Committee on Information Technology

Regular Meeting

November 17, 2022

Agenda

1. Call to Order by Chair
2. Roll Call
3. General Public Comment
4. Approval of the Consent Agenda (Action Item)
   1. Resolution Making Findings to Allow Teleconferenced Meetings under California Government Code Section 54953(e)
   2. Approval of Meeting Minutes from October 20th, 2022
5. Surveillance Technology Policy: Airport - Location Management System - Application Based Commercial Transport (Action Item)
6. Surveillance Technology Policy: Recreation and Parks Department - Non-Security Cameras - People Counting System (Action Item)
7. Update on the 5-Year Information Communication Technology (ICT) Plan
8. Overview of the FY 2023-2025 COIT Budget Process
9. Chair Update
10. CIO Update
11. Adjournment

Item Number 3

General Public Comment

Item Number 4

Approval of the Consent Agenda

Action item

Item Number 5

Surveillance Technology Policy: Airport - Location Management System - Application Based Commercial Transport

Action Item

Application Based Commercial Transport (ABCT) Technology

November 17, 2022

Annie Chung & Guy Clarke

Technology Description - ABCT

- The primary functions for the Application Based Commercial Transport (ABCT) technology are to use location data to help Airport personnel enforce operating agreements for regulated mobility programs, administer and regulate these programs, and for general transportation planning.

- By automating the monitoring and reporting process, ABCT provides a real-time look into TNC (Transportation Network Companies) traffic at the Airport, accounting for daily ride and activity locations.

- ABCT reconciles the monthly self-reported invoices from the TNC's against its collected data to ensure the Airport is properly compensated for the correct amount of traffic and receives accurate payments each month.

- The ABCT mobile app enables Ground Transportation Compliance Inspectors to check activity and enforce operating permit compliance at the Airport.

ABCT Technology – How It Works

1. Data from TNCs, including the license plate number they have on record for the driver's vehicle, is collected by a third-party platform and relayed to SFO in real-time.

2. The ABCT mobile app displays the data when the TNC drivers operate within the Airport's geo-fence (a defined perimeter) while the TNC app is active on the driver's mobile device.

3. The collected data consists of the TNC driver's commercial driving activity while operating within the Airport's geo-fence. This does not include any personal driving activity. No passenger information is collected.

4. The third-party platform that receives the data from the TNCs is the Airport Research and Development Foundation (ARDF). ARDF processes the data to invoice and collect trip fees from the TNCs on the Airport's behalf.

ABCT Technology – How It Works (con't)

5. All data collected or processed by the ABCT technology is handled or stored by a third-party vendor, ARDF, the vendor who licenses the technology from SFO. ARDF employs Amazon Web Services to host the application and its data and enables the Airport to access and receive the data at any time.

6. SFO maintains all the data for historical analysis.

7. Through the ABCT mobile app, SFO staff members, including SFPD officers assigned to the Airport Bureau, can monitor TNC drivers' activity for compliance with Airport Rules and Regulations and the conditions of the TNC's operating permit.

   - Fines can be levied against TNCs for driver activities such as: exceeding curbside staging times, or for dropping off and picking up at non-designated areas.

   - SFPD officers can also issue citations to the drivers based on violations of state and local laws.

Authorized Use Cases

Airport Specific Use Cases include:

1. *To audit and reconcile the Transportation Network Companies (TNCs) self-reported monthly invoices for trip fees based on their passenger pick-ups and drop-offs at the Airport.*

2. *To monitor and enforce TNCs' compliance with the conditions of their operating permit and the Airport's Rules & Regulations (R&Rs).*

3. *To provide support for the issuance of citations for traffic violations by the SFPD Airport Bureau.*

4. *To support Public Safety by ensuring only authorized and approved drivers and vehicles are allowed to service passengers at SFO.*

Data Lifecycle: Data Collected

Data captured is classified as Level 2, Internal Use.

This data includes:

- Geo-Location Data, the Date & Time of transactions, the Event Type (Entering, Drop-Off, Pick-Up & Exiting of SFO's location geo-fences) and the Vehicle License Plate Number.

- All data will be retained for:
  - Transportation Planning purposes
  - Enforcement of Operating Agreements
  - Regulation of Mobility Programs
  - Ensuring the Equitable Distribution of Transportation Options throughout the Airport.

