

Innovation & Technology **Strategic Plan**

Winter 2016

City of San José
Information Technology Department

Innovation & Technology Planning

Purpose

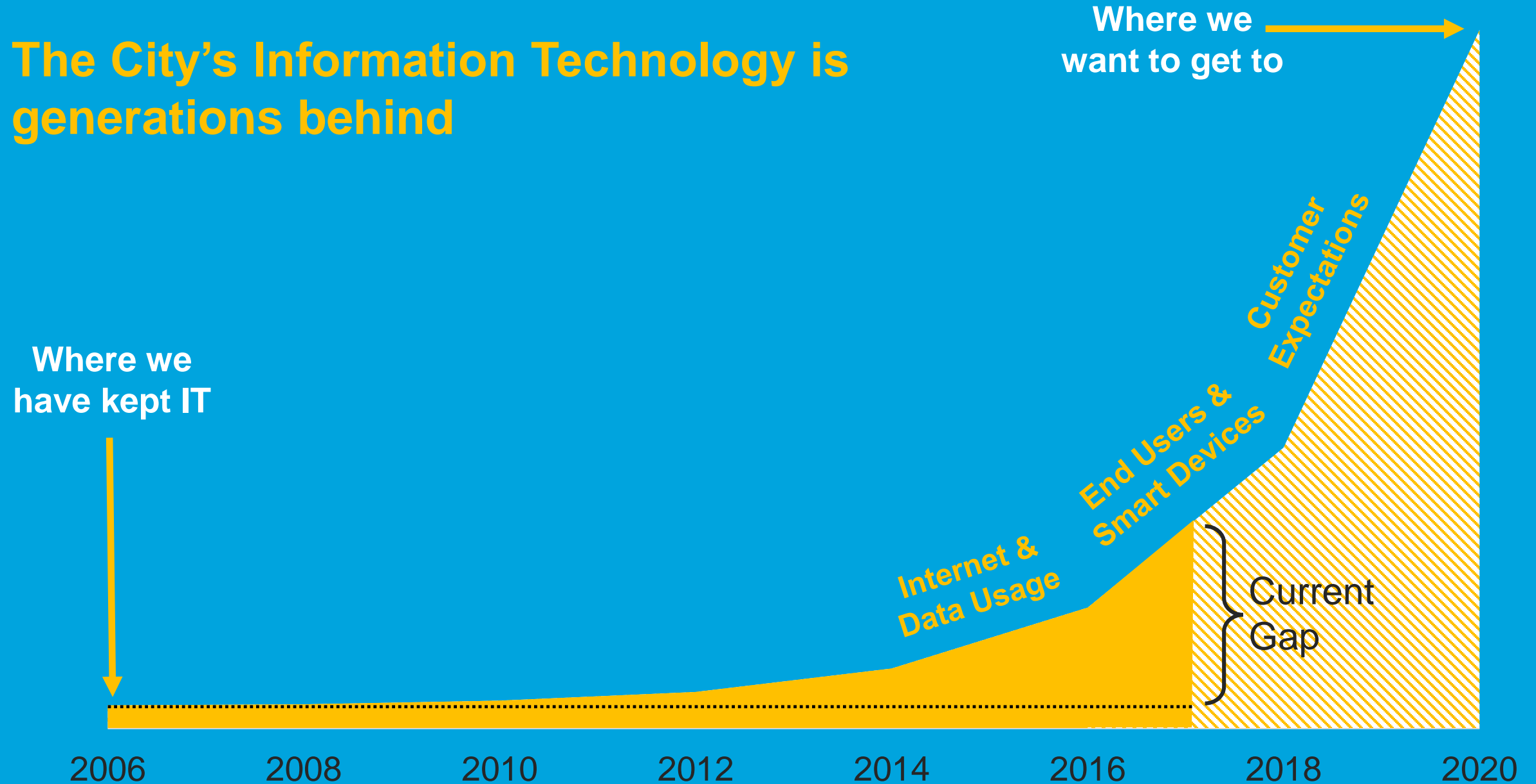
- Assess IT portfolio, capabilities, and needs
- Optimize resources, strategic and tactical efforts, and cultural investments
- Execute and sustain the San José Smart City Vision

Critical Outcomes

- Align resources, priorities, and projects
- Secure City information and system assets from evolving threats
- Successful IT through internal and external partnerships
- Ensure technology service reliability and performance

