Committee on Information Technology

Regular Meeting

February 18, 2021

Agenda

- Call to Order by Chair
- Roll Call
- Approval of Meeting Minutes from February 4, 2021
- Chair Update
- CIO Update
- FY 2022-26 ICT Plan (Action Item)
- Public Comment
- Adjournment

3. Approval of Minutes

Action Item

4. Chair Update

CIO Update

February 18, 2021

Cost Effective Technology Budgets

Ways to Reduce
Tech Purchase Costs, Operational Cost and
Streamline Procurement

Enterprise Agreements

Targeted Savings Through Shared Services, Partnering with OCA and Optimizing Use

Savings from Enterprise Agreements. When you have an idea for a new EA please contact DT!

Enterprise Contract (EA)	FY20/21 Savings	3-Yr Savings
Microsoft (licenses + Support)	$2.1M	$6.7M
Cisco	$2.6M	$6.0M
Salesforce	$2.7M	TBD (EA expires 06/21)
VMWare	$1.2M	$3.6M
Adobe	$1.0M	TBD (EA expires 08/20)
DocuSign	$0.7M	$2.1M
AT&T, Verizon & Sprint	$0.4M	$1.2M
CommVault	$0.2M	$0.6M
TOTAL SAVINGS:	**$10.9M**	**$20.2M**

Enterprise Contract (EA)	FY21/22 Savings	3-Yr Savings
Microsoft (licenses + Support)	$1.1M	$3.7M
Oracle	$0.8M	$2.3M
Cisco	$0.7M	$2.7M
DocuSign	$0.7M	$2.1M
Commvault	$0.2M	$0.6M
Mainframe	$0.2M	$0.6M
VMWare in negotiation	TBD	TBD
ESRI in negotiation	TBD	TBD
TOTAL SAVINGS:	**$3.7M**	**$12.0M**

Shared Services & Offering Choice

Creating Efficiencies, Economy, Effectiveness

DT Services	Choices
Devices	Dell, Mac
Cloud Providers for Compute & Storage	Amazon (AWS), MS Azure, Google
Database Systems	Oracle, MS SQL or MySQL, PostgreSQL, Aurora AWS
End Point Security Management	MS SCCM, FireEye HX
Virtual Meetings	Teams, WebEx
WiFi Access	Public, Open and Private
Phone Service	Cisco, Microsoft
GIS Systems	ESRI: ArcGIS Server, ArcGIS Desktop, Arc GIS Online Open Source: GeoServer, QGIS, Postgres, PostGIS
Data Integration	FME, ETL, Data Factory (Azure), Databricks (Azure), MicroStrategy

Workgroup is creating a process for researching new standards and technology.
Departments are welcome to join the conversation!

The Digital Workspace

The New Normal

Cost Center	Choices
Digital, Paperless Office	Reduce number of printers or use Follow Me printing DocuSign for digital documents, signature and routing ServiceNow – requests, tickets, assets, incidents Salesforce – digital business process for case mgt MS Teams – chat, virtual mtgs, calls, file sharing Virtual Faxes – digital faxes
Tech Support	DT Service Desk
Tech Training	Microsoft, Teams, Azure,
Legacy System Decommissioning	Mainframe - $2M savings/year
Voice Services	Turn off un-used cell phones and circuits Remove desk phone and use Jabber

Considering or needing a technical solution? Please contact DT for options!

RECENT ACCOMPLISMENTS

DT	Move of the City Primary Data Center
SFO	Check & Fly App, Biometric Boarding, Copilot App, Cloud-based Passenger Processing
DCYF	Community Learning Hubs for Student Distance Learning
ASR	**SMART Project for Property Assessment**

CITY & COUNTY OF SAN FRANCISCO
OFFICE OF THE ASSESSOR-RECORDER

Property Assessment System (SMART)

