San Francisco Committee on Information Technology (COIT)

This packet contains selected excerpts of COIT documents over the past several months that relate to the open source voting project.

The documents were downloaded from the agenda packets of various COIT meetings available at COIT's website http://sfcoit.org.

In chronological order—

1. Feb. 9, 2017 COIT meeting:
    "FY 2018–22 ICT Plan: Technology Project List" (p. 4)

2. Feb. 16 COIT meeting:
    "FY 2018-22 ICT Plan (Final)" (pp. 1, 3, 14-15 and 59-61)

3. April 7 Budget and Performance Sub-Committee meeting:
    "Full Project List" (p. 2)

4. April 14, 2017 Budget and Performance Sub-Committee meeting:
    "Performance Handout" (p. 7)

5. May 5 COIT meeting:
    "FY18 & FY19 Budget Recommendations (Draft)" (p. 3)

Department	Project Name	Primary Goal Supported	Functional Category	Projected Cost				
				FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Elections	Interim Voting System Lease	2	Replacement		$2.0 M			
Elections	Open Source Voting System	3	Replacement					
Emergency Management	911 Dispatch Center Geodiversity	1	Enhancement					$0.3 M
Emergency Management	Audio Visual System Replacement	3	Replacement	$0.2 M				
Emergency Management	Automated Fire Station Dispatching	2	Enhancement	$0.3 M				
Emergency Management	Computer Aided Dispatch Hardware Refresh	1	Replacement		$0.3 M			
Emergency Management	Computer Aided Dispatch Replacement (Scoping)	1	Maintenance			$1.2 M		
Emergency Management	CyberSecurity and Disaster Preparedness Improvements	1	Enhancement	$0.2 M	$0.2 M			
Emergency Management	Operations Floor Expansion	1	Enhancement	$0.9 M				
Emergency Management	Emergency Operations Center (EOC) Incident Management System Refresh	1	Replacement			$0.1 M		
Emergency Management	Network Equipment Refresh	1	Replacement			$0.3 M		
Emergency Management	Citywide Radio Replacement Project	1	Replacement	$8.3 M	$8.3 M			
Emergency Management	Security System Refresh	1	Replacement					
Emergency Management	Text to 911	2	New					
Environment	Replace Cisco Switches and UPS Batteries Project	1	Maintenance	$0.1 M				
Fine Arts Museums	Security Systems Refresh	1	Maintenance	$0.5 M	$0.5 M			

INFORMATION & COMMUNICATION

TECHNOLOGY PLAN

CITY & COUNTY OF SAN FRANCISCO   FISCAL YEARS 2018-22

ACKNOWLEDGMENTS

MAJOR IT PROJECT RECOMMENDATIONS

To continue our progress and reach our strategic goals, COIT recommends all $113.5 million of the Major IT Projects Allocation.

Although the Financial Systems Replacement project is on schedule to be complete in FY 2017-18, General Fund requests from the Public Safety & Public Service Radio Replacement and the Replacement of the Property Assessment & Tax System far outstrip available resources in the next two fiscal years. Only in FY 2019-20 does funding become available to address future Major IT Projects.

To adequately support implementation for each Major IT Project, COIT's funding recommendations will be determined on the basis of each project's impact, the current and future risk of deferring funding, as well as the department's readiness to implement.

Under current budget projections, COIT recommends funding the following projects:

1) Financial Systems Replacement Project (F$P)

The City's new Financial System will be the system of record for accounting, budget control, purchasing, and financial reporting for all City departments. The F$P is fully funded and is expected to go live in FY 2017-18

2) Public Safety & Public Service Radio Replacement

The Public Safety & Public Service Radio Replacement Project will upgrade the citywide radio communications system used primarily by the City's public safety agencies. The new technology will support over 7,000 mobile and handheld radios, with ten City departments and four outside agencies operating daily on the system.

3) Replacement of the Property Assessment & Tax System

The Assessor seeks to replace their property tax system in order to better support document capture, reporting, storage maintenance, conversion migration services and management.

4) Electronic Health Records (EHR)

A unified EHR system will allow the Department of Public Health to transition to performance based medicine and better track patients and service delivery outcomes.

The existing financial constraints require all available resources from the Major IT Allocation to support ongoing Major IT Projects. However, several future projects are currently being scoped out as potentially the City's next Major IT Project, including:

Voice over Internet Protocol (VoIP): The Department of Technology is investigating the options for replacing the City's telephone systems with VoIP solutions.

Citywide Customer Relationship Management: 311 is investigating the pursuit of a future CRM which could be used across more departments to better coordinate customer information and create a more seamless service experience across departments.

Voting System Replacement: The Department of Elections is currently investigating alternative voting systems, including the possibility of building an open-source system.

Universal Broadband: – The City is currently investigating options for providing gigabit speed internet connection to every household and business in San Francisco.

