

## City of San José

### Information Technology Department

#### 2019-2020 Strategic Technology Work Plan (ver.1, September 2019)

The City of San José Information Technology Department supports exceptional municipal services through modern technologies, partnering with all levels of the organization. This is a powerful contribution as the City addresses a new mission shaped by community equity, the ability to innovate, and addressing climate change.

At our best, ITD enhances the customer experience of our residents; we accelerate smart and data-driven decision-making; and we ensure the technology tools used by City employees are both responsive and resilient. Our teams deliver on this promise each day in the form of our customer support, cybersecurity, data, systems solutions, data/voice communications, and strategic support services.

The City provides specific guidance for goal alignment through the [City Manager's Enterprise Priorities](#) and [San Jose Smart City Vision](#). These are the basis this IT's annual work plan, as well as the personal goals each IT contributor defines for the performance year.

This is an important time in local government technology! The emergence of data, sensing, intelligence, and controller technologies open a world of possibilities to San Jose that can change our community to be more equitable and responsible to the environment. At the same time, cybersecurity, data privacy, and ethical use of technologies must *enable* the City organization as much as it *keeps trust* with our community. The IT Team is up to that challenge.

Thank you for being a part of San Jose's innovation and technology journey!

#### IT 2019-2020 Master Objectives and Key Results

Alignment in a large organization is as essential as it is difficult. IT works to align priorities resources, and progress in a clear manner through four mechanisms:

- (1) **A Coordinated Strategic View** as represented by the 2017-2019 Innovation and Technology Strategic Plan.
- (2) **A Coordinated Tactical View** defined by the department's simple set of Objectives and Key Results for the fiscal year.
- (3) **Tactical Management** as practiced by IT teams through their meetings, scrum planning/stand-ups/retrospectives, activity in collaboration platforms, and supporting team rituals.
- (4) **Contributor Development** through performance management, coaching, and mentoring, as well as reciprocal feedback to managers for their improvement.

When the Information Technology Department is supporting the needs of the City through great technology, when we have clarity and commitment, and when our contributors are growing, we succeed in elevating our City organization and the community we serve.

- 1 EMERGENCY MANAGEMENT AND PREPAREDNESS:** No issue is more important than the lives and safety of our residents. The City has more work to do to ensure San José is well-prepared for earthquakes and other disasters, particularly for those who are most vulnerable. As a City, we will do more to be prepared for emergencies and commit to this priority with relentless attention and support.
- 2 CREATING HOUSING AND PREVENTING HOMELESSNESS:** All people in San José need a place they can call home, and feel they belong as a vital part of the city around them. If we are to welcome everyone home to San José, we must address the housing crisis and homelessness that confront our City. Our Mayor and Council have set a goal of adding 25,000 residential units in the next five years – including 10,000 affordable units. Assisting our existing homeless residents requires the City begin to work outside traditional silos and align amongst several public and private partnerships to creatively and effectively address the challenge.
- 3 SAFE, VIBRANT, AND INCLUSIVE NEIGHBORHOODS AND PUBLIC LIFE:** The diverse mosaic of people who live, work and play in San José deserve vibrant public spaces and places that are beautiful, clean, safe and inclusive. The people of San José need community spaces that bring them together across generations, across cultures, and points of view.
- 4 THE FUTURE OF DOWNTOWN:** Downtown is everyone's neighborhood. Diridon Station is slated to become an expanded intermodal transportation hub of regional and statewide significance. Both BART and High Speed Rail are designated to join electrified Caltrain and VTA Light Rail at the Diridon Station. It is one of our highest priorities to effectively manage the complex mix of transit improvements, commercial development, residential development, and public space improvements taking place Downtown.
- 5 BUILDING THE SAN JOSE OF TOMORROW – PRIVATE DEVELOPMENT SERVICES:** To drive economic investment and development in San José, we must transform our planning, building, and permitting processes for small and large-sized businesses. We will address the efficiency and flow of our Development Services processes, because we're building the future San José that is outlined in the San José Envision 2040 General Plan.
- 6 SMART, SUSTAINABLE AND RELIABLE CITY: 21ST CENTURY INFRASTRUCTURE:** Competing in the global economy and addressing climate imperatives requires updating our energy, water, waste, transportation, and internet connectivity infrastructure, as well as translating traditional infrastructure such as roads and streetlights into 21st century infrastructure. From the launch of a Clean Energy program, long-term investments in the Regional Wastewater Facility and San José International Airport, and new strategies for Broadband and Digital Inclusion, as well as Automated/Electric Vehicles, we must focus on developing smart, sustainable, and reliable infrastructure to shape America's next great city.
- 7 STRATEGIC FISCAL POSITIONING AND RESOURCE DEPLOYMENT:** We will continue to be both strategic and responsible in how we manage and balance the City's \$3.7 billion budget, and must be smart and efficient in how we serve our community. We will always look for opportunities to be cost-effective in all aspects of our service delivery system and consider new or expanded revenue sources, while minimizing impacts to our tax, rate, and fee payers while working to ensure equity and inclusion in how our services are delivered.