Rachel Cukierman

Feb 2021

Project Objectives

- Modernize and secure the property assessment system that enables assessment of approximately $3.2 billion in annual tax revenues that fund our local neighborhood services and public schools
- Sunset the existing system since it has exceeded its useful life
- Improve service and transparency to taxpayers
- Implement modern-day data analytics tools for revenue forecasting, production analysis and reporting
- Improve data exchange between the Assessor's Office and Treasurer & Tax Collector / Controller's Office separate systems so there are less errors and less time-consuming manual corrections
- Ability to quickly implement change in the system due to state and local law or in evolving ownership structures
- Implement audit trails and data validation, which can help protect against revenue loss to the City

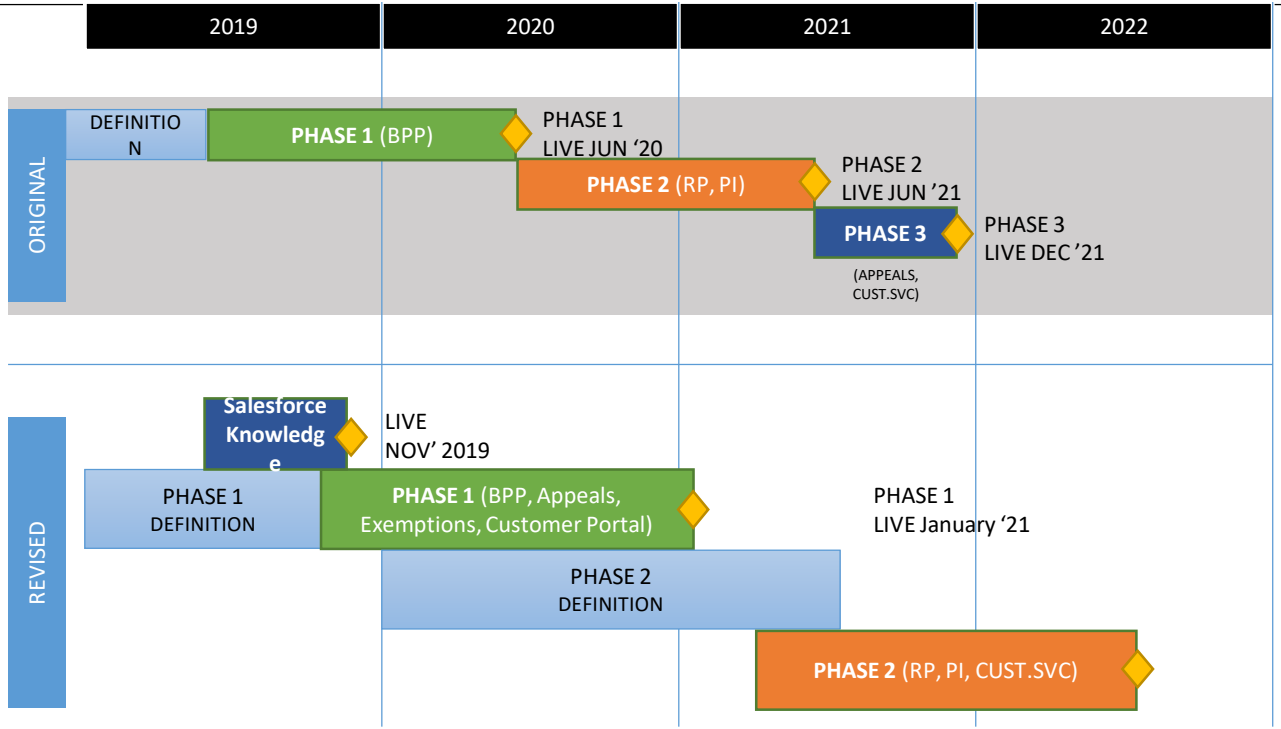
Project Budget

ASR USES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	TOTAL
Labor	$ 154,700	$ 132,239	$ 524,975	$ 670,758	$ 2,708,503	$3,629,167	$4,486,477	$12,306,820
Non-Labor	$ 63,750	$ 114,957	$ 2,458,452	$ 6,422,446	$21,269,472	$1,890,000	$1,150,418	$33,369,495
ASR TOTAL USES*	$ 218,450	$ 247,196	$ 2,983,427	$ 7,093,204	$23,977,976	$5,519,167	$5,636,895	$45,676,315

