

Technology Services

2024 City Council Presentation

MISSION:

To improve city performance.

VISION:

Denver departments deliver exceptional city services.

STRATEGIES



RELIABILITY

Technology works as expected.



INNOVATION

Technology improves operational performance.



ACCESS

Technology connects customers to information and services.



SECURITY

Technology and data are secure and protected.



PEOPLE

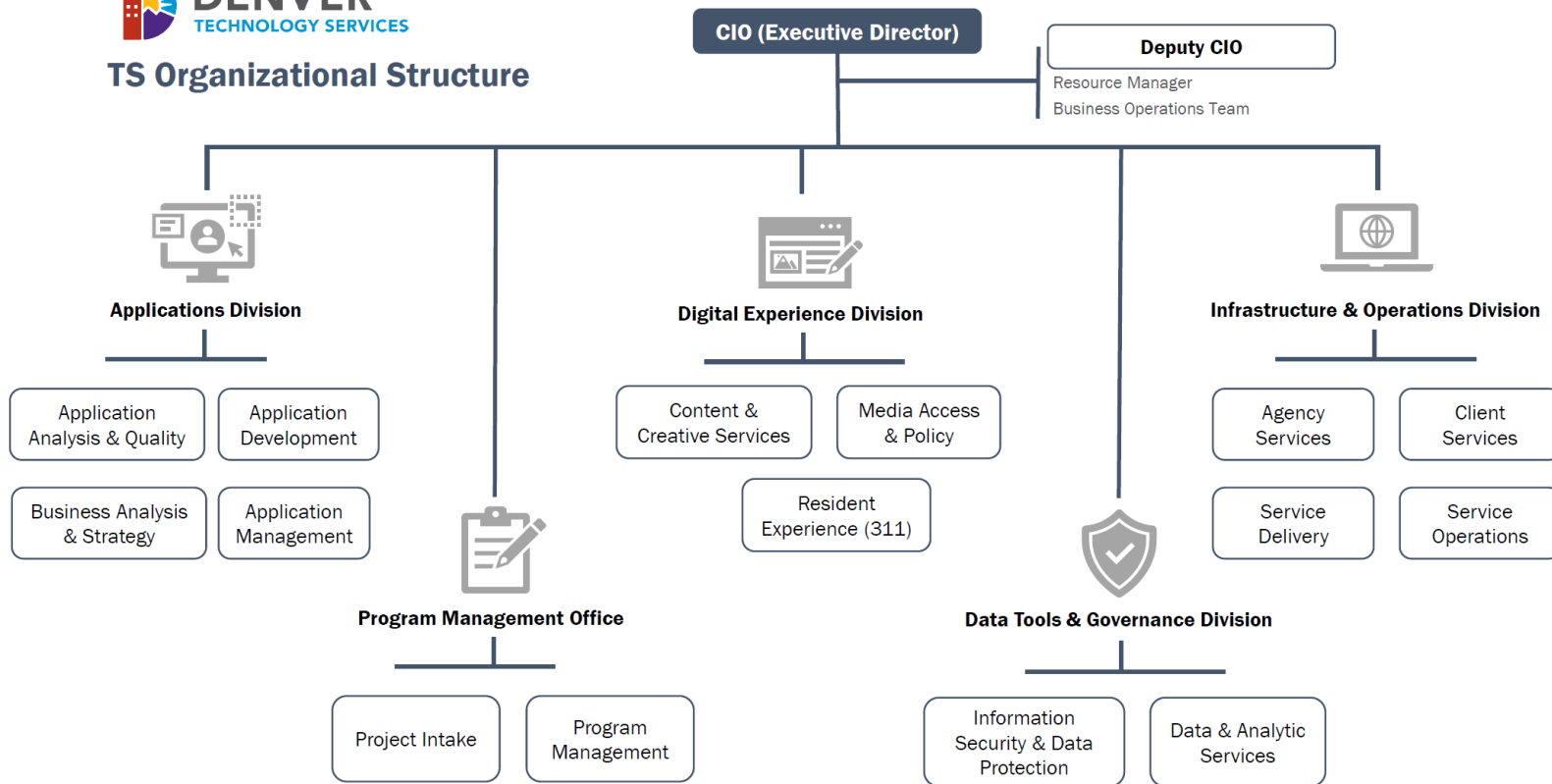
Our people are supported and inspired to do great work.