**8 POWERED BY PEOPLE:** We recognize that our employees power the City of San José and our success as a City is dependent on our ability to create a diverse, talented, and engaged workforce. Managing our talent means we will continue to accelerate and improve upon our successes in our strategic hiring, develop partnerships to create a long-term recruiting pipeline, and to support employee retention, engagement, and advancement through training and development programs.

## Smart City Vision



Just as the world looks to Silicon Valley to provide the most creative, impactful technologies to disrupt industries and transform lifestyles, so too can San José become a global leader for civic innovation. Becoming a "smart city" means that game-changing technologies and data-driven decision-making will drive continuous improvement in how City Hall serves our community, and to promote concrete benefits in safety, sustainability, economic opportunity, and quality of life for our constituents.

- Mayor Sam Liccardo

**DEMONSTRATION CITY**—Reimagine the City as a laboratory and platform for the most impactful, transformative technologies that will shape how we live and work in the future.

**INCLUSIVE CITY**—Ensure all residents, businesses, and organizations can participate in and benefit from the prosperity and culture of innovation in Silicon Valley.

**SAFE CITY**—Leverage technology to make San José the safest big city in America.

**SUSTAINABLE CITY**— Utilize technology to address energy, water, and climate challenges to enable sustainable growth.

**USER-FRIENDLY CITY**—Create digital platforms to improve transparency, empower residents to actively engage in the governance of their city, and make the City more responsive to the complex and growing demands of our community.

## IT Strategic Goals

**Build and Sustain a SECURE CITY**— Work across City Departments to **address the cybersecurity needs at all levels of the organization**. Advocate and contribute to **raise the security baseline for all governments**.

- Coordinate cybersecurity planning and management with emergency operations staffs as a core scenario.
- Successfully pass all financial, technical, and security audits. Maintain necessary certifications to support the enterprise.
- Achieve maturity with the National Institute of Standards and Technology Cybersecurity Framework.
- Attain a high level of vigilance with cybersecurity Citywide.
- Minimize malware, phishing, and data breach incidences and resulting enterprise risks, outages, and costs.
- Serve as a leader for cybersecurity intelligence sharing and joint response to protect communities.

**Achieve the SMART, SUSTAINABLE AND RELIABLE CITY vision through Modernized Technology**— Partner with City Departments to **replatform** City information and communications systems onto **modern and responsive technologies**. Grow IT staff to **lead and sustain the new tapestry of solution**.

- Advance the use of interoperable platforms and ecosystems in meeting the City's initiatives and priorities.
- Transition to digital, mobile, and social-enabled technologies to enhance services while controlling costs.
- Automate and optimize the City's common business processes.
- Build and maintain a robust IT infrastructure that supports departmental needs for new software solutions, fast networks, and seamless access to information resources.

**Plan and Execute a SUPERIOR TECHNOLOGY PORTFOLIO THAT IS POWERD BY PEOPLE**— Evolve technology services to provide **exceptional customer and employee experience**. Administer the City's technology support, software, communications, computing, mobile, infrastructure, and oversight functions to **provide exceptional outcomes at optimal cost**.