SOURCES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	TOTAL
COIT - Authorized	$2,720,000	$10,274,600	$11,867,218	$11,745,900	$ 9,693,815			$46,301,533
COIT - Request						$4,736,633	$3,386,274	$ 8,122,907
Other Sources	$1,351,937	$ 5,011,795	$ 5,687,738	$ 3,171,665	$ 2,623,452			$17,846,587
Total Sources	$4,071,937	$15,286,395	$17,554,956	$14,917,565	$12,317,267	$4,736,633	$3,386,274	$72,271,027

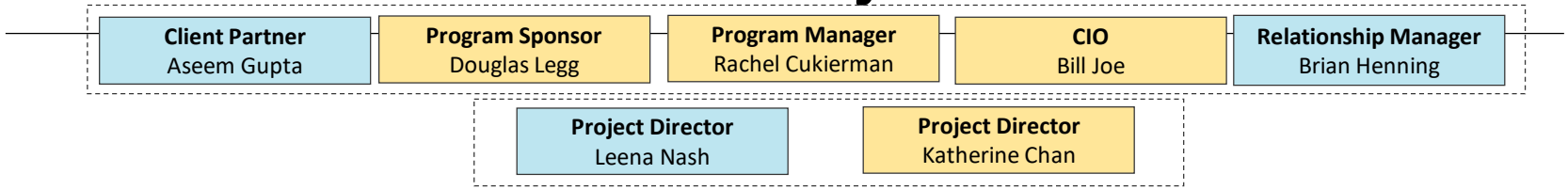
* ASR Total Uses does not include the $26,594,712 cost of the TTX/CON project or the cross-department project phase

Project Schedule (as of February 2021)



- **The Revised schedule maintains the Phase 2 Implementation duration as per original plan (12 months). The new Phase 2 duration will be baselined after Phase 2 Definition is complete.**

SMART Project Team



PMO

- **Program Manager** — Devesh Bhargava
- **Project Manager** — Satyajit Samal*

Technology

- **Technical Architect** — Jonathan Gillespie, Madhu Satrasala (CST), Christopher Fellows
- **Solution Architect** — Gajendra Rao*
- **Infrastructure** — Sean Finley
- **Integration Dev** — Arpit Mishra*, Aalok Kumar*
- **Data/Integration Lead** — Hitendra Pedapalli, Jordyn Aquino (PMO)
- **Salesforce Dev** — Vishnu Vardhan*, Aditya Raj*, Devanshu Sharma*, Nitika Semwal*, Prerna Khanijau*, Akhil Kumar*, Sujata Tiwari*, Dimple Bhatera*, Vikas Baliyan*, Prashant Sontakke*, Kaushal Pitroda*
- **Data Migration** — Suryakant Upadhyay, Rakesh Purvey*, Prerit Garg*
- **ASR Data Team** — Michelle Wong, Anand Bhokare
- **Integration** — Ron Sto Domingo
- **Dev Ops** — Mohsin* (Starts on 2/10/21)

Business

- **Functional Lead** — Jamil Badrudeen
- **Product Owners** — Cecilia Wong, Chris Castle, Connie Vindell
- **BA (Functional)** — Kevin Leonard (CST), Yatin Ajbani, Kumar Singamsetty
- **Functional Lead** — Wendy Ngo, Ahmed Hasan (PMO)
- **OCM** — Poonam Dhillon
- **Business Analyst (Functional)** — Jeannette Mok, Tina Edwards
- **SMEs** — Anthony Estacio (BPP), Mary Jane Cruz (BPP), Liz Cooper (RP), Kim Blackfield (RP)