Technology Services

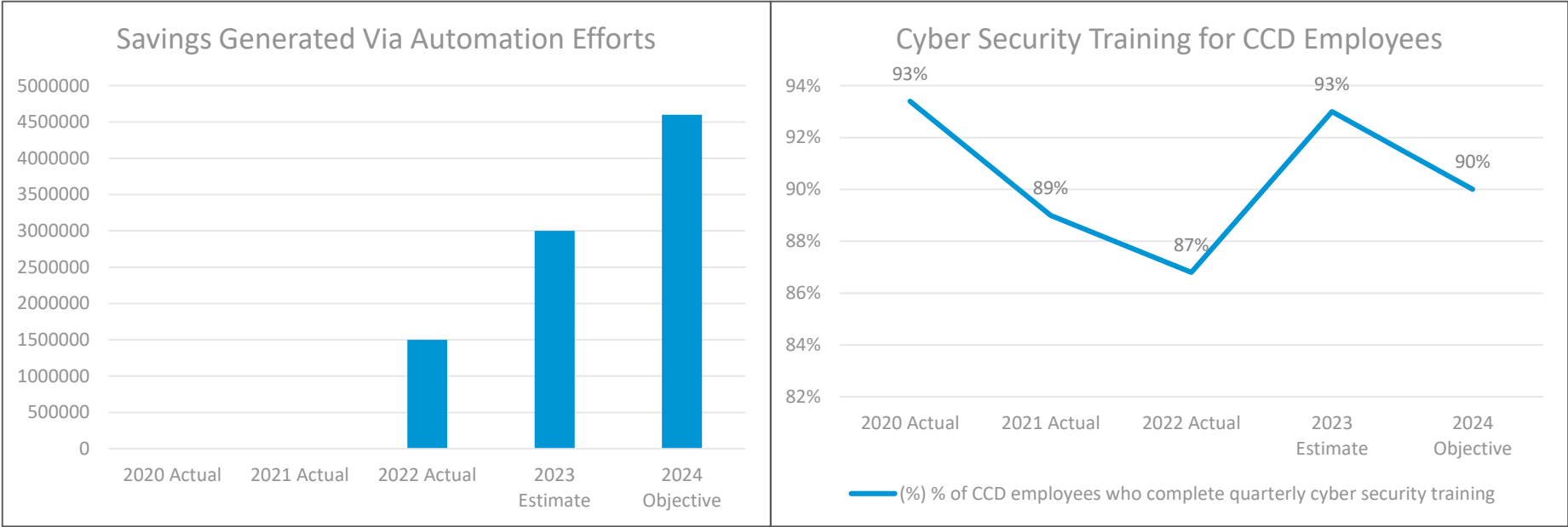
- Citywide IT partner, *plus...*
- Innovation and data
- Digital experience and digital accessibility
- Customer experience and customer service
- Optimizing 50+ lines of city business
- 350+ employees working hard for CCD and Denver residents



