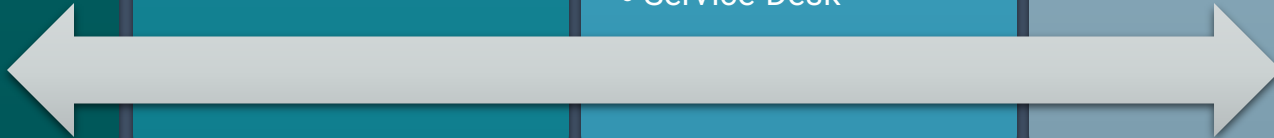
City Employee Services

- Microsoft 365 suite
- Network & wireless access
- PC support & engineering
- Remote & hybrid work support
- Service Desk

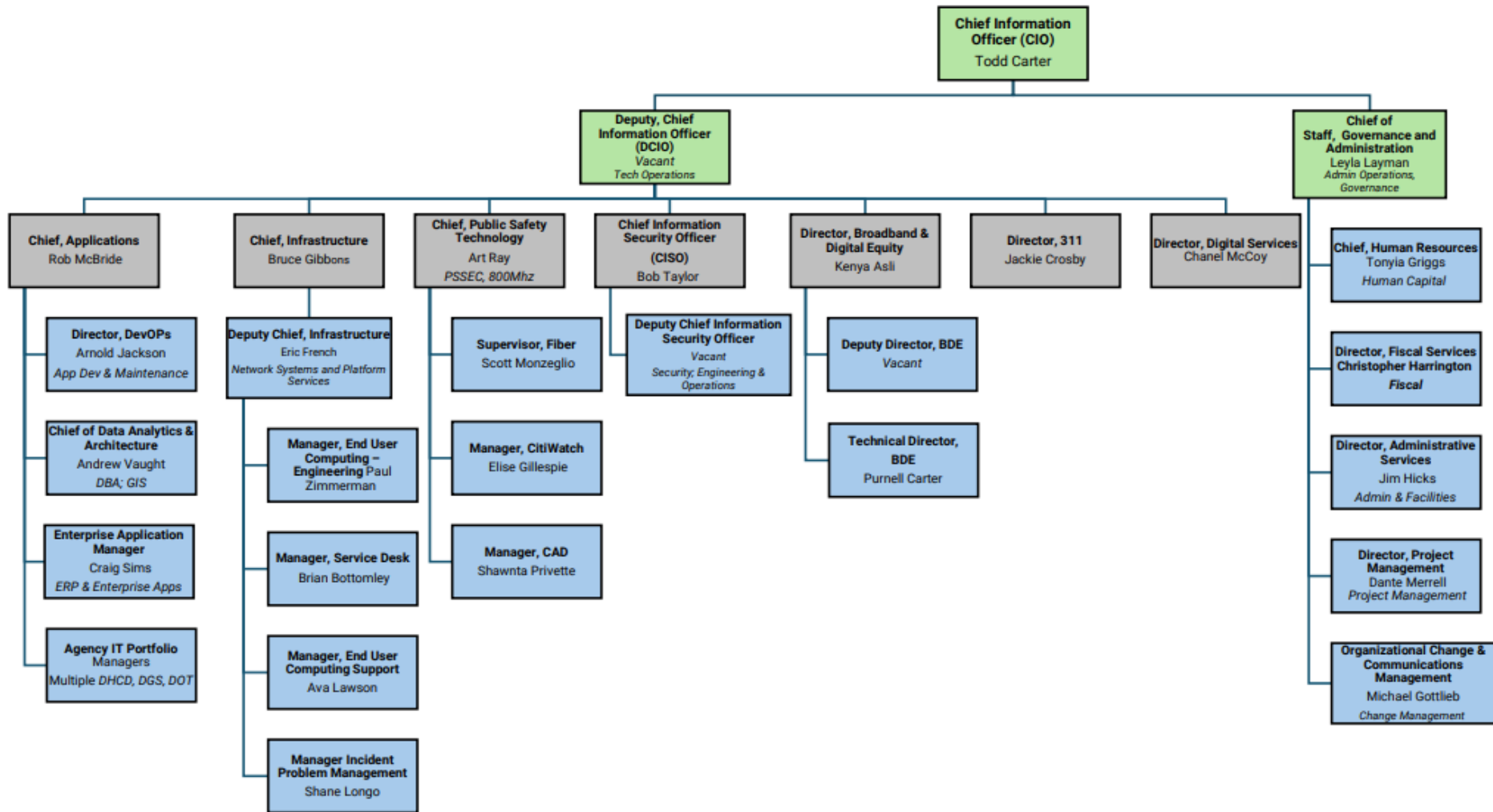


BCIT Administration

- Change management
- Financial management
- Human Resources
- IT contracts
- Staff development
- Project management