SFO

Data Lifecycle: Data Access

1. Prior to accessing or using data, authorized individuals receive training in system access and operation, and instruction regarding authorized and prohibited uses.
2. For investigative purposes, Department access to data is restricted to specific and trained personnel. Location data that is used for prosecution or investigation purposes could be retained beyond the stipulated retention period(s).
3. For litigation purposes, the City Attorney's Office has been provided data upon request.
4. Personnel with access belong to the following groups:

- SFO Ground Transportation Unit (GTU)

- SFO Law Enforcement Partners

SFO

Data Lifecycle: Data Security

1. Departments shall, at minimum, apply the following safeguards to protect surveillance technology information from unauthorized access, control, and misuse by using the following:
   - Password protected systems
   - Encrypted Storage
   - Physical Safeguards
   - Audits

2. Data is reviewed for Personally Identifiable Information (PII).

3. Access to systems utilizing wireless networks are required to be equipped with WPA2 security.

4. Written authorization from the Department is required prior to release of data.

SFO

Other Pertinent Information: ABCT

Technology includes:

- The ABCT Technology is hosted on the vendor's (ARDF) cloud service (AWS).

- All service provider systems are service-provider-owned.

- Service providers are required to provide data to SFO in real-time.

- The Airport's on-premise systems are comprised of private cloud and on-premise hardware that ingest and store the data and process analytic reports.

PSAB Meeting Dates

PSAB Meetings:

- 7/08/2022 – Initial Presentation

- 8/26/2022 – Follow-up Presentation

- PSAB recommends approval to COIT - 8/26/2022

City and County of San Francisco

Thank You

Item Number 6

Surveillance Technology Policy: Recreation and Parks Department - Non-Security Cameras - People Counting System

Action item
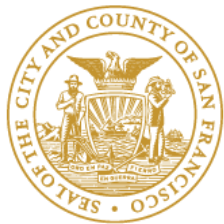
City and County of San Francisco

Recreation & Parks Department

People Counting System

November 17, 2022

Technology Description

1. Sensor mounted above entry/exit-way views imagery in 3D stereo vision.

2. Software processes the image data to produce numerical data: number of persons traversing the field of view by direction (in/out) and datetime.

3. Numerical data (XML format; no images/PII) is transmitted wirelessly to a cloud database for storage, retrieval, analysis, and reporting.

Authorized Use Case

1. Obtain occupancy data on visitors into and out of parks and facilities.

Count Data Lifecycle

- Count data is accessible to CIO and designees (password-protected CMS)
- Count data is shared internally, with other departments, and with partners
- Count data is retained long-term to facilitate comparisons over time

Personally Identifiable Information

- Sensors may collect PII during calibration

- RPD does not record, capture or store PII

- Vendor's terms of service allow for the company's use of de-identified image data

PSAB Meeting Dates

- August 26, 2022

- PSAB recommends approval

Questions

Item Number 7

Update on the 5-Year Information Communication Technology (ICT) Plan

Discussion

Components of the 5-Year Plan

1. Define the City's needs through value and goal-setting
2. Forecast the cost of projects meeting these needs
3. Recommend how to fund these projects
4. Report on our progress in achieving our goals

Draft Calendar

October '22	• Central agencies proposed revisions to vision/goals [✅] • Depts shared future major initiatives and past project performance [✅]
November '22	• COIT BP reviewed potential goal revisions and draft budget application for forecasting need [✅] • Review potential goal revisions with COIT for feedback [🟨] • Begin writing plan with contributors, specifically fleshing out goals and aligning project performance content
December '22	• Engage COIT BP on revising funding recommendations & draft ICT plan outline • Continue ICT Plan writing, adding Financial Forecasts (MBO/CON) information • Launch budget application
January '23	• Receive budget submissions & forecast cost of need • ICT plan outline presented for COIT feedback
February '23	• COIT BP review draft ICT plan • Final draft submitted to COIT for approval

Discussed Goals with Central Agencies

- Technology
  - DT – Enterprise & Cybersecurity
  - Digital Services & DataSF
  - Civic Innovation
  - Digital Equity
- Budget & Finance
  - Controller
  - Mayor's Budget Office
- Procurement
  - Office of Contract Administration
- Hiring/ Workforce
  - Department of Human Resources

Surveyed Department CIOs/ IT Manager

- Surveyed CIOs and IT Managers citywide on:
  - Recent IT accomplishments
  - Future major IT initiatives
  - Alignment with ICT Goals & suggested revisions
  - Potential areas for shared services and policy standardization
- Received responses from 38 Departments

Engagement Findings

- Overwhelming consensus that past vision and ICT goals are still highly relevant for the work ahead.
- Emphasis placed on:
  - Integrated, quality data to monitor and improve City operations and service delivery
  - Cybersecurity protocols to ensure the safety of our systems
  - Attracting and onboarding talent with greater ease

DRAFT FY 2024-2028 ICT Plan Guiding Vision

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

DRAFT FY 2024-2028 ICT Goal

Goal 1 - Online and Accessible City Services Residents Can Use

Transforming government means making services more accessible and easier to use. Redesigning our operations and innovating with new digital services is key to our modernization efforts.