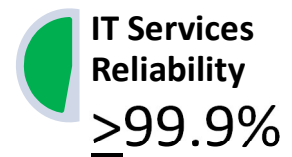
- Incorporate customer-centric experience approaches into the design and sustaining of technologies as products. Maintain customer satisfaction at  $\geq 80\%$  Good to Excellent.
- Achieve a project success at  $\sim 80\%$ . More and it's too easy. Less and we're wasting resources.
- Work with Department Heads and the IT Leadership Group to actively manage City technology priorities and protocols.
- Run a City technology environment that is both technically sound, operationally strong, and financially viable.
- Maintain a long-range architecture that maps the City's key technology transitions and investments.

**Partner to INNOVATE**— Advocate for and provide sustainable, novel approaches to improve the City's business operations. Lead change initiatives with departments. **Train. Communicate. Be fearless with technology and change.**

- Invest in sustaining an engaged, responsive, well-trained, and productive IT team with nominal attrition. Achieve 50<sup>th</sup> percentile in the Gallup Engagement Survey.
- Partner with departments, peer organizations, and vendor-partners to research, learn, and deliver initiatives that transform local government services for the better.
- Tell the City's innovation and technology story. Earn high honors for the City's best efforts.
- Sustain a Digital Front Door that serves our community and staffs well to achieve stellar service delivery.
- Set and make progress on a Green IT Plan to minimize excessive inventories, utilities usage, and e-waste.
- Work with department and Purchasing partners to expertly execute technology procurements and fulfill contracts.



### IT Metrics 2020 Goals



## Department, Division, and Team Goals

Department, Division, and Team Goals form the behavioral and work expectations for the ratings period. They also emphasize the necessity of departmental, divisional, team, and individual coordination by the organization to achieve goals that achieve the direction set by City Council and City Management for the enterprise. (NI = Needs Improvement, S = Satisfactory, C = Commendable, O = Outstanding)

<u>Department Goal: Shared IT Standards and Goals (All)</u>	<u>NI</u>	<u>S/C/O</u>
<b>Maintain high standards of professionalism, expertise, stewardship, and inter-reliance for our IT Department and City organization.</b>		
<b>Incorporate individual development goals and progress for all members of IT.</b>		
<b>Provide exceptional service! (All)</b>		
Achieve $\geq 80\%$ "Good" to "Excellent" overall ratings from customers in the City customer service survey on IT services.		
Achieve $\geq 99.9\%$ uptime and availability for City network, voice, and server services and $\geq 99.8\%$ uptime and availability for business systems.		
Complete $\sim 80\%$ of departmental projects within defined time, on budget, in scope, and stakeholder satisfaction limits.		
Achieve 50 <sup>th</sup> -percentile Engagement, as measured by the City's annual Gallup Poll Employee Survey.		
Each team member dedicates two days in peer departments to learn our customers' work and experiences. Incorporate lessons learned into improving IT services.		
Respond to all service/help requests within two hours. Resolve $\geq 70\%$ of problem cases at first call; $\geq 85\%$ within two business days; and $\geq 98\%$ within three weeks.		
Keep cases current and complete with detailed documentation.		
Ensure current certifications and positive audit outcomes across IT services.		
Maintain strong Enterprise Architecture and Change Control across all IT stakeholders.		
<b>Contribute to a secure and resilient City.</b>		
With the Cybersecurity Office, address security requirements in IT services.		
Support Office of Emergency Management planning, exercises, and activations.		
Support public safety bond work by dates set with departments in related projects.		
<b>Successfully complete the following enterprise-level projects by measures defined:</b>		
Support successful launch of the new City Website by 11/30/2019.		
Complete data architecture, implementation, and support of the SCCOE Data Zone for student outcomes by 12/30/2019.		
Complete successful business systems recovery exercise and test restore by 1/1/2020.		
Complete ODCA-based containerized and secure data solution by 1/30/2020.		
Conclude 2017-2019 IT Strategic Plan and issue report on results by 2/28/2020.		
Implement City Open Data Environment and support population of resource by City Departments by 4/30/2020.		
Grow City Data Portal usage to six data stories and five active publishing departments by 6/30/2020.		
Conclude audits by assigned dates:		
• General Controls		
12-02 #2 by 6/30/2020		
12-02 #4, #5, #6, #8, #10 by 6/30/2020		
12-02 #9 by 6/30/2020		
• Accounts Receivable		
14-02 #12, #16 by 6/30/2020		
• Mobile Devices		
16-11 #1, #11, #14, by 6/30/2020		
16-11 #2, #15, #16 by 6/30/2020		
16-11 #6, #7, #8, #9, #12 by 6/30/2020		
• Technology Deployments		