Organizational Chart



2024: A Year in Review

46

Baltimore City Recreation Centers
connected to BDE fiber

220

CitiWatch cameras
replaced

~46,000

Laptops distributed to income eligible
households

464

ARPA devices refreshed

Faster

Implemented fleet management
solution

850

CitiWatch Cameras in the Environment

576,077

311 Calls received

99.92%

Average critical server uptime

22

Hybrid meeting rooms implemented
(15 hardwired and 7 mobile)

99.47%

Website uptime

**Towing Mgmt
App**

Implemented in April

31%


BCIT Contracts included minority
participation



Budget Overview

FY25 Capital & Operating Budget Overview

Budget Type	Fiscal 2023 Actual		Fiscal 2024 Actual		Fiscal 2025 Budget	
	Dollars	Positions	Dollars	Positions	Dollars	Positions
Total Operating	\$55,847,473	164	\$69,408,038	184	\$63,317,912	187
Total Capital Allocation	\$7,000,000	0	\$12,000,000	0	\$14,167,000	0



Plans Guiding Capital Budget

Plans

- [Building a Better Baltimore Plan](#)
- [Baltimore City's Digital Inclusion Strategy](#)
- BCIT IT Plan
- [DHCD Vacants to Values](#)

IT Strategic Priorities



I. Support, Secure & Optimize Critical Infrastructure



II. Improve the Customer Service Experience



III. Cultivate Engaged, Skilled, and Adaptable IT People Resources



IV. Calibrate and Cultivate the Equity Landscape



V. Optimize IT Spend & System Efficiency



VI. Reimagine the Digital Landscape



Agency Asset Overview

What is an IT Asset?

An IT asset includes networking, digital technology, operational technology (OT), supervisory control and data acquisition (SCADA), telephony, digital assets and digital files, hardware, software, web applications, commercial off the shelf (COTS) applications, infrastructure or platform or software as a service (cloud IT), vendor managed IT or applications, workstations, desktops, laptops, tablets, the internet of things (IOT) devices, or information that may be owned, leased, entrusted to or managed by the City hereinafter referred to as IT resources.

Asset Name	Quantity
BCIT Servers (Tier Point & AVS)	407
BCIT Storage Data	382.5 TB
BCIT backup Storage Data	734.5 TB
BCIT AD accounts (76 disabled, 491 active)	567
BCIT Citrix Use (P-VDI)	83 users
BCIT Managed Servers	838
BCIT Managed Storage Data	1.89 PB
BCIT Managed Backup Storage Data	3 PB
BCIT Managed Access Points	645
CitiWatch Cameras	850
BDE Wireless Access Points (Indoor 130, Outdoor 68)	198



Recently Completed Projects

FY24 CitiWatch Camera Refresh

- **Project Number:** PRJ002405
- **Project Scope:** Replaced 220 end-of-life CitiWatch cameras. This is the final phase of the CitiWatch camera refresh program.
- **Total Spent:** \$1.1 million
- **Funding Source:** BCIT PAYGO Capital
- **Completion Date:** May 2024



Upgrade Computer Aided Dispatch Platform Phase I

- **Project Number:** PRJ002416
- **Project Scope:** In Phase 1, a subject matter expert was hired to develop the design and requirements for a detailed RFP for the City procurement process.
- **Total Spent:** \$187,916
- **Funding Source:** BCIT PAYGO Capital
- **Completion Date:** August 2024



