Smart Cities & Service Improvements Committee
IT Strategic Plan Update

Rob Lloyd, IT

March 1, 2018

1-Page IT Strategic Plan

CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY

Out of a decade of deficits, execute, secure, and sustain the civic solutions that allow the San José community to thrive.
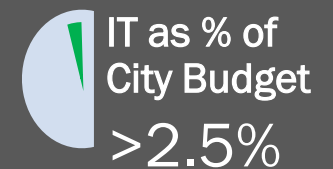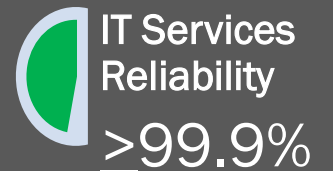
Strategic Direction

1. **Engage** an exceptional team defined by our solutions, service, & growth.

2. **Modernize** onto current and responsive technologies and services as our foundation.

3. **Secure** to manage evolving cybersecurity risks and operating requirements.

4. **Maximize investments** through project management and user-centric approaches.

5. **Accelerate** the City's ability to execute and sustain innovation.

6. **Focus** on prioritized business needs:
   - Customer Relationship Management
   - Use of Data for Decision-making
   - Business Process Automation

Underlying Assumptions

1. **Need**: Technology demands are core to operations and are increasing in cost and complexity.
2. **Vision**: The San José Smart City Vision identifies IT as a strategic multiplier for our future in which the City will invest.
3. **Priority**: The City aims to coordinate its increasing and citywide technology investments.
4. **Opportunity**: No city has better assets to make Smart Cities part of a successful community.

IT Metrics 2017-2019

Customer Satisfaction
~80%

Projects Success
~80%

IT Services Reliability
$\geq$99.9%

Employee Engagement
$\geq$50%ile

IT as % of City Budget
$\geq$2.5%

IT Advisory Board for FY2017-2018

- **Alan Cox**, Vice President, e.Republic/Center for Digital Government
- **Satchit Dokras**, US Leader, PricewaterhouseCoopers
- **Shesha Krishnapura**, CTO, Intel
- **Bill Schmarzo**, CTO for Big Data, Dell EMC
- **Velu Sinha**, Partner, Bain
- **Matt Spence**, Partner Andreessen-Horowitz
- **David Witkowski**, ED, Joint Venture Silicon Valley

- **Shireen Santosham**, Mayor's CIO & Liaison, City of San José
- **Kip Harkness**, Deputy City Manager, City of San José
- **Rob Lloyd**, CIO, City of San José

IT Strategic Plan Focus Areas

Strategic

- Engage an Exceptional IT Team
- Secure the City
- Modernize and Eliminate Tech Debt
- Master Products-Projects Execution

Tactical

- Customer Relationship Management System (CRM)
- Information and Systems Security
- Open Data and Smart Cities Foundations
- Business Process Automation
- Secure Cloud-Hub Infrastructure
- Audits and Policies
- Enterprise Architecture

IT Portfolio Map– 2017-2019 *(Initial)*

	Active							Done	
Innovation Roadmap	Business Tax System	CRM/My San Jose	Integ Permit System	IT Strategic Plan	City Data Environment				
	Facebook Terragraph	Access Eastside 1	Access Eastside 2 + 3	IT Advisory Board	Open Data Architecture				
Team	Availability 99.7%	Proj Success 5%	Engagement 8%ile	Vacancy 36%	Cust Sat 74%				
Secure	Cybersecurity Office	Privacy, Data, and Use	Cybersecurity Policy	PCI Compliance	Cyber Intel Alliance	Cyber Aware Month			
	Incident Response Plan	Continuous Education	Cybersecurity RFP	Cloud Apps Architecture	Secure Processing	Secondary Data Center			
Modernize & Execute	Prod-Project Management	HR Mgmt Upgrade	Bus. Process Automation	Workers' Comp System	3-1-1/CRM System	Business Tax Registration			
	Talent Mgmt System	Payroll Upgrade	Infrastructure Modernization	Utility Billing System	Microsoft Licensing	Server Upgrades			
	Budget System	Revenue Mgmt System	Treasury Mgmt System	Data Portal	Virtual PCs	Modernization Funding			
Audits	Technology Deployments	Mobile Devices	General Controls	External Financials	Call Handling Audit				

After one
year...

