



# **Regular Meeting**

## **September 15, 2016**

**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 Meeting Minutes from May 6, 2016 (Action item)
4. Chair Update
5. CIO Update
6. Discussion: FY 2018-22 Information & Communication Technology (ICT) Plan
7. Discussion & Action: Proposed City-wide IT Policies
  - Disaster Preparedness, Response, Recovery and Resiliency (DPR3)
  - Cybersecurity
  - Drones (discussion only)
8. Presentations: Department Strategies
  - Department of Technology
  - Mayor's Office of Civic Innovation
9. Public Comment
10. Adjournment

# **3. Approval of Minutes**

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Action Item

## **4. Chair Update**

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## 5. CIO Update

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# CIO UPDATE

## Strategy Roadshow + Positive Feedback



Connectivity



Cybersecurity



Digital Service



Tech Talent



Technology as a Service

SF Connected | Community Broadband  
Digital Equity Project of the Year!



# Council of Global City CIOs

Co-founded with Washington DC CTO

Mayor Lee and Mayor Bowser published  
co-authored announcement 9/12/2016

Founder Cities Meeting in DC this month

- NYC, The Hague, Chicago, Austin, Dubai, Seattle, Boston & Atlanta
- Mexico City, Singapore, Seoul, Santiago, Barcelona



# Council of Global City CIOs

Formed to organize global city technologists around key initiatives:

1. Smart City Framework
2. Broadband Connectivity for All
3. Accelerate the Digitization of Gov't through the open-source sharing of solution code and resources





# #SFWIFI



Unique  
Clients

Month of June

418,300

Pride Weekend

95,600



Total  
Sessions

13.5 million

969,000



Avg. Duration

3-11 min.

4-12 min.



Total

Throughput

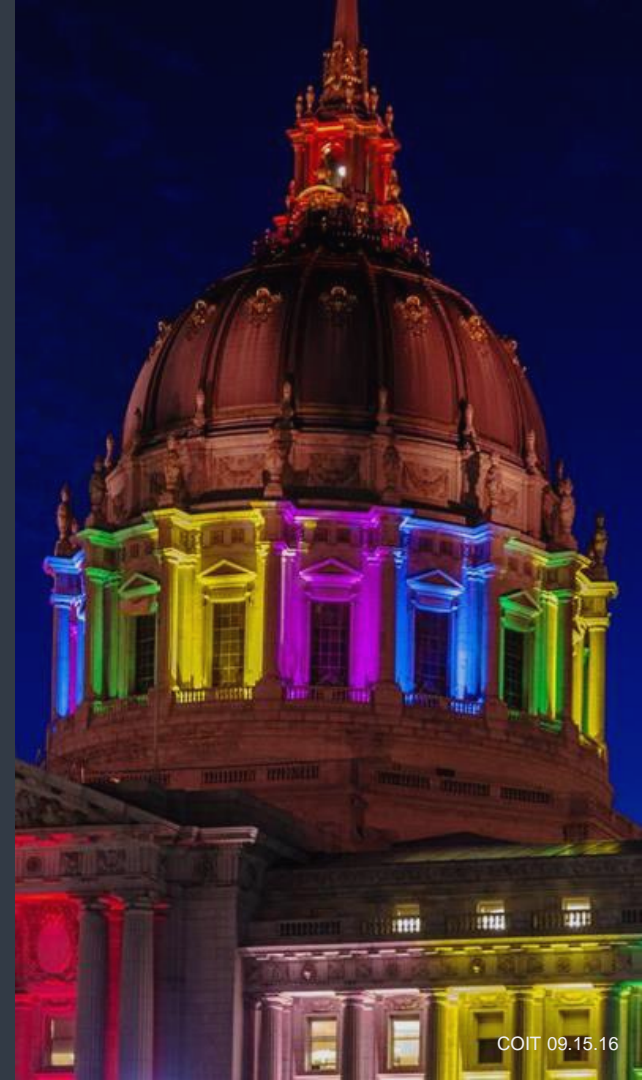
27.5 TB

\*June 2016

457 GB

\*June 25-26 2016

uploads | downloads  
Department of Technology



COIT 09.15.16

# #SFWIFI + FIBER RFIs

#SFWiFi in Public Spaces and  
Affordable Housing

San Francisco Affordable Housing  
Fiber





# | FROM ONE TO MANY



SAN FRANCISCO  
**BUSINESS PORTAL**



SAN FRANCISCO  
**VIOLENCE PREVENTION  
SERVICES**



SAN FRANCISCO  
**OFFICE OF  
SHORT-TERM RENTALS**



SAN FRANCISCO  
**DIGITAL SERVICES**



SAN FRANCISCO  
**HOUSING PORTAL**



**SAN FRANCISCO**  
**DEPARTMENT OF**  
**TECHNOLOGY**

## **6. Update: FY17-18 through FY21-22 ICT Plan**

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# FY 2017-18 thru FY 2021-22 ICT Plan

