

Special Meeting

Capital Planning Committee & Committee on Information Technology

September 17, 2015

**1 Dr. Carlton B. Goodlett Place, City Hall, Room 305
San Francisco, CA 94102**

Agenda

1. Call to Order by Chair
2. Roll Call
3. Approval of COIT Minutes from May 14, 2015 (Action Item)
4. Discussion and Action: Dig Once (Technology)
5. Policy Discussion: Drone Policy
6. Major IT Project Update: Public Safety Radio Replacement (Emergency Management)
7. Project Update: Security Cameras Project (Juvenile Probation)
8. Presentation: Public Experience Strategy
9. Discussion: IT vs. Capital Requests
10. Public Comment
11. Adjournment

3. Approval of Minutes

Action Item

4. Update: Dig Once Rules (Action Item)

Technology

Dig Once Draft Rules

Implementation

Review of Process

- Engaged consultant to assist with plan
- Published drafts for comment
- Conducted group Meetings for Comment
- Meetings with excavators and other stakeholders (changed order)

Today's Presentation

- Participation Criteria
- Satisfying Notice Requirements
- Permit Application
- Standard Specification
- Incremental Cost & Exemptions
- Backlog

- For more, visit: www.sfgov.org/digonce

Dig Once Draft Rules

Participation Criteria

Ordinance directs DT to participate in Projects only when it is “***both financially feasible and consistent with the City's long-term goals to add City communications infrastructure***”

- Consistency with City goals, DT will consider:
 - Length of the project;
 - Proximity current to or planned City facilities and/or community anchor locations; and
 - Presence of existing City Communications Infrastructure in the vicinity of the project.
- Financial feasibility, DT will consider:
 - Physical constraints;
 - Partners or customers willing to lease access to the City Communications Infrastructure;
 - Cost of alternative routes; and
 - Budgetary constraints.

DT may decline to participate in a Project if Applicant demonstrates to DT that DT's participation in the Project would cause Applicant to do one or more of the following:

- Delay a Project that involves Applicant's installation of critical infrastructure;
- Assume undue risks that DT's continued use of City Communications Infrastructure

Dig Once Draft Rules

Project Evaluation and Weighting Criteria

Current Criteria

- Length: 10,000+ ft= 10 8,000-9,000 ft= 9, 7,000-8,000 ft= 8
- Proximity to City: <500 ft. = 10 <1/4 of mile = 8 <1 mile = 4 >1 mile = 0
- Presence of Existing Fiber: 10 = no fiber 5 = some overlap 0 = completely overlapping
- Alternatives: Summation scoring; Under freeway 5 points, rail crossing 3 points, water crossing 2 points
- Poles: yes=0, no=10
- Risk to Communications Conduit:

Least	(Communications)	10
Low	(Electrical)	8
Medium	(Combined)	5
High	(Water, Sewer)	2

Criteria to Be Implemented

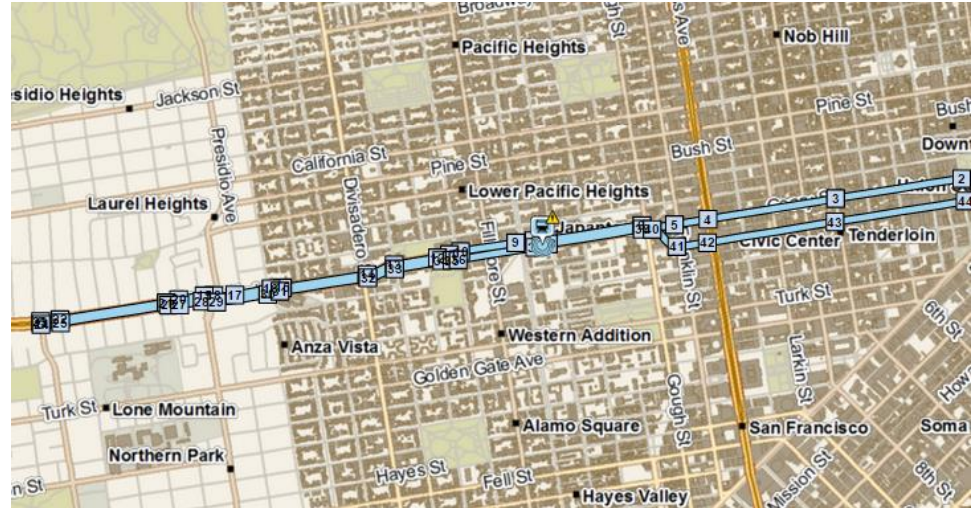
- Partners
- Delay to Critical Infrastructure
- Exceptional Cost

