



Budget & Performance Subcommittee

November 4, 2016

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

AGENDA

1. Call to Order by Chair
2. Roll Call
3. Approval of Minutes
4. Department Updates and Announcements
5. Project Update: Identity & Access Management
6. Citywide Technology Budget
7. ICT Plan Update & Discussion
8. Public Comment
9. Adjournment

3. Approval of Minutes

Action Item

4. Department Updates and Announcements

Shared Services Update

COIT Budget & Performance
Subcommittee

November 4, 2016



SAN FRANCISCO
DEPARTMENT OF
TECHNOLOGY

Shared Services: IT partner of choice, not the IT department of mandate.



- Connectivity



- Digital Service



- Technology-as-a Service



- Tech Talent



- Cybersecurity

Shared Services is the bedrock of the Department of Technology's strategy. We are focused on developing the right services with the right features at the right cost with the right performance levels according to customer requirements and demands.

Completed a Current State Assessment:

- ✓ Internal/External interviews conducted
- ✓ DT SMEs, 11 departmental IT professionals
- ✓ Asked to score Quality, Cost, and Importance of DT services they receive; identify improvements needed to increase usage; and what services they would like in the future

Who was selected and how?

Large

SFO

PD

HSA

DPH

PUC

Medium

Port

Treasurer/Tax

Collector

DEM

Small

DA

City Planning

Rec Park

Based on percent of average IT spend.

Next Steps

- ✓ Begin to define Shared Services Offering (Complete by 11/11)
 - ✓ COIT Brief on Shared Service Initiative (Complete by 11/17)
 - ✓ Standing-up an IT Shared Service Forum (Complete by 12/30)
-
- Stay Tuned! Much more to follow!

5. Identity & Access Management

Joe Voje, City Chief Information Security Officer

| Identity & Access Management

COIT Budget & Performance
Subcommittee

November 4, 2016



SAN FRANCISCO
DEPARTMENT OF
TECHNOLOGY

Strategic Alignment: Cybersecurity



• Connectivity



• Digital Service



• Technology-as-a Service



• Tech Talent



• Cybersecurity

The goal of **Identity & Access Management** is to provide a centralized repository of identities and access control of systems owned and operated by and for the City of San Francisco.

Status Summary

Total Project Cost	Total COIT Funding	Total Other General Fund Funding	Total Non General Fund Funding	Total Funding	Total Encumbered
\$1.7M	\$820K	\$891K	N/A	\$1.7M	\$920K
	Status	Description			
Scope		No change.			
Schedule		On schedule for delivery by 12/23.			
Budget		No change.			
Risks		Resource: Availability of CCSF resources for 12/23 Go Live, Controller resource availability. Active Directory and OIM Password Policies are not aligned.			

Definitions

An **Identity & Access Management Program** unites multiple initiatives and activities that manage identities, privilege, access, and trust.

IAM enables the right individuals to access the right resources at the right times and for the right reasons.

Why implement an IAM solution?

- ✓ Enhances security of CCSF systems.
- ✓ Enables centralized access to multiple independent systems (eMerge, F\$P).
- ✓ Authentication: The right people logging into the correct service.
- ✓ Privilege: Once people have access, IAM defines the privileges they possess.

What does it mean for departments?

- ✓ By **November 30**, will build a communication package for your department.
- ✓ We will train your Department's Help Desk and they can educate your department. We will be in full support.

What does it mean for department employees?

- ✓ Impacts City AD, eMerge, F\$P accounts.
- ✓ Access to enhanced security for authentication. Introduces multi-factor capability.
- ✓ Self-service password resets upon registration of a non-city email or mobile device and registration of security questions.
- ✓ Will alleviate current state challenges.
- ✓ The Help Desk will remain available for resets!

New Standards

- ✓ We will enhance the security of our passwords/passphrases by increasing difficulty for brute force cyber-attacks.

Potential Key Performance Indicators

- ✓ Number of applications City wide integrated into Single Sign-On solution.
- ✓ Number of employees that have completed their security questionnaire that allow them to reset their password.