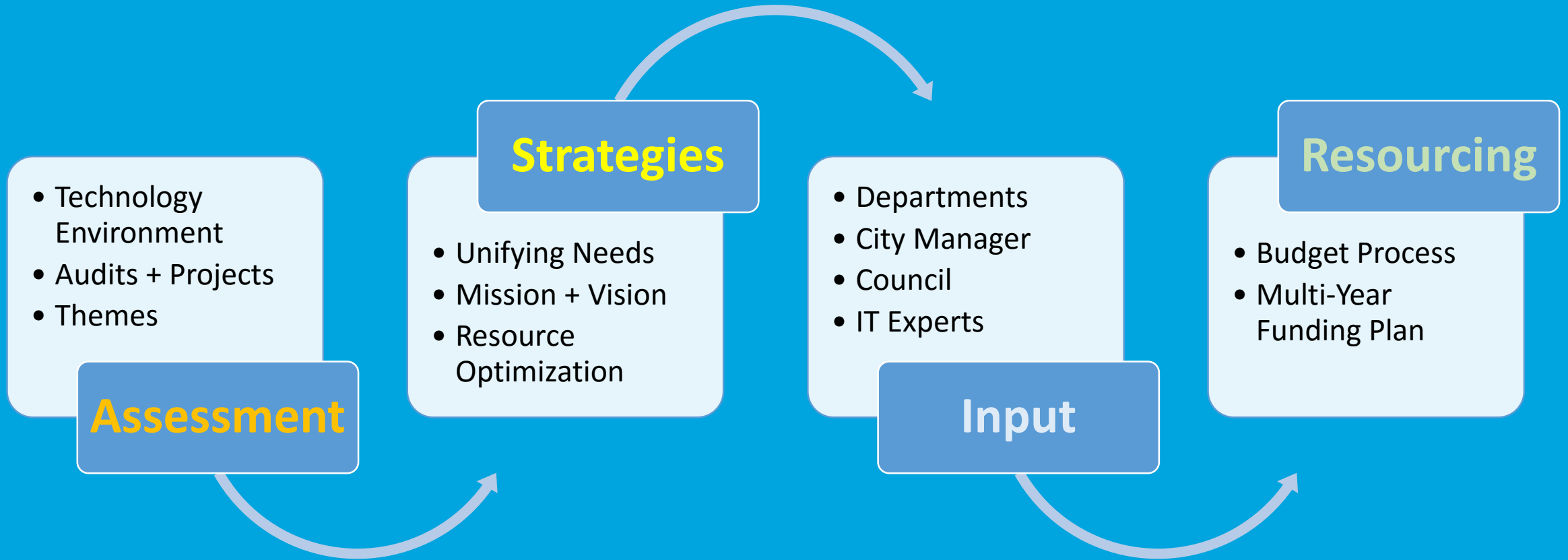
A Decade of Deficits

The City's Information Technology is generations behind



Innovation & Technology Planning

Process



Innovation & Technology Assessment



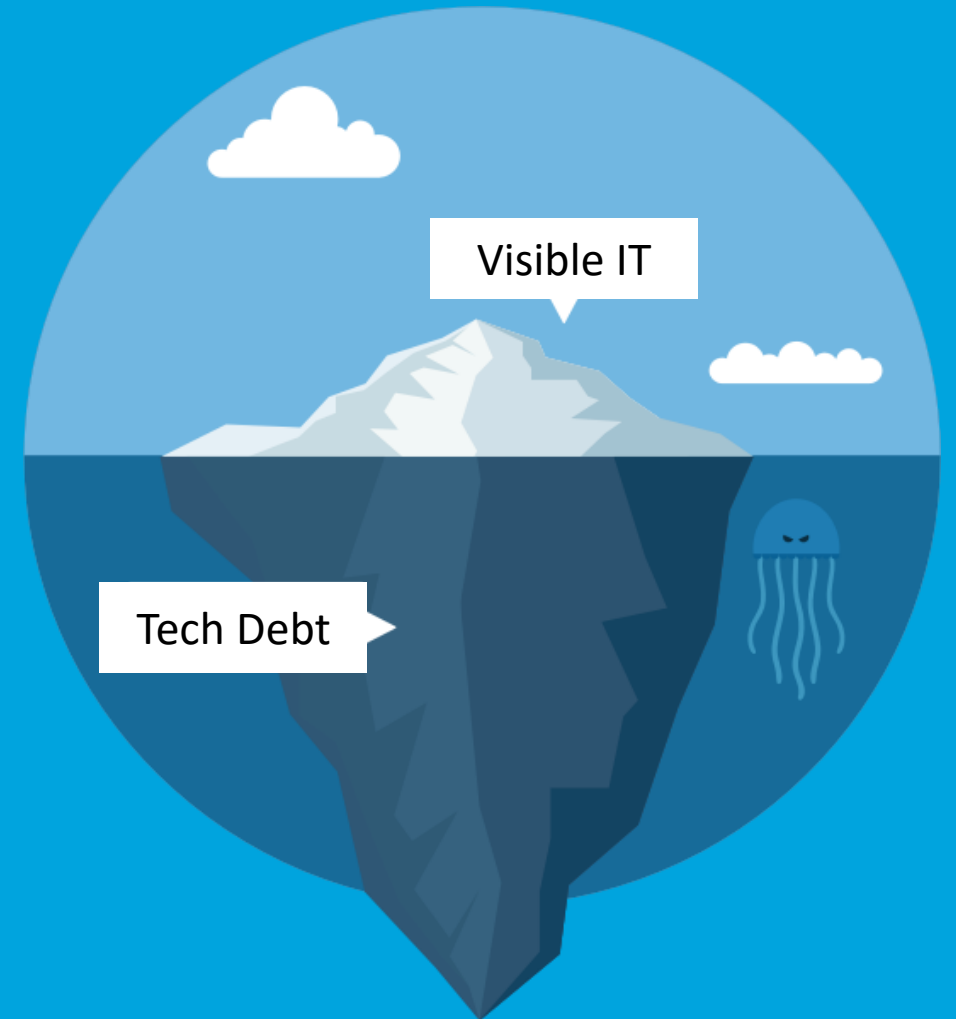
Innovation & Technology Assessment

Audit Findings

- Financial Statements
- General Controls
- Technology Deployments
- Mobile Devices
- Call Handling

Project Management

- 0 Project Management FTE
- ~240% Over-Allocated on Project Staffing
- 16/33/33 Projects Completed/Active/Queued
- 132 Projects In Backlog



Smart City Vision & Council
Innovation Cabinet Focus
Dedicated & Diverse Team
Departmental Collaboration
Core Upgrades
Demonstration Policy