TS Organizational Structure

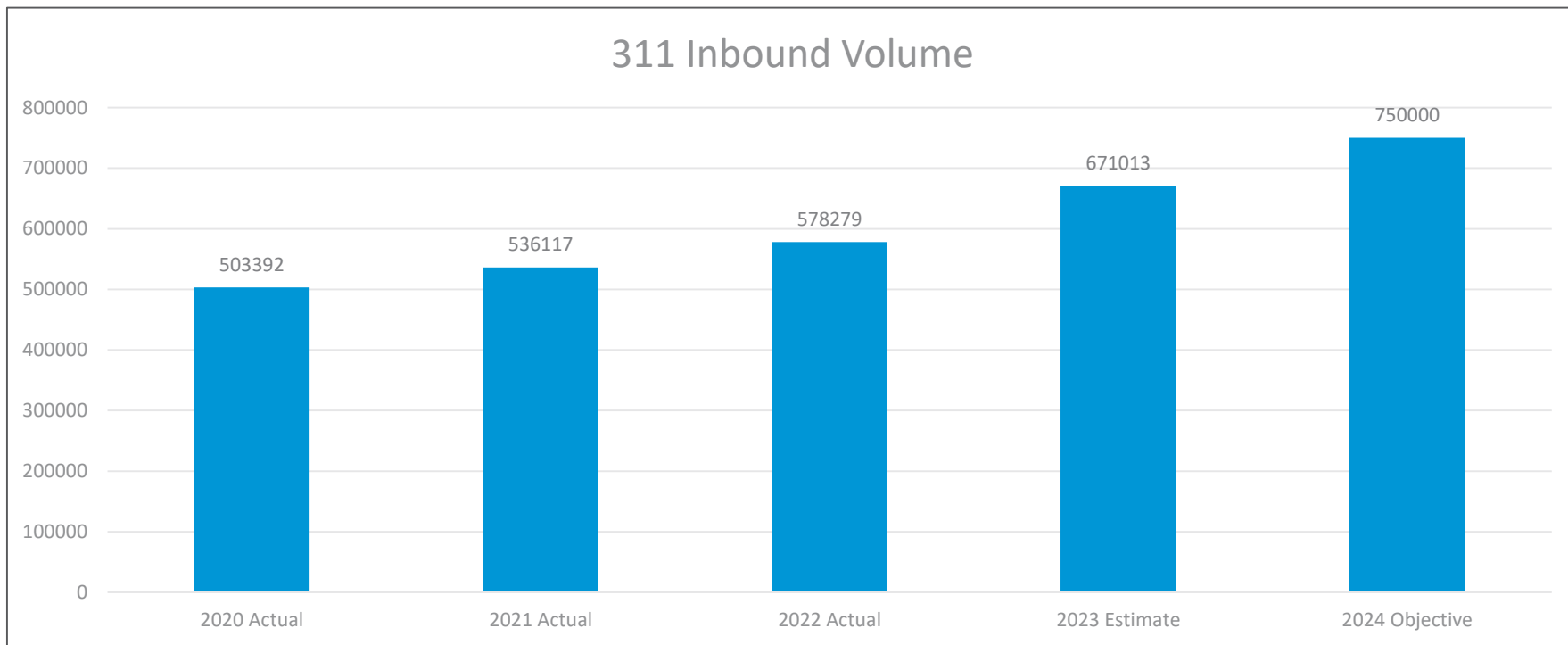


Key Strategic Metrics

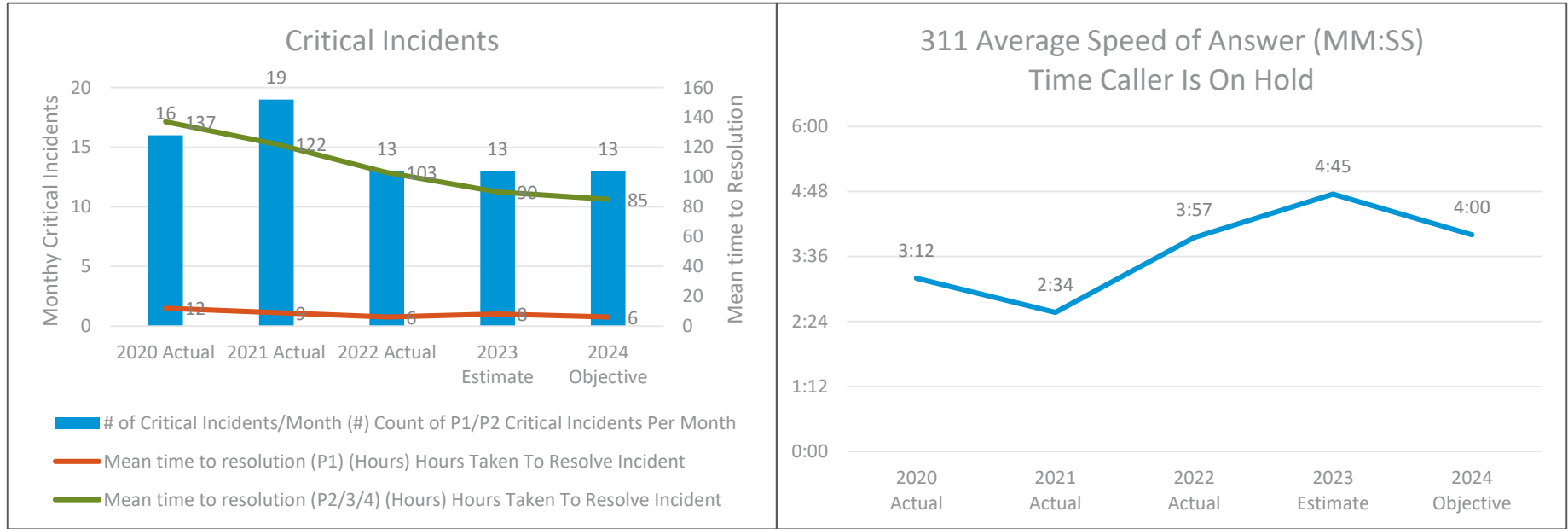


Key Strategic Metrics

311 Inbound Volume



Key Strategic Metrics



Addressing Inequities

Please provide one example of a current program, policy, or plan in place to address an inequity:

Language Translation

The 311 contact center offers real-time, human translation services over phone, email, and live chat channels via third-party translators. Beginning later this year, residents will be able to engage with interactive web and text message chats via a chatbot that immediately recognizes the language of the user and responds back in the same language.

Digital Accessibility

TS requires the technology behind Denvergov.org and the content published on the website to comply with accessibility standards set by the World Wide Web Consortium, which meet or exceed standards set by the Americans for Disabilities Act.