Recent Accomplishments

- ✓ Controller, BIAS, DT signed off on architecture (Sept, 2016)
- ✓ Technical requirements sign off with F\$P, eMerge, Request to Hire for HR (Oct, 2016)
- ✓ Coding has begun (Oct, 2016)
- ✓ Test environment set-up and deployed (Oct, 2016)
- ✓ Successful test conducted (Oct, 2016)

Next Steps: Technical & Operational

- ✓ Environment Configurations and Updates (Complete by 11/8)
- ✓ Access Authentication and Configuration (Complete by 11/17)
- ✓ IAM Governance Committee Established (Complete by 11/18)
- ✓ Test phase (Complete by 12/15)
- ✓ Deploy IAM (Complete by 12/23)
- ✓ Production Environment Warranty (Complete by 1/30/2017)
- ✓ Establish Disaster Recovery Environment (Complete by 3/1/2017)

Next Steps: Communication

- ✓ Communicate advantages of new system (Complete by 11/18)
- ✓ Pre-Go Live user Training to Departments (Complete by 11/30)
- ✓ Service Desk training video (Complete by 11/30)

IAM Roadmap

- ✓ Multi-factor tool deployment (2017)
- ✓ Privilege Access Management (2018)
- ✓ Develop roadmap for Single Sign-On to 0365 (2018)
- ✓ Explore integration with Social Media Platforms (2018)

6. Citywide Technology Budget

Matthias Jaime, COIT

Citywide Technology Budget Overview

- Annual review of IT Budget
 - Allows us to see how much the City is budgeting for technology projects and expenditures.
- Methodology
 - FAMIS: Identify IT projects through Project & Index codes, and through IT Job Classes and SubObjects.

Citywide Technology Budget

Discussion Items

- How is this information used?
 - ICT Plan
 - Annual Budget Process
- Definition of “technology”
 - Limitations of the term “Information Technology”

case study

Airport



Support and Reporting

Support desk and maintains metrics for support calls and tickets



Cybersecurity

Security protection of data assets, network and identity management



Project Managers

Manages projects and programs



Operations

Network, telecommunications, database operations and business intelligence



Enterprise and Architecture

Technical standards and architectural patterns



Citywide Technology Budget

Definitions

Projects

- COIT Projects
- Body Cameras
- Connectivity Projects
- Customer Management Systems
- Data Centers
- Digitization & Paperless
- Infor
- SFGovTV
- SFConnected
- Telephony Systems & Upgrades
- Technology Academy
- Technology Infrastructure

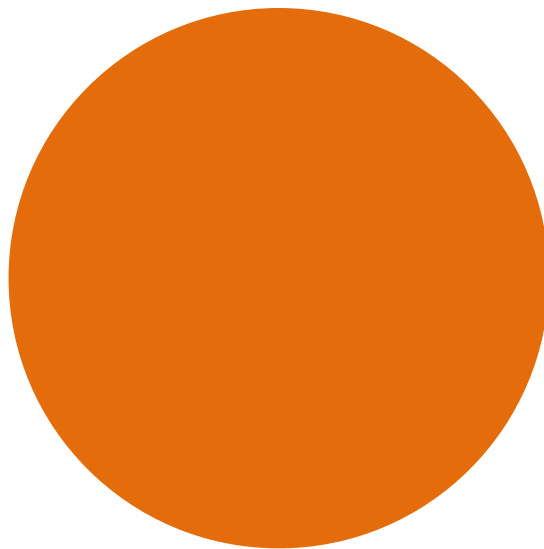
SubObject & Job Class

- Data Processing
- Systems Consulting
- Audio/Visual
- IS Job Series

FY2016-17 Budget Overview



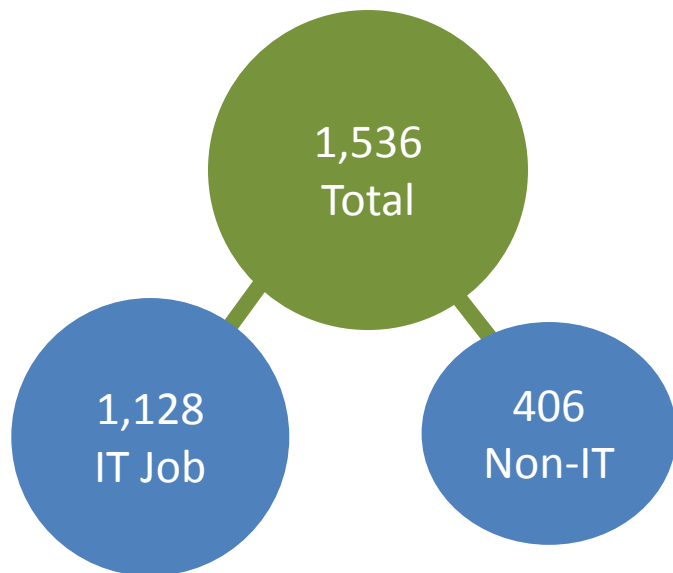
IT Budget
\$474.4 M
(4.9% of Total)



