



Special Meeting

March 31, 2017

**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 March 24, 2017
4. Department Updates and Announcements
5. FY 2017-18 and FY 2018-19 Budget Presentations
6. Public Comment
7. Adjournment

3. Approval of Minutes

Action Item

4. Department Updates & Announcements

5. FY 2017-18 and FY 2018-19 Budget Presentations

Calendar – March 31

General Fund Departments – Network & IT Infrastructure

Time	Dept	Project	FY18 GF Request	FY19 GF Request
9:15	DT	Upgrade the Network	\$1,911,000	\$1,836,000
9:30	DT	Identity and Access Management	\$503,833	-
9:45	DT	City AD/Authentication Consolidation	\$1,792,000	-
10:00		-- break --		
10:15	DT	Business Continuity & Disaster Recovery	\$1,400,000	\$1,000,000
10:30	POL	Foundational Network System	\$3,300,000	\$60,000
10:45	CON	Oracle Images to Peoplesoft HCM	\$375,000	\$375,000
11:00		-- COIT General Discussion --		
11:15				
11:30				

Calendar – April 7

Replacement Projects, Case Management, Records Management

Time	Dept	Project	FY18 GF Request	FY19 GF Request
9:15	DT	City Cloud Enhancements	\$1,605,264	\$1,605,264
9:30	ADM	JUSTIS Failover Infrastructure	\$610,000	\$249,000
9:45	ADM	County Clerk - City ID System	\$1,000,000	\$50,000
10:00	DT	IT Service Management & CMDB	\$120,000	\$205,000
10:15	PDR	Gideon	\$125,000	\$125,000
10:30	ART	Salesforce Database	\$120,000	-
10:45	DT	Citywide Cloud VoIP	\$2,300,000	\$2,300,000
11:00	DT	Drupal 8 Migration	\$1,251,000	\$1,506,000
11:15	DT	-- Cybersecurity Requests Overview --		
11:30		-- COIT General Discussion --		

Calendar – April 14

Major IT Projects

Time	Dept	Project	FY18 GF Request	FY19 GF Request
9:15				
9:45				
10:15	ASR	Property Assessment & Tax System	TBD	TBD
10:30	DPH	Electronic Health Records	-	-
10:45		-- COIT General Discussion --		
11:00		-- Final Review & Vote --		
11:15				
11:30				

DT — UPGRADE THE NETWORK

Project Objective:

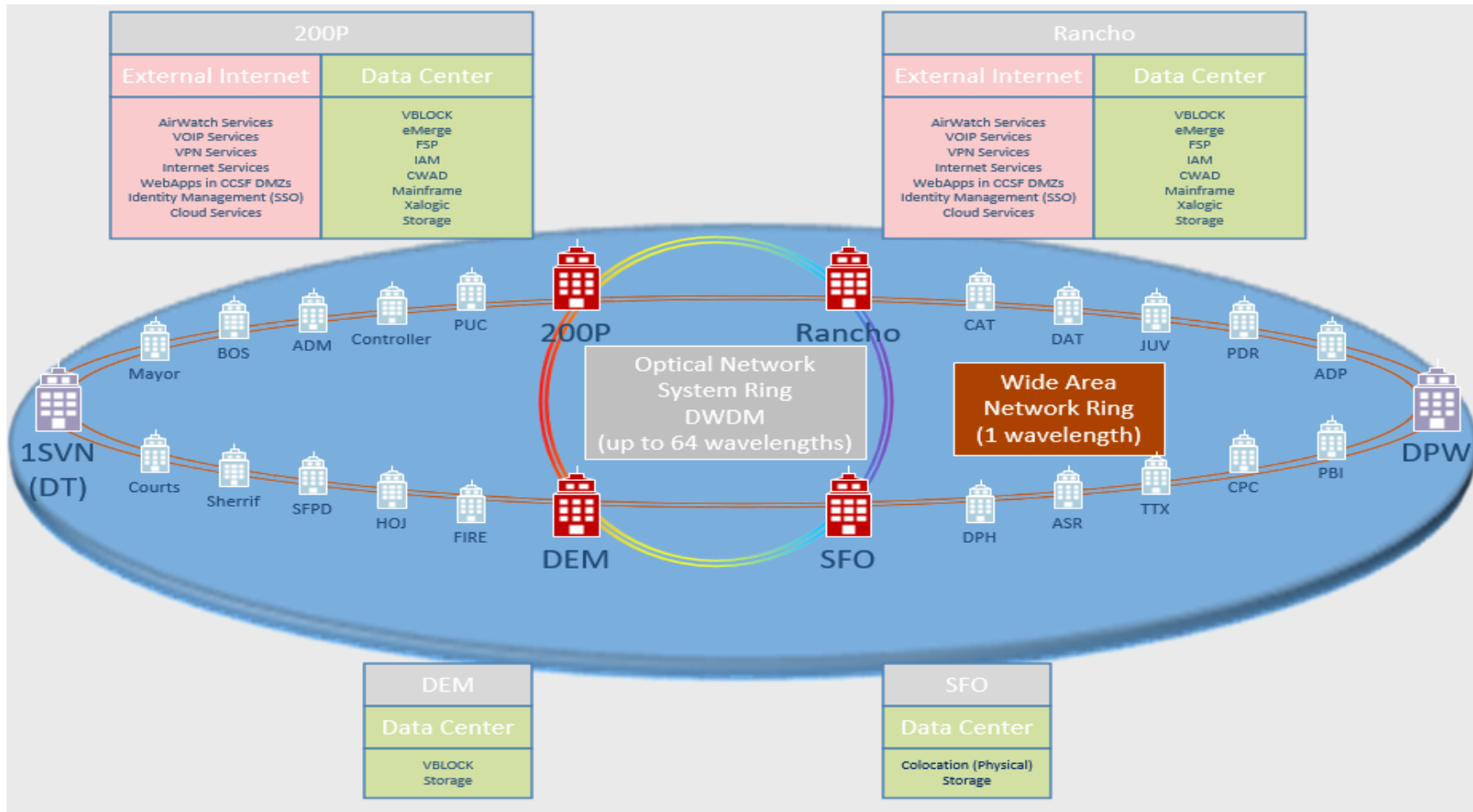
The objective of this project is to have a scalable, secure, resilient, high-availability network that can accommodate the demands of data from future applications, video, cloud providers and mobility.

Problem Definition:

The City's network has been aging and is reaching end of support and end of life within the next 3 three years. The project will resolve the support of legacy network equipment, improve higher network availability, increase resiliency and security, standardization of network equipment, and enhanced data & voice quality.