Strengths

Opportunities

Willing Partners
Silicon Valley
Stable Economy
Scalable + Efficient Technologies

Innovation & Technology Assessment

Tech Debt
Major Resource Limits
Information Security
Talent Recruitment
Project Execution
Uncoordinated IT

Weaknesses

Threats

Cybercrime & Cyberdisasters
Economic Downturn
Compliance Demands
Talent Competition

Innovation & Technology Journey



Be Brilliant at the Basics

- Reduce Tech Debt
- IT Staffing + Training
- Cybersecurity
- Core Metrics
- Data & Integration



Reach Capability Maturity

- Customer-Centric IT
- Project Execution
- Education
- Budgeting + Purchasing
- Automation

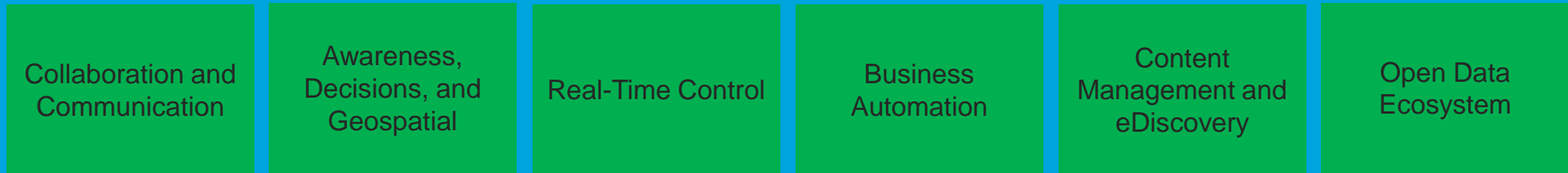


Innovate!