CCSF Budget
\$9.6B

FY2016-17 Budget Overview

Technology Personnel

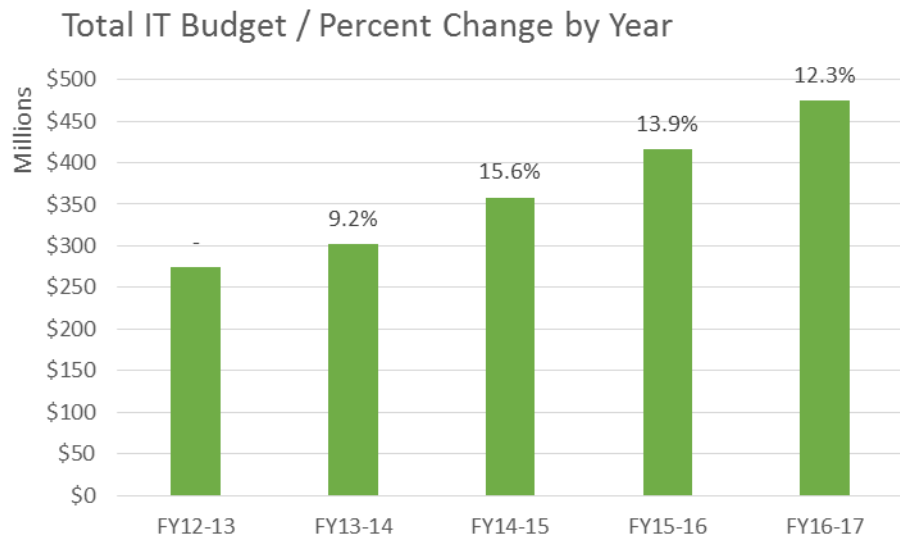


Total Salary & Fringe = \$189.8M

Non-Personnel Technology Budget Items

Prof. Services	Equip.	Other	TOTAL
\$57.7M	\$42.8M	\$183.9M	\$284.4M

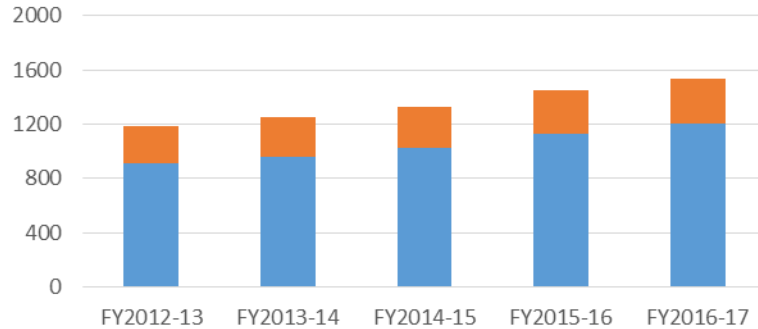
Five-Year Budget Overview



Year	IT Budget	Total Budget	% IT
FY12-13	\$274.4M	\$7.4B	3.7%
FY13-14	\$302.4M	\$7.9B	3.8%
FY14-15	\$358.1M	\$8.6B	4.2%
FY15-16	\$415.7M	\$8.9B	4.7%
FY16-17	\$474.3M	\$9.6B	4.9%

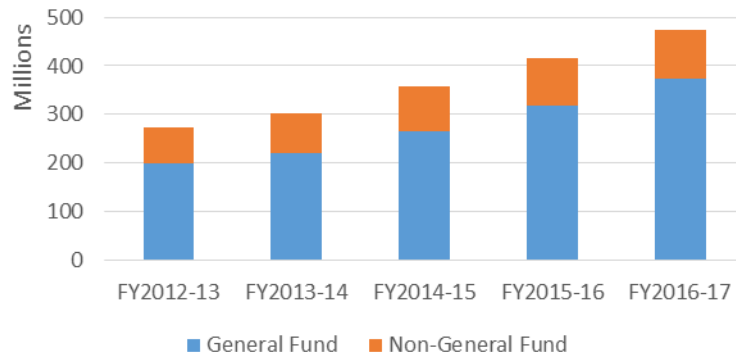
Five-Year Budget Overview: GF/NGF Split

Technology FTE



Year	General Fund FTE	Non-General Fund FTE	FTE Ratio
FY12-13	914.53	275.05	30.1%
FY13-14	960.05	288.62	30.1%
FY14-15	1021.17	302.66	29.6%
FY15-16	1127.48	325.51	28.9%
FY16-17	1208.38	327.2	27.1%