## Calendar

MONTH	GOAL	ACTIVITIES
June	Kick-Off Strategy Development	
July/August	Diagnose Current/Ideal State	Citywide Survey
September	Define Ideal State	Department Surveys External Survey Group Sessions
October	Define Strategies & Tactics	Leadership Workshops
November	Develop Recommendations	Leadership Workshops
December	Final Recommendations	
January	Review Draft/Comments	
February	Final Approval	

# FY 2017-18 thru FY 2021-22 ICT Plan

## Citywide Survey Overview

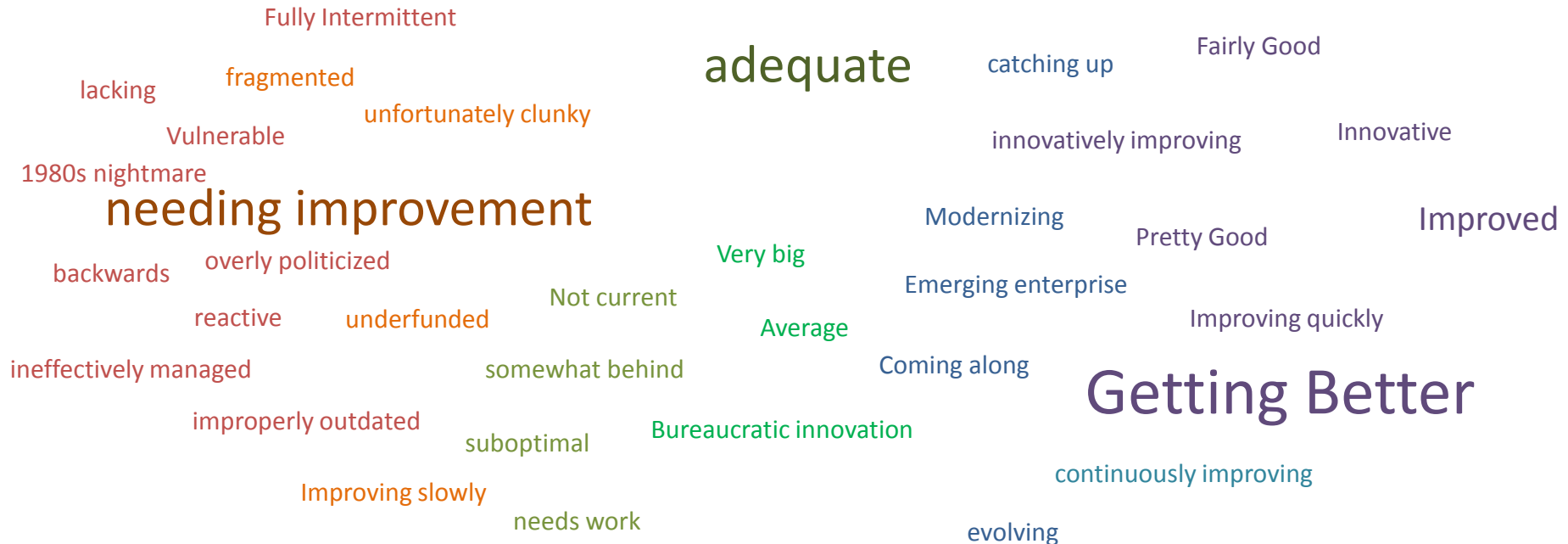
- Purpose: to take a pulse on Citywide perceptions of current state of IT, shared services; identify risks, needs, trends
- Surveyed COIT and Subcommittee members, IT managers and staff across the city.
- 40 responses received, majority were:
  - 64% - managers
  - 62% - from large (>200 FTE) departments
  - 66% - outside DT
  - 41% - staff with over 10 years experience in the city