- IT with Scale + Speed
- Digital Inclusion
- Smart Cities/IoT
- Partnerships

Innovation & Technology Blueprint

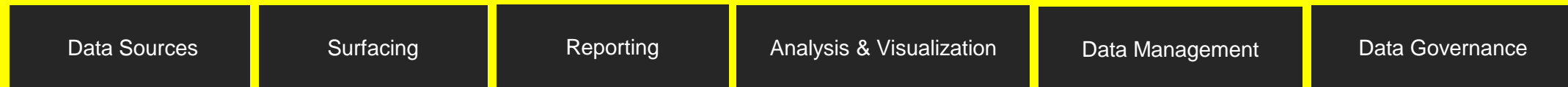
Enabled Business



Application and Data Integration



Data Ecosystem



Core Applications

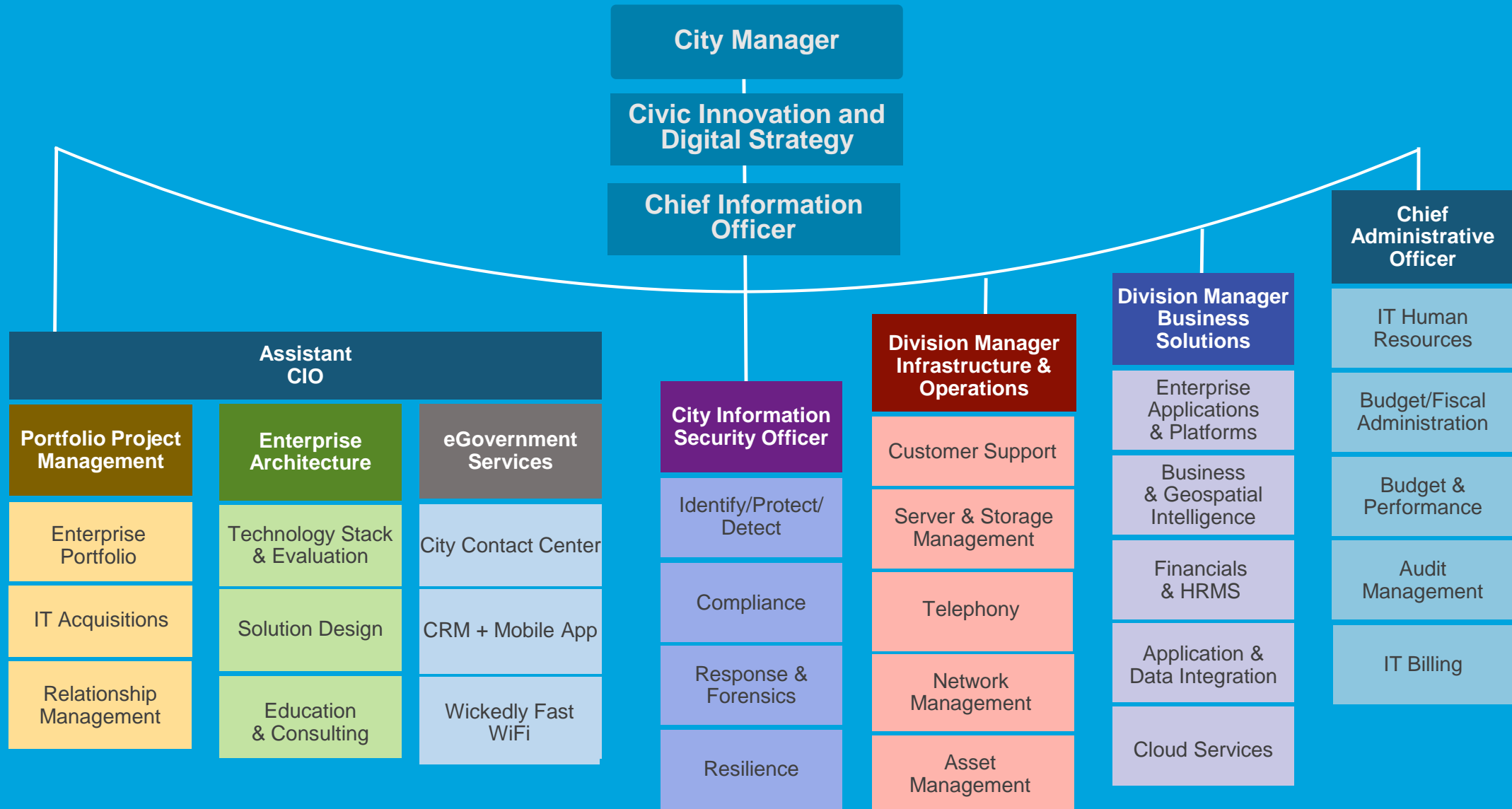


Infrastructure Layer



Security

Innovation & Technology Blueprint



IT Advisory Board

Feedback Themes

- Excellent Assessment
- Resources Do Not Support the Plan
- Cybersecurity is Essential