Please identify the communities/neighborhoods impacted by this program, policy, or plan:

The 311 contact center and Denvergov.org have citywide reach, making these equity programs available to every Denver community and neighborhood.

2024 Budget Goals

• Mayoral and City Council priorities:

- Public Safety
- People Experiencing Homelessness
- Affordable Housing
- Community Engagement and Customer Service

Aligning with
City Priorities



- Protect and secure data against compromise
- Maintain a supported and compliant technology portfolio
- Confront outside threats that are evolving and increasingly dangerous

Protecting
against cyber
threats



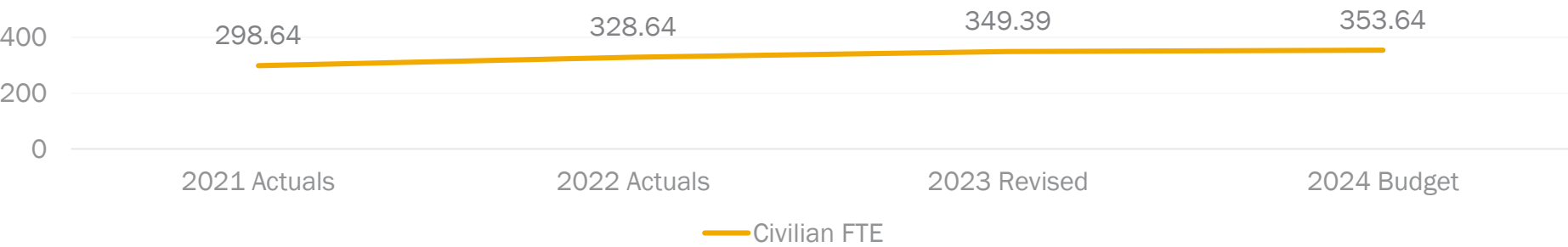
- Pursue opportunities to increase digital services and automation
- Optimize TS resource allocations
- Create mechanisms to encourage and accelerate innovation
- Prevent a return to Shadow IT