Dig Once Draft Rules

Project Evaluation and Weighting Criteria: Geary BRT



Category	Application	Score
Length:	30,677 feet	10
Proximity:	<500 ft to City Facility	10
Existing:	Fiber present?	10
Alternatives:	No freeways, bridges, etc.	5
Poles:	Utility poles present? (No → 10)	10
Risk to Communications :	Other communications facilities → none	10
Delay, Excessive Cost, Partners	Not yet implemented→5	5
Weighted Average:		7.2

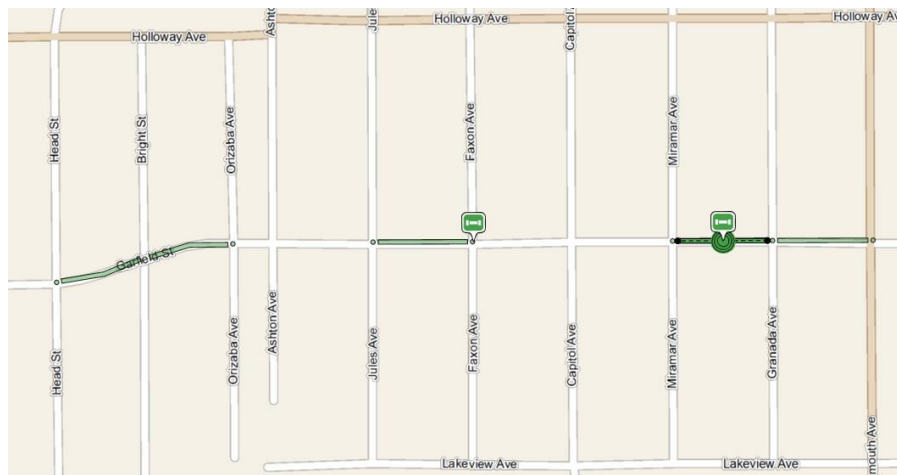


Dig Once Draft Rules

Project Evaluation and Weighting Criteria: Grafton and Garfield Streets Sewer Replacement



Category	Application	Score
Length:	1500 feet	1
Proximity:	<500 ft to City Facility	4
Existing:	Fiber present?	10
Alternatives:	No freeways, bridges, etc.	0
Poles:	Utility Poles Present? (Yes → 0)	0
Risk to Communications:	Other communications facilities → none	2
Delay, Excessive Cost, Partners	Not yet implemented → 5	5
	Weighted Average:	3.6



Dig Once Draft Rules

Notice Requirements

Notice will occur through:

**Department of Public Works'
Right-of-Way Management System
Envista (aka Accela)** **OR** **Monthly Meeting**

- DT will communicate its intent to participate in a project through the Right-of-Way Management System and with staff associated with a project.
- Applicants that have been notified of DT's participation must provide DT plans at least 14 days prior to applying for an excavation permit
- DT will review plans for compliance with Standard City Communications Infrastructure

Dig Once Draft Rules

Permit Application

- Dig Once does not apply to:
 - Projects less than 900 linear feet
 - Emergencies
 - Directional boring
- An Applicant may apply for a Permit only if:
 - DT has confirmed that Applicant's Dig Once Plans include City Communications Infrastructure
 - DT has declined to participate in the Project
- Concurrent with applying for an excavation permit, Applicant will submit copy of plans to the Dig Once Coordinator
- If the Applicant has not complied with the Dig Once Order, DT will notify DPW and Applicant