Future Major IT Projects

In addition, the City has begun investigating what may become the next major technology project. Before beginning any new technology venture, the City recommends extensive planning and scoping to better understand the true cost of any new technology. The City has begun evaluating various different projects that may be considered as major investments, which include:

- **Voice over Internet Protocol (VoIP):** The City currently relies on legacy phone systems to support operations. A transition to a VoIP solution offers multiple benefits in terms of cost-effectiveness and resiliency. Over the next two years, the Department of Technology will investigate the widespread adoption of VoIP to replace the City's telephone systems.

- **Citywide Customer Relationship Management:** Departments across the City offer direct services to residents in different capacities. To support the vision of providing a single service experience, City departments must be able to share service information with other departments. The City is investigating the pursuit of a single system to better coordinate customer information in an effort to create a seamless service experience across departments.

- **Voting System Replacement:** The City's current voting system license is set to expire in 2018. Without a long-term contract in place, the City has an opportunity to pursue alternative voting systems that could promote transparency and more security. The City is currently investigating alternative options, including the possibility of building an open-source system.

- **Universal Broadband:** Access to broadband Internet has become a universal need in the modern economy. To ensure all of our residents and businesses are able to participate in today's society, the City is currently investigating various approaches to connect every household and business in San Francisco.

With multiple projects on the horizon, the City is forced to sequence projects to support the cost-effective outcomes. COIT recognizes the inherent risks of extending a project's timeline, which can include an increase to project costs and increased risk COIT allocations levels may change. However to accomplish our goals, project funding must necessarily be spread over the five-year period of this Plan.

In turn, COIT recommends each project employ several strategies to achieve full funding. COIT's recommended funding schedule will be determined annually during the budget review process.

Annual Project Allocation

Through the Annual Project Allocation, COIT makes funding recommendations towards other ICT projects that range from citywide projects to department specific. The Annual Project Allocation is structured as a pay-as-you-go fund and intended to support new technology projects.

To support this intended purpose, COIT sorts each project into one of four functional categories: New, Replacement, Enhancement, and Maintenance. Sorting each project request into a category promotes COIT's mission to support only new technology projects with significant impact. In the future, COIT recommends the continued investment in projects that provide substantial enhancements and cost-savings to City operations.

In the FY 2018-22 timeframe, departments requested a total of $134.0 million in General Fund support. Overall, COIT will make recommendations on the approval and funding of over $71.2 million in General Fund dollars. However because funding requests far outstrip the available allocation, COIT projects a funding gap of $62.8 million over the next five years. Due to these finite resources, COIT evaluates all ICT Projects to determine the need, anticipated impact, and the department's readiness to implement. Much like Major IT Projects, COIT has developed a funding strategy for projects to be funded by the Annual Projects Allocation.

Using the ICT goals described above, COIT uses the following strategies to prioritize funding:

- **Better Coordination / Consolidation of Departmental Needs:** A majority of General Fund requests are scoped to impact only the requesting department. Several of these individual requests have been identified as having overlapping needs. COIT will continue to work with departments to support project requests that support multi-departmental and citywide initiatives and have a greater overall impact.

- **Performance Management:** For all ongoing projects, COIT evaluates current project performance as part of the determination for future funding. In some cases, COIT may re-allocate funding towards projects that are better managed or are being implemented more successfully.

- **One-Time Funding Sources and Budget Reallocation:** The City should identify one-time funding sources and explore the reallocation of existing IT dollars to fund priority projects.

- **Project Deferrals:** COIT may defer funding recommendations until comprehensive planning is complete or when sufficient resources become available.

The strategies outlined above coupled with the annual budget process will enable COIT to identify the highest priority investments.

RECOMMENDATIONS

San Francisco City services should be easy to use and accessible to every resident, visitor, and business. Every investment and every technology in the City should be working towards this singular vision.

Over the next five years, the City will continue to act as a global leader in the delivery of government services. Working together to tackle our greatest problems, technology will play a pivotal role in helping to make our City a better place to live.

To address current and future needs, COIT recommends the following:

- **Recommendation 1:** Continue to grow the Major IT Project Allocation and the Annual Project Allocations by 10 percent annually.

- **Recommendation 2:** COIT should prioritize General Fund support for technology projects that align with ICT Plan goals.

- **Recommendation 3:** A comprehensive planning and scoping phase should precede investment for future Major IT Projects to better understand total lifecycle costs and returns.

- **Recommendation 4:** COIT should sequence funding of Major IT Projects on the basis of risk, project readiness, and cost-effectiveness.

- **Recommendation 5:** COIT's allocations should support technology projects that replace or enhance existing services and promote eventual cost savings.

