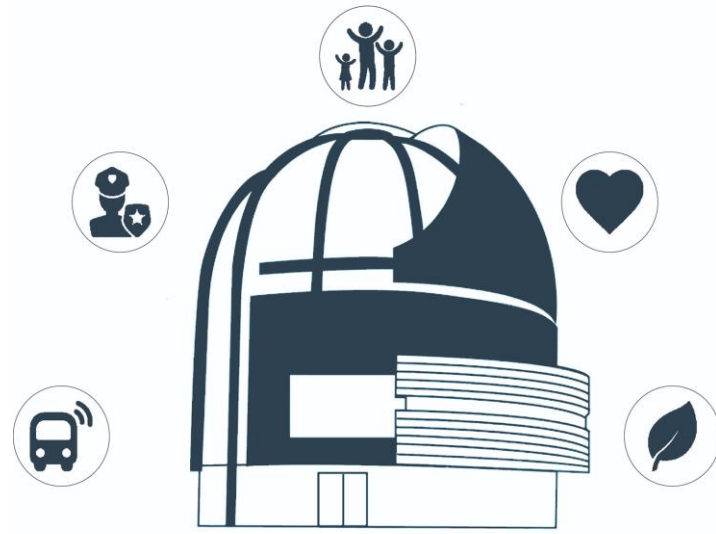# Smart City Roadmap 2.0 Project Status Update

Rajani Nair, Smart City Manager
Smart Cities and Service Improvements Committee
November 1, 2018

Connecting the Vision to Implementation

Smart City Vision (2016)

- Safe
- Inclusive
- User-Friendly
- Sustainable
- Demonstration

KEY: Developed   In Process   Future

Themes and Strategies for Smart City Roadmap Implementation (2018 - 2020)