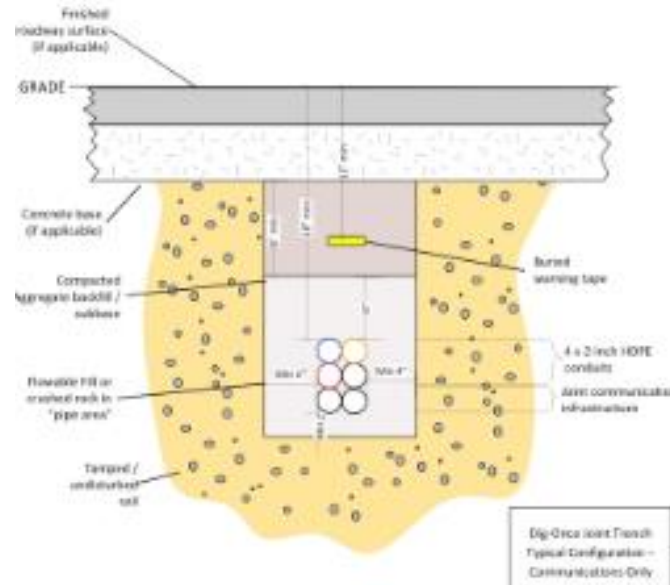
Dig Once Draft Rules

Standard Specification

- Four 2-inch conduit, HDPE SDR 11,
- Composite vaults having dimensions of 30" x 48" x 36" (W x L x D), placed in the sidewalk
- Vaults spaced at intervals of 600 feet or less, typically at the intersection of a city block
- Sweeping conduit bends to allow cable to be pulled without exceeding pull-tension thresholds when placing high-count fiber cables (e.g. 864-count)
- Three Placement Options:
 1. Together with other communications conduit
 2. In the same trench directly above Applicant's infrastructure,
 3. Placed with minimum horizontal offset

Dig Once Draft Rules

Trench Profile



Dig Once Draft Rules

Rules Development

Dig Once Ordinance No.: 220-14

- Create a process to capture, systematically and promptly evaluate “dig once” opportunities
- Reduce impact on rights of way
- Reduce cost of placing infrastructure
- Increase availability of fiber and communications conduit

Timeline	
Draft Rules Published	4/24/2015
Written Comments Due	5/8/2015
Public Meeting	5/19/2015
Final Rules	7/26/2015
Effective Date	10/01/2015

Dig Once Draft Rules

Participating in Specific Projects

- Transitioning from Planning to Execution
 - Eddie Eriksson, PM
- DT Currently Finalizing Scoring of 220 Projects in Envista (Accela Right of Way Management)
 - Applied criteria to all projects entered into Envista with a start date in the next 4 fiscal years
 - Using process to refine evaluation criteria
 - Producing a list of projects in rank order, both within available funding and not.
- DT working with project managers at excavating departments with projects to coordinate installation of communications conduit

Dig Once

Rule Development Outreach

Activity	Time Frame
Met with Individual Stakeholders: DPW, MTA, SFPUC, AT&T, Comcast, others	March -- April
Created “Dig Once Website” sfgov.org/digonce	March 27
Published 2 nd Draft of Rules, Second Group Meeting	April 24
Written Comments on Draft Rules	May 8
Published 2nd Draft of Rules, Second Group Meeting	May 17
COIT Budget and Performance Subcommittee	June 5
COIT Budget and Performance Subcommittee	August 7
Discussed Implementation of Specific Projects	June - Ongoing

Dig Once

Rule Development Outreach

Agency and individuals included in rules review

process

Name	Agency/Department
William Sanders	City Attorney
Dennis Seace	Astound/Wave Broadband
Craig Cordova	Astound/Wave Broadband
Tedi Vriheas	AT&T
Tim Laporte	AT&T
Lynn Schussel	AT&T
Terry Jenkins	AT&T
DeeDee Workman	Chamber of Commerce
Doug Nolan	Comcast
LeeAnn Peling	Comcast
Scott Adams	Comcast
Ken Gorden	Level 3
Leonard Ortega	Lotus Telecom
Raman Sing	Port
Jose Herrera	Port
Gene Chan	PW
Rene Lopez	PW