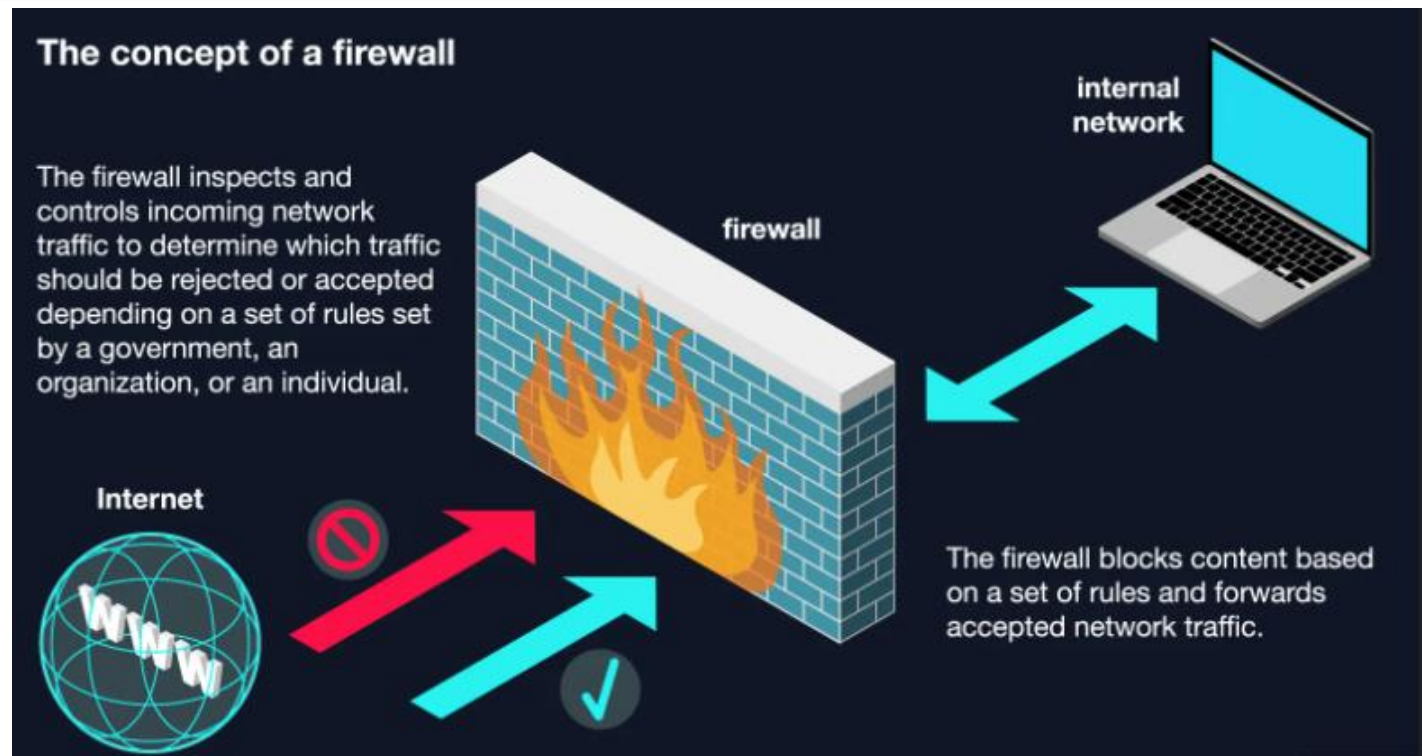
CitiWatch Private Camera Cloud Solution

- **Project Number:** PRJ002406
- **Project Scope:** Genetec Clearance is a digital evidence management system streamlines the organization of evidence and case files. This sync tool will keep both the City registry and Genetec Clearance up to date.
 - A registry of City Cameras owned and operated by businesses and homeowners.
 - A cloud-based repository of Camera records collected based on a specific incident.
- **Total Spent:** \$50,000
- **Funding Source:** BCIT PAYGO Capital
- **Completion Date:** December 2024



Upgrade Security Appliance / Firewall

- **Project Number:** PRJ002082
- **Project Scope:** Replace security hardware to improve security and performance for remote users of City applications.
- **Total Spent:** \$1.1 million
- **Funding Source:** BCIT PAYGO Capital
- **Completion Date:** January 2024



Upgrade Public Safety Technology System Infrastructure

- **Project Number:** PRJ002414
- **Project Scope:** Upgraded aging CitiWatch Infrastructure (e.g. wifi equipment, switches, camera cabinet and the uninterrupted power supply) in the Park Heights area.
- **Total Spent:** \$1,046,143
- **Funding Source:** BCIT PAYGO Capital
- **Completion Date:** July 2024





