COIT
Budget & Performance Subcommittee

Regular Meeting
March 15, 2019

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

Agenda

- Call to Order by Chair
- Roll Call
- Approval of Meeting Minutes from March 1, 2019
- FY 2019-20 & FY 2020-21 Budget Hearings
- Public Comment
- Adjournment

Action Item

3. Approval of Minutes

5. FY 2019-20 & FY 2020-21 Enterprise Department Projects

Enterprise Projects Overview

DEPARTMENT	NUMBER OF PROJECTS	TOTAL COST
Airport	5	$11.7 M
Municipal Transportation Agency	4	$183.0 M
Public Utilities	9	$75.7 M

6. FY 2019-20 & FY 2020-21 Budget: General Fund Departments

Hiring Modernization

Department of Human Resources

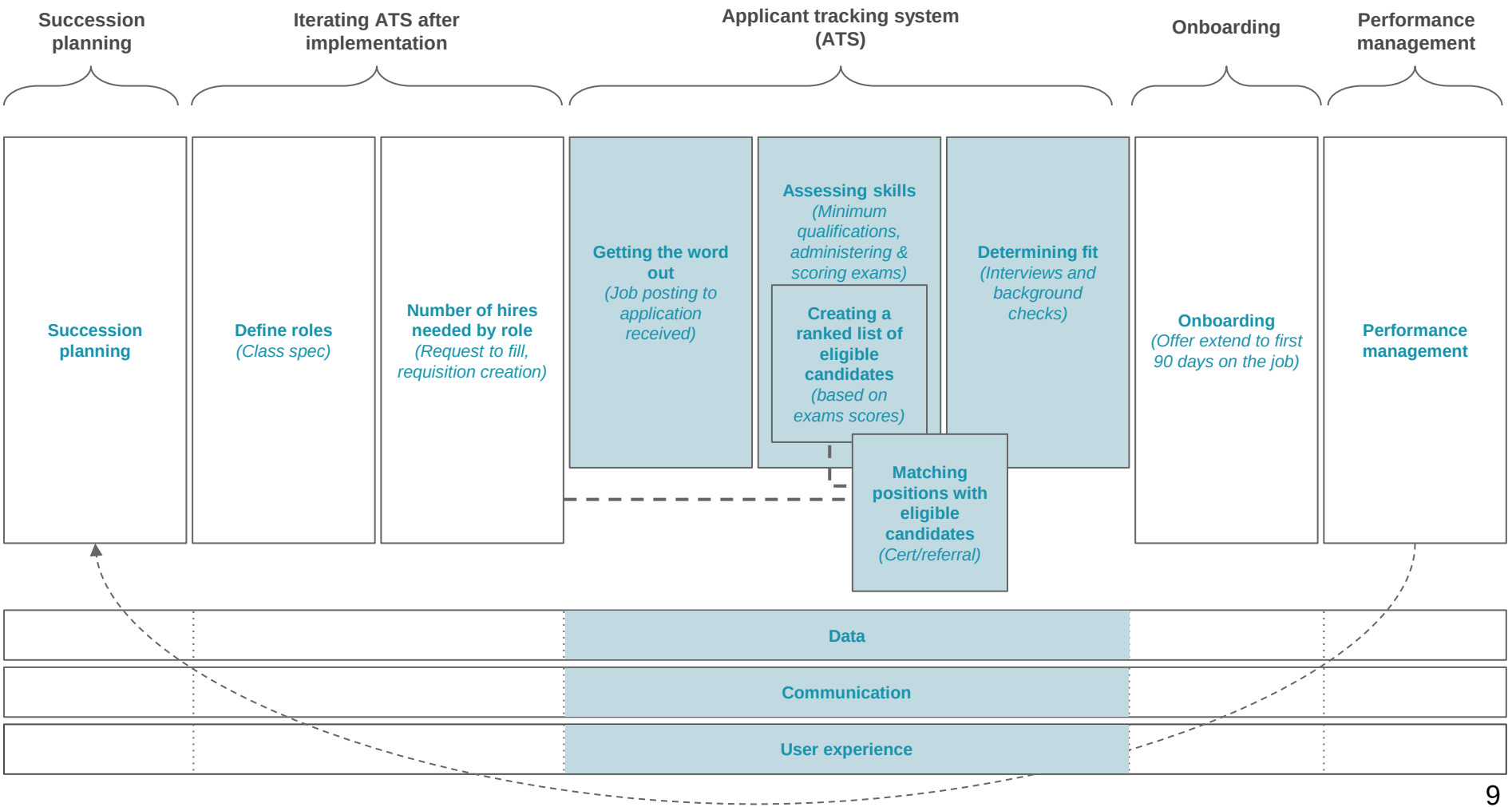
Kate Howard and Anne Marie Monroe

Hiring Modernization

Project Objective

- Define and build modern hiring practices that improve the experiences of applicants, hiring managers, and human resources (HR) professionals in the City

- Find and use technology & processes that will meet the HR needs of today and allow us to do even more tomorrow
  - Procure modern, user-friendly, and integratable HR systems to ensure the City a) is improving its hiring practices to reflect today's technology and workforce, and b) has an infrastructure that will make it easy to continue to adapt over time
  - In FY19-20, implement an applicant tracking system and procure an onboarding solution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Iterating ATS after implementation
Applicant tracking system (ATS)
Onboarding
Performance management
Succession planning
Define roles (Class spec)
Number of hires needed by role (Request to fill, requisition creation)
Getting the word out (Job posting to application received)
Assessing skills (Minimum qualifications, administering & scoring exams)
Creating a ranked list of eligible candidates (based on exams scores)
Determining fit (Interviews and background checks)
Matching positions with eligible candidates (Cert/referral)
Onboarding (Offer extend to first 90 days on the job)
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Data
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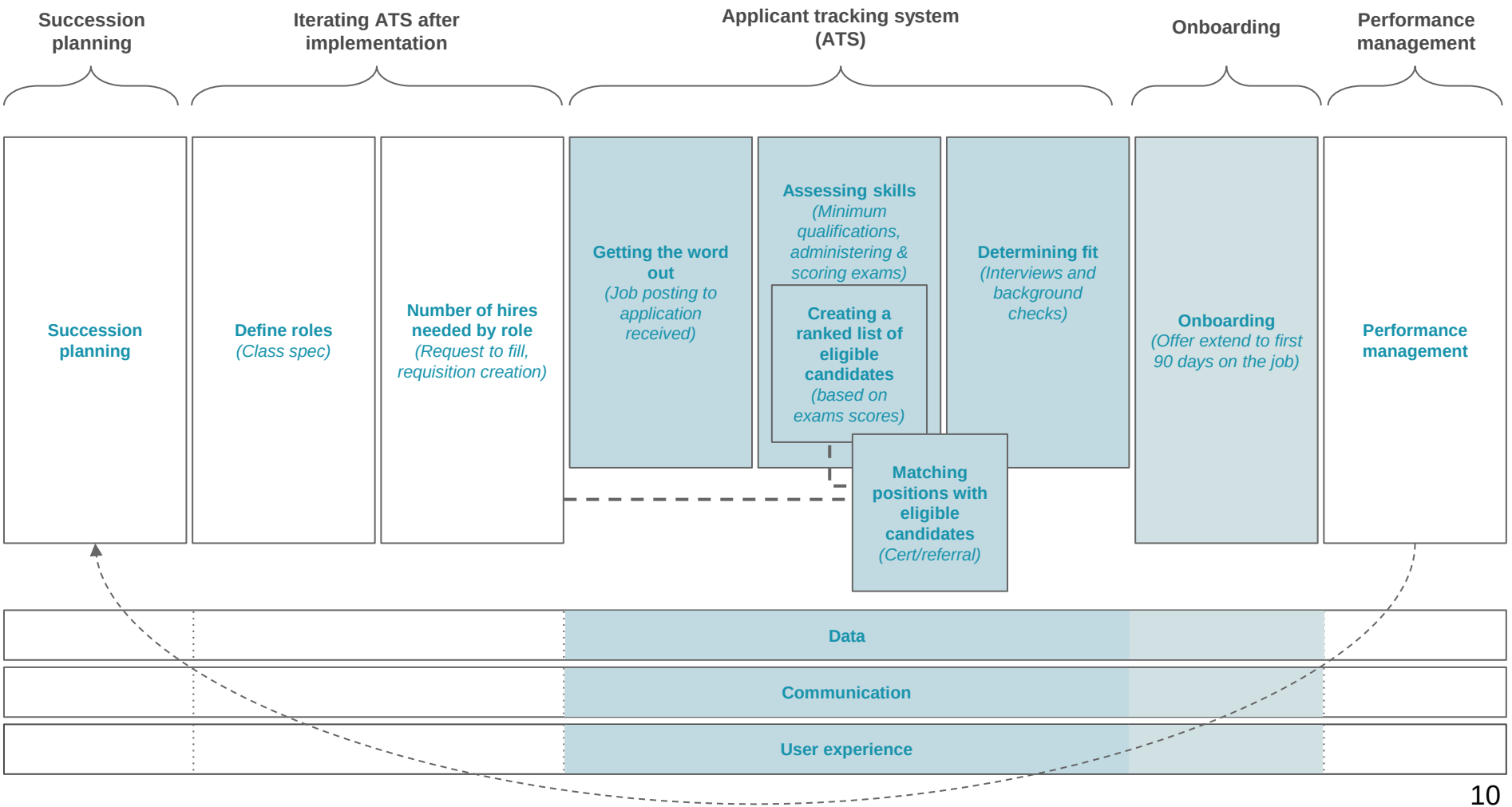
User experience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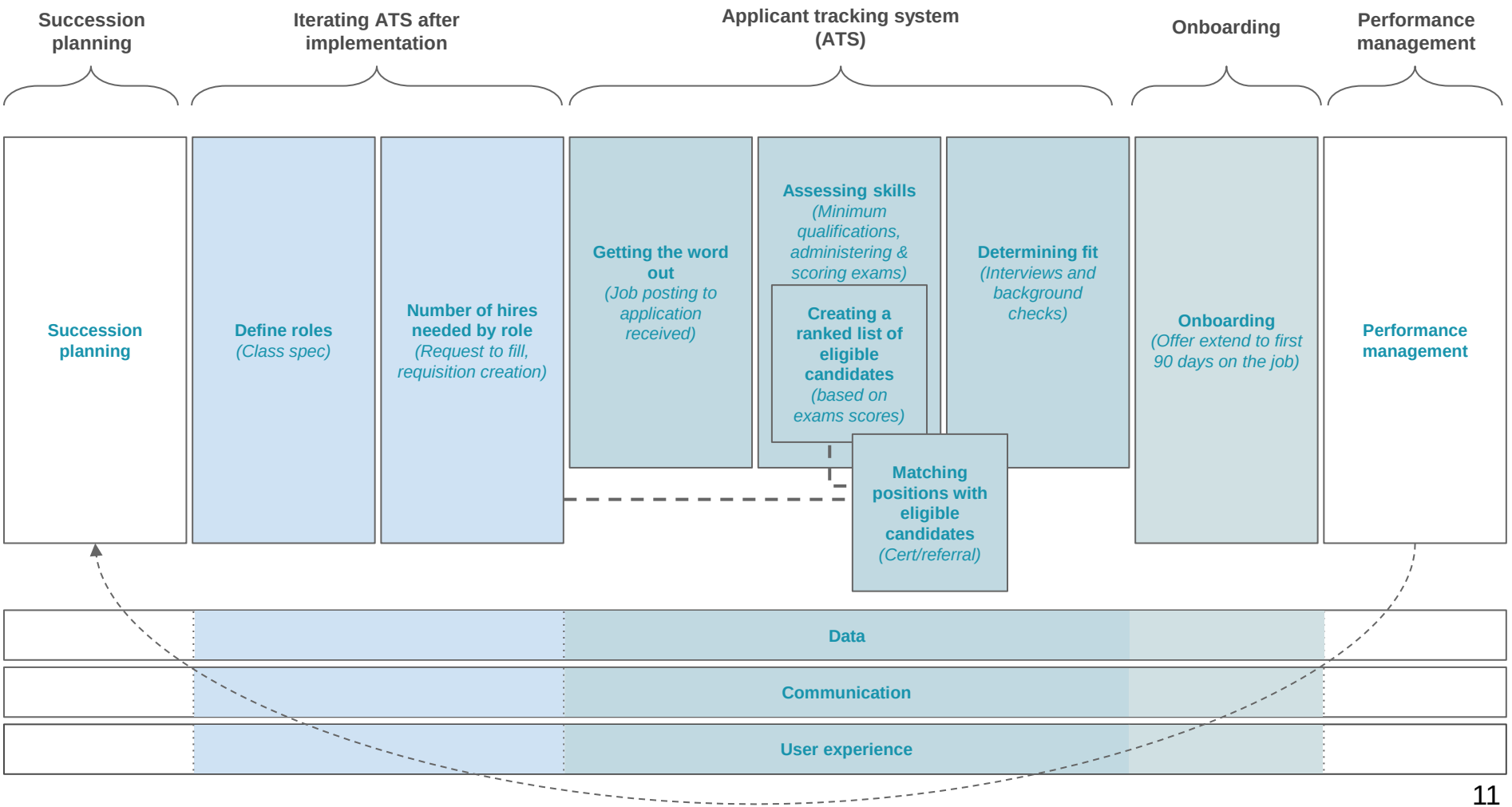
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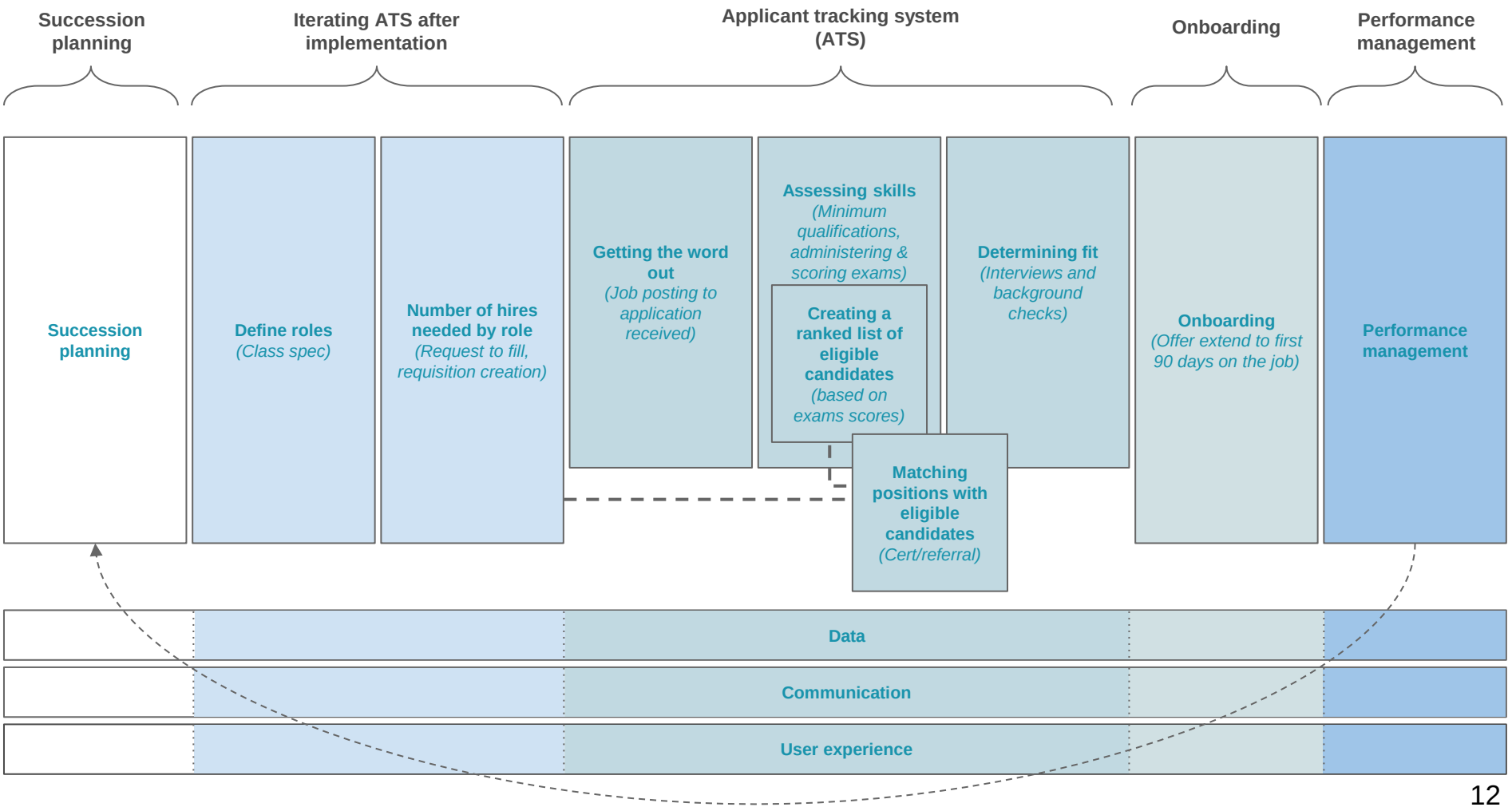
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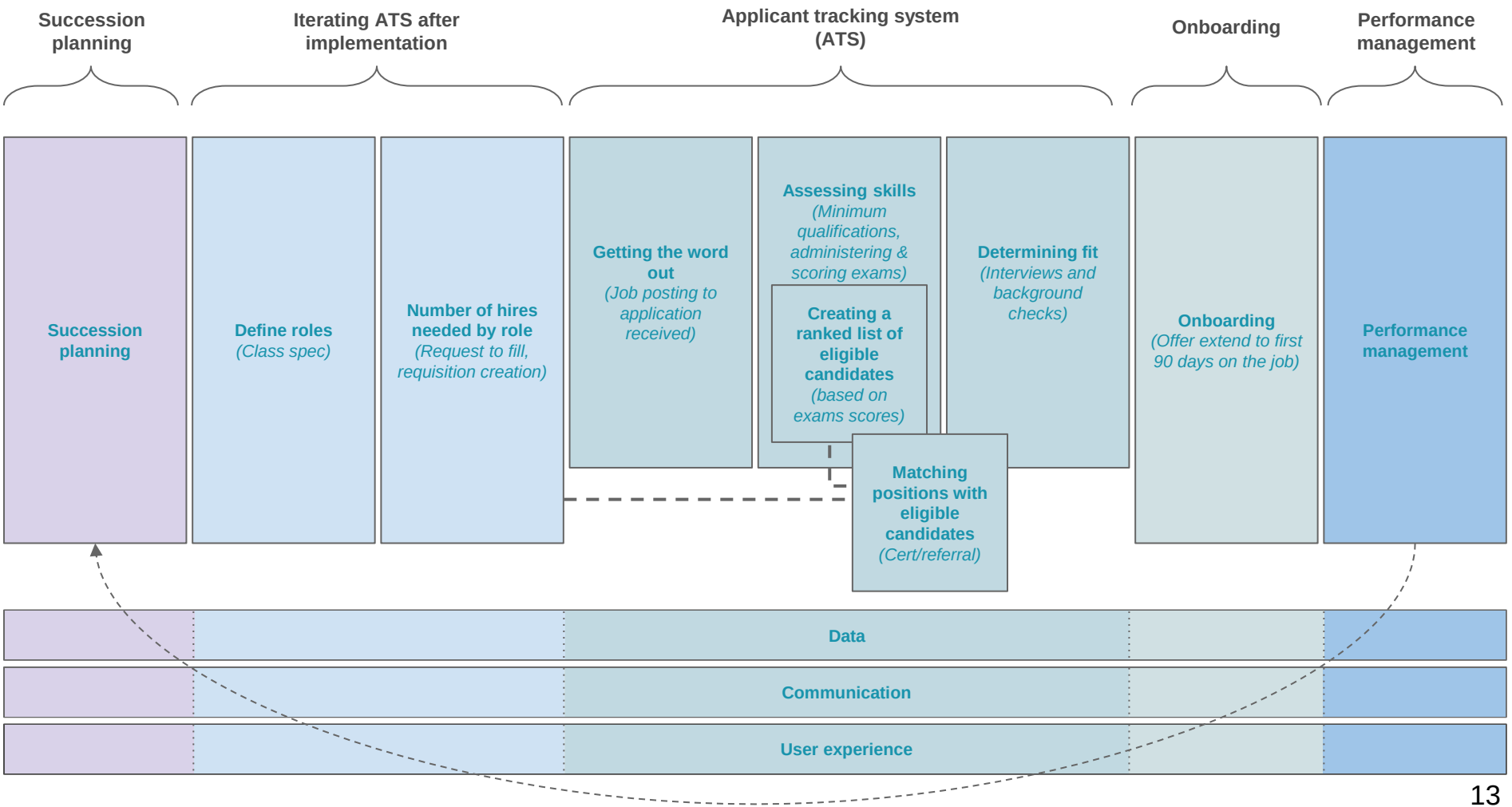
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Problem Definition