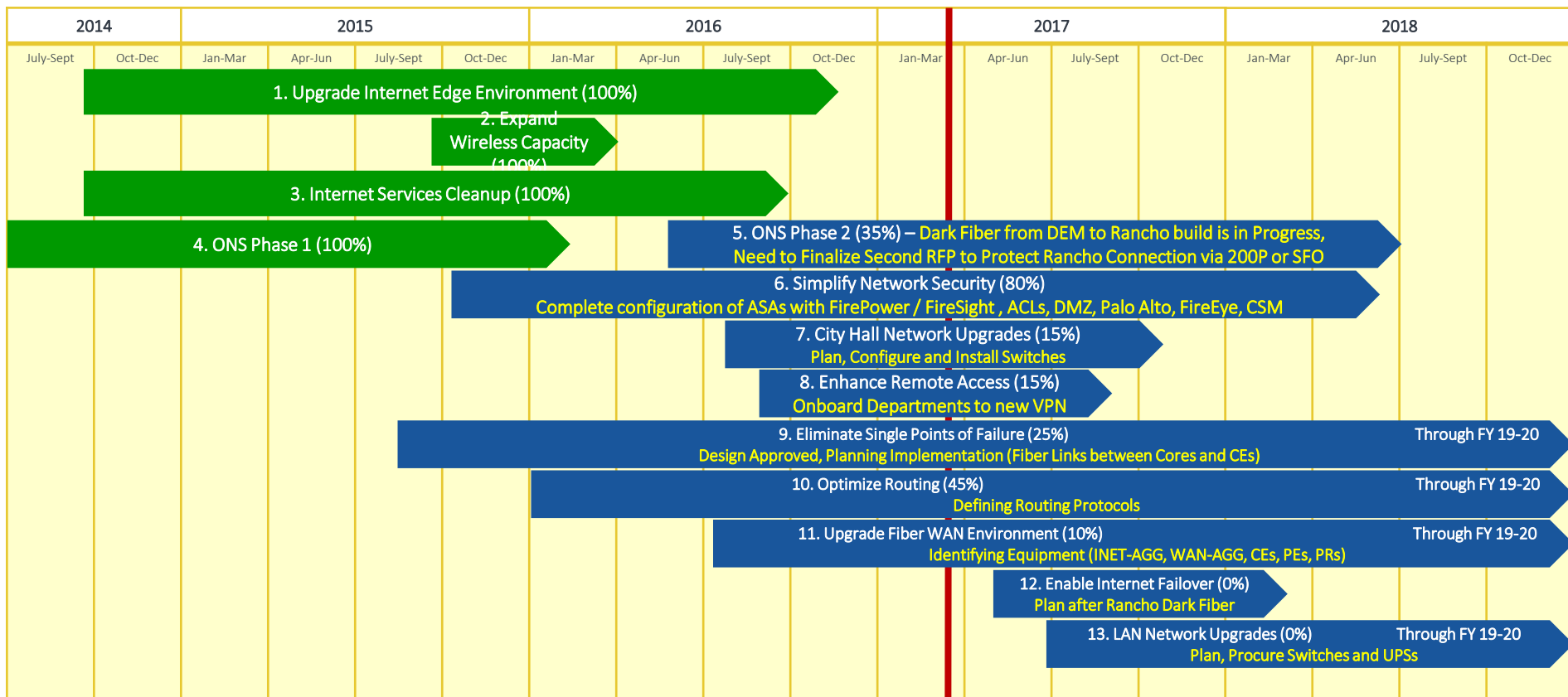
Major Stakeholders:

All CCSF Departments City wide.



Schedule

Today



DT - UPGRADE THE NETWORK





Project Budget	FY 17-18	FY 18-19
Number of FTE	3	3
FTE Classifications	1041,1042,1043	1041,1042,1043
Salary & Fringe	\$533,552	\$533,552
Software	-	-
Hardware	\$6,062,220	\$5,232,978
Professional Services	\$350,000	\$350,000
Materials & Supplies	75,000	75,000
Total Project Cost	\$7,020,772	\$6,191,530

DT - UPGRADE THE NETWORK

Category of Equipment	FY17/18		FY18/19	
	QTY	Amt. should include sales taxes	QTY	Amt. should include sales taxes
Customer Edge Network equipment (CE)	25	\$500,740	25	\$500,740
Core Equipment	11	\$935,000	10	\$850,000
LAN Access Equipment	250	\$3,750,000	200	\$3,000,000
UPS Eaton Equipment w/batteries	60	\$345,480	61	\$351,238
DWDM Equipment	3	\$531,000	3	\$531,000
Staff	3	\$533,552	3	\$533,552
Advance Services		\$350,000		\$350,000
Material & Supplies		\$75,000		\$75,000
Total		\$7,020,772		\$6,191,530

DT - UPGRADE THE NETWORK

Total Project Cost	Total COIT Funding To Date	Total Other GF Funding	Total NGF Funding	Total NGF + GF Funding	Total Spent
\$8.9M	\$7.4M	\$1.5M	\$0	\$8.9M	\$6.4M

	Status	Comment
Scope		Four swim lanes have been completed out of thirteen.
Schedule		Overall Project completion is 40%; some lagging due to delays in procurement.
Budget		On track to consume remaining FY16-17 funding by end of July 2017. COIT Funding request of \$7M for FY 17-18 and \$6.19M FY18-19 for additional hardware, professional services (30% staff, 70% other)
Risks		Final ONS leg from DEM to Rancho might need signal regeneration equipment if test results show 45db or more signal loss. ** approx. \$300K and three months delay should ONS regeneration risk event occur

QUESTIONS?

DT CYBERSECURITY – IDENTITY AND ACCESS MANAGEMENT

Problem

Definition:

Users have to access multiple City systems using different credentials. These credentials are not standardized due to lack of centralized administration and synchronization. Lack of a unifying solution makes it difficult to manage credentials and poses a security threat to the City information assets.