Examples of Recent or Upcoming Projects

- Digital Accessibility & Inclusion Standard
- SF.gov platform
- Digital hiring examinations

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DRAFT FY 2024-2028 ICT Goal

Goal 2 - Integrated City Operations that are Efficient, and Cost-Effective

Given the slow pace of the City's economic recovery, our technology solutions must continue to improve efficiency so that we can improve the quality of our services without increasing costs.

Examples of Recent or Upcoming Projects/ Standards

- Government Operations (HR, Budget, Procurement)
- Enterprise Applications & Shared Services
- DataSF Cross-Departmental Data Dashboards

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DRAFT FY 2024-2028 ICT Goal

Goal 3 - IT Infrastructure You Can Trust

Much like capital projects, technology infrastructure requires continual maintenance and investment to ensure critical systems are secure and available at all times.

Example of Recent or Upcoming Projects/ Standards

- Data Centers & Network Resiliency
- Cybersecurity Standards
- Modern Computer-Aided Dispatch System (CAD)

Next Steps

- Begin drafting outline of ICT Plan
  - Review survey and recently funded COIT projects to identify additional projects to highlight
  - Further flesh out ICT strategic goals
  - Will review with COIT in January
- Launch COIT budget application mid-December to begin forecasting cost of projects needed to meet our goals
- Update COIT recommendations on how to best fund this identified need
  - Informed by 5-Year Financial Plan update in December

Questions

Item Number 8

Overview of the FY 2023-2025 COIT Budget Process

Discussion

Budget Process Overview

Budget Intake	Dept Interviews	Budget Hearings	Final Approval
December/ January	February/ March	March/April	May

| Budget Intake | Dept Interviews | Budget Hearings | Final Approval |

January

- Launch Budget Application week of December 12th

- Submissions due January 13th (date subject to change)
  - › All projects over $100,000
  - › All projects for next five years

- Budget Instructions also available in Mayor's Instructions

Budget
Intake

Dept
Interviews

Budget
Hearings

Final
Approval

February - March

- COIT staff reviews for:

  › Project plan & application completeness

  › Alignment with City's strategic goals

- Select projects may also receive a Technical Review from DT

| Budget Intake | Dept Interviews | **Budget Hearings** | Final Approval |

March - April

- COIT Budget & Performance Subcommittee

- A select number of projects with widespread impact will be asked to provide a 5-minute presentation.

- Subcommittee will draft funding recommendations

NOTE: Presenting to the Subcommittee is not required to receive funding support, nor will all presenting projects receive funding.

Budget Intake	Dept Interviews	Budget Hearings	Final Approval

May

- COIT to provide final review and approval.

- All recommendations sent to Mayor's Budget Office for possible inclusion in the Mayor's Budget.

Questions?

Item Number 9

Chair Update

Discussion

Item Number 10

Chief Information Officer Update

Discussion

Congratulations City IT Teams

We won in the Top 5 for Large Cities!!

"Constituents expect more from modern governments. Our Digital Cities survey winners have worked hard to keep the focus on the needs of the communities they serve while implementing technology to improve delivery and execution," said CDG Vice President Brian Cohen. "We congratulate them for leading the way towards a smarter and more responsive government."

Special Thanks to: TTX, DPH, PUC, SHR, DEM, H.S.A, POL, ADM and DT

Wrap-up from October Cybersecurity Month

- What does cybersecurity mean to you?
- Thank you to City Administrator Chu for promoting cyber awareness
- Weekly staff newsletters had 30+% open rate with 8,000+ employees reading weekly cyber tips

https://www.youtube.com/watch?v=rxExvXJM-6E

New City Tech Spotlight Controller's Budget System

How it works

December	March	June	July	August
Departments get instructions and propose budgets	Departments send proposals to the Mayor and Board	The Mayor proposes a City Budget	The Board amends and approves the budget	The Mayor signs the budget
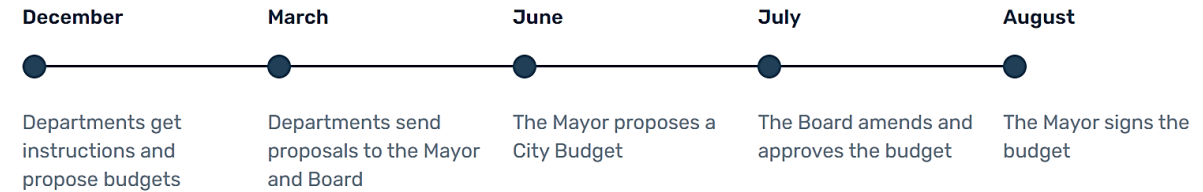
In the CIO Update, we highlight a departmental technology accomplishment.