Projects in Progress

Upgrade City of Baltimore's Website

- **Project Number:**
PRJ002080
- **Project Scope:** Redesign the City's website and upgrade from Drupal 7 to 10.
- **Estimated Total Cost:**
\$3.9M
- **Breakdown by Funding Source:**
All BCIT PAYGO Capital
- **Estimated Completion Date:** March 2026



Benefits:

- ✓ Better digital experience for residents & businesses & visitors
- ✓ Simplified access to payments
- ✓ Improved search capabilities
- ✓ Enhanced accessibility standards
- ✓ Streamlined look and feel so web users recognize services

DHCD Permitting Systems Implementation

- **Project Number:** PRJ003119
- **Project Scope:** Replace the current permitting, inspection, code enforcement and service request management/311 functions for housing. This will replace the legacy CHIP and CCE systems.

• **Estimated Total Cost:** \$7,147,644

• **Breakdown by Funding Sources:**

Total BCIT Costs	Total ARPA Costs	DHCD Total Operating Costs	DHCD Total Costs	Total Project Costs
\$2,811,870	\$2,987,185	\$1,348,589	\$4,335,774	\$7,147,644

- FY26 Request: \$1,261,540

• **Estimated Completion Date:** May 31, 2025



Benefits:

- ✓ Saves time, increases productivity, and connects government agencies to the businesses, professionals, and residents they serve.
- ✓ Moves all functions online; removing paper, manual steps and errors, dramatically cutting the time and cost of permit processing so agencies can easily facilitate growth in the communities they serve.

Enterprise Implementation of Unifier

- **Project Number:** PRJ003118
- **Description:** Consolidation of environments for DPW, DOT, and DGS, integration with Workday, enterprise reports and Data migration from legacy applications.
- **Benefits:**
 - ✓ Shared services across agencies to gain economies of scale
 - ✓ Disaster Recovery capability
 - ✓ Top-down visibility at City and Agency level for improved supplier accountability
- **Estimated Total Cost:** \$6.5M
- **Funding Source:** Capital, operating & utility funds
- **Estimated Completion Date:** February 2025



Tax Application Modernization

- **Project Number:** PRJ003238
- ✓ **Description:** Consolidation of tax management throughout the City.
- **Benefits:**—Building trust and community impact. Transition from an aging and costly infrastructure.
 - Automation of manual work to improve staff efficiency
 - Improved monitoring and security controls

○ **Estimated Total Cost:** \$16,600,000

○ **Funding Source:** Capital and ARPA

BCIT Capital	APRA	Total
12,600,000	4,000,000	\$16,600,000

- \$2.02M requested as part of FY26
- **Estimated Completion Date:** June 2026



Benefits:

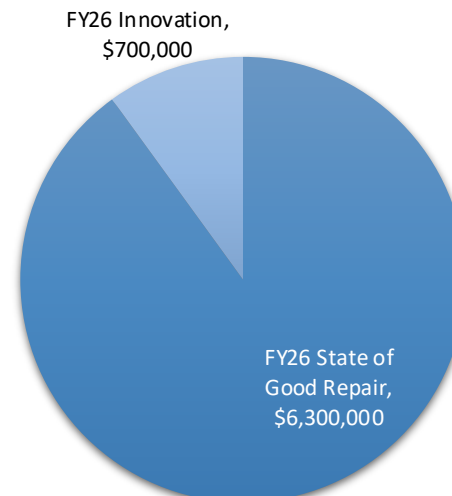
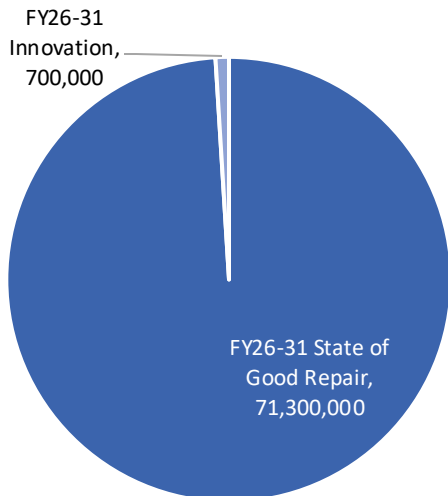
- ✓ **Taxpayers:** Delivers a robust, user-friendly system, high-level service, and reliable, transparent experiences.
- ✓ **Staff:** Increases efficiency reducing manual processing, provides real-time data and improves job satisfaction.



