8. FY 2018-19 & FY 2019-20 General Fund Presentations

City Cloud and DPR3 Project

Department Of Technology

Linda Gerull

City Cloud and DPR3 Project

Project Objective

- Build capacity to support growth of CCSF public and private Clouds
- Build capacity to support the DPR3 program
  - Duplicate production mission-critical systems
  - Departments participate on an ongoing basis with DT
  - Continually test, exercise, and improve

Primary Users & Major Stakeholders

- Already established / in process: Treasurer/Tax Collector, 311, Assessor, Port, Controller, CMS, and JUSTIS
- Other departments in queue for onboarding

City Cloud and DPR3 Project

Recent Accomplishments

- Completed private Cloud automated provisioning
- Established DR program for PeopleSoft and mainframe applications
- Completing development of DR program for IAM
- Mature DR for Departments in-process
- Continue to work with remaining Departments to develop their DR programs

City Cloud and DPR3 Project

Business Case

Current State	There is a limited ability for departments to recover from disaster events. Investments are continually needed to ensure that the City's critical infrastructure and applications are appropriately secured and supported.
Future State	Enable citywide migration to the cloud to decrease maintenance costs and enhance security, redundancy, and stability. Improve ability to recover quickly from natural and human-created disaster.

City Cloud and DPR3 Project

Benefits

- Reduce time to recover business systems after disaster
- Enhance data and system security and stability
- Decrease maintenance costs
- Reduce the time to increase capacity (scale up or down) system environment

City Cloud and DPR3 Project

Project Milestones

PHASE	DESCRIPTION
Phase 1	Get Networking and virtualization hardware, additional Azure storage, archive and back-up tools for discovery and DR resets.
Phase 2	Design DR environment for the department.
Phase 3	Duplicate production mission-critical systems.
Phase 4	Departments participate on an ongoing basis with DT to continually test, exercise, and improve DR.

City Cloud and DPR3 Project

PROJECT BUDGET	FY 2018-19	FY 2019-20
Number of FTE*	-	-
Software	$340,000	$340,000
Hardware	$860,000	$860,000
Cloud Consumption (storage, CPU)	$900,000	$900,000
Total Project Cost	**$2,100,000**	**$2,100,000**

* FTEs will be added to support these new environments as Departments implement DR. Estimate is $100,000/yr for support.

City Cloud and DPR3 Project

(Ongoing projects only)

Total Project Cost	Total COIT Funding To Date	Total Other GF Funding	Total NGF Funding	Total NGF + GF Funding	Total Spent
$3.4M	$1.5M	-	$688K	$2.2M	$536K

	Status	Comment
Schedule		Begin Date: July 2016 End Date: June 2020 % Complete: 50% Note: % complete is for this FY's work only.
Scope		
Budget		• Combining BCDR with City Cloud. • Totals above are YTD, and do not include FY18/19 new ask. • An additional $510K is encumbered
Risks		

JUSTIS Roadmap

Department of Technology/
City Administrator's Office
Ken Bukowski

JUSTIS Roadmap

Project Objective

- Creation of updated roadmap for integrated criminal justice data system which provides for modern data storage, sharing, governance and reporting

Primary Users & Major Stakeholders

- Sheriff, Police, District Attorney, Adult Probation, Public Defender, Status of Women, Superior Court, Juvenile Probation, Mayor's Office