# FY 2017-18 thru FY 2021-22 ICT Plan

## Citywide Survey Results

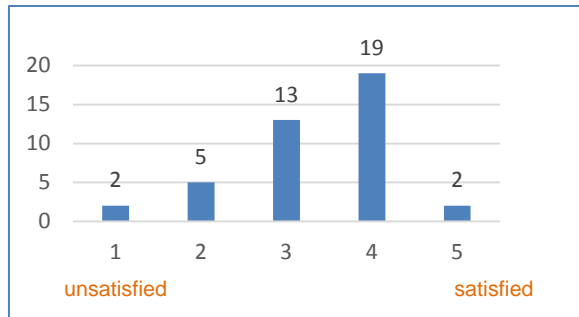
In two words, how would you describe technology in the City?



# FY 2017-18 thru FY 2021-22 ICT Plan

## Citywide Survey

How satisfied are you with the direction of City technology investments?



Support Existing Strategic IT Goals:

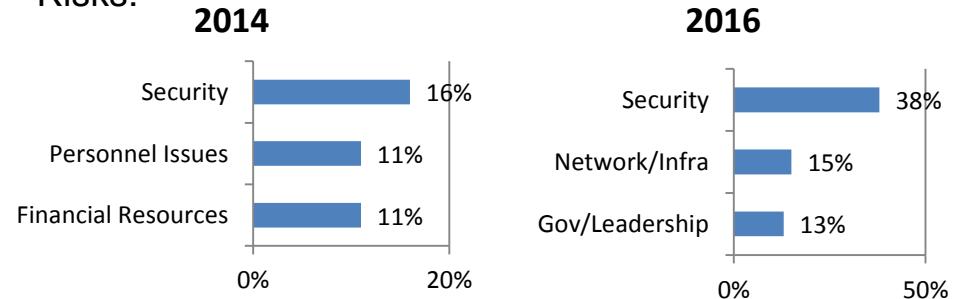
1. Support, Maintain & Secure Critical Infrastructure
2. Increase Efficiency Effectiveness
3. Improve Access & Transparency

What are the three biggest technology \_\_\_\_\_ for the City or your department in the last two years?

Accomplishments:

1. Office 365 Migration / Email Consolidation
2. Public Wifi
3. Enhanced Digital Services
4. Software Enterprise Agreements (Adobe)

Risks:



# FY 2017-18 thru FY 2021-22 ICT Plan

## Citywide Survey



# FY 2017-18 thru FY 2021-22 ICT Plan

## Next Steps

### Department IT Plan Surveys:

- All departments must respond (SharePoint)
- Questions focused around areas where potentially greatest opportunity for collaboration / shared services
- Paired with five-year project proposals
- To go out mid-September
- Open House: Come and visit us for any training needed on system – Sept TBD

### Thematic Meetings: October

# 7. Discussion and Action

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Disaster Preparedness, Response, Recovery and Resiliency (DPR3) Policy

Cyber Security Policy

Drone Policy (Discussion only)

# **COIT Disaster Preparedness, Response, Recovery and Resiliency (DPR<sup>3</sup>) Policy**

September 15, 2016

# SME Workgroup, Objectives & Actions

- Develop new COIT policy for Disaster Preparedness, Resiliency and Recovery
- Ensure multi-stakeholder engagement to meet citywide needs
- Consider policy implementability and sustainability
- 6 sessions calendared
- Citywide vetting followed

## **DP SME Workgroup Invitees**

**Todd Rydstrom, Deputy Controller – Sponsor**

**Joe Voje, City CISO – Co-Sponsor**

Airport – Ray Ricardo

Assessor-Recorder – Gigi Whitley

CON (eMerge) – Dennis McCormick

CON (Disaster Recovery) – Mark McLean

CON (F\$P) – Jack Wood

DEM – Mitch Sutton

DPH – John Applegarth

MTA – Lisa Walton

POL – Susan Merritt

PUC – Ken Salmon



## Draft Policy Statement

The COIT Disaster Preparedness, Response, Recovery and Resiliency (DPR<sup>3</sup>) policy **requires all** City and County of San Francisco departments to develop and implement disaster-related planning for information technology systems and data, planning referred to herein as **IT Continuity of Operations Plans (IT COOP) or IT Emergency Response and Recovery Plans (IT ERRP)**. The IT COOP is a component of the larger departmental Continuity of Operations Plan; and the IT ERRP is a component of the departmental Emergency Response and Recovery Plan, hereinafter jointly referred to as IT COOP/ERRP. This DPR<sup>3</sup> policy outlines the requirements for preparedness, testing and redundancy to ensure the continuity of government operations and minimize disruption to vital public services. The policy provides citywide leaders and departmental managers with clear planning and preparation practices to build resiliency in order to mitigate risks.