Name	Agency/Department
Paul Borredas	PW
Fernando Cisneros	PW
Brent Cohen	PW
Patrick Rivera	PW
John Thomas	PW
Christina Olea	PW
Lynn Fong	PW
Jerry Sanguinetti	PW
Frank Lau	SFMTA
Damon Curtis	SFMTA
Matt Lee	SFMTA
Cheryl Liu	SFMTA
Kenneth Kwong	SFMTA
David Briggs	SFPUC
Than Nguyen	SFPUC

Dig Once Draft Rules

Information and Questions

- Program Website: www.sfgov.org/digonce
- Program E-mail: Dig.once@sfgov.org
- Contact for rules:
 - Brian.roberts@sfgov.org
 - 415-581-4061
- Contact for projects:
 - eddie.eriksson@sfgov.org
 - 415-581-4091

5. Policy Discussion: Drone Policy

Drone Policy

Detail

Definition: any unmanned aircraft, or an aircraft that is operated without direct human intervention from within or on the aircraft and associated elements (including communication links and components that control the unmanned aircraft) that are required for the pilot or system operator in command to operate safely and efficiently in the National Airspace System.

Scope: Applies to the use of drones by City departments and City contractors.

Drone Policy

Authorized Use

- All City drones must be operated in accordance with all City, State, and Federal regulations, and in accordance with all Constitutional guarantees.
- Before drones may be used by a Department, the Department must obtain a Certificate of Authorization, waiver, or exemption from the Federal Aviation Administration (FAA) as required by federal law.

Drone Policy

Authorize Use

- Must have GPS, updated firmware
- City-owned drones must encrypt signal

Authorized Use

Definition

Public Safety

Use for public safety must only include operation to protect the public for the purposes of firefighting, disaster relief & recovery, containment of hazardous materials, or search and rescue.

Public Interest

Drone use in the Public Interest are activities that substantially benefit the general welfare of San Francisco, such as educational, agronomic, scientific, or permit compliance purposes.

Drone Policy

Enforcement of Authorized Use

- Before use, the Department's Director must describe the intended use of the drone.
- An annual audit of drone use and provide findings to the Committee on Information Technology.
- All drones must adhere to all FAA Temporary Flight Restrictions.

Drone Policy

Privacy

- Departments shall only collect information consistent with and relevant to an authorized purpose. The City is prohibited from using drone data to collect information on individuals or private property, except for public safety or public interest purposes.
- Before the use of a drone, departments shall notify property owners when the intended flight path is above private property. This requirement does not apply in cases of drone use during an emergency.
- For all authorized drone use, City departments will retain all drone collected data for a period not to exceed 1 year, as defined by 28 Code of Federal Regulation (CFR) Part 23. Exemptions to the data retention limit may be granted by the City Administrator's Office in special circumstances.

Drone Policy

Public Safety

- Drone operators must be certified pilots with specific FAA authorization and must register with the Department of Emergency Management.
- Drone operators must maintain a visual line-of-sight with drone in-flight at all times and may only reach a maximum altitude of 500 ft above ground level.
- Drone operators may only operate one drone at one time.
- Any drones used by the City may not have any distracting lighting, flagrant coloring, or lasers that may otherwise distract drivers.

Prohibited Zones

- Drones may not be used within five miles of an airport unless approved by the FAA. Public use of drones will not be authorized within 500 feet of historical landmarks.

Drone Policy

Next Steps

Policy Discussion Items

- Commercial permitting of drones
- Public notification system
- Exemptions to City policy
- Drone data storage
- Enforcement

6. Major IT Project Update: Public Safety Radio Replacement

Emergency Management



SAN FRANCISCO DEPARTMENT OF EMERGENCY MANAGEMENT

800MHz CITYWIDE EMERGENCY RADIO SYSTEM REPLACEMENT PROJECT

AGENDA

Major Accomplishments

Risks & Challenges

Funding

Schedule



800MHZ CITYWIDE EMERGENCY RADIO SYSTEM REPLACEMENT PROJECT

MAJOR ACCOMPLISHMENTS

- Consultant contract with Federal Engineering phases 1-3 complete
 - 5 Phases total, Contract Negotiations and System Implementation phases remaining
- Hosted quarterly Radio Steering Committee Meetings and weekly project meetings
- Selection committee assembled from end user departments
 - Emergency Management, Dept of Technology, Police, Fire, Sheriff, City Administrator, Public Works, Public Utilities Commission
 - review and score proposals, perform oral interviews and attend equipment demonstrations
- RFP published on 6/8/2015, with responses due back to the City on 9/16/15
 - Hosted Bidders Conference and executed NDAs with potential bidders
 - Performed Site Walks/visits with potential vendors



