

City of San José

Information Technology Department

2018-2019 Strategic Technology Work Plan (rev.5, April 2019)

Smart City Vision

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.

- Fully develop the city’s transportation innovation zone to test new products and services, such as autonomous vehicles, that will dramatically shape transportation in the future and mitigate traffic congestion.
- Build an “Internet of Things” platform employing transit vehicles and infrastructure by using smart sensor technologies to improve safety, mobility, and optimize our transit system.
- Create pathways for start-ups and innovators to easily access opportunities to pilot and test new products and services with the City, such as by hosting “demo days” to highlight the most innovative “smart city” companies in Silicon Valley, and sponsoring public competitions to encourage crowdsourcing of innovative solutions to civic challenges.

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

- Broaden access to basic digital infrastructure to all residents, especially our youth, through enabling free or low cost, high-speed, 1 gigabit or faster broadband service in several low-income communities, and increasing access to hardware, including tablets and laptops, for low-income students.
- Build digital skills of our residents through investing in Opportunity Youth and in professional training programs to create a pathway into high tech jobs in Silicon Valley. Expand our libraries’ roles as digital-skills training centers, with continued growth of coding camps, entrepreneurship training, maker spaces, and online learning centers.
- Better utilize digital tools to help to address homelessness and access to affordable housing in San José, such as creating an online rental registry with Housing and Code Enforcement officials to better protect tenants from retaliatory evictions, substandard housing and rent control violations. Work with non-profit partners to use mobile technology to better target scarce resources for homeless assistance.
- Support economic development in historically struggling business districts by using data tools to demonstrate the business case for investing in San José, such as illustrating the purchasing power of neighborhoods foot traffic by location.

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

- Broaden use of data analytics to improve safety, including better targeting code enforcement, identifying homes with the highest fire risk for preventative measures such as smoke alarm checks, and using geo-tagged data on graffiti complaints and truancy rates to inform “hot spot” crime prediction and prevention.[irr](#)
- Reduce traffic accidents and fatalities with connected infrastructure, data analytics, and machine learning that can that can optimize traffic systems and identify high-accident intersections. Target prevention efforts, such as by using behavioral insights to reduce speeding along corridors with high rates of injury crashes.
- Increase transparency by providing datasets, data visualizations and utilizing predictive modeling of crime and policing. For example, pursue increased accessibility and visualizations of complaint, gang crime, auto theft, blight and property crime data.

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

- Enable deployment of energy and water management technology in buildings, and promote real-time data analytics to help residents and businesses conserve energy and water.
- Rapidly deploy sensor technology on city streets and infrastructure and explore on-demand mobility apps to reduce GHG emissions.
- Create a “race to the top” across all City agencies and local businesses to improve energy and water efficiency, using data to benchmark progress, and analytics to identify best practices.

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.

- Build a digital “neighborhood dashboard” that allows residents to seamlessly access information, file report, and collectively solve issues in their own neighborhood. A robust platform would enable residents to access information about nearby development projects easily report broken streetlights and potholes, learn about local festivals, retail businesses and new construction, as well as communicate with other neighbors interested in working together to tackle local challenges.
- Expand civic engagement through initiatives like participatory budgeting and zero-based budgeting, and mobile and online applications, to expand the role of taxpayers influencing City spending decisions.
- Utilize open data and visualization to inform public dialog, policy-making, and management decisions. Ensure that all non-private city data is open by default in easily usable and understandable formats, and aim to integrate San José datasets with those of other relevant agencies, such as school districts, the County of Santa Clara, the Valley Transportation Authority, and the U.S. Census.
- Modernize antiquated City technology systems to reduce costs, improve efficiency, and empower employees to improve service, including substantial upgrades of finance, customer response management, and development services platforms.
- Digitize, automate, and integrate city services to be “user-friendly,” such as enabling online submission of all city forms and permit applications, and electronic payment for city fees. Empower City workers through increasing use of tablets and mobile devices to collect data to streamline inspections and other processes.



IT Metrics 2019



IT Strategic Goals

Secure the City's Information and Systems Assets— 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 diligence 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 San Jose Smart 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.
- Maintain a customer support function rated at $\geq 80\%$ Good to Excellent.
- 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— 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.
- Achieve a project success at $\sim 80\%$. Much more and it's too easy. Much less and we're wasting too much.
- 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.

