San José: Smart City Vision

SPUR March 24, 2016



Office of Mayor Sam Liccardo





Why now?

Fiscal Position

Citizen Demand Expected Growth Rate

Pilots to Scale

Making San José America's most innovative city by 2020







Inclusive City



User-friendly



Sustainable City

Demonstration City

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Where are we in the process?

Council vote on March 29

Work planning & hiring (Apr-Aug)

Implementation (Sept 2016-Dec 2020

Projects already in progress





Safe City: Illustrative initiatives

- 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, truancy rates, and other incidences to inform "hot spot" crime prediction and prevention.
- Reduce traffic accidents and fatalities with connected infrastructure, data analytics, and machine learning that can optimize traffic systems and identify high-accident intersections. Target prevention efforts, such as 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 data. For example, pursue increased accessibility and visualizations of complaint, gang crime, auto theft, blight and property crime data.
- Utilize "smart infrastructure" and digital platforms in emergency and disaster response to improve preparedness, response, recovery, and resiliency, and integrate crowdsourcing to engage residents in recovery efforts.







Inclusive City: Illustrative initiatives

- Broaden access to basic digital infrastructure for all residents, especially our youth, by enabling free or low cost, highspeed, 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 by investing in Opportunity Youth and 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 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 Jose, such as illustrating the purchasing power of neighborhoods and foot traffic by location.







User-friendly City: Illustrative initiatives

- **Build a digital "neighborhood dashboard"** that allows residents to seamlessly access information, file reports, and collectively solve issues in their own neighborhood
- **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 data visualizations 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 by increasing use of tablets and mobile devices to collect data in order to streamline inspections and other processes where it will improve productivity.







Sustainable City: Illustrative initiatives

- 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.







Demonstration City: Illustrative initiatives

- **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 building infrastructure with 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 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.





How are we going to get all this done?



Core values to guide our work

- Integrate digital tools into the daily work of the City to promote a transparent, data-driven culture of innovation and continuous improvement.
- Relentlessly focus on customer service, by integrating user-centric design principles into service delivery and technology platforms across City Hall.
- Protect the individual privacy of our residents and provide secure IT platforms.
- 4. Favor technology solutions that are accessible to all residents and help to level the playing field for underserved populations.
- 5. Effectively partner with the private sector, universities, foundations, and other organizations to accelerate impact.
- 6. Embrace calculated risks, pilot new initiatives, and iterate to learn from failure before scaling initiatives.
- Amplify the expertise of the City's own workforce by cultivating the best ideas within City Hall and throughout our community to leverage technology and data to improve services.
- Allocate resources to initiatives based on Council's defined priorities, impact to the community, and return on investment to the City





Thank you SPUR!