Quality Engineering

- **QE Lead** — Priyal Jain*
- **QE** — Sukhbir Kundra*, Kunal Shokeen*, Shashank Garg*, Mudit Taneja*, Parv Chhabra*, Ekta Dhawan*, Arpit Chauhan*, Nikhil Jain*

Property Assessment

- Connie Siebler
- John Bodden (Hamer)**

Project Coordinator

- Ben Lau

ASR | Sapient

* Offshore

** ASR or Sapient Resource

Factors for Success

- Prioritizing a Planning Phase to gather requirements, hire and train project staff, and set expectations with partnering agencies
- Including a City Attorney that specializes in IT solicitations and contracts as part of the team
- Close partnership with the department's business and operations to ensure that key project decisions include the business impact upfront
- Robust testing from Assessor staff (including end-to-end testing) and ensuring that the vendor quickly resolved defects
- Continuous data cleanup and data validation
- Well defined production support roles and responsibilities

Lessons Learned

- Important to have internal staff that have the following skill sets
  - Knowledge of the department's business and data, and can translate both in technical terms (IT Business Analysts)
  - Understanding of how to manage a systems implementation project (IT Project Management)
  - Understanding of how to manage a system implementation contract (IT vendor / contract management)
- Agile based methodology and deliverable based contracts are like oil and water. This reconciliation should be determined during contract negotiations.
- Embrace the Minimum Viable Product (MVP) concept and ensure that all staff on the project make decisions based on the MVP. Continuous enhancements after go-live is a good thing.
- System implementations do not happen in a vacuum. Departments that integrate with the new system should be engaged early on to 1) understand the new business requirements, and 2) have the resources (staff and budget) available to work on the integration.
- Documentation may feel like busy work, but can help to align expectations, define roles and responsibilities, and to confirm and document decisions. Ensure your vendor commits to documenting project plans.
- The ability to find talent that knows the product being implemented is an important factor to success. The availability of product talent should be taken into consideration when selecting a product.
- Working remotely fulltime is hard! But also has some benefits. Make sure staff have what they need to work from home, such as online collaboration tools.

Questions & Answers

6. FY 2022-26 Information and Communication Technology (ICT) Plan

Thank You!

Dept of Technology
- Linda Gerull
- Mike Makstman
- Sunny Lakhmani
- Brian Roberts
- Dee Prasad
- Jane Lim
- Mathew Larson

Digital Services
- Carrie Bishop

Digital Equity
- Alex Banh

Mayor's Budget Office
- Ashley Groffenberger
- Adrian Liu
- Andrea Lynn

City Administrator's Office
- Naomi Kelly
- Ken Bukowski
- Rebecca Villareal-Mayer

Data SF
- Jason Lally

Office of Contract Administration
- Daniel Sanchez
- Jonathan Jew
- Paul Cheng
- Taraneh Moayed

Airport
- Ian Law

Controller
- Todd Rydstrom
- Jack Wood

Office of Economic & Workforce Development
- Viktoriya Dostal
- Elinoemi Asenloo
- Josh Arce

Mayor's Office of Housing & Community Development
- Brian Cheu
- Helen Hale

Municipal Transportation
- Lisa Walton

Human Services Agency
- Natalie Toledo
- Noelle Simmons

Now Available at SF Open Data!

- **Dataset Inventory**: In accordance with Section 22D, the dataset inventory lists data maintained by departments that are candidates for open data.
- **Systems of Record Inventory**: In compliance with CA Government Code 6270.5, the City must publish a catalog of enterprise systems that collect data about the public.
- **Citywide Service Inventory**: List of all resident facing services provided by the City & County of San Francisco's agencies **NEW**

Capital vs Technology

TABLE 1.2

General Fund Department Program Summary
(Dollars in Millions)