Technology Spending



Year	General Fund Tech Budget	Non-General Fund Tech Budget	Ratio
FY12-13	\$198.6M	\$75.8M	32.9%
FY13-14	\$222.0M	\$80.3M	29.7%
FY14-15	\$266.1M	\$92.0M	29.2%
FY15-16	\$318.9M	\$96.8M	24.8%
FY16-17	\$373.0M	\$101.2M	22.1%

Citywide Technology Budget

Core Technology Projects

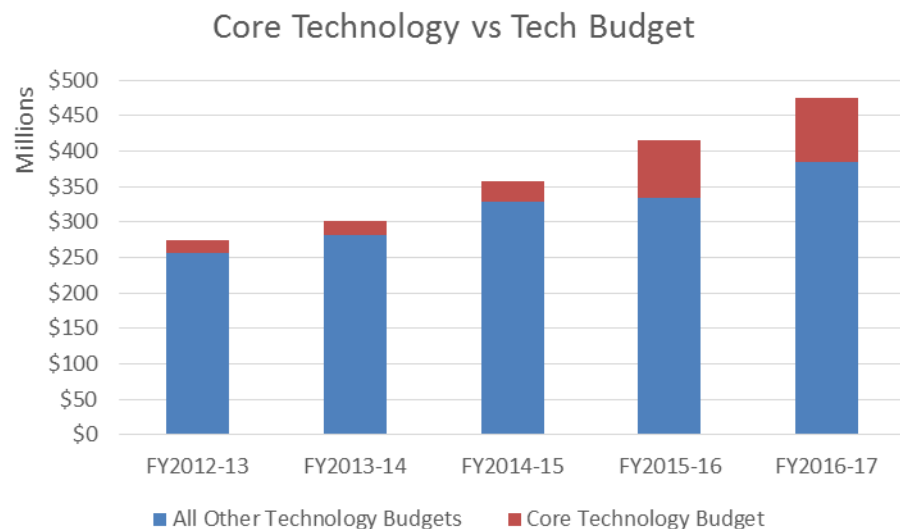
COIT Major IT Projects

- F\$P
- Radio Replacement
- Replacement of Property Tax Database
- Electronic Medical Records

Other Important Projects

- Fix the Network / Connectivity Projects
- eMerge
- JUSTIS

Core Technology Project IT Ratio



Year	Core Tech Projects	All Other Tech	% of Total
FY12-13	\$17.5M	\$256.9M	6.4%
FY13-14	\$21.0M	\$281.4M	6.9%
FY14-15	\$30.2M	\$327.8M	8.4%
FY15-16	\$82.2M	\$333.5M	19.8%
FY16-17	\$89.1M	\$385.2M	18.8%

Citywide Technology Budget

Future Discussion Items

- Tracking IT Budget/Expenditures in F\$P
- How to identify COIT projects
- Project vs. Maintenance Cost

6. ICT Plan Update & Discussion

COIT Staff

ICT Plan Update & Discussion Calendar

MONTH	GOAL	ACTIVITIES
June	Kick-Off Strategy Development	
July-Sept	Diagnose Current	Citywide Survey
October	Identify Ideal State Define Strategies & Tactics	Department Surveys
November/ December	Define Strategies / Recommendations	External Survey Group Sessions Leadership Workshop
January	Review Recommendations/Draft	
February	Final Approval	

ICT Plan Update & Discussion

Department Technology Plans

- Technology Plans (due 10/21)
 - Submission status: 85% complete!
 - Still in progress – AIR, CSC, DHR, MTA, PUC

ICT Plan Update & Discussion

Department Technology Plans - Accomplishments

- ❖ Goal 1: Support, Maintain, and Secure Critical Infrastructure
 - DPH: Zuckerberg General Hospital Opening (technology infrastructure re-build)
 - DT: Server Virtualization (on-going)
 - DT: Fix the Network (on-going)
 - City CISO
 - DEM: Public Safety Radio Replacement Project Implementation
 - LIB: Increased connectivity at branches
 - DHR/DT: Tech Hire Program
 - Citywide: Disaster Preparedness Response Recovery and R Policy