Current State	Inefficient system with duplicative data entry throughout the process (there are almost 100 points in the process where HR analysts identified excessive processing, with one of the main causes being manual data entry because of systems not speaking to one another) Lack of consistent data reporting which prevents staff from having consistent visibility into inefficiencies in hiring and ways of improving the process Poor user experience resulting in the need for a lot of training to understand how to use systems. Moreover, users assume that any updates will involve a steep learning curve, resulting in a palpable resistance to change.
Future State	**Integrated solution** with data flowing between different systems reducing amount of duplicative and manual data entry **Single source of truth** allowing HR teams to consistently report on key metrics and make decisions based on insights gleaned from that data; this includes better understanding of workflow inefficiencies and how to address bottlenecks **Better user experience** to help shepherd candidates and hiring managers through a complex hiring process **Giving hiring managers access** to the applicant tracking system so they can play a more active role in the hiring process

Hiring Modernization

Primary Users

- Candidates, hiring managers, and HR professionals are the main intended users. When looking at the bigger picture, however, all City departments (and the users of those departments' services) are in fact beneficiaries since every department needs to hire the right talent in order to deliver services effectively

Major Stakeholders

- Since hiring impacts all departments, we have approached this project as a City-wide initiative, working with a Steering Committee with representation from 15+ departments

Hiring Modernization

Project Governance

- Governance to date:
  - **Steering Committee (Sept. '17 - Present):** City-wide group of HR and Technology leaders who meet monthly to provide input and project direction
  - **Workshop participation (Sept. '17 - Present):** Received wide participation from DHR and departmental HR analysts, hiring managers, candidates and the Civil Service Commission to identify challenges and solutions
- Additional governance moving forward:
  - **Executive committee (~Spring 2019 onwards):** As we move into the next phase we know that it is key having DHR, DT, the Controller's Office and the Mayor's Office providing vision and weighing trade-offs as we implement this City-wide solution
  - **Identify champions at all levels especially as we move into implementation and will be focusing on change management (~Summer 2019 onwards):** This includes HR analysts, hiring managers, recent candidates, unions and the Civil Service Commission

Hiring Modernization

Our Approach

- The project team has had the opportunity to dissect the City's hiring processes and hear from different users
- In that process, they learned to distinguish **between HR's actual business needs and needs resulting from limitations due to today's technologies and processes**: Too often, we have simply moved a paper process online without reevaluating what the service delivery could look like now that we are operating digitally
- In applying these learnings and when thinking about the different stages of digital maturity, we want to make sure we are **constantly anchored in users' needs** and **challenging ourselves to rethink what hiring could look like** (instead of just using technology to address the problems users face with the current system and process)

Hiring Modernization

Primary Performance Measure: Reduce overall time-to-hire (TTH)

- Currently the metric is measured as the time when the request-to-fill is submitted to when the new employee starts (which covers many tasks owned by different users). In 2015, the median TTH across the City was 118 days*
- Today's system does not allow us to break down TTH into its individual components, which makes it difficult to systematically understand bottlenecks
- One overarching goal for this project will be giving the City the ability to understand TTH at a granular level
- **The RFP for an applicant tracking system highlights the importance of acquiring a system that allows us to accurately define milestones related to TTH and to track that metric consistently**

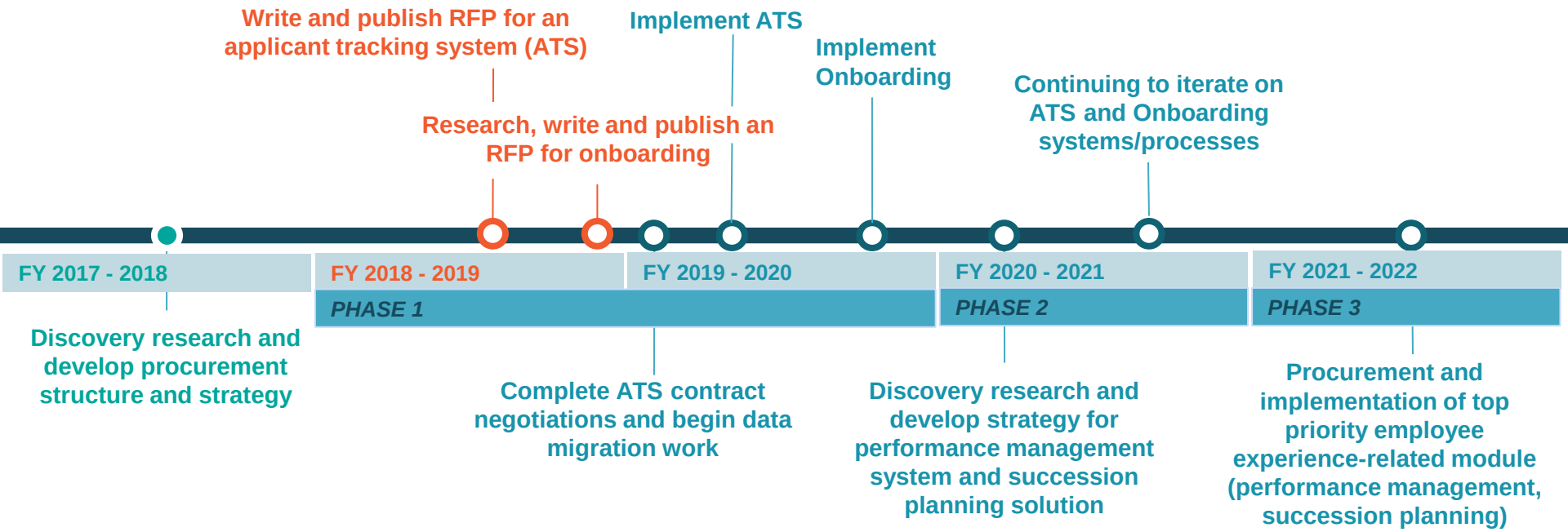
*See 2015 Controller's report *How Long Does It Take to Hire in the City and County of San Francisco?*
http://openbook.sfgov.org/webreports/details3.aspx?id=1907

Hiring Modernization

Recent Accomplishments

- Received 20 responses from the Request for Information published in May 2018
  - **Wide-range of responses**: SaaS vendors who provide applicant tracking systems, custom software development vendors, implementors, and hiring-related "microservices" (e.g., online assessments, text reminder services)
  - **Appetite for a modular approach:** Desire from the vendor community to work with the City in a modular approach

- RFP is drafted and currently pending legal review. Highlights and philosophy include:
  - **Updated hiring modules**: Differentiating between parts of the hiring process supported by off-the-shelf SaaS products vs. those that are unique to government and thus require government-specific solutions
  - **Recognizing that our needs will constantly be changing:** RFP is written based on the objectives we want to achieve rather than focused on specific functional requirements
  - **HR and Tech expertise on rating panel:** This project covers both specific HR business needs and modern technology, therefore the rating panel is comprised of a combination of HR experts and City-wide technology experts
  - **Onboarding is next:** This is one of many RFPs to help the City gain access to a modern suite of HR tools. The team has started gathering information on onboarding, which is the next RFP to be issued



- Resource plan:
  - FY 2019-20: Develop **integration and in-house maintenance team** and add other vendor(s) as needed
  - FY 2020-22: Add other vendor(s) as needed

- Additional technologies:
  - PeopleSoft: Exists as a key part of this ecosystem throughout the lifetime of this project
  - JobAps: We expect to use JobAps modules until FY 2019-20 (unless JobAps is selected as the ATS vendor, they would then exist thereafter as well)

Hiring Modernization

PROJECT BUDGET	FY 2019-20	FY 2020-21
Number of FTE	3	3
FTE Classifications	0923, 1053, 1246	0923, 1053, 1246
Salary & Fringe	594,712	608,000
Software	1,105,888	400,000
Hardware		
Professional Services	600,000	549,000
Materials & Supplies	30,000	25,000
Contingency/Other	-	-
Total Project Cost	**2,330,600**	**1,582,000**

Hiring Modernization

Total Project Cost	Total COIT Funding To Date	Total Other GF Funding	Total NGF Funding	Total NGF + GF Funding	Total Spent
$4.9 M	$1.0	-	-	-	$0.41M