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.
- Deliver and evolve the Amazing Customer Experience CRM. Engage the community and staff in stellar service delivery.
- Set and make progress on a Green IT Plan to minimize excessive inventories, utilities usage, and e-waste.
- Research and test new technologies with City Departments as prioritized opportunities arise.
- Work with departments and the Purchasing Division to expertly execute technology procurements, manage vendors, and fulfill contracts.

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 as a whole.

	Miss	Met
Department Goal: Shared IT Standards and Goals (All)		
Maintain high standards of professionalism, expertise, stewardship, and inter-reliance for our IT Department and City organization.		
Provide exceptional service!		
Achieve ≥80% "Good" to "Excellent" overall ratings from customers in the City customer service survey on IT services.		X
Achieve ≥99.9% uptime and availability for City network, voice, and server services and ≥99.8% uptime and availability for business systems.		
Complete ~80% of departmental projects within defined time, on budget, in scope, and stakeholder satisfaction limits.		
Achieve significant progress toward 50 th -percentile IT Engagement, as measured by the City's annual Gallup Poll Employee Survey.		
Dedicate two days per IT team member to work in peer departments and learn our customers' experiences. Bring lessons learned to improve IT services.		
Respond to all service/help requests within two hours. Resolve ≥70% of problem cases at first call; ≥85% within two business days; and ≥98% within three weeks.		
Keep cases current and complete with detailed documentation.		
Achieve 70% SSO for all capable products in ITD portfolio by 6/20/2019.		
Ensure certifications and positive audit outcomes across IT services.		
Coordinate technology direction and operations with departmental IT teams via the IT Leadership Group and Change Control Board.		
Support Emergency Management operations, improvements, and response.		
Maintain strong Enterprise Architecture and Change Control processes for the information and communication technologies environment.		
Demonstrate diligence in protecting City from cybersecurity risks in all areas.		
Successfully complete the following enterprise-level projects by measures defined:		
Architect Emergency Operations Center technology environment and processes to improve EOC operations, training, and exercises by 11/30/2018.		X
Complete procurement and implement the ODCA-based Data Portal and City Open Data Environment by dates set in charter. Support broad use.		
Complete My San Jose Privacy Policy by 12/30/2018. - Queued		
Work with the DoT and transportation data analytics vendor to complete an AI-based analysis of City transportation and complete a data story and article by 4/30/2019. = Won APA Award of Merit		X
Work with PRNS to complete an AI-based analysis of gang youth violence and complete a data story and article by 4/30/2019.		X
Work with partners on a data analysis and story on emergency response/times in San Jose for a data article, data story, and data well by 6/15/2019.		X
Work with partners on a data analysis and story on housing/homelessness in San Jose for a data article, data story, and data well by 6/15/2019. - Queued; Department data not ready		
Conclude audits by assigned dates:		
• Financial Statements by 6/30/2019		X
• General Controls by 6/30/2019		X
• Mobile Devices by 6/30/2019	X	
Integrate Office of Emergency Management, SJ Clean Energy, and Budget IT with ITD technologies and processes by 6/30/2019.		X

	Miss	Met
Support the use, support, and fiscal administration of information and communication technologies in the City:		
Maintain IT Fiscal Status report current to the most recent month end, providing budget to spend to encumbered to planned spending.		X
Place excellent personnel in open positions as prioritized, achieving a hire cycle time of <14 weeks.		X
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 PO requests to Finance within 2 days of receipt.		
Maintain a vacancy rate of <15% with quality hires as appraised by IT divisions.		
Respond to 100% of public records and legal hold requests within required timeframes.	X	
Successfully complete the following projects by budget, schedule, scope, and satisfaction measures defined:		
Successfully complete the IT customer service survey by 10/31/2018.		X
Complete Performance Measures Update by 1/16/2019.	X	
Implement wireless cost management solution/service by 12/31/2018 and produce savings of >\$100,000/year.	X	
Implement telecommunications billing system/solution by 3/30/2019 and produce efficiencies of >1000 hours/year.	X	
Complete annual Budget Process with CMO, the CIO, IT Divisions, and departments by 4/30/2019.		X
Assess options, recommend direction, and set projects for the following:		
Work with divisions to properly plan project and program costs.		X
Public Records Request online solution.		