FY26 Requests & Other Priority Projects

Strategy/Goals of FY26-31 Requests

- ✓ Replace aging, inefficient application systems with modernized
- ✓ Minimize redundancy and streamline the delivery of services to residents
- ✓ Invest in emerging technologies to leverage efficiencies, cost savings and improved services for City residents and businesses
- ✓ Protect against cyber security related threats
- ✓ Update unsupported infrastructure



BCIT's Equity Statement

BCIT is committed to equity in our internal and external practices.

When designing new applications, BCIT:

- Meaningfully engages stakeholders through inclusive and collaborative processes
- Conducts disability and language accessibility reviews



BCIT FY26 – 31 Requests

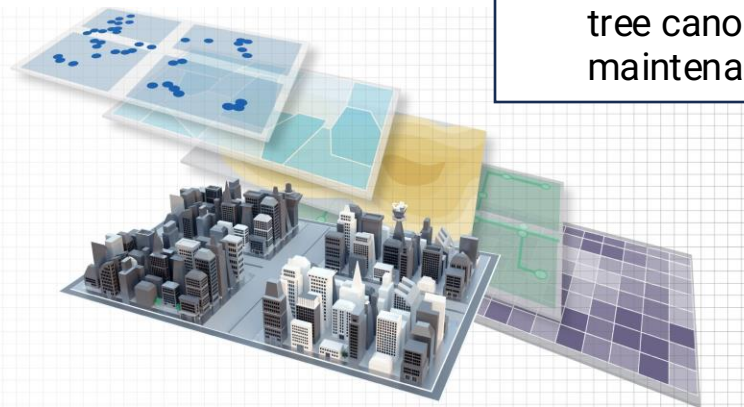
Projects	FY26	FY27	FY28	FY29	FY30	FY31
Information and Technology (BCIT)	\$7,000,000	\$7,000,000	\$14,500,000	\$14,500,000	\$14,500,000	\$14,500,000
Tax Application Modernization	\$2,020,000	\$0	\$0	\$0	\$0	\$0
CitiWatch Infrastructure Investments	\$1,668,460	\$0	\$0	\$0	\$0	\$0
Permitting	\$1,261,540					
GIS Transformation	\$1,000,000	\$0	\$0	\$0	\$0	\$0
Network Access Control	\$300,000	\$0	\$0	\$0	\$0	\$0
Artificial Intelligence Innovation	\$250,000					
Unity Storage Replacement	\$200,000	\$0	\$0	\$0	\$0	\$0
Exchange 2016 & Email Architecture Redesign	\$150,000	\$0	\$0	\$0	\$0	\$0
Salesforce 311 Migration	\$150,000	\$0	\$0	\$0	\$0	\$0
Infrastructure Platforms Upgrades	\$0	\$2,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Public Safety Technology System Infrastructure Upgrade	\$0	\$1,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Citywide Cyber Security Systems Upgrade	\$0	\$1,000,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
Application Infrastructure and Integration Upgrade	\$0	\$3,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000

GIS Transformation

- **Project Number:** PRJ003471
- **Project Scope:** Centralize the agency instances of Geographic Information Systems (GIS) to an enterprise-level cloud-based system. This system supports critical city services such as public safety, permitting, lands records management and tax collection
- **Estimated Total Cost:** \$1,000,000 (FY26 only)
- **Funding Source:** BCIT PAYGO Capital and agency general funds

Benefits:

- ✓ Improves availability and response time of the system to users
- ✓ Increases accuracy of address verification and unit routing by 911 dispatch to emergency calls for service
- ✓ Increases accuracy of monitoring and reporting on vacant housing and construction activities
- ✓ Reduces time to identify conflicts among permits requested for right of way
- ✓ Increases accuracy of spatial analyses that reveals distribution of the City's tree canopy enabling reduced maintenance costs for tree planting



Salesforce 311 Migration

- **Project Number:** PRJ003470
- **Project Scope:** Develop a plan to migrate 311 service request data to a new platform. This will include determination an analysis of platform options, how the system will be architected and an approach with integrating with other systems.
- **Estimated Total Cost:** \$150,000
- **Funding Source:** BCIT PAYGO Capital

Benefits:

- ✓ Improves resident experience related to the processing of 311 requests
- ✓ Improves flexibility to make updates to benefit the user experience quickly
- ✓ Full City ownership of the system code



Application Infrastructure & Integration Upgrade

- **Project Number:** PRJ002418
- **Project Scope:** Implement a modern communications architecture that ensures seamless integration and communication between new and updated applications, reducing manual processes and increasing operational efficiency.