Renewal Investments	FUNDED
Projected for Next Ten Years	
Facilities	681
Streets	785
Other right-of-way assets	91
Subtotal, Renewals	**1,556**
Capital Enhancement Investments	**FUNDED**
Earthquake and Safety Improvements	
HOJ Consolidation Project	367
Emergency Firefighting Water System	154
SFFD New Training Facility	150
Parks, Open Space & Greening Improvements	
Neighborhood Park Projects & Open Space Improvements	176
Other Parks, Open Space & Greening Improvements	262
Subtotal	**438**
Street Infrastructure Improvements	
Better Market Street	197
Islais Creek and 4th St Bridge Rehabilitation	27
Other Street Infrastructure Improvements	231
Subtotal	**455**
Other Improvements	
Mental Health SF	207

MAJOR IT PROJECTS	TOTAL COST
Property & Tax System	72.3
Radio Replacement	74.5
CAD Replacement	48.1
Telecom Modernization	21.1

Note: Financial figures in $ millions.

Capital Plan: Pay-Go Program

TABLE 1.3

Pay-Go Program Funding (Dollars in Millions)	FY22-26	FY27-31	Plan Total
Routine Maintenance	82	104	186
ADA: Facilities	8	8	16
ADA: Public Right-of-Way	23	33	56
Street Resurfacing	65	192	256
Enhancements	0	0	0
Recreation and Parks Base Commitment	72	72	144
Capital Contribution to Street Tree Set-aside	31	39	70
ROW Infrastructure Renewal	10	40	50
Facility Renewal	94	324	418
Total Projected Funding	**384**	**813**	**1,197**

Capital Plan

TABLE 1.1

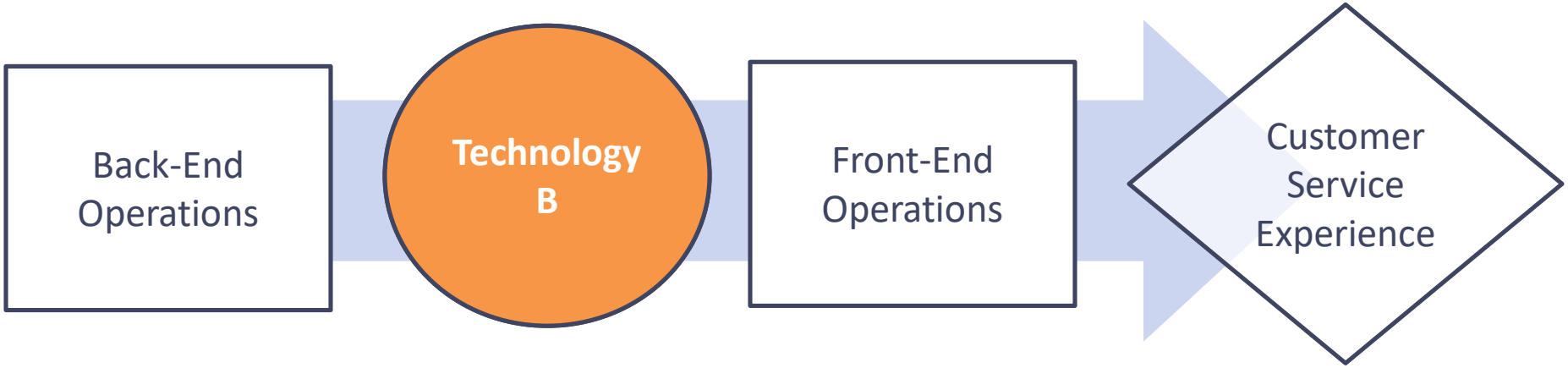
Capital Plan Summary in Five-Year Intervals (Dollars in Millions)	FY22-26	FY27-31	Plan Total
BY SERVICE AREA			
Affordable Housing	1,882	722	2,604
Public Safety	992	276	1,268
Health and Human Services	739	93	832
Infrastructure & Streets	6,247	4,331	10,578
Recreation, Culture, and Education	2,486	1,545	4,031
Economic & Neighborhood Development	3,585	2,093	5,679
Transportation	9,342	3,577	12,919
General Government	35	127	162
TOTAL	**25,307**	**12,765**	**38,072**

Technology Stats

	Number	Total Cost ($)
Replacement of Legacy Technology	30	151,110,708
Enhancement of Existing Service	41	39,625,276
Development of New Service	14	6,566,000
Other	4	19,396,737
Total	**89**	**216,698,721**

Note: Financial figures in $ millions.