	Status	Comment
Schedule		Discovery and Planning - ATS: 100% complete in August 2018 Procurement - ATS: 50% complete, RFP to be published in April 2019 Discovery and Planning - Onboarding: 10% complete, ending in May 2019
Scope		Discovery and Planning: within scope Procurement: RFP for ATS now includes API layer to interface with PeopleSoft and incorporates exam scoring and certification/referral solutions
Budget		Discovery and Planning: on budget Procurement: on budget

Risks

- **Appeals from non-selected vendors** may delay contract negotiations and implementation
- Risk that vendors won't be able to easily work with **existing systems**
- Significant risk associated with **migration of 10+ years of legacy hiring data**
- Though this project focuses on **collaboration & change management**, we suspect there will be resistance to change since we are looking to reimagine government hiring
- Will require **time and effort from other departments**. Everyone has to be on board and have sufficient resources
- By having multiple vendors contributing to the project, we increase the **complexity of integration** (logistics and timing of multiple contributors)
- Balancing the **competing priorities that come with a phased approach to implementation** and ensuring that each of the phases are appropriately sized

CON Systems Integration with the HR Modernization Project

Department

Presenter

CON Systems Integration with the HR Modernization Project

Project Objective

- Successfully integrate CON Systems (SF People & Pay, SF Learning, SF Reports & Analytics, etc.) with the new solutions of the HR Modernization Project

CON Systems Integration with the HR Modernization Project

Approach

- Given ongoing work required by CON Systems, we're assuming additional staff/consultants will be needed to meet the timelines of this coming project
- The HR Modernization Project solution is not yet defined, so the impact to CON Systems is unknown

CON Systems Integration with the HR Modernization Project

Current State	The SF People & Pay system integrates with current Applicant Tracking System (JobAps) to exchange the following data: • RC-0001-INT Outbound Active Job and Salary info to JobAps • RC-0002-INT Outbound Approved Open Job Vacancies to JobAps • RC-0003-INT Inbound Candidate Ready to Hire from JobAps • RC-0005-INT Inbound Active Elig Lists from JobAps • RC-0006-INT Outbound Create Recruit Request to JobAps
Future State	• Depending on the solutions needed for the HR Modernization Project, the above interfaces will likely need to be rebuilt with new system(s). • There could be additional integrations and customizations necessary as well, given the HR Modernization Project is replacing more than just the Applicant Tracking System. • Reporting needs also will increase due to real-time diversity and inclusion

CON Systems Integration with the HR Modernization Project

Project Team:

	Fiscal Year 2020	Fiscal Year 2021
City Staff	1053, 1054, 1070	1053, 1054, 1070
Consultants	3 Consultants	3 Consultants

Estimated Budget & Funding Request:

Total Budget - High	Total Budget - Low	FY 20 COIT Funding Request	FY 21 COIT Funding Request	Total COIT Funding Request FY20 & FY21
$2,200,000	$600,000	$398,638	$398,638	$797,276

SF Learning Citywide Offering & Support

Department

Presenter

SF Learning Citywide Offering & Support

Project Objective

- Increase Citywide awareness of:
  - SF Learning content hosting and tracking
  - Tracking 3rd party learning systems in SF Learning
- Support Citywide training and certification needs
- Support Citywide reporting from SF Learning Dashboards
- Support new department inquiries/requests to using SF Learning for training and reporting

SF Learning Citywide Offering & Support

Why Now?

- SF Employee Portal, and SF Learning, is now available to all 36,000 employees in the City (as of March 2019)
- Increased departmental requests to use SF Learning
  - DT, CON, LIB and REC
- Growing demand for Citywide training and reporting
  - OCA for Citywide Prop Q training
  - DT for SANS Cybersecurity training
- Successful build and use for DPH and their EPIC Project
  - 7,000+ employees, 6,000+ UCSF partners

SF Learning Citywide Offering & Support

System Evolution

2014
- SF Learning Launched as Pilot Project (hosted)

2015
- Brought SF Learning in-house.
- Increased adoption to 3 departments.

2016
- 3 departments continue to add new courses to SF Learning.

2017
- Upgraded to latest version of product.

2018 - 2019
- Onboarded LMS systems consultant expert
- Launched new Home Page.
- Enhancements for DPH EPIC Project.

2019 - 2021
- Upgrade to latest version of product.
- SF Learning Citywide Offering & Support

SF Learning Citywide Offering & Support

Current Usage

Number of Courses and Completions by Department (as of today)

Department	Number of Courses	Number of Completions
DHR	**36** (Citywide)	**10,998**
CON	**131** (Citywide)	**29,834**
DPH	**85** (Departmental)	**58,852**
TOTALS	**252**	**99,684**

SF Learning Citywide Offering & Support

Examples of the **252** courses and **99,684** completions hosted in SF Learning.

Dept	Course Name	Learners	Completions 2015 to Date
DHR	24 Plus Enhanced for Supervisors	Citywide	**1,323**
DHR	Intro to Managing Implicit Bias	Citywide	**2,634**
CON	Self Service Time Entry	Citywide	**883**
CON	Self Service Time Approver	Citywide	**660**
DPH	Disaster Preparedness	DPH	**4,260**
DPH	Cardio Distress/Choking Prevention	DPH	**3,078**
DPH	Injury & Illness Prevention	DPH	**2,717**

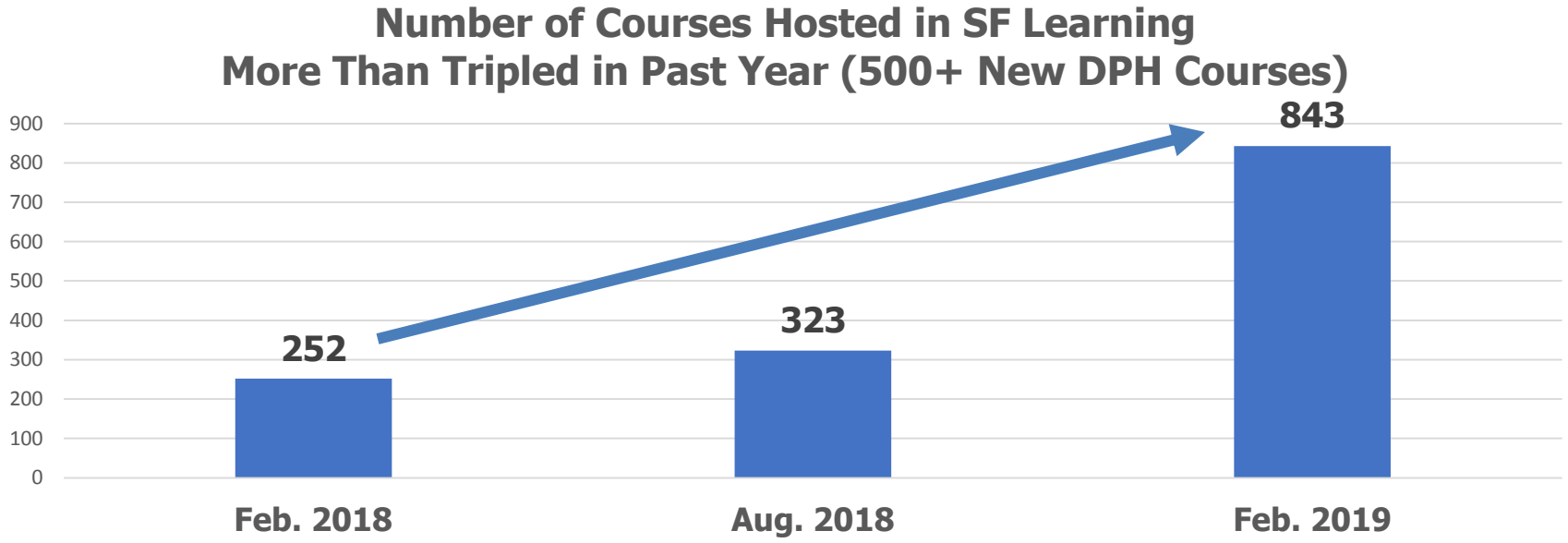
SF Learning Citywide Offering & Support

Examples of courses and completions from 3rd party learning systems but tracked in SF Learning.

Dept	Course Name	Learners	Completions 2015 to Date
DHR	Harassment Prevention	Citywide	**811**
ADM	CCSF Employee Driving Training	Citywide	**3,954**
CON	SANS Security Training (in-progress)	CON	**3,992**

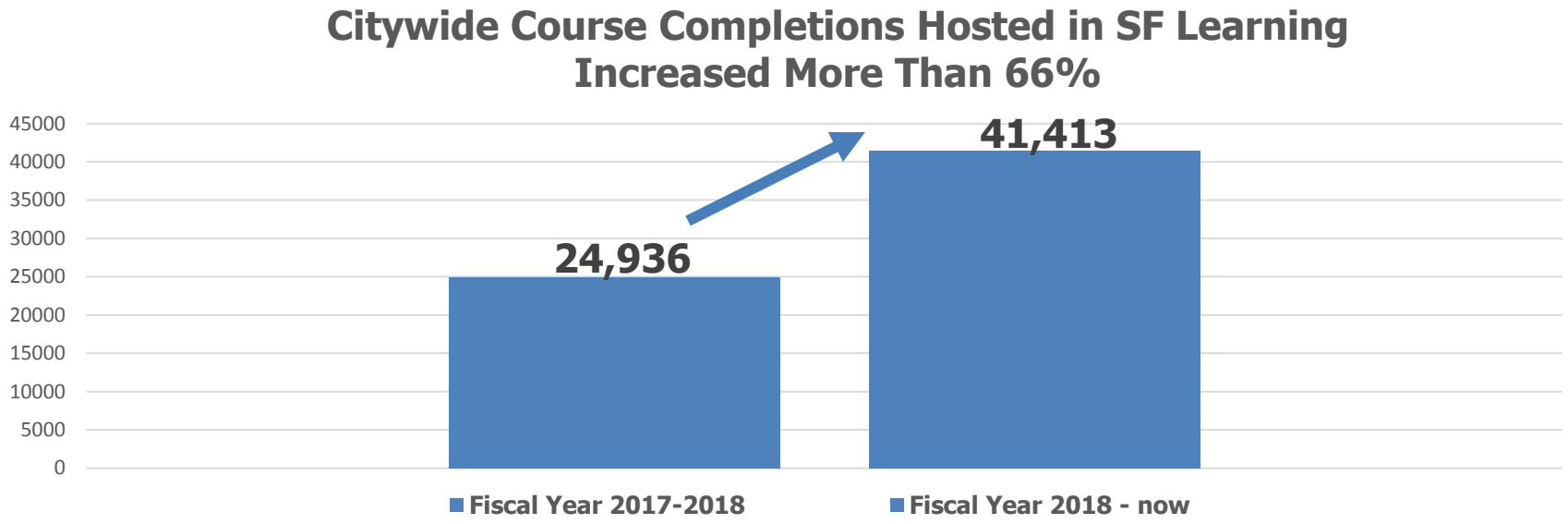
SF Learning Citywide Offering & Support

SF Learning Hosted Course Growth



SF Learning Citywide Offering & Support

SF Learning Hosted Completions Growth



SF Learning Citywide Offering & Support

DPH Experience & Use Case

- SF Learning is being used by the biggest department in the City
- **LHH and ZSFGH** have been using SF Learning for 2+ years
- **Annual Compliance Training** – successfully enrolled **7,300+ learners** in Feb. 2019
- **Electronic Health Records (EPIC)** project has dramatically increased SF Learning usage. See details next page.

SF Learning Citywide Offering & Support

DPH Experience & Use Case

- EPIC Training for DPH Phase I – 1/14/2019
  - Successfully setup **270 instructor-led trainings and 139 learner groups**
  - Successfully provisioned **700 managers with access to enroll their staff in training**
  - Automated enrollment process
  - Manager Self Service and Email notifications
  - Created templates to support mass creation of trainings

SF Learning Citywide Offering & Support

DPH Experience & Use Case

- EPIC Training for DPH Phase II – 3/15/2019
  - Successfully loaded over **300 web trainings**
  - Successfully added **5,100 non-employees (healthcare partners)**
  - Automated enrollment process
  - Added learner reminder notifications
  - Created survey template

SF Learning Citywide Offering & Support

Future State: Provide a SF Learning system…

- now available to all 36,000 employees and 6,000+ contractors
- growing requests for future departmental and Citywide training
- functioning well with recently completed upgrades
- Citywide license and maintenance costs already covered
- reporting dashboards for Citywide and departmental trainings
- integrated with SF People & Pay (real-time employee updates)
- integrates (share completions) with 3rd party learning systems
- retains employee learning history across different departments & jobs
- ease of use via the SF Employee Portal

SF Learning Citywide Offering

Funding Request:

- Project Team

	Fiscal Year 2020	Fiscal Year 2021
City Staff	1053, 1054, 1070	1053, 1054, 1070
Consultants	Functional, Developer	2 Full Time Consultants

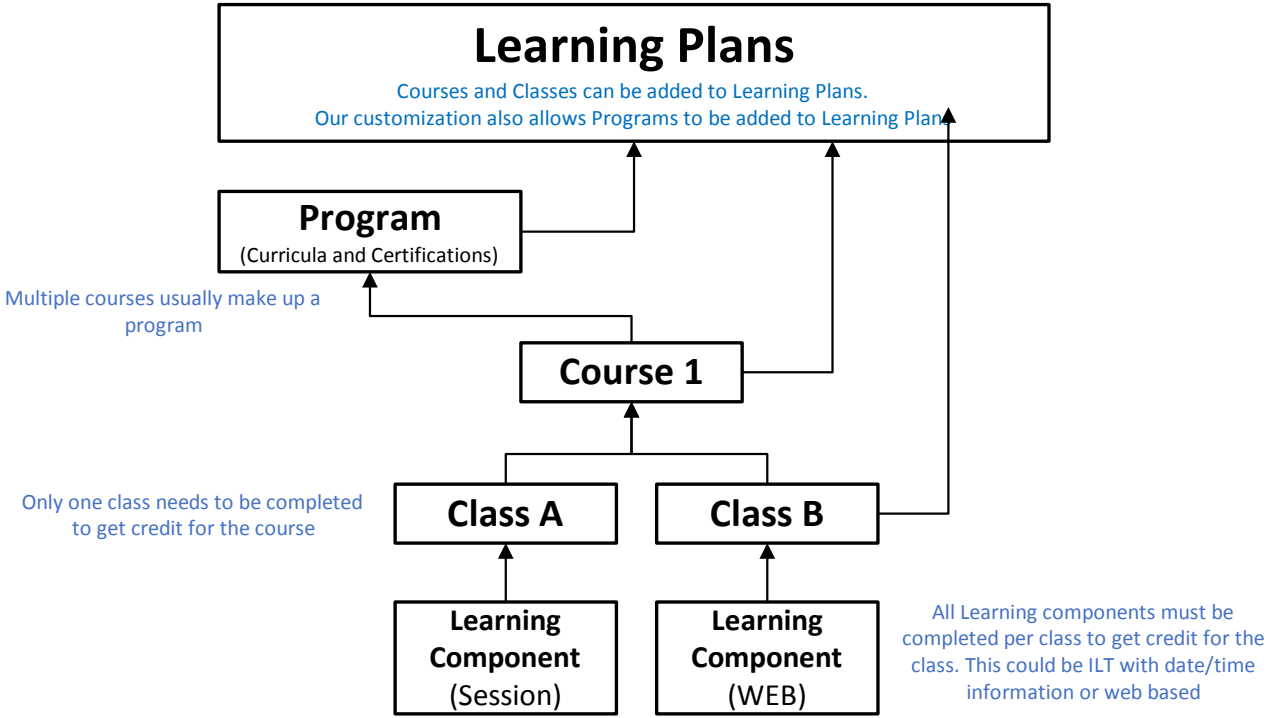
- Est. Budget

Total Budget - High	Total Budget - Low	FY 20 COIT Funding Request	FY 21 COIT Funding Request	Total COIT Funding Request FY20 & FY21
$2,500,000	$2,000,000	$639,389	$673,375	$1,312,764