- **Recommendation 6:** The City should set aside a separate funding source for the continual refreshment of IT hardware.
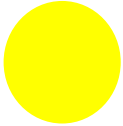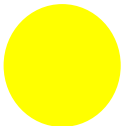
ALL PROJECTS

Dept	Project Name	FY18 Cost	FY18 GF Request	FY19 Cost	FY19 GF Request	Rank	Presentation Date
COIT	PC Refresh	$925,000	$925,000	$925,000	$925,000	Tier 3	
Controller	Apply Oracle Release Images for PeopleSoft Human Capital Management	$375,000	$375,000	$375,000	$375,000	Tier 2	31-Mar
Controller	Employee Gateway Portal Access for All Employees/Retirees	$220,000	$220,000	$50,000	$50,000	Tier 2	24-Mar
Controller	Expansion of PeopleSoft Enterprise Learning Management	$50,000	$50,000	$50,000	$50,000	Tier 1	24-Mar
Controller	Financial System Project	$2,214,322	$300,000			Tier 1	
Controller	Implement PeopleSoft Maintenance Management Module			$750,000		Tier 1	
Controller	Replacement of PeopleSoft Financials & Supply Chain Management (FSCM)					Tier 3	
Controller	Replacement of PeopleSoft Human Capital Management Hardware/Infrastructure			$900,000	$900,000	Tier 3	
District Attorney	Case Management System Replacement	$250,000				Tier 3	
District Attorney	CyberSecurity	$100,000	$100,000	$35,000	$35,000	Tier 3	
District Attorney	Data "Forensic Video" Storage	$200,000	$200,000	$20,000	$20,000	Tier 2	
District Attorney	Document Management	$100,000		$100,000		Tier 2	
District Attorney	SharePoint Online Development	$100,000	$100,000	$100,000		Tier 2	
District Attorney	Voice over IP (VoIP) Phone System	$340,000	$340,000	$45,000	$45,000	Tier 2	
Elections	Interim Voting System Lease			$2,000,000	$2,000,000	Tier 3	
Elections	Open Source Voting System			$4,000,000	$4,000,000	Tier 1	
Emergency Management	Audio Visual system replacement	$198,000	$198,000			Tier 3	

ELECTIONS- VOTING SYSTEM REPLACEMENT

Total Project Cost	Total COIT Funding To Date	Total Other GF Funding	Total NGF Funding	Total NGF + GF Funding	Total Spent
$300,000	$300,000	-	-	$300,000	$0

	Status	Comment
Scope	🟡	A comprehensive scope and cost projection is still needed for this project. Elections has begun to recruitment for an 1824 to lead project development.
Schedule	🟡	0% Complete – Elections will begin recruitment for an 1824 and write an RFP for a consultant in Q4 of FY 2016-17.
Budget	🟢	• Sufficient funds are available to hire an 1824 to act as a project manager. • Elections will use remaining funds to hire a consultant to scope the project.

Risks	• Current vendor owned system is end of contract in December 2018. • Scope and cost of a full replacement project is unknown. • Insufficient resources to support building open-source software from scratch.

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Department	Project Name	Project Overview	FY 2017-18 COIT GF Request	FY 2018-19 COIT GF Request	FY 2017-18 HIGH SCENARIO			FY 2018-19 Scenario		
					COIT Annual Allocation (GF)	COIT Major IT Allocation (GF)	Non-GF Sources	COIT Annual Allocation (GF)	COIT Major IT Allocation (GF)	Non-GF Sources
District Attorney	Case Management with Document Management	Implementation of a new case management solution as well as provide a centralized document management solution for case artifacts.								
District Attorney	CyberSecurity	Provide improved network security and monitoring to protect the assets of the Distrct Attorney's Office.	$100,000	$35,000						
District Attorney	Data "Forensic Video" Storage	Implementation of a storage solution that is scalable based upon the active caseload.	$200,000	$20,000						
District Attorney	SharePoint Online Development	Build a user friendly intuitive SharePoint Online site that would allow for collaboration of data within the District Attorney's Office.	$100,000							
District Attorney	Voice over IP (VoIP) Phone System	Replace the current Avaya phone systems located at all of the District Attorney 732 Brannan, 850 Bryant Street, Youth Guidance Center, and Polk Street.	$340,000	$45,000						
Elections	Interim Voting System Lease	The City's current voting system contract is set to expire at the end of 2018. The City may need to obtain an interim voting system.		$2,000,000						
Elections	Open Source Voting System	The City is currently exploring the feasibility of developing and implementing an Open Source Voting system in San Francisco.		$4,000,000						
Emergency Management	Audio Visual system replacement	Replace audio visual system on the 911 operations floor.	$198,000							
Emergency Management	Automated Fire Station Dispatching	Speed up dispatching of 9-1-1 calls to Fire and Medical personnel.								
Emergency Management	Computer Aided Dispatch Hardware Refresh	Refresh CAD (Computer Aided Dispatch) system hardware - servers, network, and file storage equipment.		$337,000						
Emergency Management	CyberSecurity and Disaster Preparedness Improvements	Improve CyberSecurity protection and Disaster Preparedness for critical public safety IT systems maintained by DEM.	$180,000	$150,000						
Emergency Management	DEM Operations Floor Expansion	Increase 911 call taking and dispatching capability.	$383,940	$538,060	$383,940			$538,060		
Emergency Management	Radio Replacement Project	Replace Citywide Emergency Radio System for Public Safety and Public Service Departments.	$8,315,400	$8,349,782	$8,315,400			$8,349,782		