On the horizon for City Departments is the budget submittal process. This month we are sharing the Controller's new Budget Management system that will be used by all city departments to submit budget requests.

Discussing this system will be:
Jack Wood, Director Systems Division
Theresa Kao, CON Project Manager

The Implementation & Go-Live of the SF Budget System
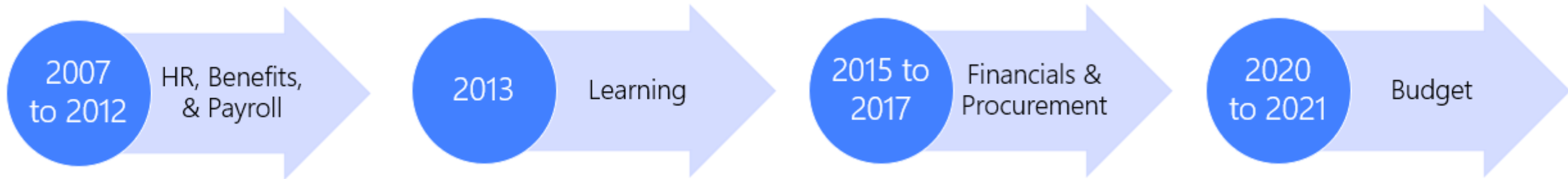
# Timeline of SF Budget System – from project inception to first final products

SF Budget System is to support the annual budget process to produce City's balanced and adopted budgets and hiring authority.

	2020							2021												2022								
Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug

- RFP
- Initial Setup
- Analyze + Design + Prototype + Configuration
- Finetuning
- Report Development (including Admin Reports, Budget Reports, 1% for Labor Negotiation, AAO & ASO)
- Testing
- Go-Live: Tier 1 BAD + MBO
- Go-Live: Tier 2 Dept Users
- Dept Stage
- MYR Stage
- B&F/Tech
- BOS
- 1st Mayor Proposed Budget
- 1st Adopted AAO/ASO

Budget System – BPMS (Legacy) vs. BFM (Now)

Legacy Budget System, BPMS, went live in 2009, was at the end of useful life. It was sunset in December 2021.

IBM Cognos Budget & Performance Measurement Systems (BPMS)
On-Premises
Reporting Tool: EIS -> BI
Intranet with Internet Explore only
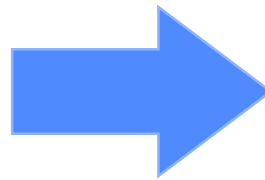
SHERPA Budget Formulation and Management (BFM)
Cloud via Amazon Web Services
Sherpa Reporting with SAP's BusinessObjects

User Interface – BPMS (Legacy) vs. BFM (Now)

Better and more user friendly interface + a dynamic dashboard with tiles to communicate with users.

New in SF Budget System

- ❖ **Position Number from HCM:** reconcile regular job classes from budget process!

- ❖ **Work Order # (WO #):** no more where is the other side of the IDS pair!

- ❖ **IDS Forms:** I see your lines, you see my lines, let's talk and balance our IDS!

- ❖ **Capital Budget Request Integration:** submit capital requests right here in BFM!

- ❖ **Excel export / import capability:** making entry will be a breeze!

- ❖ **Bye Bye BI Reports:** has its own reporting tool, +50 new reports added!

- ❖ **Real Time Reporting:** yes, you are reading it right, REAL TIME!

- ❖ **Centrally Loaded Budget Line Items:** these are to be managed by central offices