Appendices

SF Learning Citywide Offering & Support

Catalog Hierarchy Structure

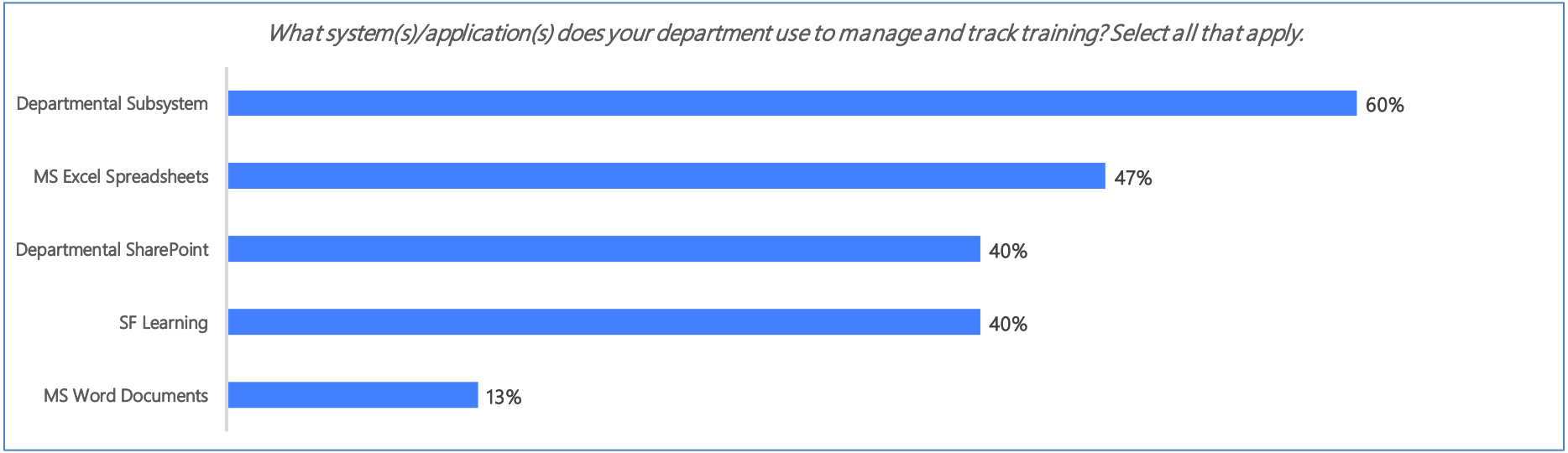


SF Learning Citywide Offering & Support

Future State: Form A Project Team To…

1. Scale the system for expanded use
   - Add further enhancements to functionality and usability
   - Build integration with 3rd party learning systems
2. On-board requesting departments to use SF Learning
   - Assessments: Educate and provide requirement fit/gap assessments
   - Onboarding: Setup courses, learning groups, automate enrollments, test content, etc.
   - Knowledge Transfer: Ensure departments are able to support their content going forward
3. Integrate with existing department learning sub-systems
4. Improve CON Systems support
   - Training/knowledge transfer to current CON Systems support staff

CON Systems Learning Survey (Nov 2018 – 15 Departments Responded)



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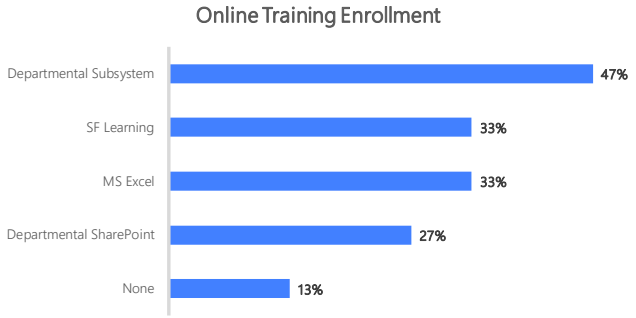

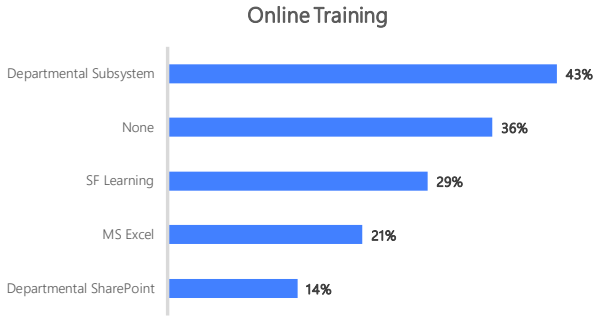

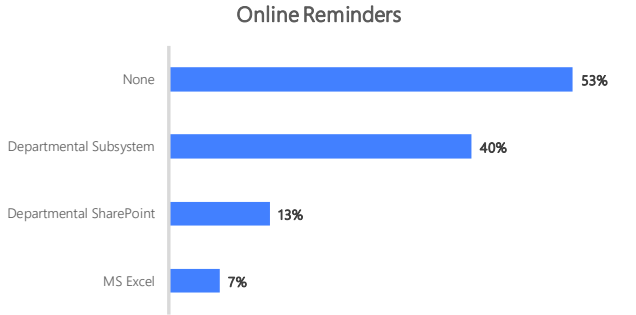

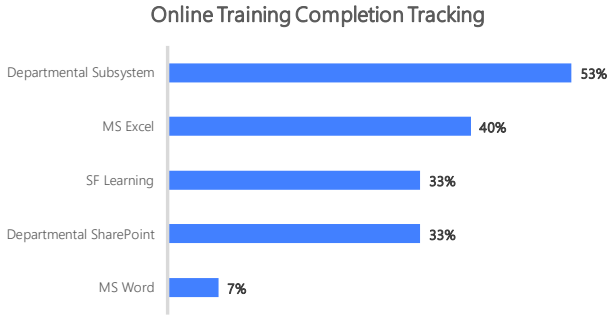

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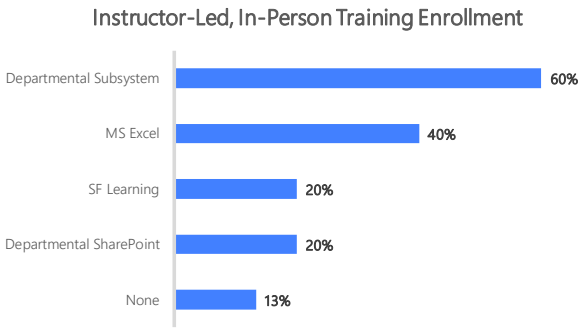

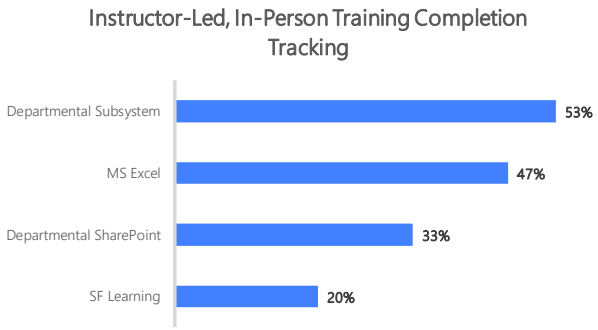

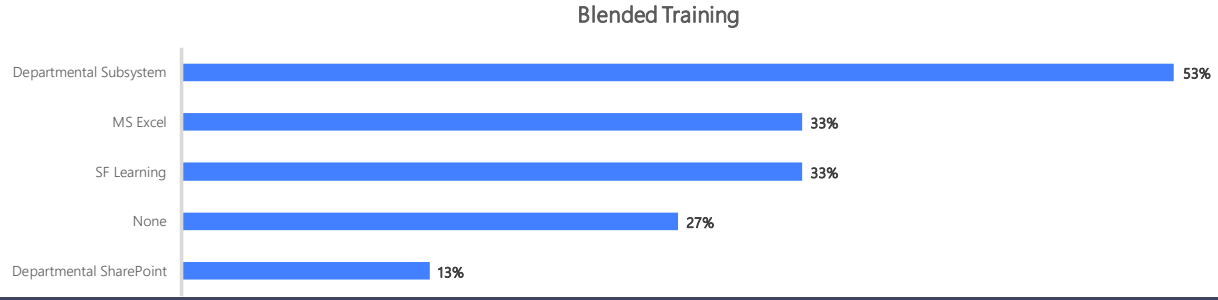

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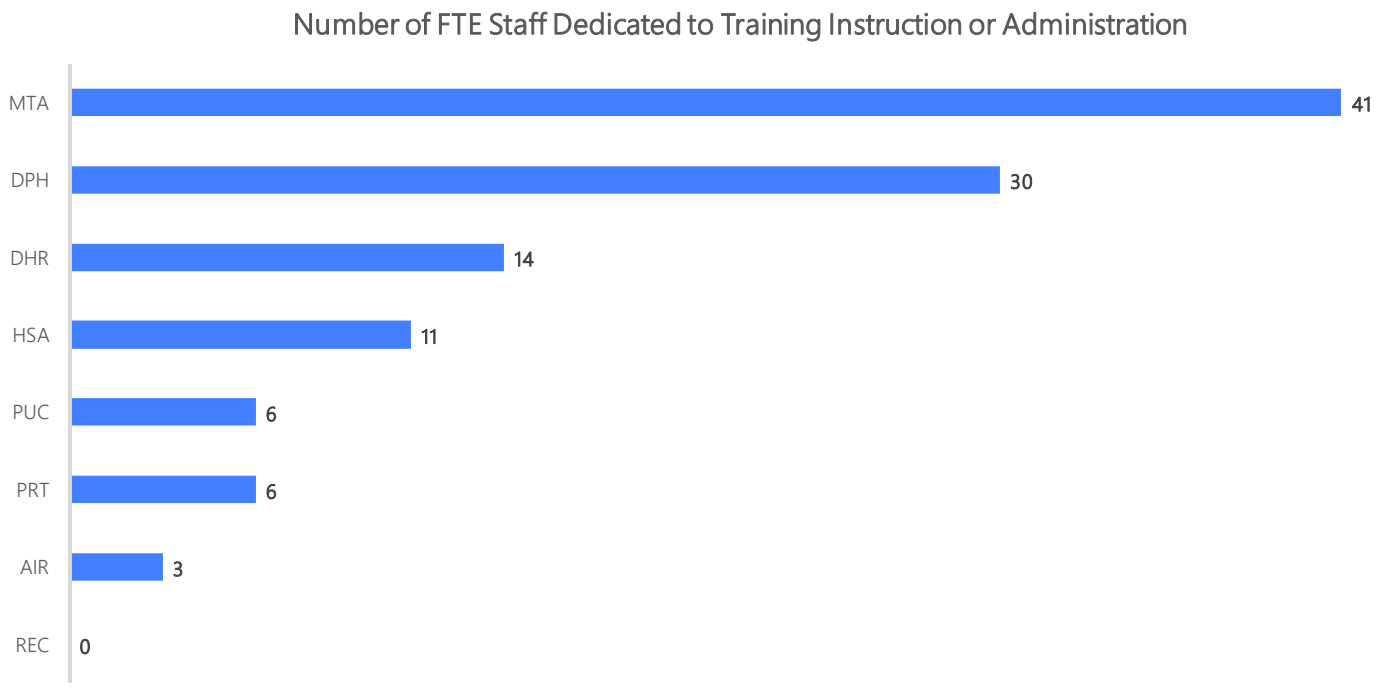

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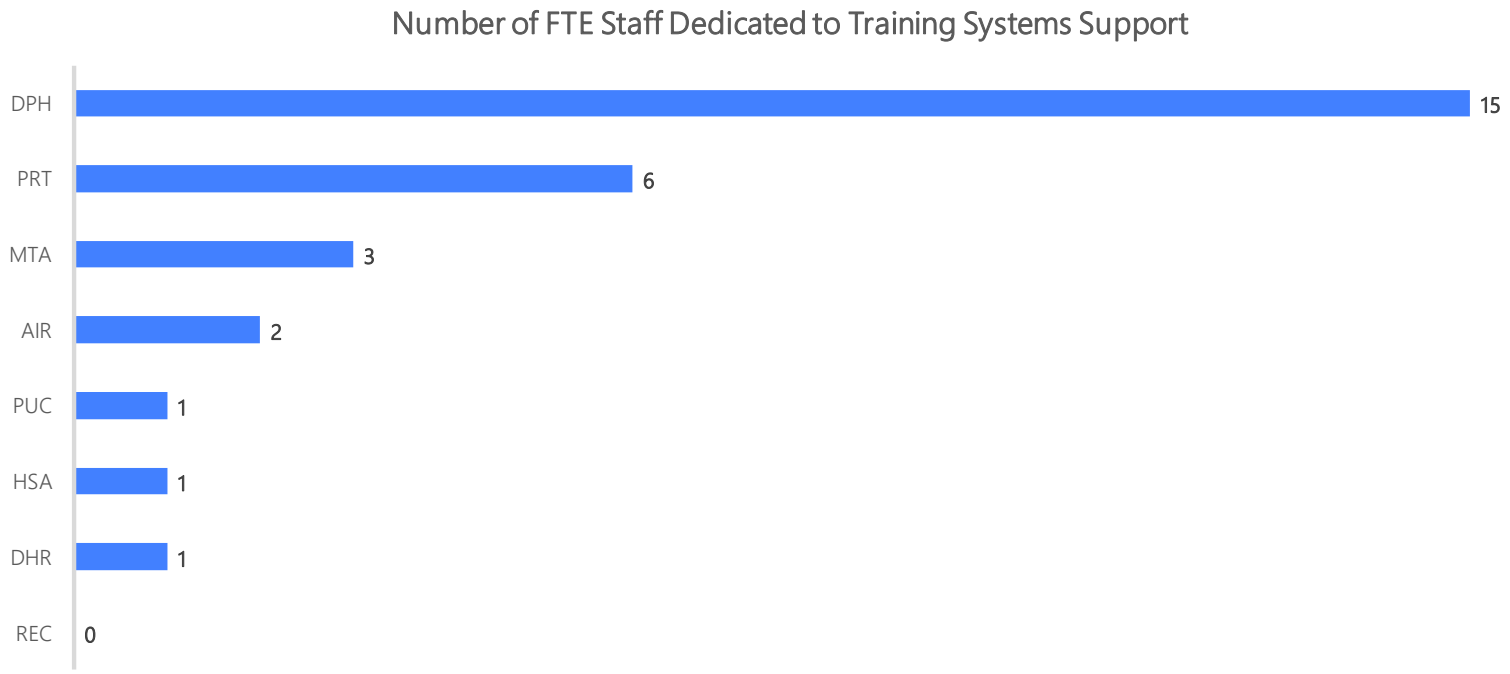