OVERALL FACTOR RATING

	Miss	Met
<u>Division Goal: City Portfolio, Products, Projects Office</u>		
Support the effective product and project management across the City:		
Maintain updates/upgrades, integrations, and support of issues.		
Complete project management templates, trainings, and tools for C3PO. Charter materials and training to be done by 12/14/2018. All materials and training to be done by 6/30/2019.		X
Deliver City Initiatives within Excellence		
Achieve delivery within scope, schedule, cost, and business value goals defined in project charters for...		
Complete new Business Tax System implementation and migration by 11/15/2018.	X	
Develop and procure My San Jose 2.0 architecture by 8/30/2018 and 12/31/2018 4/30/2019, respectively.		
Manage My San Jose to achieve the following key results by 6/30/2019:		
<ul style="list-style-type: none"> • Adoption: Increase active users to ≥40,000 • User Experience: Recurring users to ≥20,000; Staff training ≥100 • Great Handling: Internal Customer Satisfaction 80%; External Customer Satisfaction 80% 		
BTS Amnesty in production with community by 6/30/2019.		
Smart Irrigation by 6/30/2019.		

Business Process Automation analysis and procurement requirements by 9/15/2018, procurement by 12/20/2018, and implementation of prioritized solutions by 6/30/2019. -Delayed in procurement

Arcadia Ballpark by 7/8/2019.

Time Clocks by 9/30/2019.

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

Identify and cost product management training by 12/15/2018.

X

Identify and cost user experience design training by 11/1/2018.

X

OVERALL FACTOR RATING

Division Goal: City Customer Contact Center

Miss

Met

Deliver Superior Customer Service meeting Service Level Agreement and Standards

Maintain Wait Times of ≤ 3 minutes, answer rate of ≥85%, and a First Call Resolution rate of ≥70%(Des, All)

Report the volume of calls to Budget Office and City Departments on a monthly/annual basis and update Customer Contact call tree options at least quarterly with customer departments.

X

Maintain City Customer Service Policy Standards across departments in the City Customer Contact Center and departmental call teams.

X

Administer and support the City's Contact Center Coordination Group, meeting at least quarterly to address trends and shared needs.

X

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

Enhance Strategy for team to backup Program Manager 9/30/18.

X

Implement Call Customer Survey function by 11/30/18.

X

Complete onboarding of Fire Communication Support calls by 5/31/19.

X

Improve automated chat and other forms of customer contacts to reduce the amount of time required per session by 2/28/2019.

X

Support City Auditor, Police, and Fire in completion of the 9-1-1/3-1-1 audit for presentation to City Council by 5/28/2019.

X

Customize scripts for chat tool to improve efficiency and implement chat survey function by 5/31/2019

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

Assess Customer Contact Center Program Manager backup and general team staffing with results of 9-1-1/3-1-1 audit.

OVERALL FACTOR RATING

Division Goal: Cybersecurity Office

Miss

Met

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)

X

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

Complete Cybersecurity Standards and purchasing review checklist first version by 8/31/2018		X
Complete Cybersecurity Standards first version by 9/30/2018.		X
Conduct Cybersecurity Awareness Month campaign by 11/2/2018.		X
Transition city users to web-based VPN by 11/30/2018.	X	
Cybersecurity Services RFP by 12/31/2018 6/30/2019.		
Effectively coordinate and transition firewall and security across Network and Cybersecurity teams by 6/30/2019.		X
Work with Finance to obtain Cybersecurity insurance by 3/30/2018. -Hold		
Implement full Cybersecurity Response Plan and processes by 12/31/2018.		X
Complete Contingency Plan first version by 12/31/2018.		X
Begin continuous security awareness training and habituation program by 3/31/2019. - Hold		
Implement and achieve fully-operational Virtual Security Operations Center by 4/30/2019. - Hold		
Complete a Cybersecurity Assessment by 2/28/2019 and remediation by 6/30/2019. - Hold		
Assess options, recommend direction, and set projects for the following:		
Business Resilience and Resumption Plan		X
Cybersecurity Letter of Attestation - Hold		
AI-driven preventative security solution		X
Review Cybersecurity hygiene options for options to improve		X

OVERALL FACTOR RATING