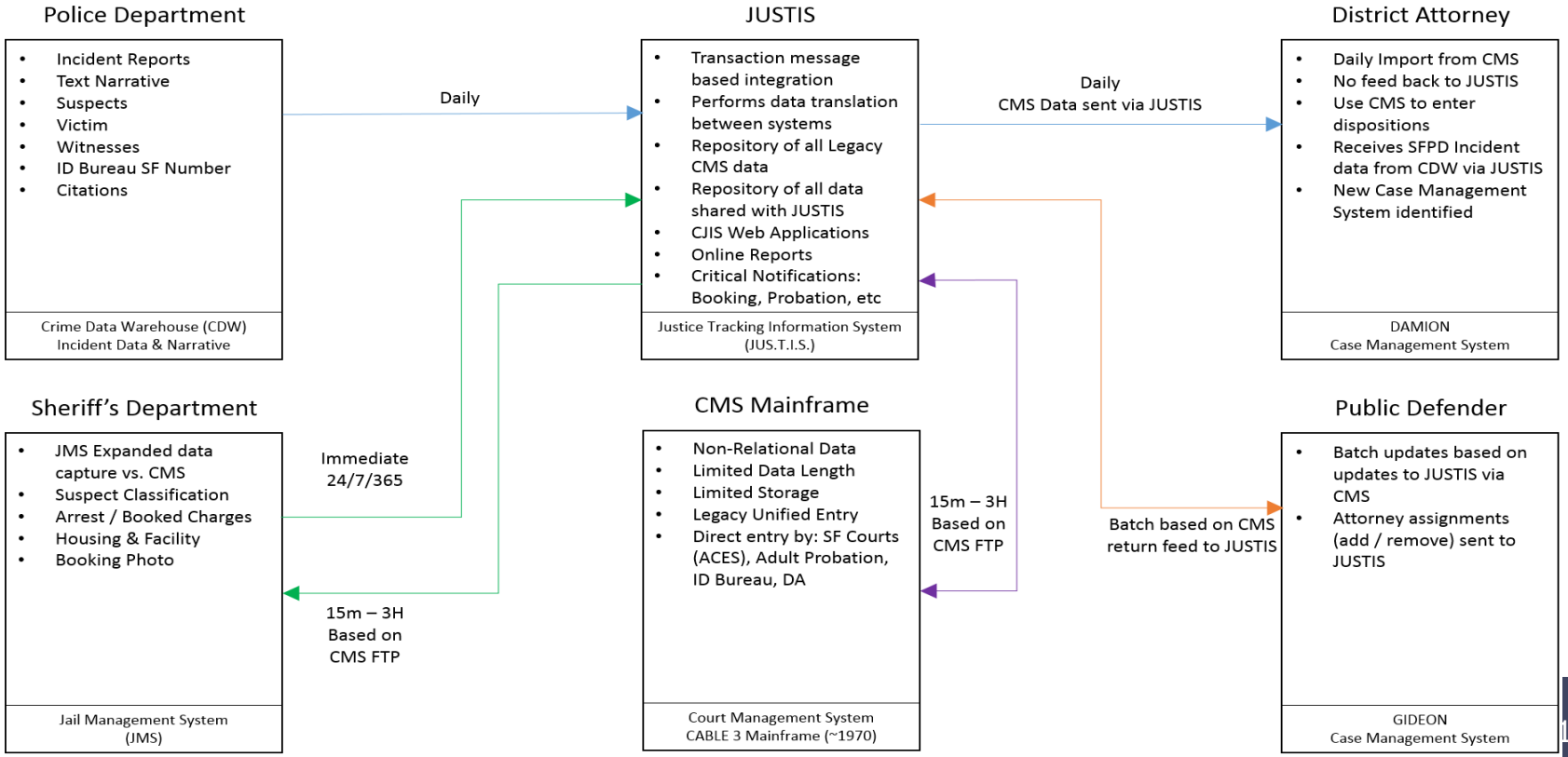
JUSTIS Roadmap

JUSTIS Today

- A 24x7x365 production program since Sheriff and CMS integration go-live in December 2009.
- Most departments still rely on CMS for parts of their business workflow.
- Secure server and network infrastructure in place to securely move data between department systems. Reporting environment also in place where all departments have access.
- Multiple data repositories in place and moving non-CMS data, such as the SFPD Crime Date Warehouse Incident data.
- District Attorney, Adult Probation, Sheriff, and Courts are in various states of obtaining or implementing new case management systems.
- JUSTIS creates and hosts new applications: Booking alert for anyone booked while on probation and alert system for persons of interest.