## Draft Policy Statement (cont.)

Planning on how to effectively minimize, and recover from, the effects of a service-impacting disaster **must be coordinated citywide**, as success will rely upon the assistance, resources and expertise of multiple City agencies. Effective recovery is dependent on each City agency following agreed upon procedures and practices in order for the overall goals of timely response and recovery to be met.

## Draft Policy Requirements

- IT COOP/ERRP drafts will be completed by July 2017. Final plans must be completed by July 2018 and updated at least biennially by each City department.
- All new City IT contracts, policies and procedures must incorporate disaster resiliency. Existing contracts should be modified upon renewal to address disaster resiliency.
- A departmental IT COOP/ERRP is primarily for departmental use.

## Draft Policy Requirements

- Each department shall develop (or revise) its IT COOP/ERRP to be in alignment with this COIT DPR<sup>3</sup> policy.
- Each department is responsible and accountable for its own DPR<sup>3</sup> program.
- Each department shall test its IT COOP/ERRP at least annually.
- Each department shall train its employees to execute its IT COOP/ERRP.

## Draft Policy Requirements

- A department's IT COOP/ERRP shall include the following components:
  - Communications
  - IT Incident Response
  - IT Succession
  - Criticality of Service List
  - Data Inventory & Security Assessment
  - Drills & Testing
  - Data Backup and Restoration
  - Equipment Replacement
  - Power Supply
  - Network & Telephony Connectivity
  - Cyber-Security
- Department heads are responsible for ensuring compliance with this policy.

## Draft Roles & Responsibilities

- **COIT:** Provide necessary support to Departments to enable them to develop and complete their IT COOP/ERRPs and provide ongoing policy guidance and oversight to ensure citywide consistency with DPR<sup>3</sup> standards and best practices.
- **Department Head:** Responsible for ensuring compliance with this policy.
- **Department CIO/IT Lead:** Responsible for development of IT COOP/ERRPs and ongoing testing and monitoring of DPR<sup>3</sup> compliance.
- **Department Business Stewards/Owners:** Responsible for departmental business operations and compliance and specifying recovery time objectives.

## Draft Roles & Responsibilities

- **Department of Technology:** Responsible for developing and implementing IT COOP/ERRPs for Citywide IT infrastructure support, including, but not limited to, the citywide business network, internet connectivity, telecommunications and emergency radio communications, as well as assisting departments without internal IT staff with the development of their IT COOP/ERRPs.
- **CSA Audits:** CSA Audits will periodically audit departmental IT COOP/ERRPs and test results for compliance with DPR<sup>3</sup> policy and standards.

**Questions?**



# CYBERSECURITY



# CYBERSECURITY POLICY OVERVIEW

- Improve inventory of network hardware and software
- Document data types and the systems on which they reside within our perimeter and in the cloud
- Conduct risk assessments on systems and data store
- Patching, Vulnerability Scanning, Hardening Systems, Reporting Incidents and remediating them
- Improve knowledge level of employees in the areas of Cybersecurity threat and risk mitigation

# | CYBERSECURITY SMEs

Joe Voje (CISO, CCSF)

Brent Lewis (DHR)

Thomas Borton (CISO, SFO)

Paul Karawanny (ISO, PUC)

Robert Eickwort (ISO, HSA)

Ana Contreras (CON)

David Cabral (ISO, POL)

Ron Bell (ISO, MTA)

# CYBERSECURITY POLICY STATEMENT

The Cybersecurity Policy lays the foundation for the City and County of San Francisco's (CCSF) Cybersecurity Program as a whole and demonstrates executive level support for the program. The program's charter, cybersecurity framework, policies, standards, and guidelines provide a risk-based approach to protect information resources essential to the effective and efficient government of the City and County.

*Read full policy in handout*

# OVERVIEW

## History

- CCSF City Administrator issues an order to stop the use of drones for City purposes until a COIT policy is passed
- Original draft policy discussed at September 2015 meeting

## Today's Discussion

- Review updates to the City's drone policy
- Receive final comments before final review & action

# PURPOSE

The City is dedicated to embracing technologies that help improve its services. The use of drones in the public interest is expected to benefit residents and visitors to the City through the more efficient use of City resources.