- 16-04 #9 by 11/30/2019
- Vehicle Abatement
  - 18-04 #2, #5, #6, #9 by 6/30/2020
- 9-1-1 and 3-1-1
  - 19-01 #10, #11, #17, #18, #19 by 6/30/2020
- Development Services
  - 14-08 #13 by 6/30/2020

Support completion of and Council approval of City Privacy Principles by 9/30/2019.  
 Support completion of and Council approval of City Privacy Policy by date set with City Manager's Office and Civic Innovation.

**Place San Jose in the top ten of the annual Digital Cities Awards.**

**Produce no more than one safety issue per year, none major.**

**OVERALL FUNCTION RATING**

**Division Goal: Business Solutions**

**NI**

**S/C/O**

**Maintain 100% of production systems to within one major version and three updates of current.**

**Successfully complete the following projects by budget, schedule, scope, and satisfaction measures defined:**

- Implement Wells Fargo IVR feature into BTS by 8/30/2019. X
- Complete capacities, performance, and support review of the City SharePoint environment by 9/30/2019 to support strong Citywide adoption. X
- Implement process to manage budget system tables from benefits by 9/30/2019. X
- Implement new bargaining unit for Park Rangers by 9/30/2019. X
- Implement OE#3 general wage increase by 10/6/2019. X
- Complete timeclock implementation with HRMS integrations by 10/20/2019.
- Complete HRMS upgrades for new health plan providers by 10/21/2019 for OE and 12/16/2019 for final.
- Complete automation of payment posting from bank into rev system by 10/30/2019. X
- Update and improve application monitoring for Division's critical and essential applications by 10/30/2019.
- Set CIS plan for feature activation, system update, and training by 11/30/2019.
- Complete migration to modern SharePoint templates with related setup, updates, and standards by 12/30/2019.
- Create a SharePoint Community of Excellence for training, templates, and best practices by 12/30/2019.
- Implement documented governance protocols for Office 365 and SharePoint by 12/30/2019.
- Complete SQL Server set-up and configuration for IPS DTS by 12/30/2019.
- Complete Tech Procurement streamlining for non-direct departments by 12/30/2019 and direct departments by 6/30/2020.
- Complete old revenue system data conversion by 12/30/2019.
- Complete Budget Fees and Charges by 1/31/2020.
- Complete calendar year-end financials and human resources processes by 1/31/2020.
- Complete database environment refresh by 1/31/2020.
- Lead successful full adoption of SharePoint in 4 target departments by 2/29/2020.
- Decommission old rev system by 3/30/2020.
- Deploy new ODA and build database DR Site by 3/31/2020.
- Improve SharePoint to support successful adoption of records retention, search, and eDiscovery tools by target department by 4/30/2020.
- Complete development and deployment of the Ordinance application including integrations with Hyperion by 4/30/2020.

Complete documentation of Hyperion rules and processes and train successor by 4/30/2020.

Complete PRNS transaction system version upgrade to current by 5/30/2020.

Achieve 70% SSO for all capable products in ITD portfolio by 6/20/2020.

Complete ESD calculation and County load for 2020 by 6/30/2020.

Upgrade event management system to version 44.1 by 6/30/2020.

Support implementation of electronic travel and expense management solution by 6/30/2020.

Improve Microsoft environment Health Score by at large percentage by 6/30/2020.

Deploy OneDrive Citywide by 6/30/2020.

Complete interfaces with revenue system by 6/30/2020.

Implement Legal Interest/Regular Interest/Penalty calculations by 6/30/2020.

Complete financials updates and improvements with Finance by 6/30/2020.