Current IAM Functionality

- Self service password Management access for citywide Active directory users.
- Optional dual factor authentication mechanism for password management.
- Real time reconciliation users from PeopleSoft Human Capital Management.
- User Provisioning to HCM, ELM and FSCM PeopleSoft applications
- IAM Access Management provides Single Sign-On (SSO) solution to HCM, ELM , FSCM, Request to Hire(RTH) and F\$P vendor portal PeopleSoft applications.
- IAM Access Management provides Single Sign-On solution to Oracle Business Intelligence Enterprise Edition (OBIEE)

DT CYBERSECURITY — IDENTITY AND ACCESS MANAGEMENT

Project Objective:

The main goal of Identity and Access Management (IAM) is to provide a centralized repository of identities and access control of systems owned and operated by city and county of San Francisco.

1. Enabling Multi Factor authentication for tier one applications
 2. Provide access management to privileged account users for all city departments.
 3. Integrate and onboard new applications with IAM to provide Single Sign-On functionality for internal and external applications.
 - FreshDesk Single Sign-On integration for Controller office.
 - DocuSign Single Sign-On solution for citywide departments.
 - ServiceNow Single Sign-On integration for DT.
 - Cisco AnyConnect VPN Single Sign-On integration for DT.
 - Office 365 Single Sign-on integration with IAM for citywide departments.
 - Onboarding Oracle APEX with IAM for department of Justice.
- NIST CSF 2.1(Access Control), 2.4 (Information Protection Processes & Procedures), 2.6(Protective Technology)

Major Stakeholders:

**Department of Technology – Lead, Controller, Department of Justice, City Attorney's Office
All City Departments**

DT CYBERSECURITY — IDENTITY AND ACCESS MANAGEMENT

Project Implementation Stages/Phases

	Phase 1	Phase 2	Phase 3	Phase 4
Dates:	Q1&Q2(17-18)	Q3,Q4(17-18)	Q1&Q2(18-19)	Q3&Q4(18-19)
Description:	DocuSign FreshDesk	Office 365 Oracle APEX	OPAM/CyberArk Cisco SSO & MFA	ServiceNow

DT CYBERSECURITY — IDENTITY AND ACCESS MANAGEMENT

Project Budget	FY 17-18	FY 18-19
Number of FTE	1*	*1
FTE Classifications	1042	1042
Salary & Fringe	\$177,368	\$177,368
Software		
Hardware	\$100,000.00	-
Professional Services	\$748,800	-
Materials & Supplies	-	-
Total Project Cost	\$1,026,168	\$177,368

DT CYBERSECURITY — IDENTITY AND ACCESS MANAGEMENT

	FY 2016-2017	FY 2017-2018	FY 2018-2019
Amount allocated	\$820,000	\$1,333,000	0
Project costs (used / committed)	\$817,221	\$636,921	
Balance	\$2,779	\$696,079	
Project Requirements	\$820,000	\$1,026,168	\$177,368
Adjustment for new project requirements		\$330,089*	\$177,368

DT CYBERSECURITY – IDENTITY AND ACCESS MANAGEMENT

Total Project Cost	Total COIT Funding To Date	Total Other GF Funding	Total NGF Funding	Total NGF + GF Funding	Total Spent
\$1,026,168	\$1,057,180	\$	\$	\$	\$

	Status	Comment
Scope		
Schedule		% Complete
Budget		

Risks	Resource availability – Consultants and hardware
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QUESTIONS?

DT CYBERSECURITY - CITY AD/AUTHENTICATION CONSOLIDATION

Problem Definition: As Windows Server 2008 R2 comes to end of life*, there is need to assess current server operating systems to determine the level of upgrade. Moreover, there's need to Optimize the CWAD design, enhance CWAD distributed administration capabilities, and improve CCSF department adoption.

*MS Server 2008 r2 EOL – January 13, 2015. Extended EOL is January 14, 2020.