JUSTIS Roadmap

Integration Overview



JUSTIS Roadmap

Phased Implementation

- Phase 1: Creation of the Hub and Spoke system to replace the aging integrated legacy mainframe system (CABLE 3, also referred to as CMS) and to allow departments to implement their individual case management solutions. Limited data sharing scope to focus on CMS dependencies.
- Phase 2: Identify and share the greater and more diverse data now captured by the modern systems. Existing interfaces to be expanded sending JUSTIS data not stored within CABLE. Data sharing and interpretation defined by MOU's.
- Phase 3: Data warehousing and online reporting repository

JUSTIS Roadmap

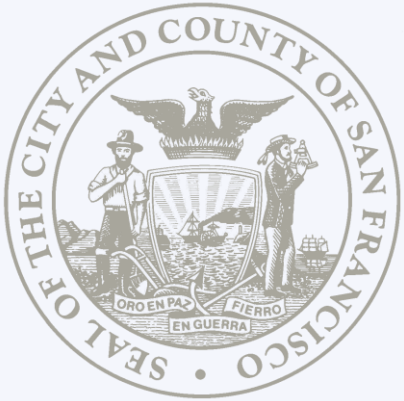
Next Steps

- Support and maintain Phase 1 system and the implementation of the Superior Court's CMS replacement system.
- Work with consultant and JUSTIS stakeholders to create updated program roadmap which includes:
  - Review and update of existing JUSTIS goals and objectives with identification of gaps, barriers, milestones for implementation, action items, priorities and timelines
  - Detailed next steps to build, manage, operate and maintain an integrated JUSTIS system
  - Options and a recommended design, cost and schedule for a centralized data repository that will allow for analysis and reporting across departments
  - Recommendations on staffing, infrastructure, priorities, governance, change control and systems redesign

JUSTIS Roadmap

COIT Budget Request

PROJECT BUDGET	FY 2018-19	FY 2019-20
Number of FTE	-	-
FTE Classifications	-	-
Salary & Fringe	-	-
Software	-	-
Hardware	-	-
Professional Services	800,000	500,000
Materials & Supplies	-	-
Total Project Cost	**$800,000**	**$500,000**



Mainframe Retirement Plan

Mainframe Retirement Plan

Project Objective

- Compose detailed migration plan for aging mainframe applications:
  - PD reporting and law/justice business processes
  - Controller reporting, and other financial sub processing

Primary Users & Major Stakeholders

- PD and CON

Mainframe Retirement Plan

Recent Accomplishments

- Negotiated a five year lease on a new IBM Mainframe during 2017 to support financials systems and criminal justice systems
- Established and tested a mature disaster recovery program

Mainframe Retirement Plan

Business Case

Current State	Skill set required to support mainframe are decreasing. The mainframe applications do not use modern database and software capabilities. Legacy applications are not modernized to integrate with existing business systems. Users cannot perform ad-hoc reporting or self service functions. Increased cost to departments as tenants leave the platform.
Future State	Move MF workloads to an existing supported infrastructure. Deliver technology focused services that drive efficiency, cost savings and allow client departments to focus on delivering services to constituents.

Mainframe Retirement Plan

Benefits

- Improve efficiency of citywide data centers by centralizing and streamlining operations
- Realize cost savings
- Quicker turnaround time to apply enhancements or changes to applications
- Enable modern data sharing and system interfaces

Mainframe Retirement Plan

PHASE	DESCRIPTION
Phase 1	Define and inventory all MF processes including: applications, middleware, interfaces, infrastructure.
Phase 2	Develop Technical Migration Plan - Detailed plan and engineering to migrate all processing off of the mainframe in order to retire the platform.
Phase 3	Phase and budget the migration and retirement of the mainframe.

Mainframe Retirement Plan

PROJECT BUDGET	FY 2018-19	FY 2019-20
Number of FTE	DT Staff	TBD-
Software/Hardware	-	TBD-
Phase 1 & 2: Professional Services	$200,000	-
Total Project Cost	**$200,000**	**-**