SAN FRANCISCO DEPARTMENT OF EMERGENCY MANAGEMENT

800MHZ CITYWIDE EMERGENCY RADIO SYSTEM REPLACEMENT PROJECT

MAJOR ACCOMPLISHMENTS (CONT.)

- Components of the RFP include
 - Replacement of Radio Communications Infrastructure and Consoles
 - Replacement of Radios (Portables, Mobile Radios, and Consolettes)
 - 2 to 18 year Maintenance Agreement (options)
 - Financing options for infrastructure and radios
- RFP and supporting documents and addendums can be found at:
<http://mission.sfgov.org/OCABidPublication/BidDetail.aspx?K=9745>



800MHz CITYWIDE EMERGENCY RADIO SYSTEM REPLACEMENT PROJECT

MAJOR ACCOMPLISHMENTS (CONT.)

- Developed and executing MOUs with Dept. of Public Works – Bureau of Design and Engineering
 - Twin Peaks Tower Replacement
 - Mechanical Upgrades to Radio Sites
 - Replacement of all HVAC and BMS systems
 - Electrical Upgrades to Radio Sites
 - Clay Jones Generator Replacement
 - South Hill Tower Replacement
 - Bayview Site Development





800MHZ CITYWIDE EMERGENCY RADIO SYSTEM REPLACEMENT PROJECT

MAJOR ACCOMPLISHMENTS (CONT.)

- Extended Master Purchase and Maintenance Agreement with Motorola Solutions
 - Board of Supervisors approved 2 years worth of funding until Sept. 2017
- Completed first radio purchase for SFPD, SFFD and SFSD (\$1.4M)
 - 362 portable radios with accessories and spare batteries
 - Selected from user dept. trials
 - Working on training and distribution plan
- Interoperability improvements in BART Tunnels





800MHz CITYWIDE EMERGENCY RADIO SYSTEM REPLACEMENT PROJECT

RISKS & CHALLENGES

- Sites & Site Leases
 - Working with Real Estate Dept. and SFMTA on lease arrangements at One Market Plaza, Clay/Jones, and Bayview Radio Site
 - Lease with Cal Parks at South Hill/Daly City radio site, Cat Ex Certificate process underway
 - Environmental Application for Twin Peaks Tower still under review, Cat Ex Certificate process underway
 - VA Hospital radio site needs to be relocated
- Radio coverage underground, including BART and Muni tunnels
 - Evaluating system reliability
- Long term maintenance costs for departments
 - Per radio charges for dept. and outside agency costs



SAN FRANCISCO DEPARTMENT OF EMERGENCY MANAGEMENT

800MHz CITYWIDE EMERGENCY RADIO SYSTEM REPLACEMENT PROJECT

FUNDING OVERVIEW

		Funding Received			
Subsystem	Estimated Total Cost	FY 14-15	FY 15-16	FY 16-17	delta
Infrastructure (Vendor Contract)	\$31.2M			\$12.4M	\$18.8M
Public Safety Radios	\$25.5M	\$1.5M	\$1.5M		\$22.5M
Public Service Infrastructure	\$2.0M				\$2.0M
Public Service Radios	\$5.1M				\$5.1M
Redundant Fiber to Radio Sites	\$2.0M				\$2.0M
Project Staff & Consulting	\$8.7M		\$2.8M		\$5.9M
Capital Funding- Radio Site Work	\$5.1M		\$2.5M	\$2.6M	-
TOTAL	\$79.6M	\$1.5M	\$6.8M	\$15.0M	\$56.3M