Suggestions

- Force Prioritize to Small Set of Needs
- Embrace As-a-Service Models
- Manage Staff Transitions and Pressures
- Emphasize Investments that Meet Multiple Needs
- Engage Groups, Employees, and Leading Cities



11 Strategic Initiatives Prioritized

Non-Negotiable

- Talent Engagement / Hiring / Retention
- Cybersecurity + Resilience
- Modern Infrastructure Platform (Cloud Hub)
- Portfolio-Project Management

Highly Desirable

- Amazing Customer Relationship and Service Request Management
- Data Platform for Decision-Making + Transparency
- Business Process Automation

Future

- Information, Communications, and Security Policies Refresh
- Enterprise Architecture + Customer Centric Organization + 24x7x365 IT
- Records Management Program and Platform + eDiscovery
- IT Modernization Fund + Creative Work Spaces

Strategic Initiatives – Additional Background

Cybersecurity Office + Modern Business Resumption

- Cybercrime and Cyberdisaster Preparation; Compliance with Standards and Regulations; Cyber Intel Integration with Prevent/Protect Activities; Complete Incident Management Plans; Refresh Security Policies
- Resourcing: Citywide Cybersecurity Training; Build Business Resumption Capabilities; Implement Security Operations Center & Services; Achieve Positive Security Audit Outcomes

Cloud Hub Infrastructure

- Resourcing: Implement High Availability Architecture to Improve IT Reliability to $\geq 99.9\%$; Implement IT Infrastructure Environment for Citywide Use; Maximize Cloud Vendor Flexibility; Refresh Server, Network, Storage, and Operation Systems to Supported Versions

Portfolio-Project Management Office

- Improve to 80% Project Success Metric; Implement Project Training to Maximize Return on IT Project Investments
- Resourcing: Staff Product-Project Management Professionals as Citywide Resource; Support CRM Staffing and Upgrades

Strategic Initiatives – Additional Background

Amazing Customer Relationship / Service Request Management

- Complete CRM and Mobile/Web Access; 3-1-1 System at City Contact Center; City Services Dashboard; Integrate CRM and Work Systems for Efficiencies; Enable Citywide Service Analytics
- Resourcing: Complete Prioritized CRM Upgrade Requests from City Management, City Council, Departments, and Community; Add Social Media Integration; Add Machine Learning and ChatBot

Open Data Communities Architecture

- Implement Technical Platform for Data-to-Devices Management for Smart Cities Solution; Migrate City Data Portal to Scalable Platform
- Resourcing: Increase Access to Analytics Software; Pilot Public Safety and Transportation Smart City Solutions; Increase Data Transparency Assets

Growth/Engagement/Hiring/Retention Initiative

- Staff Development Opportunities; Increase ITD Engagement to $\geq 50\%$ and Customer Satisfaction to $\geq 80\%$; Reduce ITD Vacancy Rate to $\geq 15\%$; Engage with San Jose Tech Community
- Resourcing: Multi-Generational IT Talent Model; Refresh ITD Classifications

Strategic Initiatives – Additional Background

Business Process Automation

- Transition Internal Paper-based Processes to Electronic; Enable Secure and Easy Online Submittals for City Work Processes
- Resourcing: Pilot RFP Development Tool to Accelerate Procurement; Implement Contract Lifecycle Management System; ; Enable Electronic Signatures

Information, Communications, and Security Policies Refresh

- Update Dated IT Policies
- Resourcing: Expand Access to and Use of Mobile Computing Devices

Enterprise Architecture + Customer-Centric Org + 24x7x365 IT

- Enterprise Architecture to complete Technical Architecture for IT Services Citywide to Optimize Staffing and Training; Implement Modern IT Standards for Contracts and Procurement
- Resourcing: Add Staffing for All-Hours IT Availability; Improve User Experience and Testing Routines in Solution Implementations