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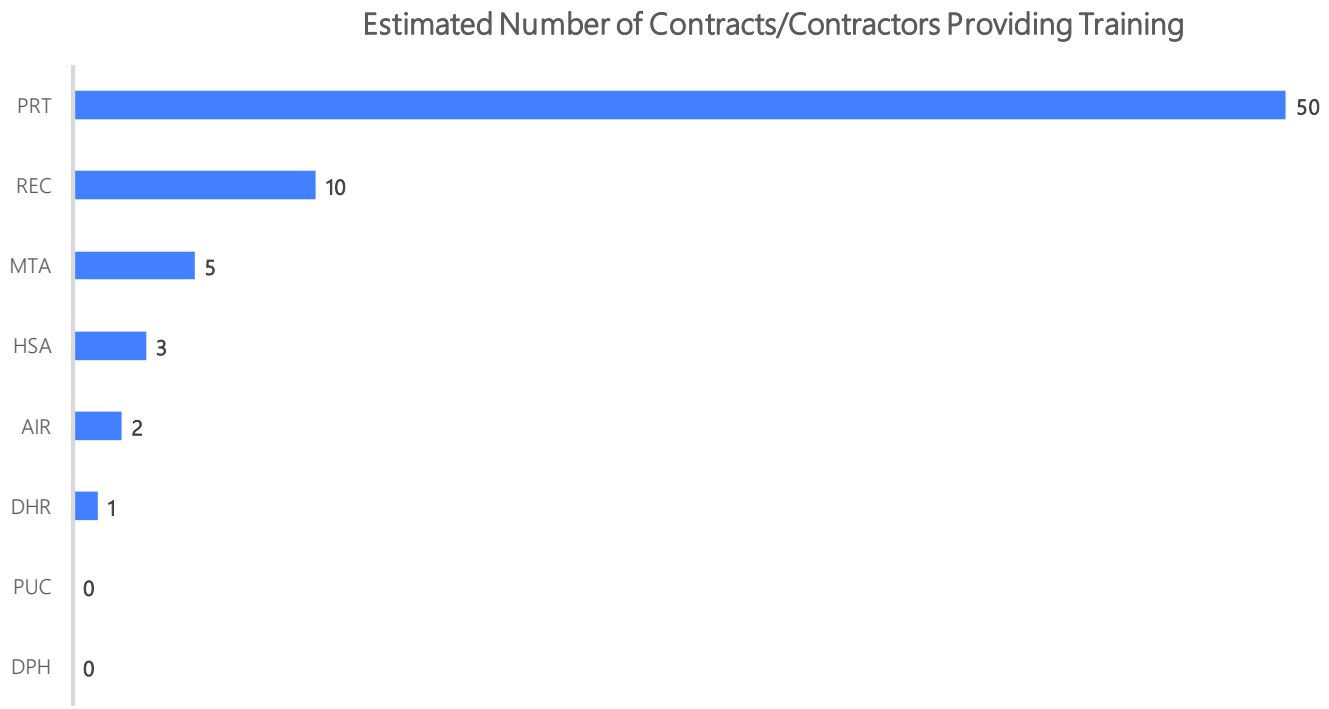


Criminal Justice Roadmap Implementation

Linda Gerull
City Chief Information Officer

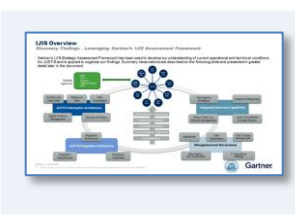
Criminal Justice Roadmap

Project Background: The JUSTIS 5-Year Roadmap began with establishment of the baseline Current State Assessment. The future state vision was then built in collaboration with key agency and program stakeholders considering consensus needs, technology trends and Integrated Justice Information Systems (IJIS) leading practices.

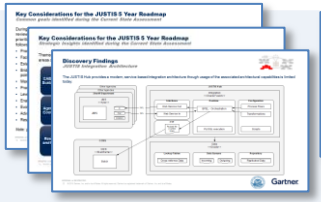
Project Development Process: Working with agency stakeholders and JUSTIS leadership, the initiatives were designed to realize the Future State Vision and used prioritization and dependencies to create the five year Roadmap. The FY2019/2020 budget will implement prioritized initiatives of the Roadmap.

Roadmap Development

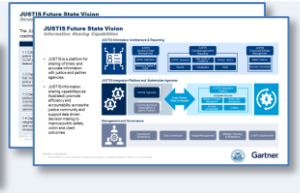
- ✓ **Defines the initiatives, schedule, costs, and recommended implementation plan** that will deliver the JUSTIS 5-Year Roadmap to enhance JUSTIS systems and provide 21st century capabilities to the Juvenile and Criminal Justice Agencies to help them achieve their missions and better serve the community.
- ✓ Is **consensus driven** and based on input from executives, operational and technical stakeholders across CCSF.
- ✓ Considered perspectives on **best practices**, **technology trends** and **market capabilities**.
- ✓ Defines **accountability** among leadership and delivery groups with **transparent links between business objectives and technology** priorities.



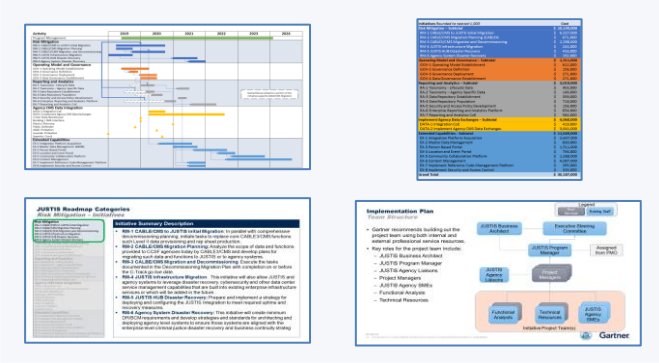
IJIS Assessment Framework



Current State Assessment



Future State Vision



JUSTIS 5 Year Roadmap
Initiatives, Schedule, Costs and Implementation Plan

Roadmap Objectives

JUSTIS will provide a platform for sharing of timely and accurate information with justice and partner agencies. JUSTIS information sharing capabilities will leverage modern technology to: improve the quality and consistency of criminal and juvenile justice data, enable the sharing of data between JUSTIS agencies in real-time whenever applicable, deploy robust reporting capabilities regarding the complete life cycle of the local criminal justice[1] system, and drive improvements in public safety outcomes through transparency and inter-agency collaboration.

Objectives

Data driven decisions and processes with direct and measurable impact on public safety and quality of life imperatives

Improve and expand **collaboration** between partner agencies and community based organizations to improve outcomes and reduce recidivism

Enhanced levels of **transparency and accountability** to all facets of the criminal and juvenile justice processes including **equitable treatment, privacy, and required confidentiality** for all impacted individuals

Improved **process efficiencies** enabling and reduction of paper based processes thereby enabling staff to focus on high impact interaction with clients and the public

Enablement of CCSF to fully realize the benefits of current and future **technology innovations in a fiscally responsible and cost-effective manner.**

A **resilient, secure and reliable** foundation for CCSF data sharing

JUSTIS Roadmap

Planning Priorities

Justice Lifecycle Data Consistency: Enable the understanding of criminal and juvenile justice information across the enterprise

Reporting: Modernize, improve or establish (as required) JUSTIS analytics & reporting

CABLE/CMS: Define and develop an approach to fully replace existing CABLE/CMS functionality

Platform Optimization: Expand usage of the integration platform standards to align with data sharing business needs

Operating Model: Provide organizational, resource and change management structures to ensure continuous JUSTIS service

Governance: Refresh and establish governance structures to manage inter-agency decisions and responsibilities

1. Criminal justice is in inclusive of both adult and juvenile justice systems and agencies.

Roadmap Objectives & Future State

The JUSTIS 5 Year Roadmap will facilitate achievement of the following strategic objectives. These strategic objective(s) will be used to ensure the Roadmap initiatives are aligned with the Future State Vision described herein and as a baseline to measure effectiveness of the Roadmap's implementation.

Innovations

1.1 Establish a common taxonomy and comprehensive criminal justice conceptual data model, aligned across all JUSTIS member agencies and where possible with state and federal standards.

1.2 Deploy a city wide criminal justice data store that includes 'index level' data from all criminal justice agencies, covering the complete criminal and juvenile justice lifecycle, aligned to the common taxonomy.

1.3 Deploy an enterprise reporting analytics platform which enables stakeholder agencies, the JUSTIS Technology Support Team, and community partners to create dashboards, queries, and standard reports.

1.4 Deploy and/or re-architect the current JUSTIS integration platform with a lighter weight, secure and scalable architecture that encourages increased levels of data sharing.

1.5 Deploy data exchanges consistent with the needs and data sharing opportunities presented by the implementation of new juvenile and criminal justice agency systems over the next 24 months.

1.6 Deploy a platform for sharing electronic documents and managing digital evidence.

1.7 Deploy a collaboration platform for awareness and communication with health care and social services agencies to improve both individual and population level outcomes.

1.8 Extend JUSTIS to include Juvenile data and transactions with required access controls.

1.9 Rebrand and transform JUSTIS inclusive of the Roadmap strategic objectives to define the next generation public safety and social system for CCSF.

Sustainment and Risk Mitigation

2.1 Decommission CABLE/CMS including removal of dependencies on CABLE/CMS from all other CCSF criminal justice applications.

2.2 Complete CCSF planning and integrations to support the Superior Court go-live[1] on criminal C-Track without disrupting the partner agency operations.

1. Planned for late 2019

2.3 Establish a DR strategy that aligns interdependent resiliency levels across stakeholder agency systems and with the JUSTIS Hub, and justice environment.

2.4 Establish security mechanism which manages enterprise access to agency data through JUSTIS.

2.5 Establish governance for the funding, prioritization, expansion, and implementation of transformative technology projects and data management which impact the CCSF Criminal & Juvenile Justice landscape.

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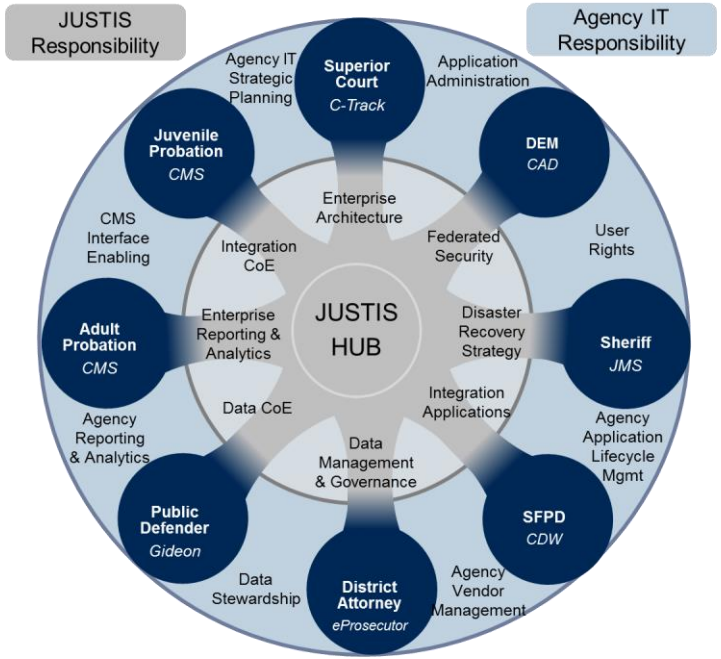
Management and Governance	JUSTIS Operating Model - Provide organizational, resource and change management structures to ensure continuous JUSTIS service levels to all stakeholder agencies; provide an operating model for the JUSTIS Technology Support Team with necessary capacity and access and support

Responsibilities for the JUSTIS Technology Support Team, in addition to the services provided today, will include:

- Establish, sustain and extend the JUSTIS architecture and standards including integrating Juvenile Probation's CMS into the JUSTIS Hub
- Administer and operate the integration platform (i.e., JUSTIS Hub), including monitoring of queues and other operational mechanisms
- Provide an Integration Center of Excellence (CoE) which consults with agency level IT and/or third party vendors when designing interfaces and establishing interface contracts
- Document and configure platform level components for specific interfaces and support testing, including providing test harnesses where appropriate
- Provide a Data Center of Excellence to support JUSTIS reporting and query development
- Common infrastructure for criminal justice applications will be managed consistent with CCSF, state and federal standards and protocols



Note: agency applications shown are representative examples

Roadmap Governance

Current State	The current JUSTIS governance processes have evolved over many years and needs to be restructured: 1. Incorrectly categorized as a project rather than an on-going operational support initiative 2. Tactical/operational vs. strategic focus 3. Requires direct participation by senior level executives 4. Must increase governance/transparency over agency IT initiatives
Future State	1. Establishing the following governance bodies: a. Executive Sponsor: City Administrator b. Executive Board: Agency Executive Directors 2. A dedicated Office of Justice Technology within the Department of Technology with a Program Officer and staff 3. Focused workgroups which support inter-agency coordination and the ongoing use and evolution of criminal justice technology and systems 4. Establishing a Program Governance Charter to formalize responsibilities, processes, and roles

Roadmap Performance Measures

- Address the critical City & County risks identified as the front end of the roadmap.
- Complete institution of the Office for Justice Technology and full resource needs by 10/2019.
- Institute the JUSTIS Executive Board and Workgroups with regular meetings and support resources by 12/2019.