*Planning costs (\$1.8M) not included in above allocations

**Maintenance Costs not included in above estimate



SAN FRANCISCO DEPARTMENT OF EMERGENCY MANAGEMENT

800MHz CITYWIDE EMERGENCY RADIO SYSTEM REPLACEMENT PROJECT

SCHEDULE & NEXT STEPS

Major Milestones	Start Date	End Date
Phase 1 – Inventory and Needs Assessment	April 2014	July 2014
Phase 2- Design Criteria and Budget Projections	June 2014	December 2014
Phase 3 – Spec Writing & RFP	October 2014	March 2015
Phase 4 – Procurement Process	March 2015	March 2016
Phase 5 – System Implementation	March 2016	December 2018

7. Project Update: Security Cameras

Juvenile Probation

Security Cameras Project Update

Overview

- Juvenile Hall:
 - Houses pre-adjudicated youth
 - Capacity of 150 youth – current admissions in mid-60s
 - 24-7 operation
- Designed for restrictive and secure environment.
- Operations governed by Federal and State law.
- Access control integrated with security camera monitoring is essential. Existing system is live viewing only upon activation by central control.

Security Cameras Project Update

Scope

- Scoping/Design/bid package phase
 - ✓ Engage DPW Architecture to manage consultant to prepare design/bid documents
 - ✓ Settle on scope of design/bid prep contract
 - Develop scope for phase 1 of project based on funding
 - Develop scope and budget for remainder of project
- Project Scope
 - Replace existing cameras (approximately 150)
 - Add cameras to cover space in viewable range (~200 cameras)
 - Add recording ability and storage; server space
 - Integrate with existing access control system

Security Cameras Project Update

Statu

- Project behind
 - Funding, scoping, capacity issues
- Project Cost:
 - Originally \$2.3M, expected to be greater given inflationary factors
 - Currently funded at \$1.45M
 - COIT funded \$750K, of which \$250K was provided previously
 - DT Spent \$6,162 for initial scoping and cost estimate
- Risks and Issues
 - Funding
 - Capacity