DT CYBERSECURITY - CITY AD/AUTHENTICATION CONSOLIDATION

Project Objective:

This project has 4 major objectives targeted to improve the Citywide AD and its adoption by CCSF departments

1. Assessment and remediation of CWAD to align design & configurations with best practices
2. Upgrade CWAD from 2008 R2 to the latest release for improved features and support
3. Migrate 13,000 department users from local AD to CWAD (i.e. DPH & DPW)
4. Implement the Enhanced Security Administrative Environment (ESAE)

NIST CSF 1.1 (Asset Management), 2.1 (Access Control)

Major Stakeholders:

- Department of Technology – Lead
- All City departments (All City Departments that participate in O365 are consumers of this platform)
- The following department consume CWAD as their primary AD environment: DT/HSS/WOM/ENV/ETH/CSC/WAR/CON/FIR/PAB

DT CYBERSECURITY - CITY AD/AUTHENTICATION CONSOLIDATION

Project Implementation Stages/Phases

	Phase 1	Phase 2	Phase 3	Phase 4
Dates:	Aug 17 – Sept 17	Oct– Nov17	Jan 17 – August 18	Jan 18 - June 18
Description:	CWAD Assessment	CWAD Remediation	CWAD Upgrade Admin Tools Upgrade	CWAD Migrations

DT CYBERSECURITY - CITY AD/AUTHENTICATION CONSOLIDATION

BUDGET DETAILS

S/N	INITIATIVE	BUDGET
1	CWAD assessment and remediation	550,000
2	CWAD Upgrade	300,000
3	Department AD migrations into CWAD	592,000
4	Admin Tools Upgrade	350,000
	Total	1,792,000

DT CYBERSECURITY - CITY AD/AUTHENTICATION CONSOLIDATION

Project Budget	FY 17-18	FY 18-19
Number of FTE	-	-
FTE Classifications	-	-
Salary & Fringe	-	-
Software	-	-
Hardware	-	-
Professional Services	\$1,792,000	-
Materials & Supplies	-	-
Total Project Cost	\$1,792,000	-

DT CYBERSECURITY - CITY AD/AUTHENTICATION CONSOLIDATION

Total Project Cost	Total COIT Funding To Date	Total Other GF Funding	Total NGF Funding	Total NGF + GF Funding	Total Spent
\$1,792,000*	\$943,532	\$	\$	\$	\$320,800

	Status	Comment
Scope		
Schedule		% Complete
Budget		
Risks	See next slide	



QUESTIONS?

DT CYBERSECURITY - BUSINESS CONTINUITY/ DISASTER RECOVERY AND DPR3 IMPLEMENTATION

Ensures City's critical IT Infrastructure can sustain and recover during and after a natural/human-made disaster

Problem Definition:

BCDR – IT Infrastructure

1. Current DR environment was built with the consideration of Controller office partial workloads and IT systems.
 - Need to increase the capacity to support full capable BCDR requirements for Controller office and other major stakeholders on DR requests including DT's Shared Services with respect to the IT COOP Plan requirements as per DPR3 Policy.
2. DT DR environment in Rancho Data Center is currently 1/5 the total size of production workloads in SF Data Center for compute, memory and storage to support DR, Development and Test Environment .
 - Need to increase the capacity to support 1:1 in size with production to just address DR capabilities
3. DT Currently lacks IT Infrastructure capacity to support all stakeholders requiring DR Support

DT CYBERSECURITY – BUSINESS CONTINUITY/ DISASTER RECOVERY AND DPR3 IMPLEMENTATION

Ensures City's critical IT Infrastructure can sustain and recovered during and after a natural/human-made disaster

Project Objective:

2. Reduce disruption to IT operations; Protect critical IT infrastructure, systems, equipment, records and other assets by implementing appropriate IT recovery strategy by reducing the financial impact and user impact during & after an emergency/disaster;
3. Provide department IT functional and operational stability in the event of a major disaster;
4. Address the gaps on the city department's IT continuity of operations and IT recovery strategies with respect to people, process and places.
5. Improve the IT recovery strategy/process for essential business functions, connectivity, communications, data and systems;
6. Respond quickly at all levels in the event of an emergency or threat in order to continue city's critical IT internal operations and partnering departments during & after an emergency/disaster.
7. NIST CSF 5.1(Recovery Planning)

Major Stakeholders:

1. CONTROLLER – eMerge, FSP and FAMIS
2. TTX – Aumentum, Wausau, Adobe
3. 311 - All Tier 1 & 2 Systems and Applications
4. Other City departments through DT – Shared Services: (GIS, DMZ, IAM, Digital Services, City Cloud, Active Directory, Citywide email, O365) – utilized by most of the SF city departments

DT CYBERSECURITY - BUSINESS CONTINUITY/ DISASTER RECOVERY AND DPR3 IMPLEMENTATION

Project Implementation Stages/Phases – BCDR Implementation

	Phase 1	Phase 2	Phase 3	Etc...
Dates:	Q3&Q4 (17-18)	Q1,Q2 & Q3 (18-19)		
Description:	Build and configure Tier 0 and Tier 1 IT Systems	To Support Tier 2 and Tier 3 Systems		

Tier Level	Criteria	Recovery Time Objective (RTO)
Tier 0	Critical	RTO <= 4 hours
Tier 1	High	RTO >4 hours <= 8 hours
Tier 2	Moderate	RTO > 8 hours <= 72 hours
Tier 3	Low	RTO > 72 hours <= 1 Week

DT CYBERSECURITY - BUSINESS CONTINUITY/ DISASTER RECOVERY AND DPR3 IMPLEMENTATION

Project Implementation Stages/Phases – DPR3 Implementation

	Phase 1	Phase 2	Phase 3	Phase 4
Dates:	Q3 - 17	Q4 - 17	Q1 - 18	Q2 - 18
Description:	Review and identify gaps on the existing COOP Plans	Provide support on Business Impact Analysis, Risk Assessment	Gather information on the development of COOP Plan	Draft, review and finalize the COOP Plan

DT CYBERSECURITY - BUSINESS CONTINUITY/ DISASTER RECOVERY AND DPR3 IMPLEMENTATION

Year	Activity	Amount
2017-2018	COOP development professional services \$53,265* per engagement for 8 departments	\$426,120
2017-2018	Increase storage capacity at DR site by 188TB	\$999,480
2018-2019	Upgrade compute environment, 2 UCS chassis w/ 16 blades	\$390,000
2018-2019	Purchase additional storage capacity by 132TB	\$590,000
Total		\$2,405,600

DT CYBERSECURITY - BUSINESS CONTINUITY/ DISASTER RECOVERY AND DPR3 IMPLEMENTATION

Project Budget	FY 17-18	FY 18-19
Number of FTE	-	-
FTE Classifications	-	-
Salary & Fringe	-	-
Software	-	-
Hardware (Increase storage capacity at DR site by 188TB)	\$999,480	\$980,000
Professional Services (DPR3 Implementation)	\$426,120.00	-
Materials & Supplies	-	-
Total Project Cost	\$1,425,600	\$980,000

QUESTIONS?

POL - FOUNDATIONAL NETWORK SYSTEM

Project Objective:

- To accommodate new Department of Justice Recommendations and technological innovations, provide a solid foundation network architecture for the Crime Data Warehouse (CDW) platform to ensure stable, consistent and reliable operations of public safety and law enforcement applications:**
- **Support high availability, failover and disaster recovery (multi-site)**
 - **Scalability to ensure future growth of mission critical applications and storage**
 - **Straightforward maintenance and support with limited resources**

Major Stakeholders:

**People of City and County of San Francisco
Public Safety Agencies
Courts**

POL - FOUNDATIONAL NETWORK SYSTEM

Problem Definition:

Current CDW Infrastructure

- Aging equipment (IBM blades, Oracle Database Appliances, etc.)—cannot renew support for blades, other becoming end of life
- Increasing capacity constraints and significant difficulties with storage and network configurations
- Load-balancing equipment reaching capacity and cannot support increasing numbers of new applications and concurrent users
- Three disparate environments—Dev, Test, and Productions are all completely different. Test is also used for training at the academy, which means no testing can occur while training is occurring. Environments have different hardware, sizing, and in some cases software

POL - FOUNDATIONAL NETWORK SYSTEM

Project Implementation Stages/Phases

	Phase 1	Phase 2	Phase 3	Phase 4
Dates:	FY17 Q4 to FY 18 Q1	FY 18 Q2	FY 18 Q4	FY18 Q4 to FY 19 Q1
Description:	Architecture Design and Equipment Procurement	Equipment Implementation and Configuration	Existing CDW 3.0 Migration to New CDW 4.0 Environment	Implementation of Disaster Recovery and High Availability