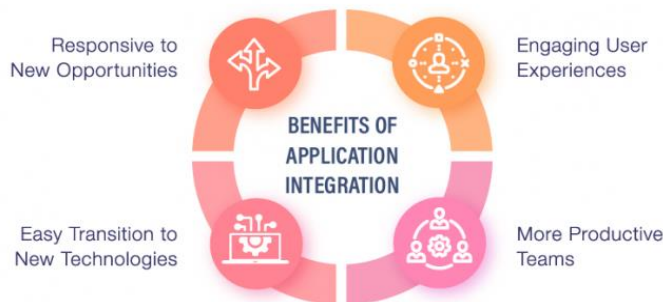
- **Estimated Total Cost:** \$27M

FY2027	FY2028	FY2029	FY2030	FY2031
3,000,000	6,000,000	6,000,000	6,000,000	6,000,000

- **Funding Source:** BCIT PAYGO Capital

Benefits:

- ✓ Improve communication and data sharing between systems
- ✓ Eliminate redundant data collection
- ✓ Increase operational efficiency
- ✓ Reduce manual processes



Artificial Intelligence Innovation

- **Project Number:** PRJ003517
- **Project Scope:** Artificial intelligence is transforming industries. The City will invest in configuring applications to use AI to improve decisions and reduce the instances of manual/repetitive tasks.
- **Estimated Total Cost:** \$250,000 (FY26 only)
- **Funding Source:** BCIT PAYGO Capital

Benefits:

- ✓ Improves efficiency and effectiveness of government services



Unity Storage Replacement

- **Project Number:** PRJ003468
- **Project Scope:** The City continues to utilize more cloud-based solutions and storage. As such, BCIT is looking to implement new storage solutions to maximize the City's storage capacity and support the increasing demand for IT services.
- The Unity storage device is end-of-life (EOL). Security patches and technical support are no longer available from the vendor.
- **Estimated Total Cost:** \$200,000 (FY26)
- **Funding Source:** BCIT PAYGO Capital

Benefits:

- ✓ Reduce risk of outages of systems and associated data
- ✓ Improve storage functionality
- ✓ Maintain current support for storage appliances
- ✓ Reduce potential for system vulnerabilities



CitiWatch Infrastructure Investments

- **Project Number:** PRJ003464
- **Project Scope:** Replace existing, aged and unsupported infrastructure that supports CitiWatch cameras.
- **Estimated Total Cost:** \$1,668,460 (FY26 only)
- **Funding Source:** BCIT PAYGO Capital
- **Benefits:**
 - ✓ Improved stability and availability of CitiWatch systems



Citywide Cyber Security Upgrade

Benefits:

- ✓ Continuity of operations and maintenance of city services for government stakeholders, residents, and visitors
- ✓ Protect safety of City data and systems

- **Project Number:** PRJ002417
- **Project Scope:** Upgrade the City's cyber security systems to enhance the security capabilities of the City's cyberinfrastructure.

- **Estimated Total Cost:** \$11M

FY2027	FY2028	FY2029	FY2030	FY2031
1,000,000	2,500,000	2,500,000	2,500,000	2,500,000

- **Funding Source:** BCIT PAYGO Capital



Network Access Control (NAC)

- **Project Number:** PRJ003466
- **Project Scope:** Implement hardware to protect the City's network from unauthorized access by outdated or non-city devices.
- **Estimated Total Cost:** \$300,000 (FY26)
- **Funding Source:** BCIT PAYGO Capital

Benefits:

- ✓ Improves the security of the network by allowing only compliant and authorized devices on the City's network
- ✓ Maintains visibility of the devices accessing the network