**SCOPE:** This Policy applies to all information resources operated by or for the City and its component departments, boards, and commissions. Elected officials, employees, consultants, and vendors while working on behalf of the City are required to comply with this Policy.

# AUTHORIZED USES AND EVALUATION PERIOD

- Department uses must comply with all City, State, and Federal laws and regulations, and with all Constitutional guarantees.
- The City's Drone Policy requires each department wishing to use drones to issue a department policy describing the authorized uses. Departments must prioritize the privacy and safety of residents, businesses, and visitors of San Francisco.
- This Policy will be subject to a **one-year evaluation period**.

# EVALUATION PERIOD AND AUTHORIZED USES

Department	Authorized Use
Controller's Office	<ul style="list-style-type: none"><li>– Disaster Cost Recovery</li><li>– Audit Compliance</li></ul>
Fire Department	<ul style="list-style-type: none"><li>– Search &amp; Rescue</li></ul>
Public Utilities Commission	<ul style="list-style-type: none"><li>– Inspections</li><li>– Disaster Cost Recovery</li><li>– Security</li><li>– Emergency Response</li><li>– Investigations</li></ul>
Port	<ul style="list-style-type: none"><li>– Inspections</li><li>– Modeling</li><li>– Security</li><li>– Marketing</li></ul>
Recreation & Parks	<ul style="list-style-type: none"><li>– Inspections</li></ul>



# PRIVACY

- Departments shall collect information using a drone, or use drone-collected information, only to the extent that such collection or use is pursuant to an authorized purpose. Under no circumstances may drone data be used for personal purposes.
- Departments must notify the public of intended drone operations at least 48 hours in advance through the Open Data portal.
  - Exception for emergency or security uses.

# DATA SECURITY

- Departments are advised not to maintain archives of any images, video, or other drone data.
- To the extent departments do retain drone-collected data, such data may be accessed by the operating department only.

# NEXT STEPS

## Discussion Points

- Training Requirements
- How to allow data sharing for authorized uses, while protecting privacy
- Geo-Fencing
- How to vet other department uses

## 8. Strategy Update

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Department of Technology

Mayor's Office of Civic Innovation

# | DT STRATEGY



# 5YR STRATEGIC PLAN



Connectivity



Digital Service



Technology as a Service



Tech Talent



Cybersecurity





# CONNECTIVITY



33 PUBLIC  
PARKS  
+MARKET ST

## 1.1 NETWORK

Build a resilient and comprehensive network

## 1.2 #SFWIFI

#SFWiFi expansion to provide public connectivity

## 1.3 PARTNERSHIPS

Develop public-private partnership structures

Connectivity is defined as the process of building and maintaining a constant connection between two or more points (devices, applications) across multiple platforms (IOS, wired or wireless media connections), for the benefit of the public and the city employees that serve them.



# DIGITAL SERVICE

BUSINESS PORTAL

**17.5K** MONTHLY  
PAGES VIEWS

**13X MORE USERS**

Leverage digital assets and tools to modernize “brick-and-mortar” civic service delivery, and offer online alternatives for a constituency that is increasingly expecting “an app for that” for their service needs.

## 2.1 STAFFING

Create a Digital Service-focused team.

## 2.2 PUBLIC EXPERIENCE

Improve public experience through a unified, collaboratively developed Digital Services Strategy.

## 2.3 PRODUCTS

Develop, launch, and iterate new and existing digital products / services.





# TECHNOLOGY AS A SERVICE

## SERVICENOW

**34** MAJOR PROJECTS  
COMPLETED  
**99.5%** REQUESTS  
RESOLVED

Enhancing customer service operations and optimizing internal infrastructure architectures (hosted cloud solution, citywide voice over IP – VOIP).

### 3.1 CUSTOMER SERVICE

Establish best-in-class tools, methods and experiences for customers

### 3.2 ARCHITECTURE

Modernize our Infrastructure Services

### 3.3 SHARED SERVICES

Establish Shared Services Strategy for technology-focused services



# CYBERSECURITY

90%

WORKSTATION  
SECURITY  
COMPLIANCE

Cybersecurity is defined as the body of technologies, processes, practices and policies designed to protect the organization from the impact of attack, damage or unauthorized access of networks, computers, programs and data. As we make progress on a greater connected and digital City, the security of our digital infrastructure becomes vital to our organizational health and resiliency. A Citywide approach to information security policy, framework, and operations will be critical in the coming years.