01
02
03
04
05
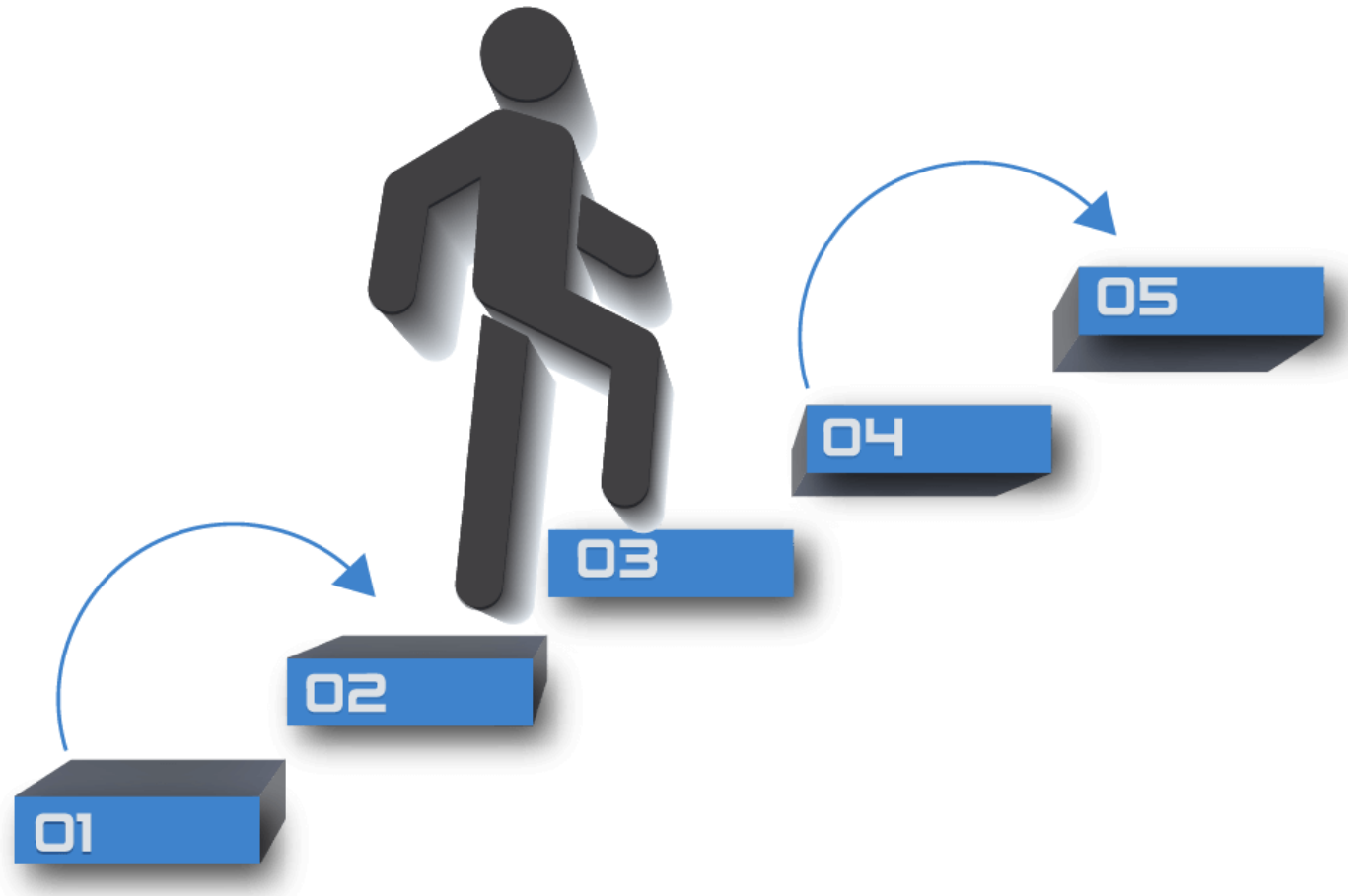
Progress

Strategic Initiatives

- ✓ <u>IT Talent</u>
  - Vacancies <u><</u>10%; New Classifications/Compensation; 4X Engagement
- o <u>Secure City</u>
  - PCI Assessment and Update; Cybersecurity Program; Education; CISO
- o <u>Modernize</u>
  - IT Strategic Plan; 10 Major Systems Done; 8 Active; 4 Queued
- o <u>Ability to Execute</u>
  - C3PO Team Formed; Standard Processes and Templates; IT Work Plan Set; Working on Tools and Routines