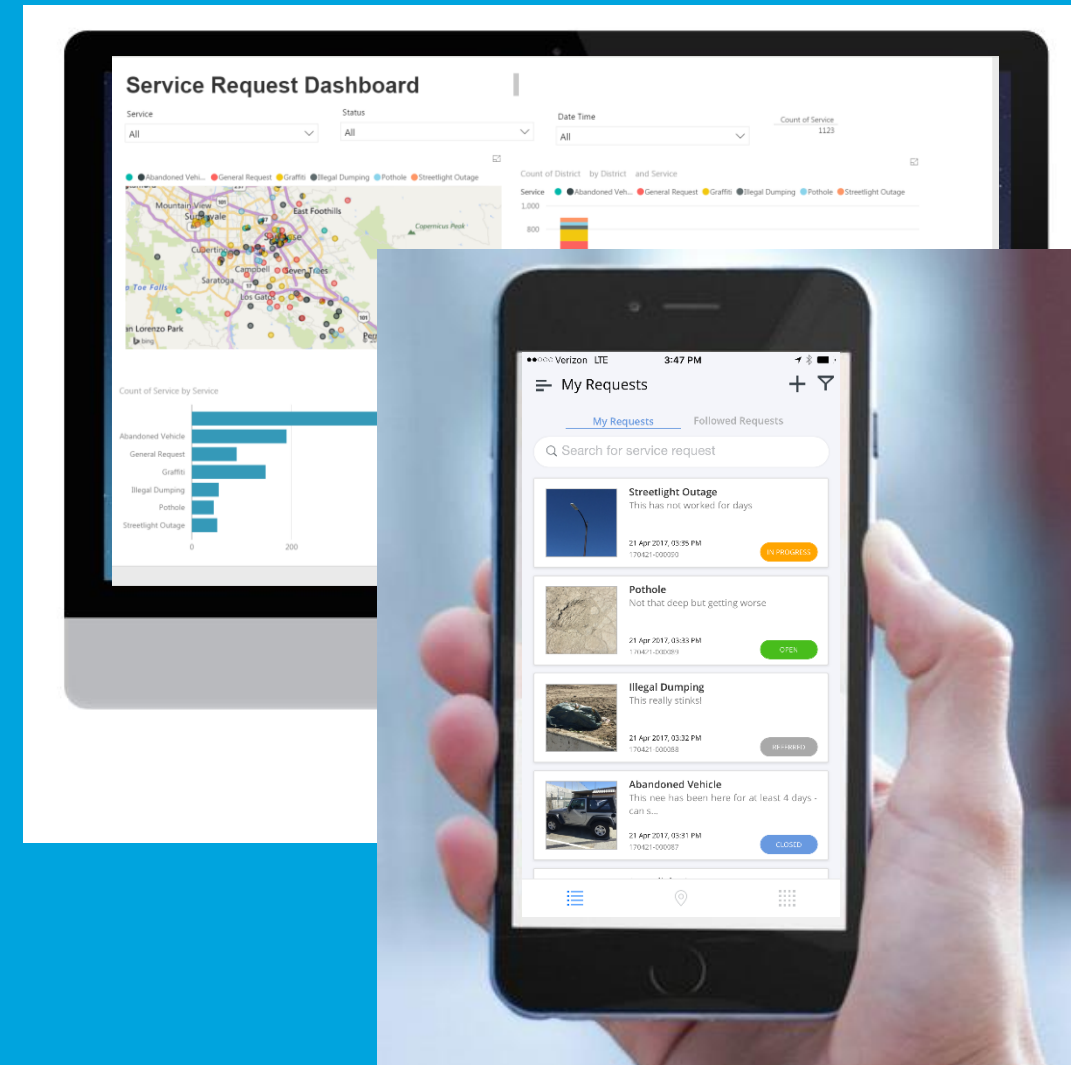
Customer Relationship Management

Amazing Customer Experience!

