#### Department of Technology: Capital Plan

2018-2027

January 23, 2017





- Since 2002, DT has installed over 226 miles of fiber, connecting 330 facilities
- Facilities include City office buildings, radio towers, police stations, traffic signals, health clinics, pump stations, video cameras, college campuses and more.
- Program largely incrementally funded through project specific allocations, with some systemic investment from COIT & CPC



#### DT Capital Projects and Programs FY 2018 - 2027

Item	Plan Status	Revised Estimated Cost	Submitted Cost
Fiber Connections for City Buildings and Facilities	Deferred	\$8,850,000	\$5,500,000
Dig Once*	Deferred	\$78,000,000	\$59,000,000
Network/Security Operating Center	Deferred	\$1,326,000	\$4,000,000
Broadband for San Francisco	Emerging	\$700,000,000	\$700,000,000

\* Dig Once costs will become subsumed in Broadband for San Francisco costs if project moves forward beginning in FY 19-20.



## Connecting Buildings and Facilities

- DT currently plans to connect 117 additional facilities in the coming four years at a cost of \$5.8 m
- The overall budget an upgrade the fiber backbone at a cost of \$3.0 m; this element of the program does not benefit a single building, but ensures that the entire system is robust, resilient and scalable
- Not a static target:
  - Integration of increasing range of facilities, such as traffic signals and pump stations
  - Need for greater resiliency through redundant connections
  - New construction





- Dig Once takes advantage of existing street excavation to install underground conduit through which fiber optic cable may be pulled.
- DT is working with Public Works to identify projects where participation is efficient.
- If the Broadband for San Francisco initiative moves forward, Dig Once opportunities will be evaluated in the context of this program and the cost associated with Dig Once will be included in the Broadband project.

Project Name	Lead Agency	Status	Linear Feet		FY 17-18	FY 18-19
Geary Concrete (2684J)	MUNI Forward	Design	8,000	\$1,040,000	\$1,040,000	
22 Fillmore (2765J)	MUNI Forward	Pre-planning	10,000	\$1,500,000	\$1,500,000	
Fillmore St- North (2870J)	MUNI Forward	Pre-planning	14,000	\$1,820,000	\$1,820,000	
14 Mission - Randall (2827J)	MUNI Forward	Pre-planning	4,500	\$585,000	\$585,000	
14 Mission - Downtown ( 2829J)	MUNI Forward	Pre-planning	11,000	\$1,430,000		\$1,430,000
Consolidated Projects FY 19-20, 20-21			12,000	\$1,560,000		\$1,560,000
Better Market Street (2348J)	Public Works	Design	13,200	\$1,716,000		\$1,716,000
Combined Combined Utility/Paving Projects			10,000	\$1,300,000		\$1,300,000
					\$4,945,000	\$6,006,000



## Network/Security Operating Center

- This will create a new collaborative working space for the Network Operations Center (NOC), Security Operations Center (SOC) and Service Desk operations at a total cost of \$1.3 m.
- DT seeks to create approximately 50 workspaces in an area that currently supports 20 workspaces.
- DT estimates that the cost for opening floorspace in DT's headquarters by removing walls between the currently enclosed NOC, Mainframe and Training rooms, including workspace & collaboration furniture, and equipment will be \$650 K.
- Activate underutilized atrium footage and provide refreshed carpeting and paint throughout the larger DT floorspace will cost an \$676 K.



# **Broadband for San Francisco**

- The Broadband for San Francisco project seeks to ensure that every San Francisco resident and business has access to gigabit speed broadband service at affordable prices.
- This year's Capital Budget includes \$2.0 million for DT to develop a business case and and plan for possible network deployment.
- DT has selected an advisory services firm and is in the process of interviewing a manager for this program.
- DT included an estimate of the cost (\$700 m) of deploying such a network in its Capital Plan, the business case will validate this cost and provide recommendations on next steps.