POL - FOUNDATIONAL NETWORK SYSTEM

Project Budget	FY 17-18	FY 18-19
Number of FTE	2	2
FTE Classifications	1043, 1064	1043, 1064
Salary & Fringe	\$300,000	\$300,000
Software	\$1,130,000	\$300,000
Hardware	\$715,000	-
Professional Services	\$1,125,000	-
Materials & Supplies	\$30,000	-
Total Project Cost	\$3.3 M	\$600,000



QUESTIONS?

CONTROLLER - ORACLE IMAGES TO PEOPLESOFT HCM

Project Objective:

Oracle provides “release images” which includes new functionality and fixes for the City’s PeopleSoft Human Capital Management (HCM) system every 2 months. The concept behind these images is to avoid large, costly upgrades by providing customers with smaller and more frequent changes with configuration settings to activate or inactivate new functionality.

Major Stakeholders:

- Key central agencies utilizing PeopleSoft HCM that will be impacted by new functionality, including DHR, HSS and CON PPSD
- All City departments are also impacted since all are core users of PeopleSoft HCM functionality

CONTROLLER - ORACLE IMAGES TO PEOPLESOFT HCM

Problem Definition:

The Controller's Office cannot apply the images at the bi-monthly pace in which they are released. The latest image published by Oracle is image 24, whereas the City's HCM system is on image 13. The primary reason we're not up to date is that the City's HCM system is highly customized, requiring a large amount analysis, design and testing to ensure new functionality does not disrupt the existing customizations. Also, other project priorities (e.g. F\$P) have consumed resources.

This project is to catch-up on the images, which will be up to image 24-25 by Summer 2018. For this particular catch-up, we will also upgrade PeopleTools (PeopleSoft's proprietary development platform) from version 8.5.4 to 8.5.5. So it is a two-fold project, both of which are complex and require professional services who:

- are more familiar with the new functionality available in the release images
- have performed upgrades to PeopleTools version 8.5.5
- will augment the City team which is regularly focus on operating the HCM system and it's regular processes such as bi-weekly employee payroll, salary updates, fiscal and calendar year end cycles, benefits enrollment and more.

CONTROLLER - ORACLE IMAGES TO PEOPLESOFT HCM

Project Implementation Stages/Phases




	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Dates:	Jan - Mar 2018	Apr - May 2018	Jun – Aug 2018	Sep 2018	Oct 2018
Description:	Initiation	Planning & Analysis	Upgrade & Integration	Testing & Training	Deployment

CONTROLLER - ORACLE IMAGES TO PEOPLESFT HCM

Project Budget	FY 17-18	FY 18-19
Number of FTE	~11	~11
FTE Classifications	0933, 0932, 1070, 1054, 1053, 1044, 1043, 1042	0933, 0932, 1070, 1054, 1053, 1044, 1043, 1042
Salary & Fringe	\$0	\$0
Software	\$0	\$0
Hardware	\$0	\$0
Professional Services	\$375,000	\$375,000
Materials & Supplies	0	0
Total Project Cost	\$375,000	\$375,000

CONTROLLER - ORACLE IMAGES TO PEOPLESOFT HCM

Total Project Cost	Total COIT Funding To Date	Total Other GF Funding	Total NGF Funding	Total NGF + GF Funding	Total Spent
\$750,000	\$0	\$0	\$0	\$750,000	\$0

	Status	Comment
Scope		<ul style="list-style-type: none"> Analysis required to identify new functionality available within each release image and work with departments to confirm what functionality will be used by the City Analysis of change coming with PeopleTools v8.5.5
Schedule		<ul style="list-style-type: none"> Proposed schedule to be reviewed and approved by eMerge Steering Committee
Budget		<ul style="list-style-type: none"> Pending COIT funding

Risks	<ul style="list-style-type: none"> Other competing project priorities overlapping with schedule Department requests for more functionality than possible to implement given the schedule
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QUESTIONS?

6. Public Comment