Department User Survey
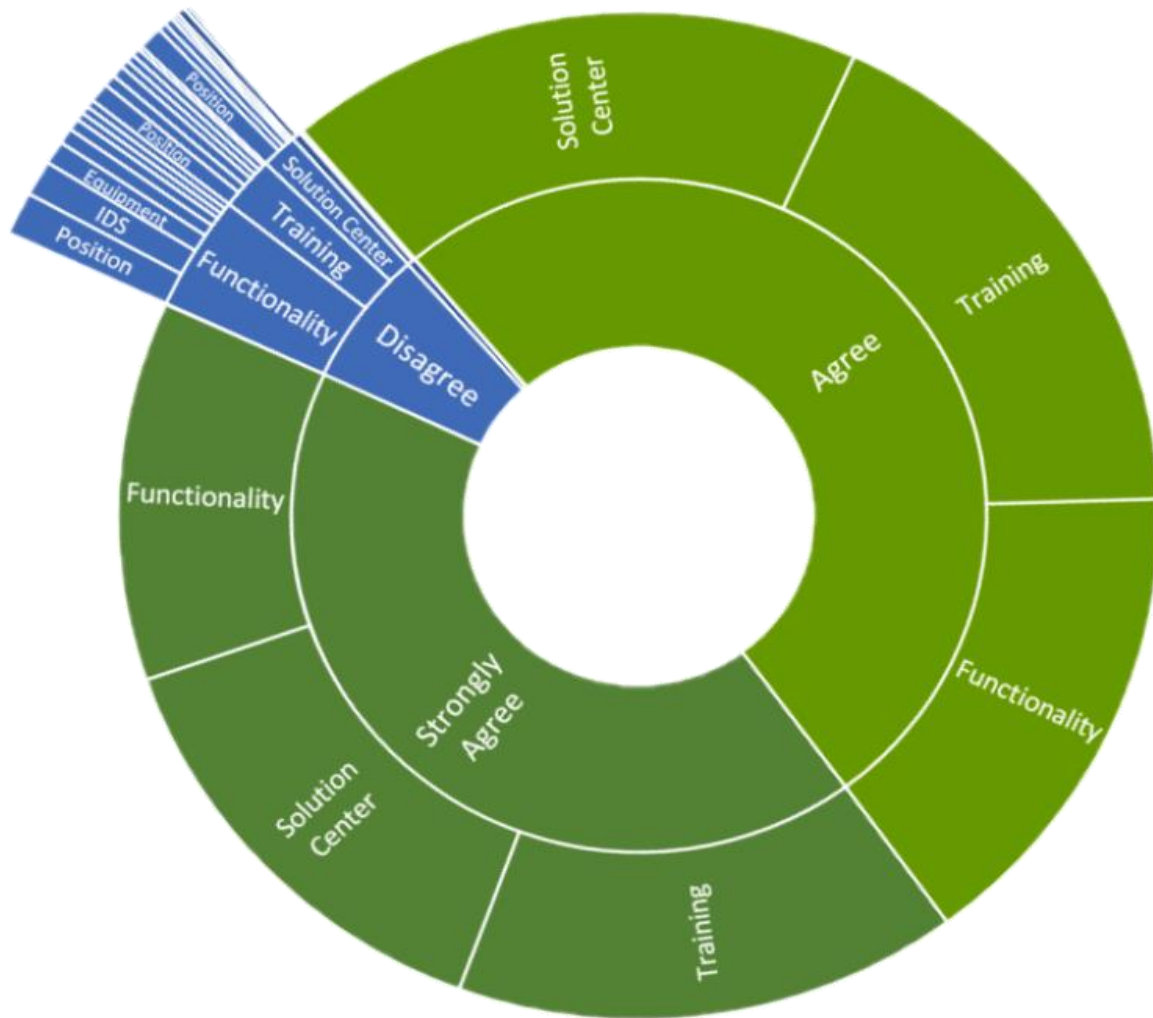
Survey Summary:

Overall responses return with positive experience:

- Real time report
- Structural setup
- Big Improvement over legacy system
- Smooth budget process and rollout

Pain Points in general are in below areas:

- Position
- IDS
- Equipment
- Capital
- Playback functionalities for training videos

Positive Feedback & Shout Out

"The BFM system is a great improvement since the structural setup helped drastically to improve the time it takes to do entries..."

"Love the real time reports, it's great to be able to check the entries are done correctly right away."

"...I do applaud your team for undertaking the HUGE task of onboarding every department onto this new System, and for following up with all of us! The level of thoughtfulness in your support has been a welcome experience."

"...same reporting available with position changes was a game changer.."

The best feature is the live updates and calculations after an entry is saved.

"I think it is a big improvement over the legacy system. Well done!"

shout Out!

"Big, BIG thanks to Ysabel & Ed for their help and availability!!! Thanks guys!!"

Thank you for all your hard work developing and implementing this system. I know it can't have been easy and you have been getting a lot of constructive (and probably less constructive) feedback along the way. BFM is working great and BAD has provided quick and helpful support all through department phase.

Congrats on a successful launch!
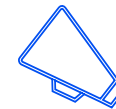
Next Steps

- Stabilization & Adaption

- Sandbox Environment for Pre-Planning

- Implementing new asks from user survey feedback and debrief with MBO/BAD

- Refresh Trainings for the upcoming new budget cycle

- Efficiency Improvement: automation, integration, new reports

- Enhancement: new functionalities, new features

Adjournment