Complete budget system updates and improvements with Budget by 6/30/2020.

Complete contingency plans for all main systems by 6/30/2020.

Complete fiscal year-end financials and human resources processes by 7/31/2020.

Support parking system implementation and network requirements by project dates defined by project team and coordinated with IT.

Complete database server refresh by 12/30/2020.

**Assess options, recommend direction, and set projects for the following:**

Assess and analyze an intranet directory resource for Citywide use by 12/30/2019.

Assess options related to modifying payroll cycle for greater efficiencies by 12/31/2019.

With Finance, assess and analyze direction for Business Tax System by 2/28/2020.

With City Clerk's Office, assess and analyze direction for Giles 2.0 by 2/28/2020.

Complete analysis and technical assessment of integrating ESD Building Performance Reporting citations in RevQ by 6/30/2020.

With systems owners, assess and analyze approaches and tools for a code repository by 6/30/2020.

Assess and propose a plan for replacement of the City Intranet with the Communications Department and Civic Innovation.

Assess CEVP opportunities with CMO, Fire, DoT, Verizon and Amazon.

**OVERALL FUNCTION RATING**

**Division Goal: IT Infrastructure and Operations**

**NI**

**S/C/O**

**Maintain 100% of production systems to within one major version and three updates of current.**

**Successfully complete the following projects by budget, schedule, scope, and satisfaction measures defined:**

Standup new O365 Test Environment by 9/30/2019.

X

Deploy server antimalware to all servers by 9/30/2019.

X

Complete Wi-Fi/Wireless procurements to replace expiring agreement by 9/30/2019.

Streamline New Hire Onboarding process by 9/30/2019

Complete WiFi infrastructure and deploy laptops to support activation of PRNS DOC by 10/30/2019.

Complete DR contingency plans (ISCP) for Infrastructure core service by 10/30/2019

Complete Windows 10 hardware resourcing and procurement by 11/30/2019.

Implement network connectivity solution to replace T1 at PRNS branch offices by 12/30/2019.

Upgrade endpoint antimalware to all PCs by 12/30/2019.

Complete Network Service SLA and cost model for Data/VoIP/Video by 12/30/2019

Deploy network management software for equipment by 3/30/2020.

Complete build out the hyperconverged infrastructure by 4/30/2020.  
 Complete reprographics MFD procurement by 5/30/2020.  
 Complete disaster recovery implementation and test by 5/30/2020.  
 Replace 100% of switches to new standard equipment by 6/30/2020.  
 Deploy new network port security by 6/30/2020.  
 Implement network high availability and load balancing for Internet facing applications by 6/30/2020.  
 Implement network connectivity diversity of major sites to secondary DC by 6/30/2020.  
 Upgrade 100% of Windows 7 computers to Windows 10 by 6/30/2020.  
 Upgrade 100% of Windows 2008 servers to Windows 2016 by 6/30/2020.  
 Migrate 100% of servers and storage defined in infrastructure refresh project plan from old environment to hyperconverged by 7/30/2020.

**Assess options, recommend direction, and set projects for the following:**

With Public Works, assess and analyze portal UPSs at MDFs/IDFs and propose a system alerting and monitoring by 12/30/2019.  
 With OEM, assess current EOC technologies and processes, then recommend an ideal technology build plan for the new EOC by 12/30/2019.  
 With departmental IT teams, assess, plan for, and implement resilience in core infrastructure services for critical City facilities for power vulnerability events by 10/30/2019.

**OVERALL FUNCTION RATING**

**Division Goal: IT Strategic Support**

**NI**

**S/C/O**

**Administer department resources to support the successful use of information and communication technologies in the City:**

Maintain IT Fiscal Status report to providing budget- encumbered=spent/planned status within two weeks of each month-end close.  
 Place excellent personnel in open positions as prioritized, achieving a hire cycle time of ≤14 weeks.  
 Achieve zero contract lapses, late payments, penalties, and late orders for IT goods and services.  
 Assist City Departments with prompt IT purchasing, approvals, and requisition processing. Process and forward finalized PO requests to Finance within 2 days.  
 Maintain an average vacancy rate of ≤13% with quality hires as appraised by IT divisions.  
 Respond to 100% of public records and legal hold requests within required timeframes.  
 Align and update Budget Programs with services including updating information in Hyperion and FMS.  
 Review technology procurement requests with response decisions in two business days on average.