## 4.1 POLICY

Adopt cybersecurity framework to protect critical systems and data

## 4.2 OPERATIONS

Identify, Protect, Detect, Respond, Recover using the NSIT. Framework



# TECH TALENT



**2x**  
INCREASE  
YR/YR



**120+ EMPLOYEES HIRED,  
PROMOTED, OR CONVERTED**

People are valuable, and technology talent is in high-demand. We are adopting modern approaches to recruitment, retention, and staff development that are widely adopted in the industry and will be game-changing for government.

## 5.1 TALENT

Create a modern and competitive talent recruitment and retention program

## 5.2 COORDINATION

Facilitate Citywide coordination for talent recruitment and retention

## 5.3 SUCCESSION

Fill all active and funded positions, including ongoing succession planning and response.

# OPERATIONAL EXCELLENCE



Policy &  
Governance



Communications



SFGovTV



Finance &  
Administration



# MEASURING THE MOVEMENT

Performance metrics for all services, initiatives, objectives and strategies.

Reported and measured in recurring “stat-type” meetings

Watch Our Progress

Dynamic KPI & Strategic Initiative Dashboards to be published

Quarterly Performance Reports



# | MEASURING THE MOVEMENT

Continue to meet with Department Heads to discuss and incorporate feedback on the final strategy

## **Shared Services Strategy**

Kicked off our work with Gartner Consulting to define technology Shared Services with city-wide departmental input and contributions.

Resulting in a San Francisco Shared Technology Service Strategy

# MOCI STRATEGIC REVIEW



SF MAYOR'S OFFICE OF CIVIC INNOVATION  
OFFICE OF MAYOR EDWIN M. LEE

# AGENDA

- Who is MOCI?
- Background and context
- Vision/Mission
- New Approach (process, people, portfolio)
- 90 day plan (key milestones)



# WHO IS MOCI?



Chief Innovation Officer



Director, Civic Innovation Partnerships



Deputy Innovation Officer

# CONTEXT



SF MAYOR'S OFFICE OF CIVIC INNOVATION  
OFFICE OF MAYOR EDWIN M. LEE



HARVARD | BUSINESS | SCHOOL  
**COMMUNITY PARTNERS**  
Harvard Business School Association of Northern CA

STRATEGIC PLANNING PARTNERSHIP  
[February - June 2016]

# INTERVIEW FEEDBACK & ACTION

## CCSF STAKEHOLDERS AND PEER Interviews

- Chief of Staff, Dept Heads, Managers
- Boston
- New York

## STRENGTHS

- Talent pipeline
- Partnerships
- Digital services (Business Portal)

## OPPORTUNITIES

- Stronger alignment with Mayoral priorities
- Clarify role, services, value proposition, and engagement model
- Internal communication - share updates, metrics, outcomes

## VISION, MISSION & FOCUS

- Clarify role, focus areas & desired outcomes

## CORE COMPETENCIES & RESOURCES

- Assess skills, staffing & resources to succeed

## PROJECT PORTFOLIO & EXECUTION PLANS

- Work with stakeholders to prioritize key projects and align resources & execution

## OVERSIGHT & MEASUREMENT

- Define success metrics, key operating practices, & stakeholder review

## COMMUNICATION

- Define plan for telling the MOCI story and reporting progress

# REVISED MISSION & VISION

## OUR VISION

A government that is more collaborative, inventive and responsive to San Franciscans.

## OUR MISSION

To support City departments by introducing new approaches, resources and technology for Mayoral priorities.



# OUR VALUES

Our values serve as a compass for our actions  
and how we engage with our City.

1. LEADERSHIP: The courage to shape a better future
2. COLLABORATION: Leverage collective talent
3. AGILITY: Entrepreneurial and nimble
4. CREATIVITY: Imagination to drive innovation
5. ACCOUNTABLE: Track and evaluate results

# A DISCIPLINED APPROACH

## The Steps of the Innovation Delivery Model

The Innovation Delivery Model guides cities through four steps:



**Bloomberg  
Philanthropies**

- Proposed partnership under discussion
- MOCI value proposition
  - Applying methodology to QOL
  - Additional resources through staff and partnerships

# PROJECT CRITERIA



## ACCEPTANCE CRITERIA

1. **Relevance** - Mayoral priority
  - Equity
  - Affordability
  - Quality of Life
  - Resilience
  - Good Government
2. **Impact** - cost savings, revenue generation, saving lives, improved service delivery, ROI



## SUNSET/TRANSITION CRITERIA

1. **Outcomes** - project has met identified outcomes or will likely not achieve outcomes
2. **Maturity** - point where MOCI's value/need has diminished; sponsoring partner able to continue work successfully

# PROJECT PORTFOLIO

## QUALITY OF LIFE INITIATIVE

Bringing collaborative partnerships and technology to the Fix-It Director to develop long-term quality of life improvements.