Progress

Projects

- ✓ <u>Support Systems</u> – HRIS, Payroll, Talent Upgraded; On-Cloud
- ✓ <u>My San Jose</u> – Live; Audit closed; Working process improvements
- ✓ <u>Workers' Comp</u> – System live; Items resolved with State audit
- ✓ <u>Utility Billing</u> – Recovery project complete; Live
- ✓ <u>Revenue Management</u> – System migrated; Live
- ✓ <u>Treasury Management</u> – System migrated; Live
- ✓ <u>Compliance</u> – PCI compliance resolved; Documentation complete
- <u>Budget System</u> – Phase 1 complete; Phase 2 near completion
- <u>Business Tax</u> – Project Recovery complete; Moving to Green
- <u>Infrastructure Modernization</u> – RFP in review

IT Portfolio Map– 2017-2019

(Update: 2/2018)

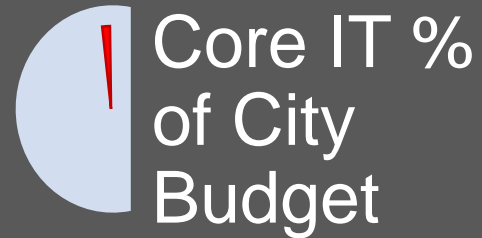|	Active				→	Done			
Innovation Roadmap	Business Tax System	Integ Permit System	City Data Environment				IT Strategic Plan	My San Jose 1.x	Access Eastside 1
	Facebook Terragraph	Access Eastside 2 + 3						IT Advisory Board	Open Data Architecture
Team	Skills Plans	Availability 99.7% → 99.1%				Proj Success 5% → 72%	Engagement 8%ile → 29%ile	Vacancy 36% → 9%	Cust Sat 74% → 86%
Secure	Cybersecurity Office	Privacy, Data, and Use	Cybersecurity Policy	Secondary Data Center			PCI Compliance	Cyber Intel Alliance	Cyber Aware Month
	Incident Response Plan	Continuous Education	Cybersecurity RFP					Cloud Apps Architecture	Secure Processing
Modernize & Execute	Bus. Process Automation	Payroll Modifications	Budget System Phase 2			Prod-Project Management	HR Mgmt Upgrade	Talent Mgmt System	Payroll Upgrade
	Infrastructure Modernization	Virtual PCs	Microsoft Licensing	Server Upgrades		Budget System	Treasury Mgmt System	Revenue Mgmt System	Workers' Comp System
	Active Dir Upgrades	Data Portal	Payroll Transition	Modernization Funding			Utility Billing System	3-1-1/CRM System	Business Tax Registration
Audits	Technology Deployments	Mobile Devices	General Controls	External Financials					Call Handling Audit

IT Scorecard

November 2016 → February 2018

Customer Satisfaction

74% → 86%

Project Success Rate

5% → 72%

Infrastructure Reliability

99.7% → 99.0%

IT Employee Engagement

8%ile → 29%ile

Service Response

7AM-6PM

Core IT % of City Budget

1.2% → 1.3%

Expired Hardware

71% → 66%

Vacant IT Positions

37% → 9%

Needs Remain

## Continuing the Progress...

- Balancing City's Overall IT Funding Levels

- Building Staffing and Skills

- My San Jose 2.0 to 3.0

- Data Security, Privacy, Use, and Engagement

- Key Investments

    - Tech Debt

    - Data Infrastructure

    - Business Process Automation

Needs Remain

Authorized Departmental Staffing	2016-17	10 Year Change
Airport	187	-52%
City Attorney	78	-18%
City Auditor	15	-17%
City Clerk	15	-17%
City Manager	66	-27%
Economic Development	57	-27%
Environmental Services	540	13%
Finance	117	-16%
Fire	822	-6%
Housing	65	-19%
Human Resources	54	-27%
Independent Police Auditor	6	0%
Information Technology	83	-47%
Library	360	-2%
Mayor and City Council	27	n/a
Parks, Recreation and Neighborhood Services	653	-13%
Planning, Building and Code Enforcement	319	-13%
Police	1,650	-9%
Public Works	559	-5%
Retirement	40	42%
Transportation	447	-7%
Total	**6,159**	**-13%**