ICT Plan Update & Discussion

Department Technology Plans - Accomplishments

❖ Goal 2: Increase Efficiency and Effectiveness

- CON: PeopleSoft 9.2 Upgrade (complete)
- PDR: Gideon Upgrades (on-going)
- PUC: Agency wide SharePoint deployment (on-going)
- OCA: eSignatures deployment (on-going)
- CON: Financial Systems Replacement Implementation (on-going)
- FIR: Electronic Pre-hospital Care Report (PCR) Application (complete)
- TTX: Expansion of workflow and process redesign (complete)
- ASR: Property Tax System Readiness Assessment (ongoing)

ICT Plan Update & Discussion

Department Technology Plans - Accomplishments

❖ Goal 3: Improve Access and Transparency

- TTX: New Business Registration (complete)
- Citywide: Digital Services Strategy (complete)
- DHR: Deployed new website (on-going)
- 311: Deployed new website (complete)
- BOS: Assessment Appeals Online Filing System (complete)
- ETH: Electronic Filing Enhancements (on-going)
- HSS: Released first data sets to SF Open Data Portal
- DT: Business Portal Technology Enhancements (on-going)

ICT Plan Update & Discussion

Department Technology Plans - Challenges

Common Themes:

- Resources – time, money, staff
- Infrastructure – network/connectivity/telephony
- Cyber Security / Disaster Preparedness
- Integration with F\$P

ICT Plan Update & Discussion

ICT Plan Metrics

- Re-evaluating current measures
 - Keep what's working
 - Change what's not
 - Better define our objectives
 - Look to what is already being tracked
 - Start small

ICT Plan Update & Discussion

ICT Plan Metrics – Goal 1

Goal 1

Support, Maintain, and Secure Critical Infrastructure

Objectives

1.1: Keep downtime for critical systems to less than 0.1 percent

1.2: Protect critical ICT system from major disruptive elements

1.3: Prevent and defend City systems with strong cyber-security practices

Measures

Percent of downtime

Average bandwidth

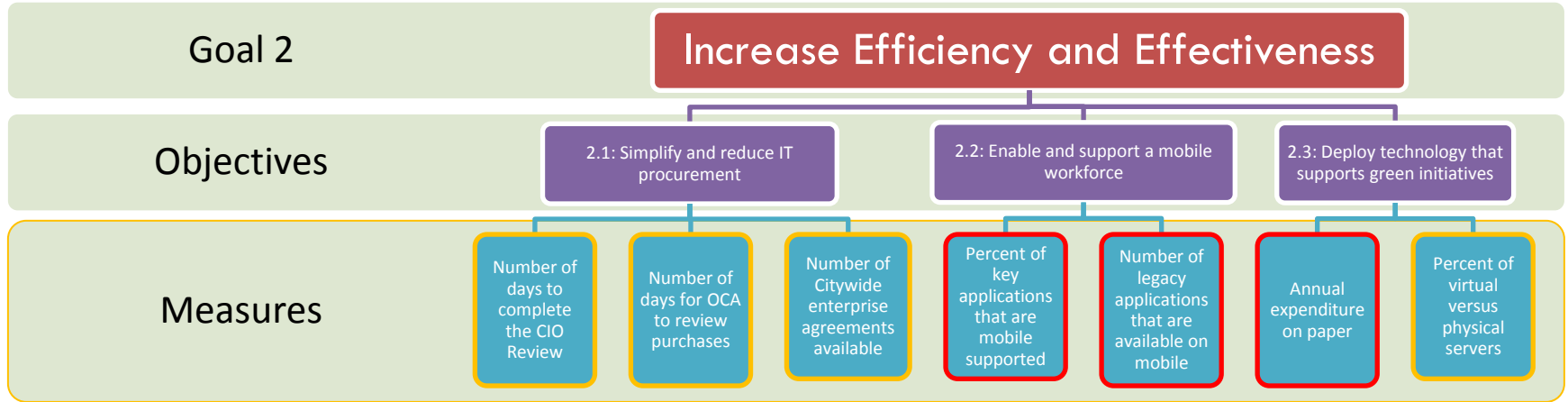
Percent of critical systems that are redundant