### PARTNERSHIPS

- Civic Bridge - Google improving mobile 311 app
- Startup in Residence - technology
- Superpublic - intergovernmental partnership

### GOOD GOVERNMENT

- Digital Services Strategy: COIT, MBO, City Administrator, DT, 311
- Smart Cities: MTA, Planning, DT, OEWD
- Universal Internet: Sup. Farrell, COIT, MBO, City Administrator, DT
- Procurement Innovation: MTA, OCA, COIT

### CUT PROJECTS

- Future of Work: OEWD

### PAST PROJECTS

- Living Innovation Zones: Planning, DPW, SFAC
- Affordable Housing Portal: MOHCD, DT
- Business Portal: OEWD, DT
- Advanced Manufacturing Initiative: OEWD
- Open Data



# Now we are applying the Bloomberg Innovation Delivery Approach to our Quality of Life Initiative.

INVESTIGATE THE PROBLEM

GENERATE NEW IDEAS

PREPARE TO DELIVER

DELIVER AND ADAPT

## ★ We are here

Build relationships and collaborate from the start

Create a preliminary list of challenges

Work to understand the problem

Finalize challenges and contributing issues

Select metrics for each challenge

Look elsewhere first

Open innovation: engage many

Other tools to increase flow of new ideas

Additional resources

Select initiatives

Set preliminary initiative targets

Get agreement on the core components

Develop initiative work plans

Finalize all targets

Develop a communications strategy

Delivery routines

Dealing with reluctance during delivery

Creating conditions for long-term success

# MEET LISA, the mom

Lisa, age 35, lives with her 4 year old daughter Alexa in the Fillmore. She wants Alexa to be safe and happy!



- Lisa works until 7pm, picks up Alexa from a friend's house and they walk home together at night. There are street lights out along her route and Alexa is scared of the dark. [*Smart Cities: "smart" lights can be immediately detected and reported to SFPUC when they go out*]
- Someone told Lisa to report the streetlight on 311. She downloaded the app but found it confusing to use. [*Civic Bridge: Google bringing top talent to improve the 311 app experience*]
- The sidewalk is always littered with garbage. Even once it gets cleaned up, more shows up days later. [*Fix-It Behavior Change: partnership with behavioral science leaders to implement and measure interventions*]
- Lisa is involved with Alexa's soccer team and they're looking to reserve space for a practice. She keeps calling but Rec&Park phone line is busy [*Spotery is working with Rec & Park to build an online field reservation tool through Startup in Residence*]
- Lisa has heard she may qualify for a more affordable housing unit but doesn't know which units she's eligible for. [*Digital Services: Development of MOHCD's Housing Portal*]

# MEET ROBERT, the business analyst

Robert works for HSA. He just wants to focus on serving clients better but seems to always be doing paperwork.

- People are always frustrated they have to come to HSA offices during work hours to apply for services. He wants to put services online but doesn't have a team with technical skills to do it [The New Chief *Digital Services* Officer will create standards and template to easily put simple services online.]
- Robert has to do four procurements to support critical programs in the next four months! Not sure how he'll get to them all. [Merging together multiple RFPs through *Procurement* technology saves time!]
- A good portion of HSA clients don't have access to internet at home to apply for HSA services [*Universal Internet* will connect San Franciscans to broadband internet at an affordable rate]



# NEXT STEPS

## EXECUTION ROADMAP

- 90 Day Plan
  - Establish Advisory Board
  - Bloomberg decision
  - Quality of Life Kick-off
  - Develop communication plan
- Immediate Next Steps
  - Socialize new approach with stakeholders

# MOCI STRATEGIC REVIEW



SF MAYOR'S OFFICE OF CIVIC INNOVATION  
OFFICE OF MAYOR EDWIN M. LEE

## **9. Public Comment**

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