Creating
capacity for
innovation

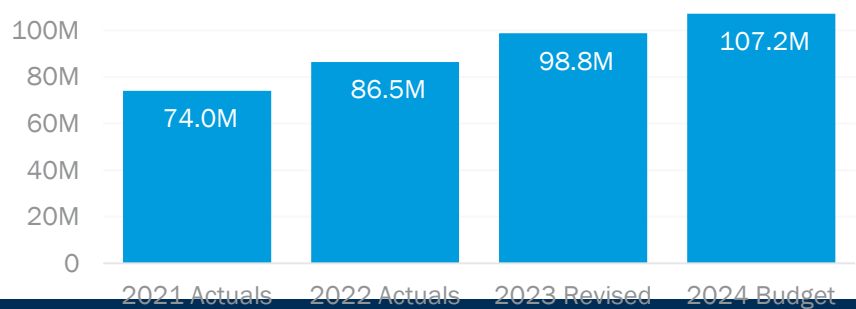


General Fund Expenses, Revenues, and FTEs

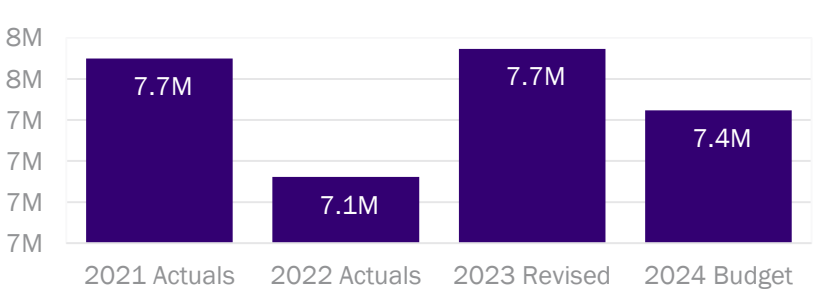
Total FTE



Total Expenses



Total Revenues



2024 Budget Alignment with City Council Priorities



Community Engagement and Customer Service



Affordable Housing and Support for People Experiencing Homelessness



Community Safety and Wellness



2024 Budget Alignment with City Council Priorities



2024 Total Budget Investment	\$9.2M	77 FTE
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- Phone & live chat
- Navigation of city services
- Chatbot coming soon

311 Contact Center



- Live public meeting coverage
- City news and information
- Arts and cultural programming

Denver 8 TV



- Denver’s “front door”
- Online Services Hub
- Online access to resources

Denvergov.org



- Citywide voice & brand
- Addressing resident questions & concerns
- Oversight of city accounts

Social Media



- Proactive, targeted communications
- Expanding enterprise tool
- Opted-in resident database

Resident Email



2024 Budget Alignment with City Council Priorities



Affordable Housing and Support for People Experiencing Homelessness

2024 Total Budget Investment

\$4.1M

14 FTE

- Accela Modernization (iFund)
- Improved customer portal
- Optimized workflows

Permitting



- Field activity tracking
- Location mapping
- Cross-agency collaboration

Encampments



- Strategic Sourcing
- Grants Management

Financial



- Network Connectivity
- Solutions to enable services

Micro-Communities



2024 Budget Alignment with City Council Priorities



Community Safety and Wellness

2024 Total Budget Investment	\$13.4M	39 FTE
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- P25 Radio System
- Emergency Notification systems
- 911 Dispatch

Critical Communications



- Video capabilities
- Real-time intelligence
- Data & analytic services

Situational Awareness



- Lifecycle Management
- Threat detection
- Incident Response
- Disaster Recovery

Cyber Readiness



- Electronic Engineering Bureau (EEB)
- Site & field connectivity
- Storage

Operational Support



Summary of 2024 Budget Expansions

Account Category	Permanent	One-Time	Total 2024
Personnel	\$0	\$0	\$0
Services and Supplies	\$6,131,309	\$0	\$6,131,309
Capital Equipment	\$0	\$0	\$0
Internal Services	\$0	\$0	\$0
Total	\$6,131,309	\$0	\$ 6,131,309

Permanent FTE	On-Call/Limited FTE	Total 2024 FTE
0.00	0.00	0

Approved Capital Improvement Programs

Title/Description	Budget Impact
Innovation Fund Projects	\$4,000,000
Radio System Upgrades	\$681,356
User Component Replacements	\$200,000
Infrastructure Network Replacements	\$1,000,000