Number of departments with security policies

Percent of staff with security training

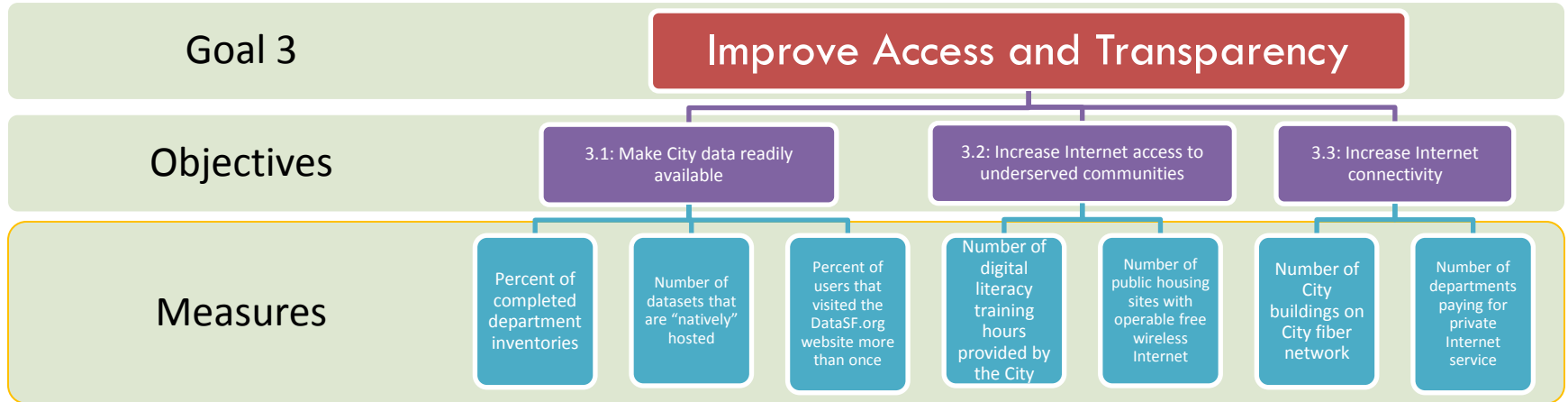
ICT Plan Update & Discussion

ICT Plan Metrics – Goal 2



ICT Plan Update & Discussion

ICT Plan Metrics – Goal 3



ICT Plan Update & Discussion

ICT Plan Metrics – Next Steps

- Working group meetings to evaluate ICT Plan objectives and advise COIT on metrics.
 - Will determine: status, frequency, lead, and reporting structure
 - Will align with key focus areas for COIT
 - To be discussed at next Subcommittee meeting in December

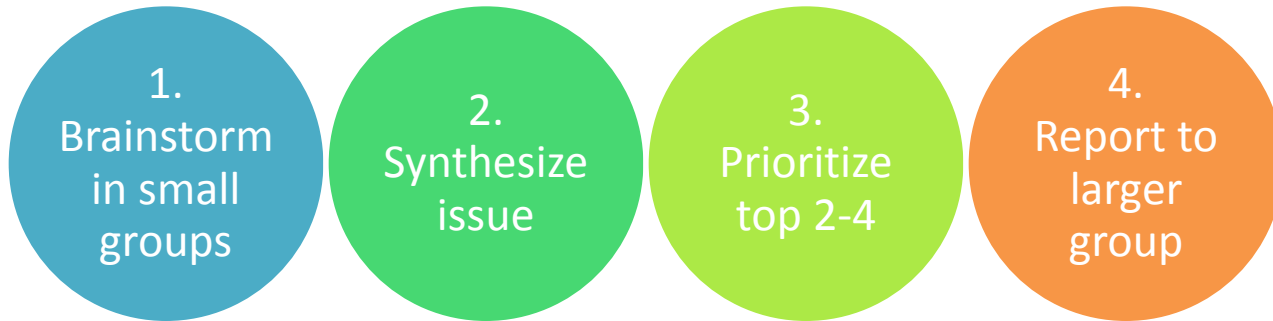
ICT Plan Themes

- Strategic Sourcing & Procurement
- IT Hiring
- Disaster Recovery
- Cybersecurity
- Connectivity
- Data Centers
- Digital Services
- Shared Services

ICT Plan Update & Discussion

Major Themes – COIT Focus Activity

Purpose: COIT has identified a number of general themes based on various inputs and needs to prioritize focus areas over next few years.



8. Public Comment