Security Cameras Project Update

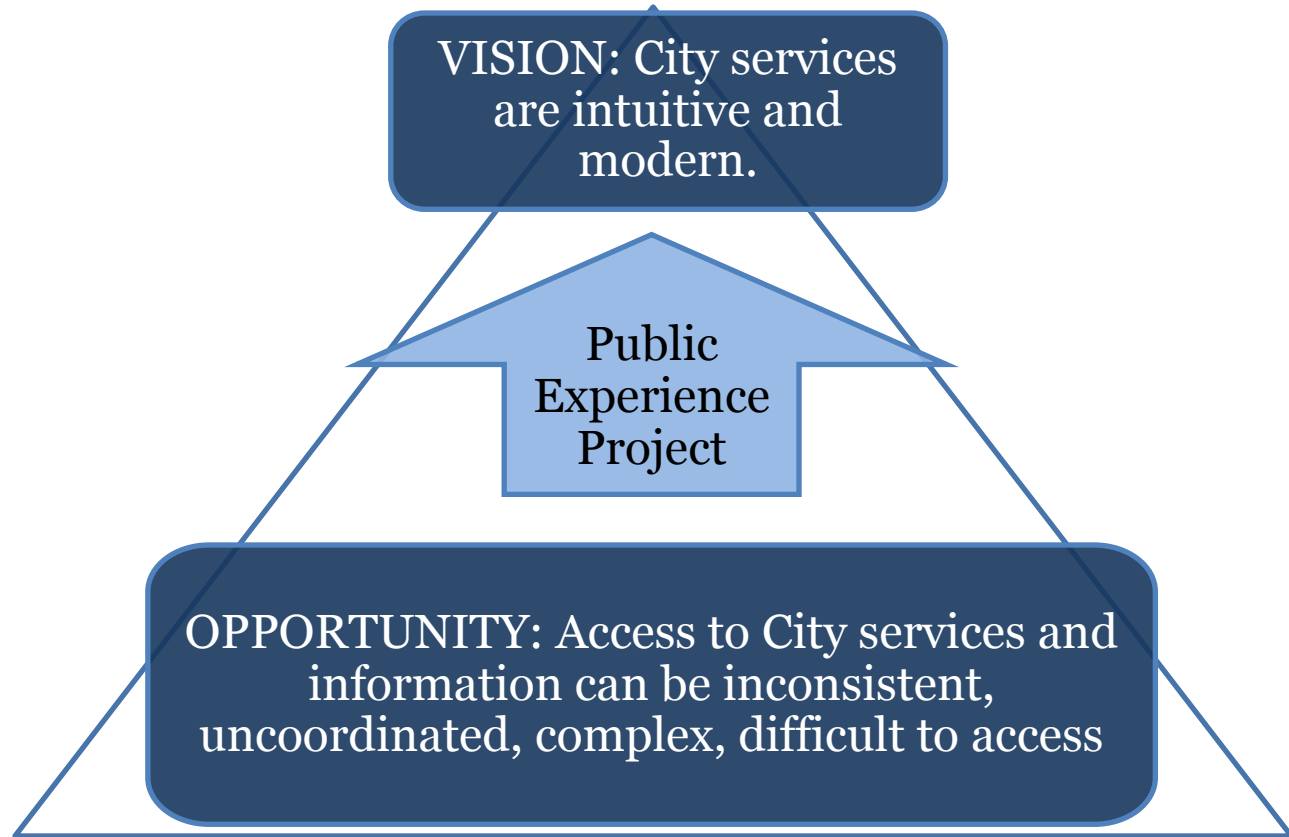
Future Milestones

- Planning: Contractor scope, design, architectural drawings and bid package (4 months)
- Phase 1: Bid, Award, Contract
 - Dependent on design and scoping above
- Phase 1: Construction
 - Dependent on design and scoping above
- Phase 2: Bid, Award, Contract
 - Dependent on funding availability
- Phase 2: Construction
 - Dependent on funding availability

8. Presentation: Public Experience Strategy

An aerial photograph of San Francisco, California, showing a dense urban landscape. The Transamerica Pyramid is the central focus, standing out among other skyscrapers. The foreground is filled with a grid of smaller, colorful buildings. The sky is overcast with soft, grey clouds. A white rectangular box with a thin border is superimposed over the middle of the image, containing the text 'PUBLIC EXPERIENCE' in white, bold, sans-serif capital letters.

PUBLIC EXPERIENCE



The City's service culture creates consumer-focused products

VALUES

1. The delivery of information and transaction services are unified and should be structured together
2. City public services should be consumer-focused, modern, and seamless.

CCSF CURRENT STATE ASSESSMENT

Analysis of how the City currently delivers services, in all forms (digital, phone, brick & mortar, postal)

Department interviews to learn:

- service delivery strategies
- pain points
- service transaction volumes
- and plans for the future.