Replacement Model



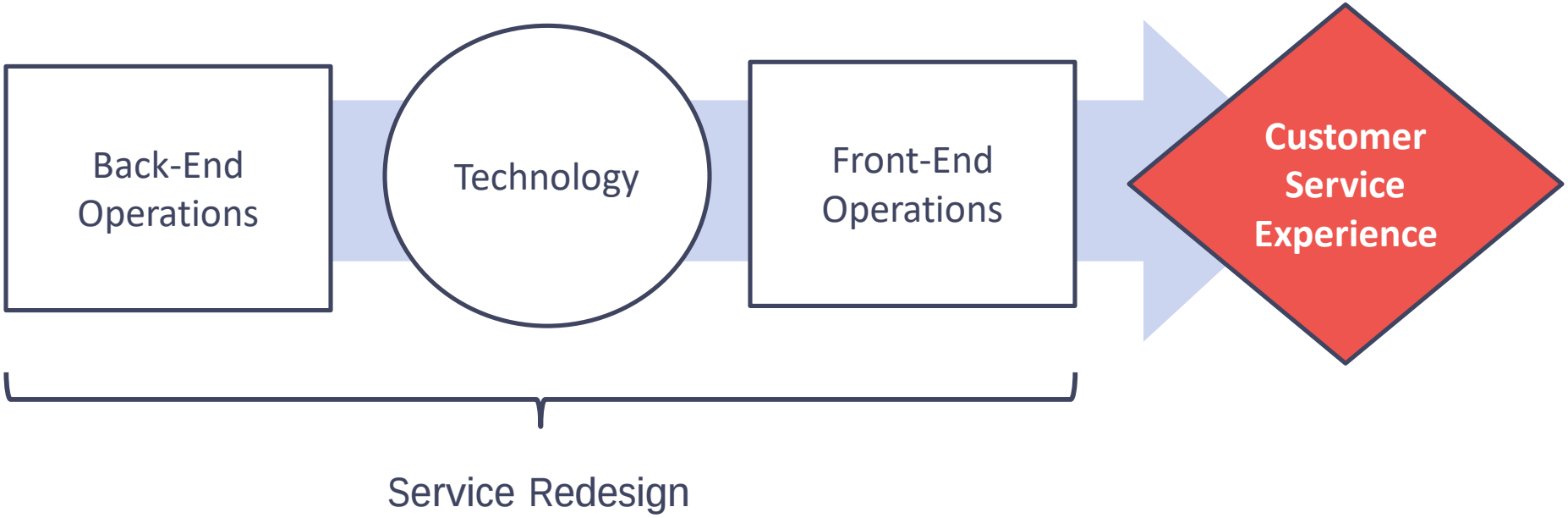
Technology Project Characteristics

- Closely related to business operations
- Interdependency
  - Service experience
  - Data
  - Infrastructure
- Technical Expertise Required
- Equity & Accessibility