IT Staffing as a % of Total City*

industry standard: 3% to 5%
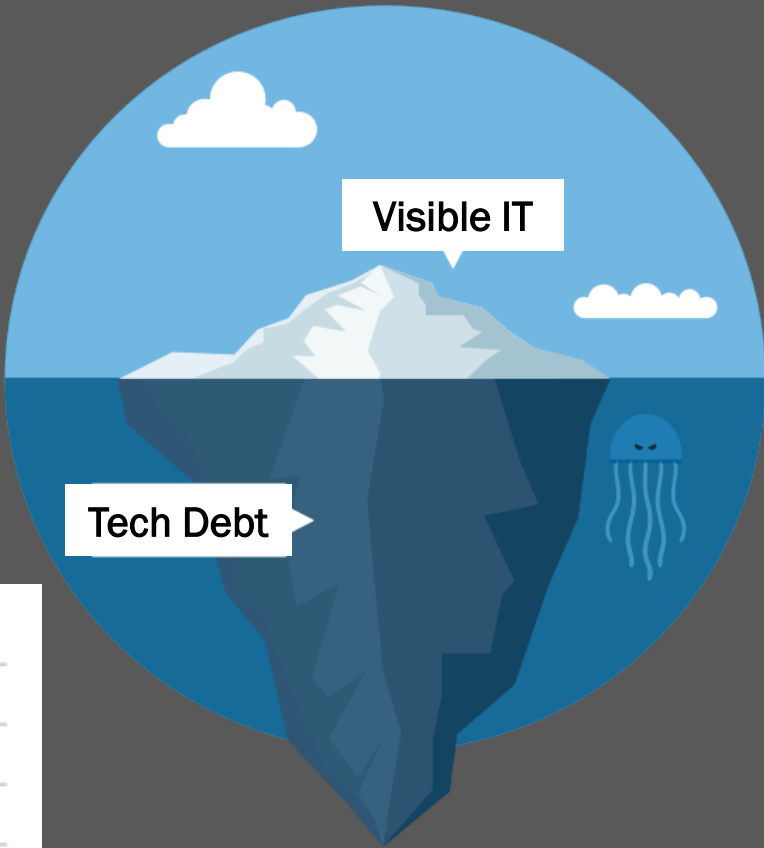
Budgeted Operations by Department, 2016-17 (All Funds)		10 Year Change
Airport	$ 63,251,206	-25%
City Attorney	$ 17,428,286	12%
City Auditor	$ 2,473,336	-13%
City Clerk	$ 2,735,287	-10%
City Manager	$ 14,365,470	43%
Economic Development	$ 11,843,693	18%
Environmental Services	$ 257,753,261	38%
Finance	$ 18,650,894	21%
Fire	$ 203,413,562	50%
Housing	$ 10,787,566	7%
Human Resources	$ 10,364,871	9%
Independent Police Auditor	$ 1,260,406	51%
Information Technology	$ 22,265,107	-6%
Library	$ 38,734,292	13%
Mayor and Council	$ 13,248,694	37%
Parks, Recreation and Neighborhood Services	$ 75,979,901	6%
Planning, Building and Code Enforcement	$ 53,093,858	24%
Police	$ 346,977,957	22%
Public Works	$ 101,326,271	15%
Retirement	$ 6,551,984	106%
Transportation	$ 88,865,210	16%
Total	**$ 1,361,371,112**	**20%**

Visible IT

Tech Debt
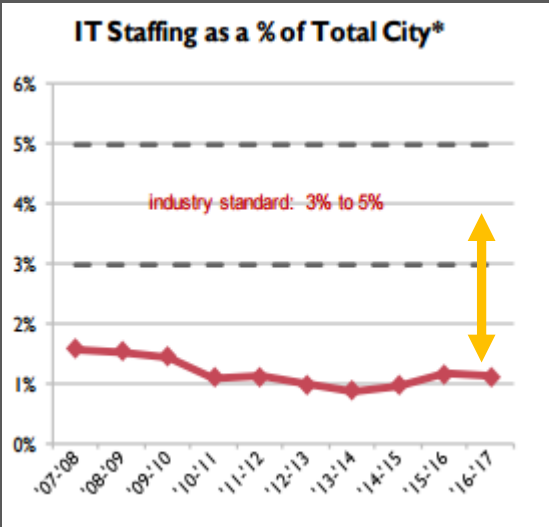
Special Accomplishments

- <u>Intel</u> – Donated assets for capacity and failover
- <u>Dell EMC</u> – Open Data Architecture validated; Police Analytics
- <u>Center for Digital Government</u> – Top-Ten Digital Cities in the nation
- <u>StateScoop</u> – Top 31 Smart Communities / Top 17 Cybersecurity
- <u>Ada Awards</u> – City a leader in government Cybersecurity direction

Questions / Feedback