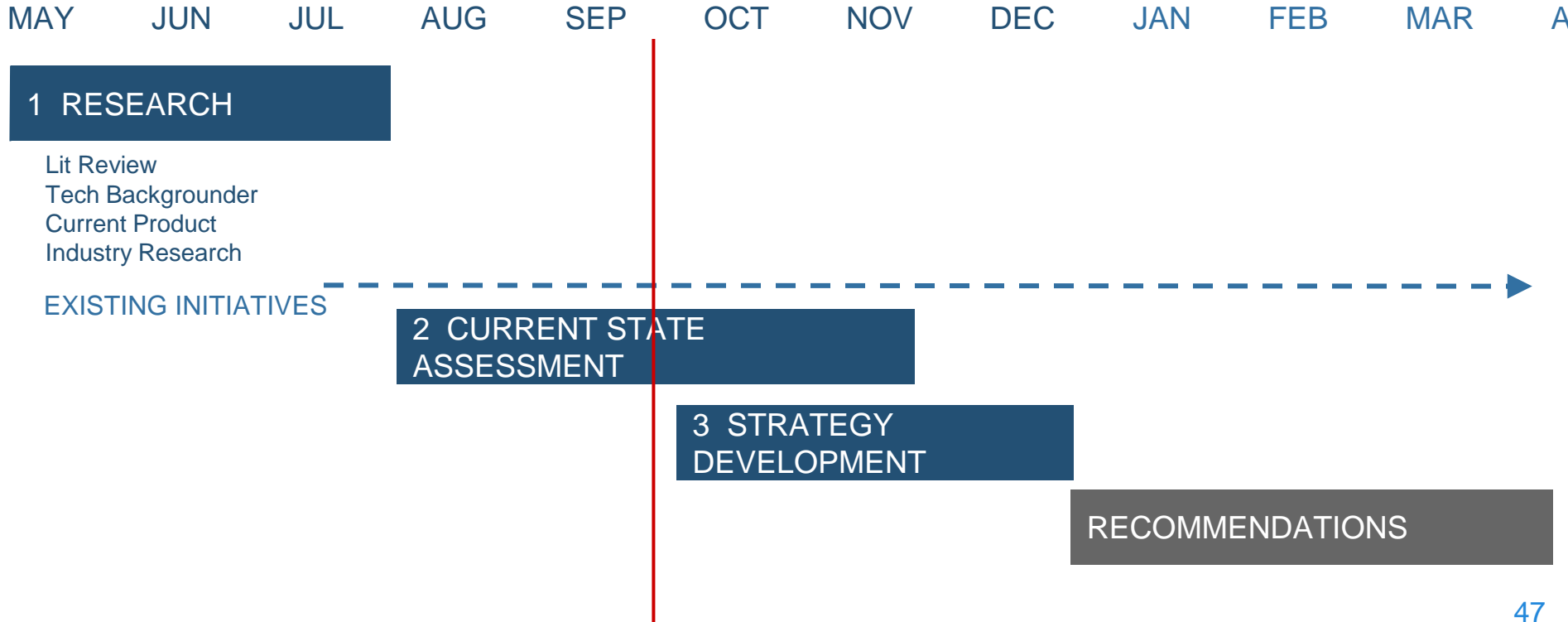
This data will be the foundation in developing the strategy

DELIVERABLE: THE STRATEGIC PLAN

Strategic Plan Components:

1. Vision/Mission/Goals
2. CCSF Current State Analysis
3. 5-year Roadmap - short and long term recommendations
 - Resource Strategy
 - Governance
4. Dept Toolkit – best practices checklist, glossary, etc
5. Establish Evaluation Metrics

PROJECT TIMELINE



LEADERSHIP

Executive Sponsor:

Naomi Kelly

Department Leadership:

Department of Technology

Mayor's Office of Civic Innovation

COIT

Mayor's Budget Office

Open Data Office

9. Discussion: IT vs. Capital Requests

IT vs Capital Requests (GF)

Overview

Opportunity for better coordination and planning around General Fund requests that overlap IT and Capital.

- Define what request should be reviewed by COIT, CPC, Mayor's Budget Office
- Coordination and clarification around these requests and funding recommendations.

IT vs Capital Requests (GF)

- Requests:
 - COIT: Costs associated with an IT project implementation
 - Ex: Wifi in City Hall
 - CAPITAL: IT Infrastructure related to capital improvement project
 - Ex: Data/phone infrastructure that is part of a larger capital improvement project
 - OTHER GF SOURCES: Hardware, software, or equipment NOT related to a project (generally not reviewed by COIT for approval or funding)
 - Ex: Ongoing software license costs; equipment refresh – not part of a project

IT vs Capital Requests (GF)

Previous Requets

Examples	COIT	CAPITAL	OTHER GF SOURCES
Security Camera Project	IT Hardware/Software	Physical infrastructure improvements	Ongoing Support and Maintenance
Capital Improvements: IT Fixtures, Furniture, and Equipment (FF&E)		Physical infrastructure	IT Hardware/Software
Public Safety Radio Replacement Project	IT Infrastructure and Build	Physical infrastructure improvements	Equipment/ Ongoing Support/Maintenance
Fiber/WiFi/Dig-Once	WiFi Equipment and Installation	Fiber/Conduits Equipment and Installation	Ongoing Support and Maintenance

IT vs Capital Requests (GF)

Next Steps

Short-term:

- Budget Instructions: COIT to ask if request is related to or being asked of other GF sources (Capital/Op. Budget)
- Use that initial information to trigger further discussions with departments as part of COIT staff review of projects

Longer-term:

- Further discussions to help clarify for depts the distinction between General Fund requests

10. Public Comment