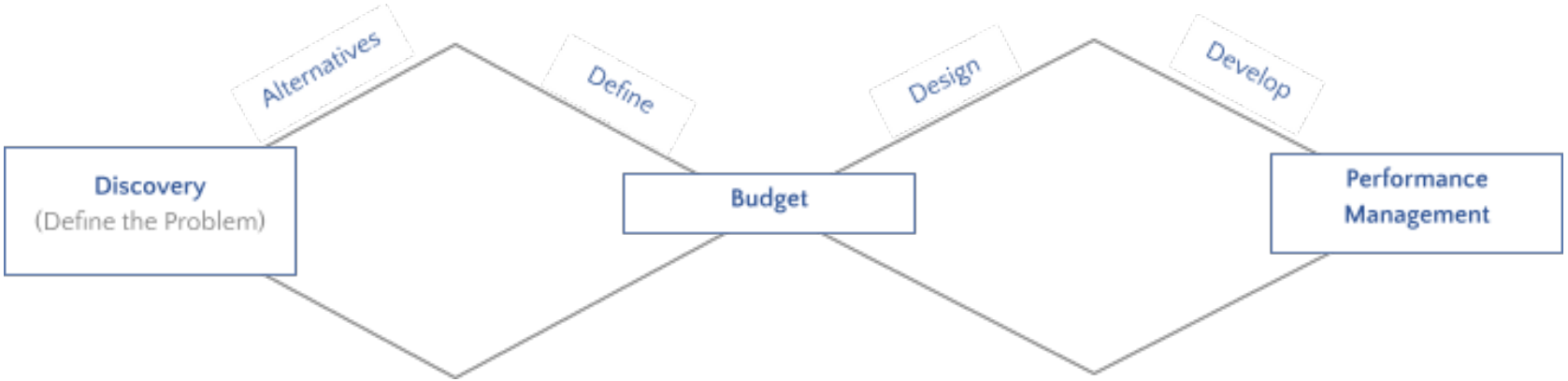
Public Services

Service	Service	Service	Service	Service
Website				
Applications	Applications	Applications		
Data				
Cybersecurity				
Infrastructure				

Switch to: Service Model



Rethinking Technology Governance



COBIT IT Governance Maturity

0 – **Non existent**

1 – **Initial/Ad hoc:** IT governance activities are integrated with the enterprise governance process. Management has only an approximate indication of how IT contributes to business performance.

2 – **Repeatable but intuitive:** Selected IT processes are identified for improvement based on individuals' decisions. Communication on governance standards and responsibilities is left to the individual. Individuals drive the governance processes within various IT projects and processes.

3 – **Defined:** A baseline set of IT governance indicators is developed where linkages between outcome measures and performance indicators are defined and documented

4 – **Managed and Measurable:** There is a clear understanding of who the customer is, and responsibilities are defined and monitored through SLAs. Performance indicators over all IT governance activities are being recorded and tracked, leading to enterprise wide improvements.

5 – **Optimized:** Enterprise governance and IT governance are strategically linked, leveraging technology and human and financial resources to increase the competitive advantage of the enterprise.

Digital Accessibility

A service is digitally accessible if:

- Mobile accessible
- Designed for people with disabilities / low literacy

Service Area	Number of Services
Administration & Records	57
Arts & Culture	31
Business	40
Neighborhood & Infrastructure	29
Permitting	10
Public Safety & Justice	11
Social & Health Services	16
TOTAL	**194**

Proposed Vision Statement

Government services that are available and universally accessible in times of crisis and beyond

Technology / Service Goals

Online and Accessible City Services Residents Can Use	18 Projects	Service, Service, Service Website
City Operations that are Efficient and Cost-Effective	27 Projects	Applications, Applications Data
IT Infrastructure You Can Trust	43 Projects	Cybersecurity Infrastructure

COIT Allocations

	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Annual Allocation	2.3	2.5	2.8	4.2	4.7
Major IT Allocation	15.5	25.0	25.7	26.2	28.8
Total	**17.8**	**27.6**	**28.5**	**30.4**	**33.4**

Note: All figures in $ millions.

Technology Forecast

	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Number of Projects	74	69	55	42	36
General Fund Request	36.9	43.5	50.1	30.0	17.3
COIT Allocation	17.8	27.6	28.5	30.4	33.4
Difference	**(19.1)**	**(15.9)**	**(21.6)**	**0.4**	**16.1**

Note: Financial figures in $ millions.

Recommendations

1. COIT allocation levels should return to pre-COVID levels by FY 2025-26.
2. Dedicated Funding for Universally Accessible Services.
3. City departments to submit Digital Transformation roadmap alongside FY 2022-23 budget proposals.

COIT Proposed Action

Approve the FY 2022-26 Information and Communication Technology (ICT) Plan and submit to the Mayor and Board of Supervisors.

7. Public Comment