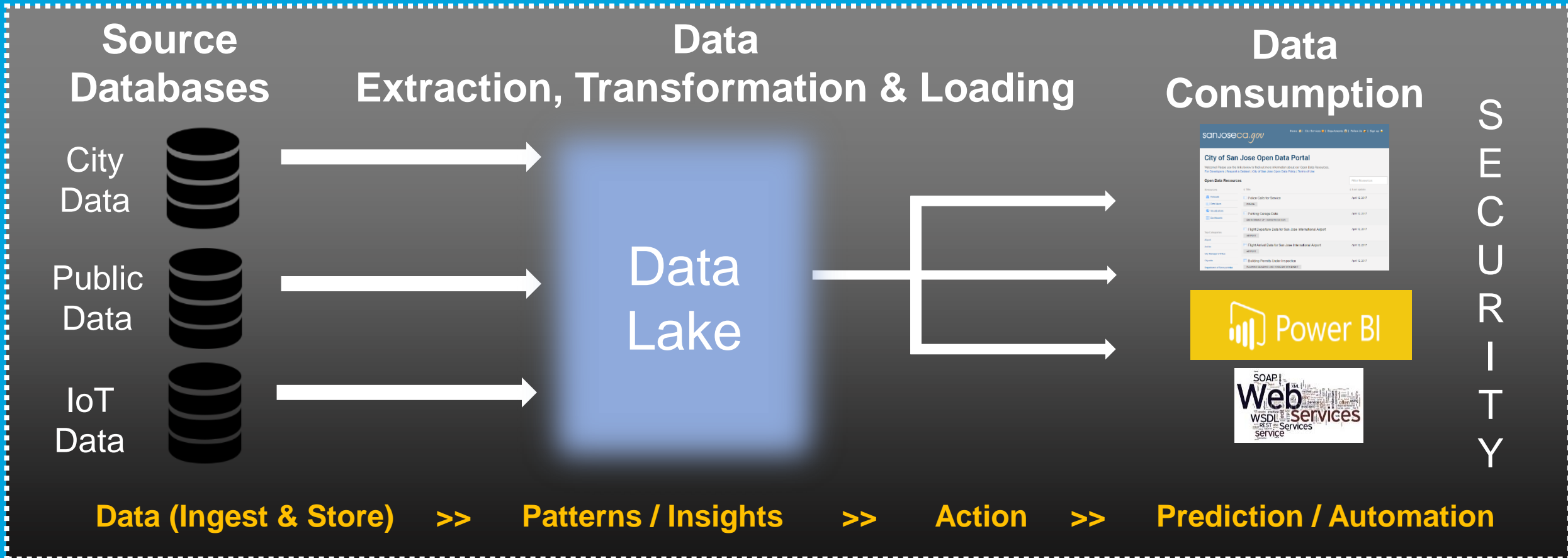
- Ease + Efficiency + Integration + Analytics
- Phase 1: Majority of Request Types
 - Illegal Dumping
 - Abandoned Vehicles
 - Graffiti Abatement
 - Streetlight Outage
 - Potholes
 - General Requests

Alpha Launch – May 1, 2017

- Mobile App and Web Portal
 - Workflow Integrations and Dashboards
- ## Go Live Target: Late June, 2017



Open Data Community Architecture (ODCA)



- Architecture Drafted
- Planned: Data Portal Migration; Smart City Platform Tests; Public Safety Pilot
- Partner with Dell EMC on Innovation Pilot

Major Projects in Pipeline

Business Process Automation

- Mobile Device Request
- RFP Automation
- Business Tax Online Registration
- Contracts Life Cycle Management

Business Solutions

- Budgeting System
- Debt Collection System
- Workers' Compensation System
- Treasury Management System
- Enterprise Content Management
- Customer Relationship Management Phase 2
- Records Imaging & History
- eDiscovery

Infrastructure

- Infrastructure Modernization
- Network Modernization
- Virtual Desktop Infrastructure
- Enterprise Asset Management
- Active Directory Upgrade

Cybersecurity

- Disaster Recovery & Business Resumption
- Data Loss Prevention
- Software Defined Networking
- Mobile Device Management
- Security Standards & Policy Refresh

1-Page IT Strategic Plan

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. **Re-platform** 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.
2. **Vision:** The San José Smart City Vision identifies IT as a strategic multiplier for our future.
3. **Priority:** The City aims to coordinate its increasing IT investments.
4. **Opportunity:** No city has better assets to make Smart Cities part of a successful community.

IT Metrics 2017-2019