Appendix

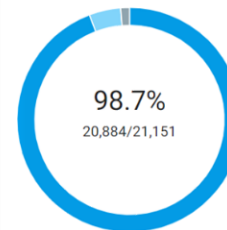
Core Contractual Obligations

Expenditures	Strategic Plan Alignment	FTE	Duration
Licenses: \$6,131,309	   	N/A	Permanent

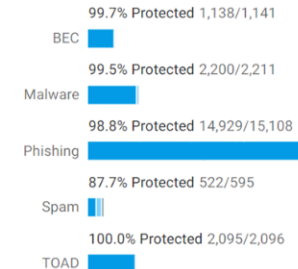
Contractual increases to the maintenance costs associated with the software used for cybersecurity, enterprise applications, cloud services, video surveillance, site connectivity and data storage. This increase is primarily driven by increases in the software costs related to enterprise billing, Gentax, data storage and operationalized iFund projects and technology priorities we inherited from agencies (e.g. DPD). All these technologies and services are required to meet our compliance obligations (PCI, CJIS, etc.) and reduce risk.



All Malicious Messages



Breakdown by Threat Categories



● Pre-Delivery Protected ⓘ
 ● Post-Delivery Protected ⓘ
 ● Potentially Exposed ⓘ

P25 Radio Upgrade

Expenditures	Strategic Plan Alignment	FTE	Duration
Services & Supplies: \$681,356 Z1903 Capital Transfer	 RELIABILITY	NA	Temporary

This request will fund the 5-year maintenance interval for the Public Safety Radio system. The P25 Motorola radio system is used primarily by Safety to respond to resident emergency calls and coordinate on scene activity. The maintenance will maintain vendor supportability through version and security upgrades for both hardware and software. Our current system release version will become obsolete and not supported by Motorola. We need to update our system release version to keep current for operational, security and technical needs.



PC Replacement Plan

Expenditures	Strategic Plan Alignment	FTE	Duration
Services & Supplies: \$200,000 ZI904 Capital Transfer	 RELIABILITY	NA	Permanent

The existing PC replacement budget will not support the ratio of laptops (60%) to desktops (40%). Our laptop fleet increased 20% during the pandemic to support a hybrid work environment. The PC replacement budget has not kept up with the cost of inflation. This increased funding will maintain a 5-year replacement lifecycle needed to support a hybrid work environment

Type	Total Fleet	% of Fleet	Quantity Laptops	Cost Per Item Package	Total
Standard Laptop	9237	0.5	4618.5	\$1,300	\$6,004,050
Standard Desktop	9237	0.3	2771.1	\$920	\$2,549,412
Developer Laptop	9237	0.1	923.7	\$2,346	\$2,167,000
Developer Desktop	9237	0.1	923.7	\$2,356	\$2,176,237

Dell Pricing by Year				
Year	Desktop Pricing	Laptop Pricing	Precision	Precision Laptop
2018	620	1000	2300	2240
2019	650	1000	2000	2150
2020	650	1000	2000	2363
2021	717	1167	2000	3678
2022	916	1377	2346	2527
2023	913.42	1304.76	2356	2402.57

IT Infrastructure Lifecycle

Expenditures	Strategic Plan Alignment	FTE	Duration
Services & Supplies: \$1,000,000 ZI905 Capital Transfer	 RELIABILITY	NA	Permanent

It is essential that IT infrastructure be replaced on a regular lifecycle to maintain reliable and secure services. When the support life is reached for this equipment, it is not possible to purchase Support and Maintenance from the manufacturer. This includes the ability to protect this hardware from security attacks, replace failed hardware, and meet the needs of new systems or applications. This also impacts the ability to meet required regulations that include CJIS (Criminal Justice Information) and PCI (payment card industry) that could slow or even halt city operations. This equipment is the foundation to providing IT Services to all city agencies and the services provided to the citizens of the City and County of Denver. Replacing this equipment is essential to maintain a secure and stable environment.

Critical Infrastructure due for replacement:

- Security Firewalls
- Video Security Surveillance
- Network infrastructure
- Wireless equipment
- Virtual Server Infrastructure