Roadmap Implementation

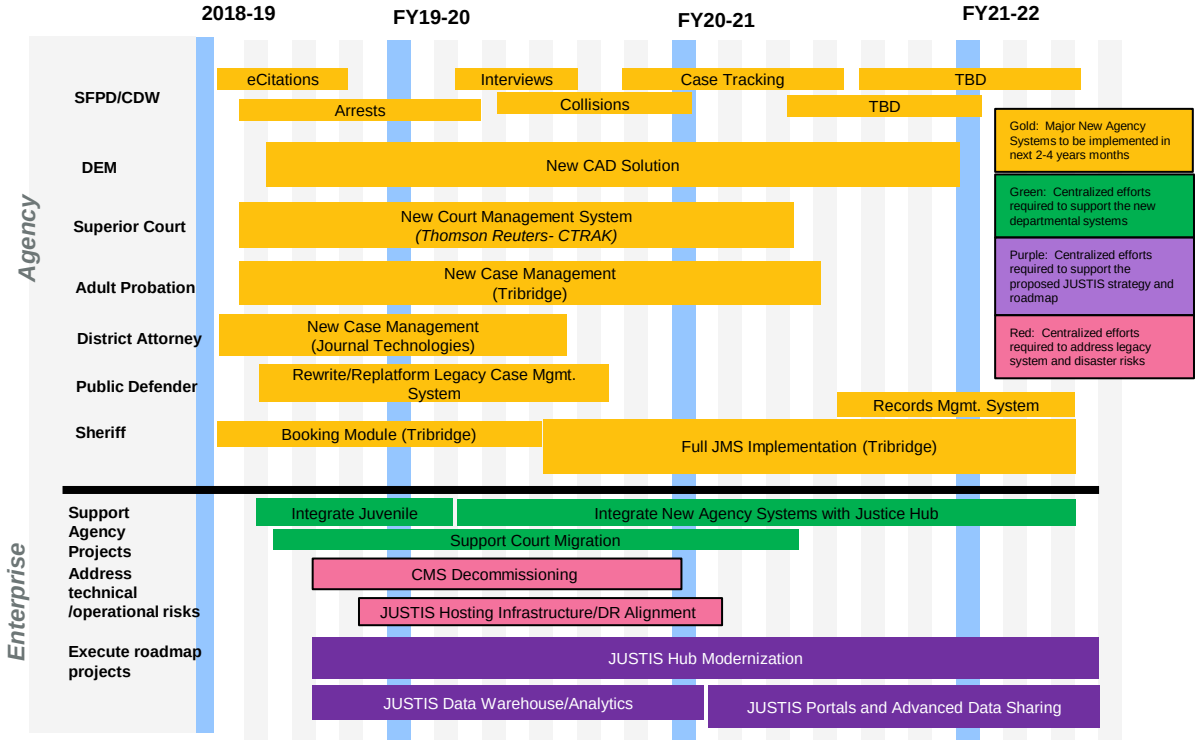
Recent Accomplishments

- Completed JUSTIS Roadmap development with Gartner and partner agencies
  - Assessment
  - Strategic Vision and Governance
  - Roadmap Initiatives and Implementation Plan
  - Cost and Schedule
  - Executive Overview

Roadmap Implementation

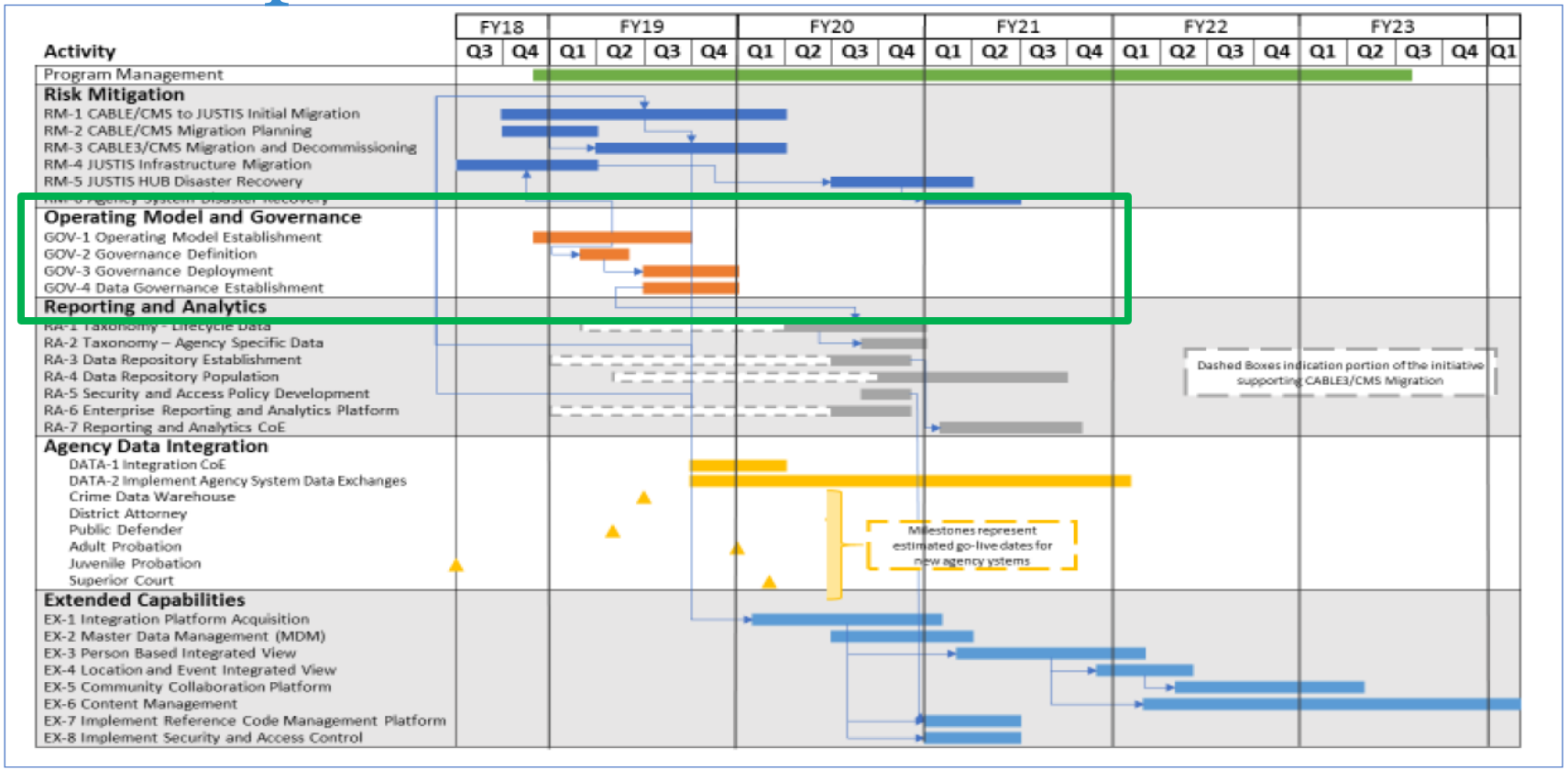
The Criminal Justice Roadmap considers both Agency Driven and Shared Initiatives

- **Primary Users**: POL, SHF, SFTC, DAT, PDR, JUV, ADP, WOM, ADM, DEM, and TIS.
- JUSTIS agencies are in the midst of replacing core case management systems.
- Each new system will need to be thoughtfully integrated with JUSTIS
- Significant effort will be required to decommission CABLE/CMS.
- Infrastructure and DR issues need to be addressed.
- The modernized, real-time JUSTIS data exchange and comprehensive enterprise level reporting must be implemented.



Having the right governance over the JUSTIS and the transformation program is foundational.

Roadmap Schedule



Gartner Estimated Initiative Costs

Total estimated hardware, software and labor costs for each initiative are shown.

- Internal CCSF resources were included in the effort estimates, however, no incremental cost was applied as these resources are already budgeted
- The model does not include ongoing maintenance or support costs
- Estimates do not include cost contingencies; best practice is to include a 20-25% contingency for technology projects similar to those in the Roadmap

Category	Initiative	Investment	Sub Total
Risk Mitigation	RM-1 CABLE/CMS to JUSTIS Initial Migration	$ 6,327,000	
	RM-2 CABLE/CMS Migration Planning	$ 671,000	
	RM-3 CABLE3/CMS Migration and Decommissioning	$ 2,298,000	
	RM-4 JUSTIS Infrastructure Migration	$ 244,000	
	RM-5 JUSTIS HUB Disaster Recovery	$ 416,000	
	RM-6 Agency System Disaster Recovery	$ 192,000	
			$10,149,000
Operating Model and Governance	GOV-1 Operating Model Establishment	$ 612,000	
	GOV-2 Governance Definition	$ 156,000	
	GOV-3 Governance Deployment	$ 271,000	
	GOV-4 Data Governance Establishment	$ 271,000	
			$1,311,000
Reporting and Analytics	RA-1 Taxonomy - Lifecycle Data	$ 403,000	
	RA-2 Taxonomy – Agency Specific Data	$ 146,000	
	RA-3 Data Repository Establishment	$ 359,000	
	RA-4 Data Repository Population	$ 718,000	
	RA-5 Security and Access Policy Development	$ 156,000	
	RA-6 Enterprise Reporting and Analytics Platform	$ 654,000	
	RA-7 Reporting and Analytics CoE	$ 584,000	
			$3,019,000
Implement Agency System Data Exchanges	DATA-1 Integration CoE	$ 419,000	
	DATA-2 Implement Agency System Data Exchanges	$ 3,641,000	
			$4,060,000
Extended Capabilities	EX-1 Integration Platform Acquisition	$ 2,647,000	
	EX-2 Master Data Management	$ 830,000	
	EX-3 Person Based Portal	$ 1,511,000	
	EX-4 Location and Event Integrated View	$ 756,000	
	EX-5 Community Collaboration Integrated View	$ 1,268,000	
	EX-6 Content Management	$ 4,007,000	
	EX-7 Implement Reference Code Management Platform	$ 295,000	
	EX-8 Implement Security and Access Control	$ 335,000	
			$11,649,000
Grand Total			**$30,187,000**

Roadmap Implementation

GOV 1-4, Operating Model and Governance Initiative

PROJECT BUDGET	FY 2019-20	FY 2020-21
Number of FTE	2	6
FTE Classifications	various	various
Salary & Fringe	$400,000	$1,200,000
Software	-	$300,000
Hardware	-	$200,000
Professional Services	-	$300,000
Materials & Supplies	-	-
Contingency/Other	-	-
Total Project Cost	**$400,000**	**$2,000,000**

Mainframe Retirement:
Court Management System (CMS)

Computer Assisted Bay-Area Law Enforcement – Module 3 (CABLE 3) Decommissioning

Rob Castiglia
Department of Technology

CMS/CABLE 3 Decommissioning

Project Objective

- Mitigate County's risk from dependence on End-of-Life Criminal Justice Mainframe Infrastructure
  - Identifying and decoupling department dependencies on Cable 3
  - Replace critical functionality in a NEW web based architecture

Primary Users

- Criminal Justice Agencies
- San Francisco Superior Court
- FBI, DHS, BART, CHP are external agencies

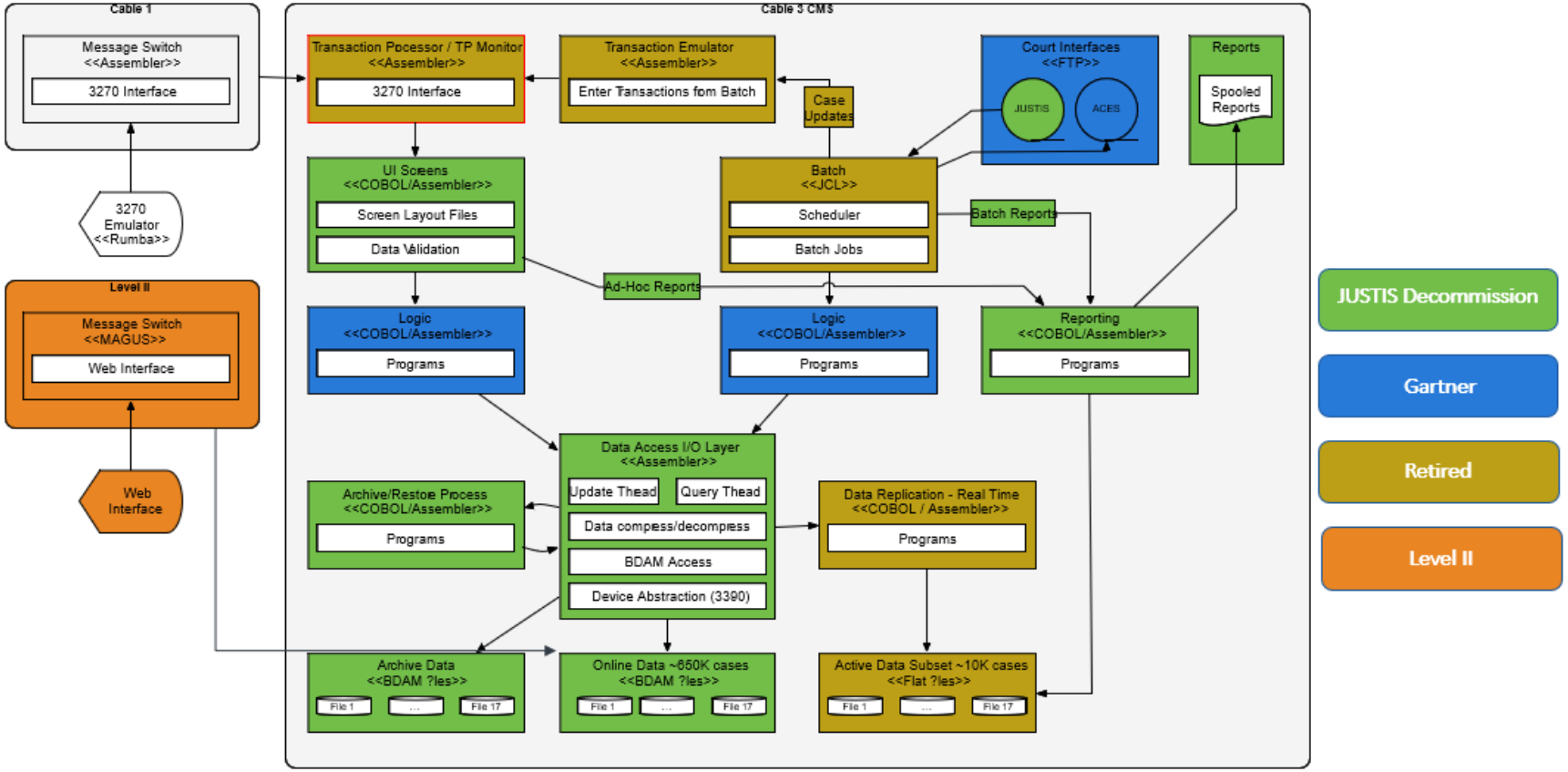
Major Stakeholders

- POL, SHF, DAT, PDR, ADP, DEM, and SF Superior Court

CMS/CABLE 3 Decommissioning

Current State	The San Francisco Superior Court is moving from the mainframe Court Management System (CMS/CABLE 3) to Thomson Reuters CTRAK case management system for criminal cases. In order to continue essential criminal justice operations the City must remove dependencies on the CMS/CABLE 3 and replicate functionality within the JUSTIS Hub to coincide with the CTRAK migration. There are a large number of critical risks associated with the City's reliance on functionality from the proprietary and dated CABLE3/CMS architecture and the dependency on the single vendor providing on-going application support.
Future State	1. Develop detailed plan and scope to remove all dependencies by CCSF agencies on CABLE3/CMS 2. Plan includes specifications for migrating CCSF CABLE3/CMS functionality into the Office of Justice Technology or agency systems 3. Replacement of all dependencies - including operational, report, and mainframe 4. Train personnel on new web based interface 5. Decommissioning of CABLE3/CMS