**Successfully complete the following projects by budget, schedule, scope, and satisfaction measures defined:**

Successfully complete the Annual IT Customer Service Survey by 10/15/2019 and coordinate improvements efforts with IT departments.  
 Complete annual Budget Process with CMO, the CIO, IT Divisions, and departments by 4/30/2019.  
 Procure and implement telecommunications billing system/solution by 6/30/2020 and produce efficiencies.  
 Complete Performance Measures Update by 6/30/2020.





Assess and recommend product and project management training and tools to meet C3PO needs including:

- Project chartering process with ITD managers by 12/31/2019
- Project lessons learned with ITD managers by 1/31/2020
- Project chartering and lessons learned with Dept IT Managers by 2/29/2020
- C3PO tools POC, status reporting, and project repositories with ITD and Dept IT Managers by 4/30/2020
- Effective purchasing and contract management practices with ITD and Dept IT Managers by 6/30/2020

Assess and recommend product and user experience/customer experience engineering processes to meet C3PO needs by 3/30/2020.

**OVERALL FUNCTION RATING**

**Division Goal: City Customer Contact Center**

**NI**

**S/C/O**

**Deliver Superior Customer Service and Standards**

Maintain Wait Times of  $\leq 3$  minutes, answer rate of  $\geq 85\%$ , and First Call Resolution rate of  $\geq 70\%$ .

Report call handling volumes and quality measures to customer departments monthly. Update Customer Contact call tree options at least quarterly with customer departments.

Work with department contact groups to maintain the City Customer Service Policy Standards across all call teams.

**Successfully complete the following projects by budget, schedule, scope, and satisfaction measures defined:**

Complete Municipal Water Payment Plan by 2/1/2020.

Improve CIS handling and complete shutoff processes by deadlines set by the cross-department ESD-Finance-IT team.

Automate and pre-script chats and target customer contacts to reduce per session time by 20% by 1/3/2020.

Complete transition of Phase 1 of non-emergency calls received by 911 to the Customer Contact Center, targeting a rate of at least 25,000 per year with high call ratings and minimum call-backs and transfers by 2/28/2020.

**Assess options, recommend direction, and set projects for the following:**

Assess and recommend performance metrics and benchmarks for customer contacts and handling effectiveness by 12/11/2019.

**OVERALL FUNCTION RATING**

**Division Goal: Cybersecurity Office**

**NI**

**S/C/O**

**Protect City infrastructure, information, and systems from cybersecurity risks:**

Maintain...

- Security architecture and compliance reviews
- Active perimeter security management and monitoring
- Compliance with required standards—e.g., PCI, PII, CJIS, et al
- Safe computing training and communications with City employees
- Incident response and preparation

• Coordination with partners (ACTRA/FBI/DHS/MS-ISAC)

Update Cybersecurity policy and standards at least annually.

**Successfully complete the following projects by budget, schedule, scope, and satisfaction measures defined:**

Activate password expiration in HRMS by 8/30/2019.

X

Lead completion of Information System Contingency Plans by 10/30/2019 to support Power Vulnerability Contingency Planning.

Conduct a highly effective and visible Cybersecurity Awareness Month campaign for the month of 10/2019.

Complete Cybersecurity Breach Script of initial steps by 11/30/2019.

Work with Finance to obtain Cybersecurity insurance by 12/30/2019.

Complete Cybersecurity Services RFP awards by 1/31/2020.

Begin continuous security awareness training and habituation program by 10/30/2019.

Implement and achieve fully-operational Virtual Security Operations Center by 6/30/2020.

Complete Cybersecurity Assessment; resolve critical items; and attain letter of attestation for the City's security by 7/30/2020.

**Assess options, recommend direction, and set projects for the following:**

Review Cybersecurity hygiene options for options to significantly improve the City's profile.

Review AI-driven preventative security options for options to significantly improve the City's profile.

**OVERALL FUNCTION RATING**