Exchange 2019 & Email Architecture Redesign



- **Project Number:** PRJ003467
- **Project Scope:** Exchange 2016 goes end of life in 2025. This application is critical to City operating Office 365 and performing critical functions.
- **Estimated Total Cost:** \$150,000 (FY26)
- **Funding Source:** BCIT PAYGO Capital

Benefits:

- ✓ Continued support of the current Exchange environment (Outlook email services)
- ✓ Implement an architectural design to enable resiliency in the event of an on-premises data center outage

Infrastructure Platforms Upgrades



Benefits:

- ✓ Enhances the reliability and availability of the City network
- ✓ Reduces risk of system failures
- ✓ Advances safeguards of sensitive data
- ✓ Improves support for the evolving needs of government operations and services



- **Project Number:** PRJ002410
- **Project Scope:** Upgrade, replace, and mitigate infrastructure platforms (switches, servers and storage) to ensure availability and security of the City’s information technology resources. All infrastructure platforms have an estimated three to five-year lifespan.
- **Estimated Total Cost: \$14M**

FY2027	FY2028	FY2029	FY2030	FY2031
2,000,000	3,000,000	3,000,000	3,000,000	3,000,000

- **Funding Source:** BCIT PAYGO Capital

Public Safety Technology System Infrastructure Upgrade

- **Project Number:** PRJ002414
- **Project Scope:** Upgrade and replace public safety technology system infrastructure for unanticipated issues with a particular project or a change in legislation that places additional requirements on technology within the public safety space.

- **Estimated Total Cost:** \$13M

FY2027	FY2028	FY2029	FY2030	FY2031
1,000,000	3,000,000	3,000,000	3,000,000	3,000,000

- **Funding Source:** BCIT PAYGO Capital



Benefits:

- ✓ Ensures high availability of public safety communication systems (e.g. dispatch system used by 911, the radios used by emergency personnel, the radio towers)
- ✓ Full compliance with legislation

Priority Projects Outside of FY26-31 Request

Project Name	Project Number	Explanation	Total Estimated Cost
800 MHz Georedundant Site	PRJ003465	A redundant site is needed to endure radio system availability should an outage occur at 200 Holliday.	\$2.2M
VDI Expansion to Azure Environment	PRJ003469	Expands the virtual desktop environment to accommodate more users and provide additional failover capabilities in case of a disaster recovery situation.	\$1.7M
Upgrade CAD Platform	PRJ002416	Replace the legacy Computer Aided Dispatch system used to route 911 calls for service to emergency personnel.	\$15M
Broadband Network Upgrade	PRJ001978	Through ARPA the City invested approximately \$30 million into a broadband infrastructure. This project supports refresh costs and maintenance costs of the existing network.	\$32M



Conclusion

Critical Issues Facing BCIT

Lack of continuous IT funding leads to the realization of operational, security, and customer service risks. Continuous investment in IT significantly reduces the City's vulnerability to cyber-attacks and ability to recover, and provides cost-saving opportunities, process improvements and efficiencies for Baltimore City residents.

NEEDS	IMPACT	EXAMPLE
Protection against cyber security-related threats	Mitigates against destructive malware from stopping or halting city services and/or data.	SolarWinds supply chain hack; phishing schemes targeting sensitive information or funds
Updating unsupported infrastructure & aging applications	Updates allow the city to provide timely and accurate critical services to city residents. Unsupported infrastructure & software increases vulnerabilities, which increases our operational risk.	End of Life Systems; cash processing; dispatching of City work crews and first responders
Investments in emerging technologies to leverage efficiencies, cost savings and better services for City residents	Residents and employees benefit from more efficient software systems and increased availability of critical services.	Paymentus online payment system, DHCD permitting system
Better understanding of our data and processes	Minimizes redundancy and streamlines the delivery of services to the citizens.	Tax modernization, DHCD permitting & Unifier

IT Directions Moving Forward

- Maintain secure, robust, and resilient infrastructure and security posture to reduce business risks
- Continued investments in applications that grow with the business and maintains best practices
- Leverage new technologies that yield benefit to residents and agency services
- Added investments in Operational Technology (OT) Systems that demonstrate critical risks and cannot run to failure
- Optimize application and architecture to yield benefit in government services
- Move the City forward with digital services



Appendix

Technology Translation