CMS/CABLE3 System Model



CMS/CABLE 3 JUSTIS Staffing

Function	Number	Duration - Months	Cost / Hour	Extended
Level II	1	?	?	$170,000
Power BI Arch	1	6	180	$172,800
Business Analyst	4	12	180	$1,182,400
APEX / Web Dev	3	9	180	$777,600
Power BI Dev	3	9	180	$777,600
				$3,080,400

1) These are the minimum resources required to aggressively structure a CABLE3/CMS decommission, with minimum adverse disruption to the CCSF criminal justice system in an **18-month to 24-month period**.
2) OIS costs are not listed due to an assumption that CCSF does not want to increase their contract even temporarily. OIS decommission time needs to be found via freezes on any new or modified MIR's, changes to CABLE3 and a reduction in non-decommission functions to critical CABLE3 operations only.
3) Level II costs are based on a smaller proof-of-concept project via SFPD and projected out for the anticipated scope increase of all CABLE3 query transactions. Excludes RAP sheet. No visibility into Level II calendar availability or time to complete.
4) Existing JUSTIS team will need to be fully applied to sub-projects 1 through 9 <u>and</u> made available to external BA's, Dev & BI teams for data source identification, mapping and definition.

CMS/CABLE 3 Department Staffing

Department	Number	Duration - Months	Notes - Additional to base Cable3 Decommission
Emergency Management (DEM)	1	2+1	DEM supports PD, SD & Fire with heavy use of CABLE 3 transactions and reports which include but are not limited to Level II.
Police (PD)	1	6+1	Multiple Sub-Projects that include ID Bureau system replacement, RAP & Be Advised systems and Level II backend overhaul with minimum GUI impact.
Sheriff (SD)	.5	3+1	Warrants bureau may require additional BA, Dev & BI resources.
District Attorney (DA)	1	3+1	V&V of new charge disposition interface.
Public Defender (PDR)	.5	2+1	None
Adult Probation (ADP)	.5	2+1	Known heavy MIR user
Pre-Trial Diversion	1	2+1	Unknown scope of Cable3 utilization

1) This is the minimum anticipated need of the listed departments.
2) Assumption is that Level II takes care of all external agency needs (FBI, DHS, CHP, BART, etc)
3) +1 to month is the backend reporting V&V responsible coordinating agency resource.
4) No anticipated staffing needs from: Courts (outside of C-Track implementation), Juvenile Probation and the Department on the Status of Women.

CMS/CABLE 3 Decommissioning

Recent Accomplishments

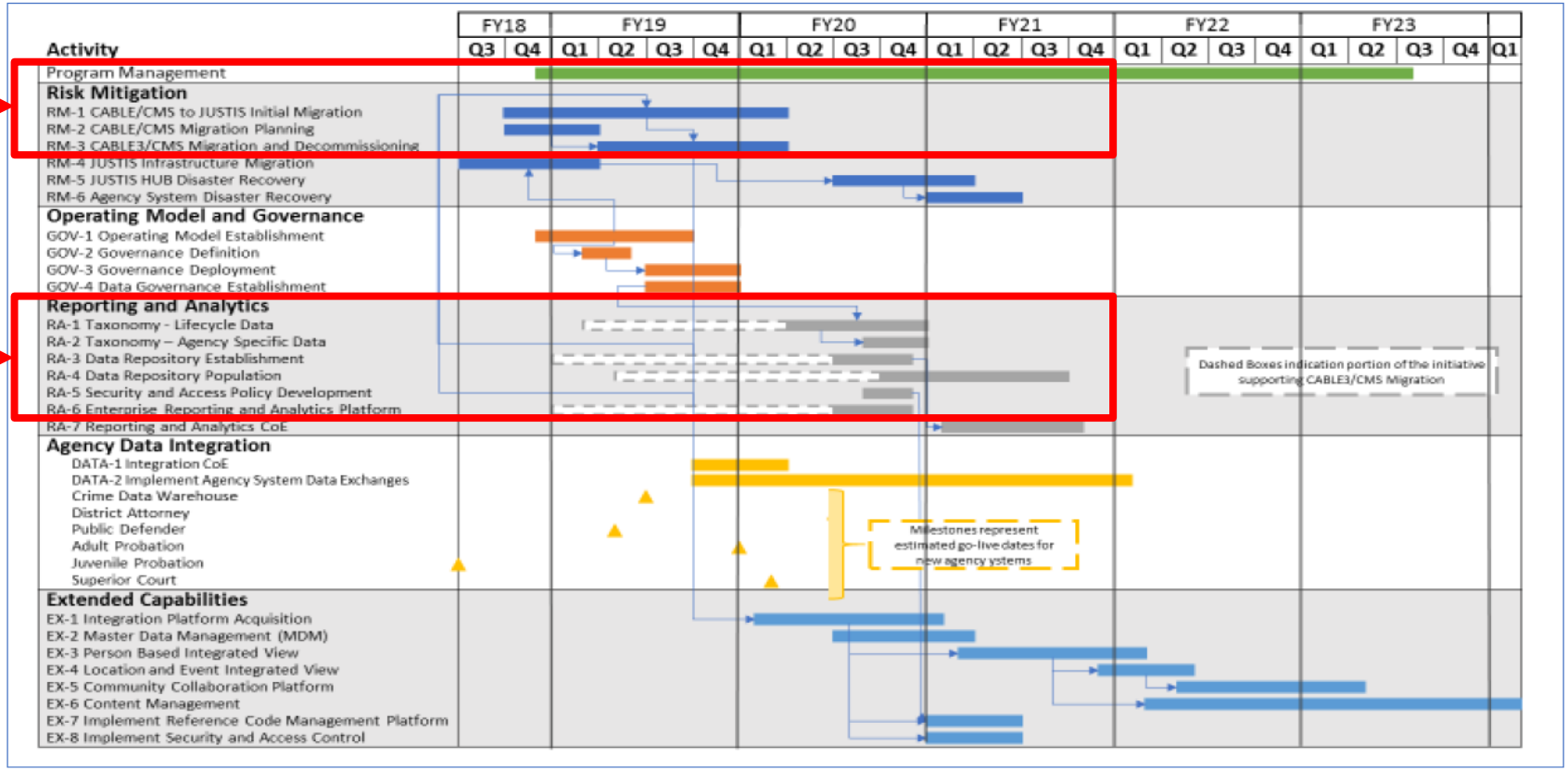
- Completed the JUSTIS Roadmap and Initiative Definition

- Beginning transition of mainframe applications to web based applications
  - PD ID Bureau migration (fingerprinting)
  - RAP & Be Advised Alerts
  - Web Applications, Reporting, Security

Performance Measure

- Complete 100% of the CABLE-3 de-commissioning by 11/2020 and assist the Courts with integration of data streams.

CABLE3 Schedule



CMS/CABLE 3 Decommissioning

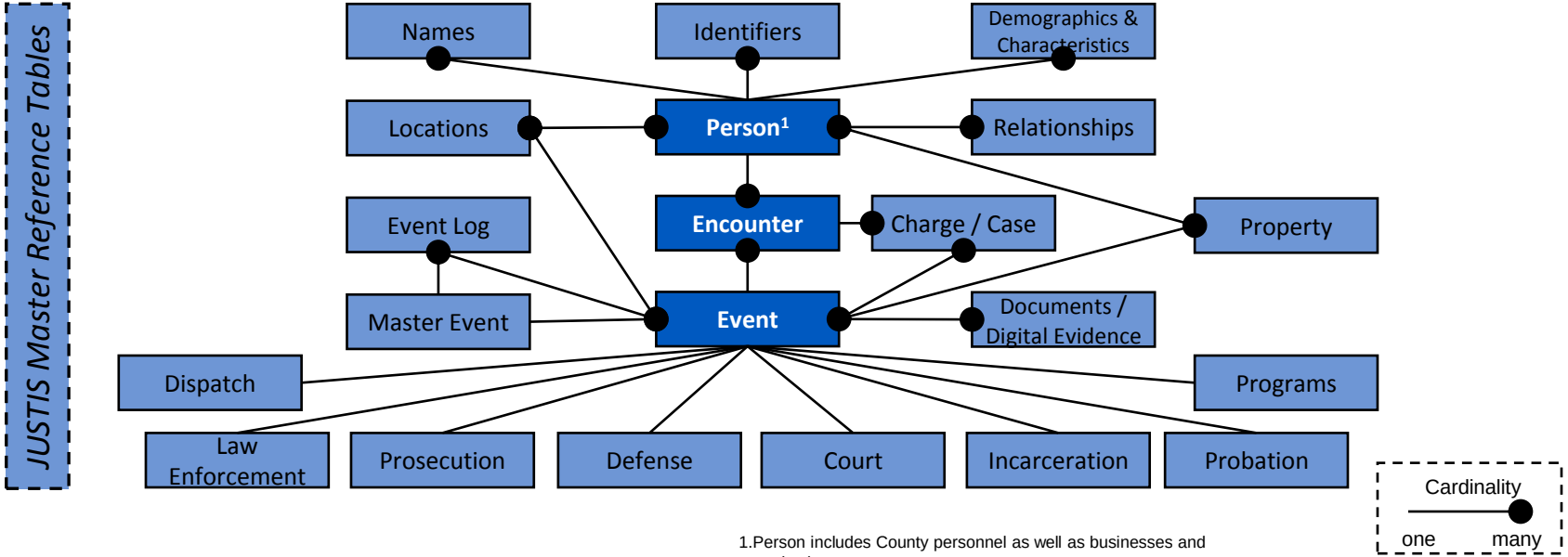
PROJECT BUDGET	FY 2019-20	FY 2020-21
Number of FTE	6	5
Dept BA's and Prod Mgrs	3	3
FTE Classifications	various	various
Salary & Fringe	$1,650,000	$1,450,000
Software	$300,000	$100,000
Hardware	$200,000	-
Professional Services	$800,000	$500,000
Contingency/Other	-	-
Total Project Cost	**$2,950,000**	**$2,050,000**

END OF PRESENTATION

JUSTIS Information Architecture

Justice Lifecycle Data Consistency – Establish and sustain a common taxonomy, shared reference data structures and common identifiers to facilitate consistent representation and understanding of criminal justice information across the enterprise

JUSTIS will provide a common vocabulary (i.e., taxonomy) for CCSF criminal justice information across all stakeholder agencies. The JUSTIS Future State Vision also includes a Conceptual Data Model for managing information that will be retained centrally and be made available for JUSTIS Reporting Services. JUSTIS Data Governance will govern the long term evolution of the model and compliance with standards (e.g., NIBRS).



1.Person includes County personnel as well as businesses and organizations

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Foundational Network Systems – Phase 2

Police Department

Will Sanson-Mosier

Foundational Network Systems – Phase 2

Project Objective

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

Problem Definition

Current State	When completed, Phase 1 only migrates CDW database tier to Oracle Exadata 7 infrastructure hosted by DT at 200 Paul and Rancho Cordova sites. Oracle Business Intelligence (BI), Secure Enterprise Search (SES) and CDW middle-tier application layer still resides on existing end of life IBM blade center.
Future State	CDW middle-tier application layer, BI and SES migrated to SFGOV cloud infrastructure: • Oracle Exadata – database tier, including BI • Cisco UCS – middle-tier application layer and SES

Foundational Network Systems – Phase 2

Primary Users

- City Employees

Major Stakeholders

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

Foundational Network Systems – Phase 2

Primary Performance Measure

- CDW performance and stability will be the same or better than prior platform

Foundational Network Systems – Phase 2

Recent Accomplishments

- Exadata appliances at 200 Paul (primary site) and Rancho Cordova (secondary site) were installed, configured and operational. CDW database tier primary site will host production and secondary site will host development and testing environments, also a replicated production standby using Oracle Data Guard for data protection
- CDW Test environment was cloned to secondary site for testing and validation
- CDW Test middle-tier application will be redirected to secondary site database tier and cut over will occur

Foundational Network Systems – Phase 2

PHASE	DATES	DESCRIPTION
Phase 1	1/8/2019 to 6/30/2019	CDW databases migrated to Oracle Exadata 7
Phase 2	7/1/2019 to 6/30/2020	CDW middle-tier, BI and SES migrated to SFGOV cloud and disaster recovery and high availability established

Foundational Network Systems – Phase 2

PROJECT BUDGET	FY 2019-20	FY 2020-21
Number of FTE	-	-
FTE Classifications	-	-
Salary & Fringe	-	-
Software	-	-
Hardware	-	-
Professional Services	$1,100,000	$400,000
Materials & Supplies	-	-
Contingency/Other	-	-
Total Project Cost	**$1,100,000**	**$400,000**

Foundational Network Systems – Phase 2

Total Project Cost	Total COIT Funding To Date	Total Other GF Funding	Total NGF Funding	Total NGF + GF Funding	Total Spent
$3.2M	$2.1M	-	-	$2.1M	$2.1M

	Status	Comment	
Schedule		Begin Date End Date % Complete	7/1/2019 6/30/2020 Not started
Scope		Architecture design options and professional services estimates for Phase 2 completed	
Budget		• Final Phase 2 funding amounts will determine final design and implementation schedule • $700K for Oracle Consultants and $400K for Oracle Advanced Monitoring & Resolution Services	

Risks	No funding and potential inability to hire or retain Oracle DBA and developer positions will leave critical systems vulnerable to end of life equipment

Online Navigation and Entry (ONE) System

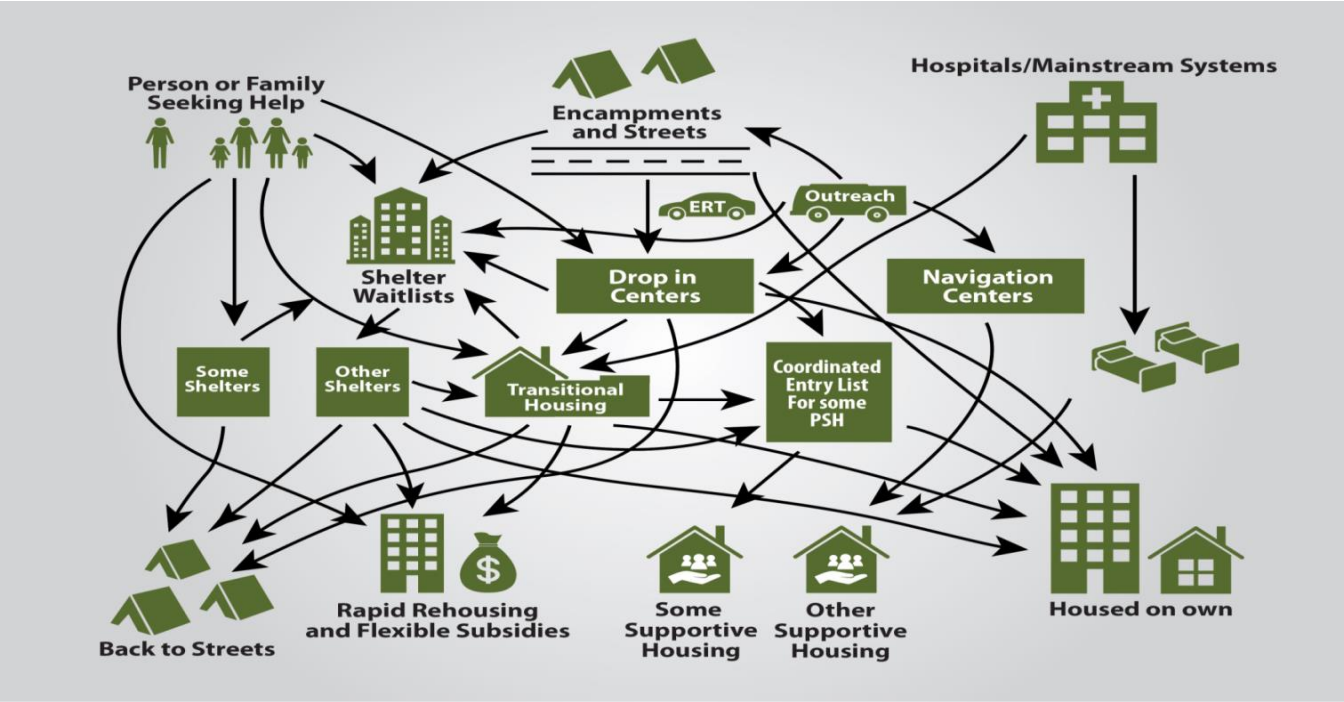
Dept. of Homelessness and Supportive Housing
Gigi Whitley, Deputy Director, Admin & Finance

ONE System

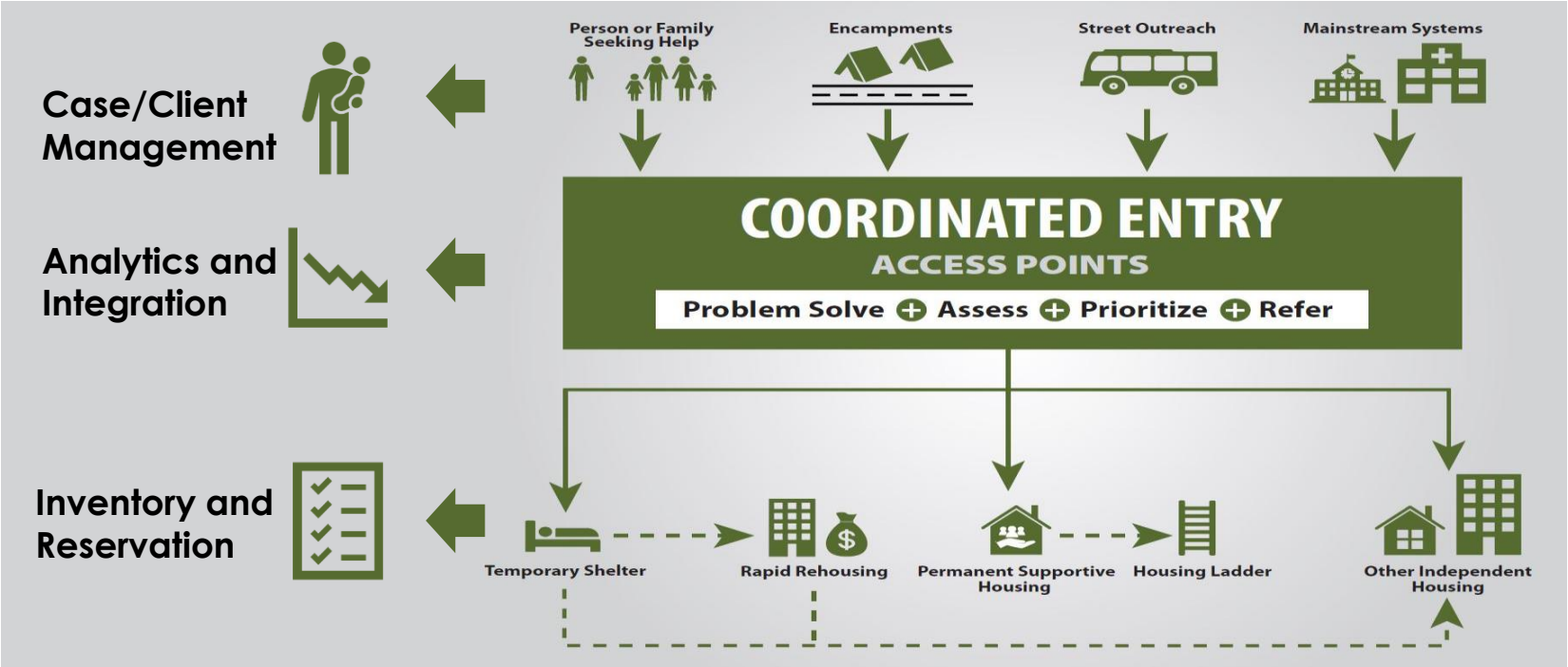
Project Objective

- Improve service delivery for clients
  - Provide platform to improve service delivery, care coordination, and data sharing with nonprofit partners, federal agencies, Department of Public Health, Human Services Agency and other City partners.
- Enable more effective allocation of resources
  - Rapidly deploy housing and other services to highest priority clients with highest vulnerability, highest barriers to housing, and highest chronicity of homelessness
- Better performance management and accountability
  - Provide real-time and comprehensive Homelessness Response System (HRS) data for performance management and accountability for tracking and reporting output and outcome measures

Clients' Experience of Accessing Services



Future State



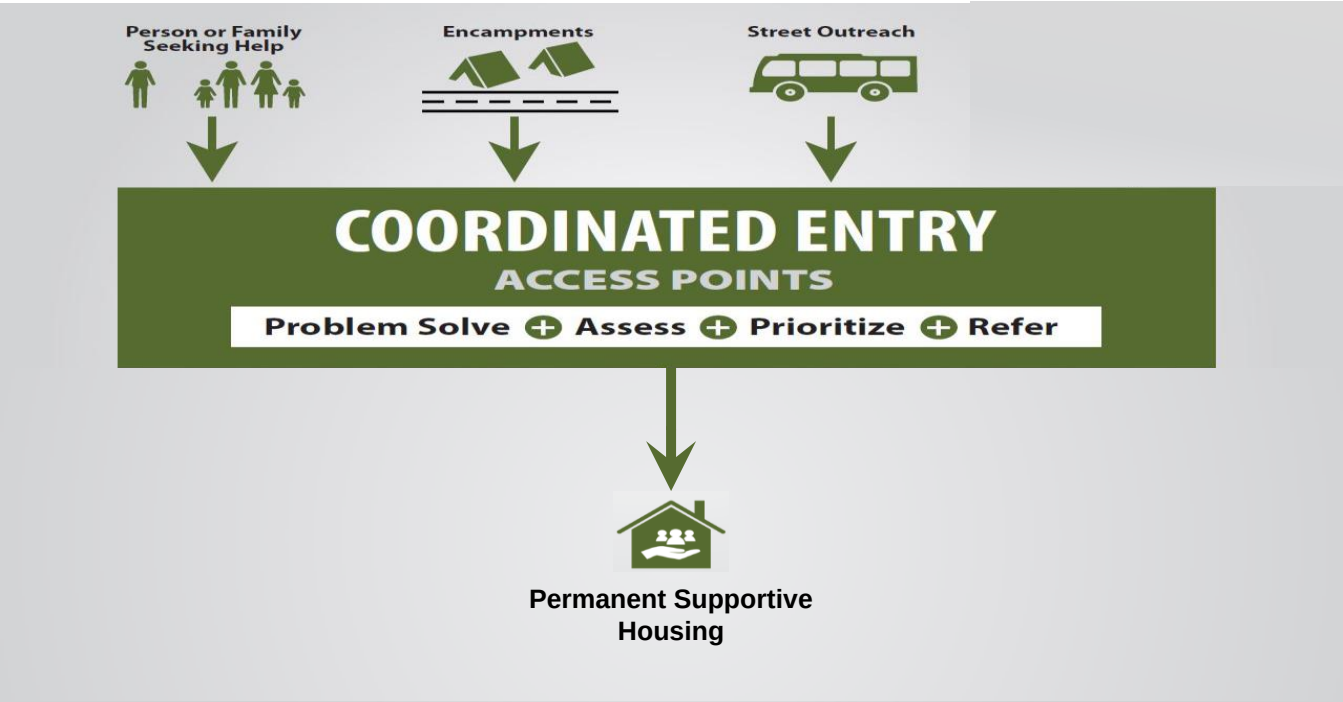
Homelessness Response System Measures

Performance Measures (*In Development*)

- Output Measures to Track/Report: (How much are we doing?)
  - Number of unduplicated households that are experiencing homelessness
  - Number/percentage of unduplicated households assessed through Coordinated Entry
  - Number of unduplicated households served in temporary shelter
  - Number of unduplicated households with successful problem-solving resolutions (prevention/diversion)
  - Number/percentage of prioritized households exiting homelessness into stable housing

- Outcome Measures: (Is anyone better off?)
  - Average length of time a person is experiencing homelessness
  - Number of unduplicated households newly experiencing homelessness
  - Percentage of unduplicated households that return to homelessness

Current State



Problem Definition

Current State	• Need for additional functionality and case management system • Shelter management system not yet implemented • Lack of robust housing inventory tool (notes field for housing matches) • User adoption and data quality issues • Lack of integration/interfaces with CBO partners (double data entry)
Future State	• Provide single system of record that is easy to use and provides full functionality for CBOs and City users • Support full scope of services, including case management, shelter bed reservation and housing inventory management • Enforce common client intake, assessment, prioritization, matching, referral, enrollment, and tracking processes. • Interface client and services data with CBO, DPH's CCMS replacement systems • Enable reporting and analytics for different data consumers

ONE System

Primary Users

- City Employees
- Community-based Organizations (Total 1,200 users)

Major Stakeholders

- Nonprofit organizations and Department of Homelessness and Supportive Housing (Future state: Department of Public Health, and other City agencies)

ONE System

Recent Accomplishments

- ONE System used by HSH and its community partners for client assessment, prioritization and housing placement
- ~50,000 client records in the ONE
- Better understanding of client prioritization and chronicity/vulnerability e.g. county assistance clients
- Federal HUD (HMIS) data reporting requirements met
- ONE System data used with other sources for HOMSTAT/public reporting
- Data matching now possible with H.S.A. and DPH clients underway for discrete projects (e.g. Whole Person Care billing/outcome reporting).

ONE System

Future Phases – Planning Process

Gartner Engagement – 16-week project ending in April 2019

- Health Check
- Functional Requirements Development (Use Cases) and Documented business and technical requirements: Workshops includes providers and City stakeholders
- Review of interface with DPH/Whole Person Care-funded CCMS replacement
- Technical/Fit-for-Purpose Assessment (Gaps analysis)
- Final Roadmap

ONE System

PHASE	DATES	DESCRIPTION
Phase 1	Current - June 2019	-Complete Coordinated Entry (all populations) -HUD reporting/base system rollout
Phase 2	July 2019-June 2020	-Improve usability/workflow optimization, role-based security enhancement, mobile deployment, case management functionality
Phase 3	July 2019-June 2021	-Enhanced data analytics and reporting -CBO system/data integration capability
Phase 4	July 2019-June 2022	-Shelter management system -Housing inventory system

ONE System – Phases 2-4

PROJECT BUDGET	FY 2019-20	FY 2020-21	FY 2021-22
Number of FTE	8	8	6
FTE Classifications	9978, 1054, 1043, 1053(5)	9978, 1054, 1043, 1053(3)	9978, 1054, 1043, 1053(3)
Salary & Fringe	$2,630,000	$2,630,000	$2,030,000
Software	$1,754,150	$695,700	$695,700
Hardware	-	-	-
Professional Services	$5,262,450	$2,087,100	$2,087,100
Total Project Cost	**$9,464,600**	**$5,412,800**	**$4,812,800**

ONE System

Project Performance Measures

- Measures of project completion
  - Percentage of valid, legacy data migrated into the ONE
  - Number of clients/households assessed through coordinated entry, prioritized, referred, enrolled, and tracked in the ONE
  - Progress against planned milestones for enhanced functionality
- Measures of user adoption/data completeness
  - Number of HRS nonprofit and City staff inputting client data into the ONE
  - Number of programs with data tracked and reported in the ONE system
  - Number of active client/household records
- Measures of data quality
  - Number of active client profiles with complete, accurate records

ONE System - Phase 1

Total Project Cost	Total COIT Funding To Date	Total Other GF Funding	Total NGF Funding	Total NGF + GF Funding	Total Spent
$4,047,398	-	-	$4,047,398	$4,047,398	$3,528,741

	Status		Comment
Schedule		3/1/2017 6/30/2019 86%	Phase 1 nearly complete.
Scope			Scope shifted from implementing federal HMIS-compliant reporting system to build out of coordinated entry functionality for all populations. Three of 15 legacy database migrated. Other legacy systems and shelter functionality deferred to future phases.
Budget			On budget. Budget includes licenses for 1,200 users, system administration/support and customization
Risks	Lack of dedicated internal resources with experience in software lifecycle management Lack of resources for future phases Lack of resources for ongoing nonprofit engagement and support to adoption of new business practices		

7. Public Comment