Smart Infrastructure

Broadband Strategy

IoT Strategy

Drone & Robotics Strategy

User-Friendly Government

Open Data Environment strategy

Digital Service Strategy

Privacy Strategy

Data Strategy

Procurement Strategy

Smart Mobility

Autonomous Vehicles Strategy

Emerging Mobility Strategy

Mobility Strategy

Equity

Digital Inclusion Strategy

Community Wi-fi strategy

Incubator Strategy

Homelessness

Safe City

Emergency Management Roadmap

Safe City Strategy

Clean City & Smart Sustainability

Climate Smart Plan

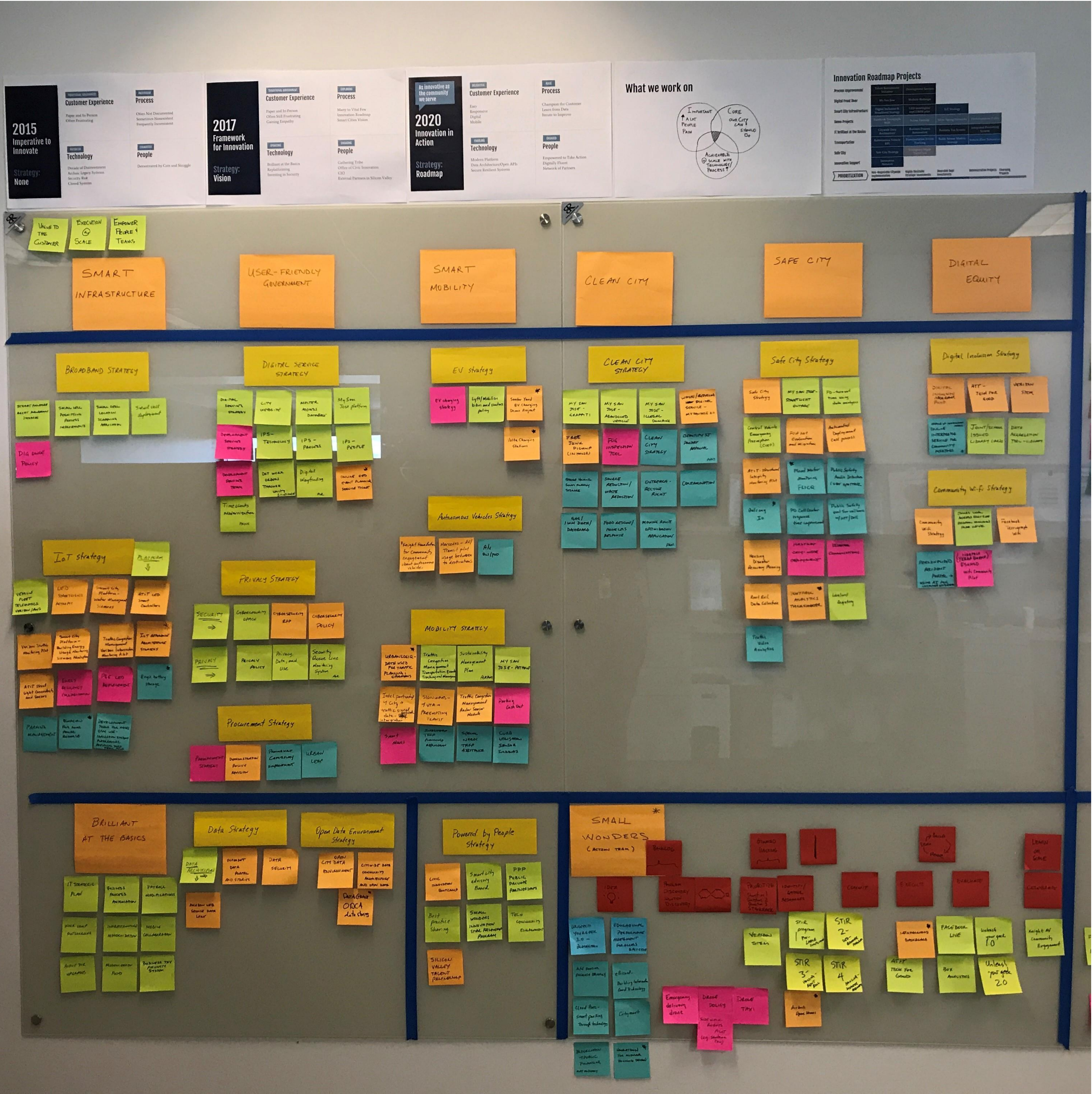My San Jose 2.0

EV strategy

Brilliant at the Basics

Cybersecurity strategy

IT Strategic Plan

IT infrastructure strategy

Business Process Automation

Smart City
Roadmap 2.0 is a work
in progress.

At last count, the
portfolio is over 600%
larger (133 projects)
than the
Innovation Roadmap
1.0 (22 projects)

80% Big Rocks
20% Small Wonders

Brilliant at the Basics

Theme	In Progress	Initiating	Backlog
Brilliant at the Basics	Secure the City *(minor delay)*	Business Tax Amnesty System	IT Sinking Fund
	IT Talent & Engagement	Community Data Portal	IT Services Reorganization
	IT Infrastructure Refresh	My San Jose 2.0	IoT Platform
	Business Process Automation *(minor delay)*	Data Security and Privacy	
	Products-Projects Management	City Open Data Environment	
	Business Tax System *(major delay)*	Data Engagement (SVCF Grant)	
	IT Policies Refresh *(minor delay)*	IoT Architecture	

Smart Infrastructure

Theme	In Progress	Initiating	Backlog
Smart Infrastructure	Small Cell permitting team & process improvements	LED Streetlights	Battery storage solutions
	Small cell deployment	Smart City Platform - Building Energy Usage Monitoring	Parking Management
	Small Cell street furniture asset managment application	LED Lighting pilot and smart lighting nodes/controllers	Energy Resilency Collaboration
	LED Replacement in Downtown	Structural Monitoring pilot	Blockchain for Solar Power Exchange
	IoT Reference Architecture	Smart Infrastructure Nodes pilot	Volta Charging Stations
	Dig Once Policy	Smart City Platform - Water Management	
	Vehicle Fleet Telematics	Vision Zero Intersection Monitoring Services Pilot	
	EV strategy *(minor delay)*	Vehicle Fleet Telematics - Verizon Connect/AWS	
		Senter Yard EV Charging Demonstration Project	

Smart Mobility

Theme	In Progress	Initiating	Backlog
Smart Mobility	Traffic Congestion Management - Transportation Events Tracking and *(minor delay)*	Traffic Congestion Management - Radar Sensor Module	Autonomous Vehicles Strategy
	UrbanLogiq	Autonomous Vehicle - Network Safety	Autonomous Vehicles Bus/Ped
	CVEP	Autonomous Vehicle - Connecting key destinations	Smart Moves
		Autonomous Vehicle - AV Community Engagement (Knight Foundation)	Parking Cash Out
		Sustainability Management Plan (Airport)	Curb Utilitzation Sensor Insights
		My San Jose - Pothole	Intergrated Trip Planning Application
		Mobility Strategy	Spacing Needs Trip Assistance
		Emerging Mobility Strategy	Traffic Signal Data Intergration - Intel
		Sinewaves with VTA - Preempting Transit	
		New Parking Management	

User-Friendly Government

Theme	In Progress	Initiating	Backlog
User-Friendly Government	Intergrated Permitting Systems - Technology *(minor delay)*	Development Services Strategy	Drone & Robotics Strategy
	Intergrated Permitting Systems - Process *(minor delay)*	Demonstration Policy Revision	Energy Recilency Collaboration
	Intergrated Permitting System - People *(minor delay)*	Civic Innovation Bootcamp	Engie Battery Storage
	Cybersecurity Office	Procurement Strategy	Parking Management
	City Website *(minor delay)*	Development Services Team	Assest management tools for PRNS O&M use
	Privacy Strategy	Procurement Capability Improvement	Beautify San Jose Project Approval
	Data Strategy	Timeclocks Modernization	
	Neighborhood Dashboard	Online Event planning service ticket service	
	My San Jose 2.0 - Abandoned Vehicle		
	My San Jose 2.0 - Graffiti		
	My San Jose 2.0 - Illegal Dumping		
	My San Jose 2.0 - Pothole		
	My San Jose 2.0 - Streetlight Outage		
	My San Jose 2.0 - General Request		
	Facebook Live and Box Analytics		
	STIR program		
	Master Address Database		
	Digital Services Strategy		
	Cybersecurity RFP		
	Cybersecurity Policy		
	Online Event planning service ticket service		
	Security Queue Line Monitoring System		

Safe City

Theme	In Progress	Initiating	Backlog
Safe City	Central Vehicle Emergency Preemption (CVEP)	Automated Deployment Call process	Footfall Analytics
	FD using data analysis to improve turnout time	Safe City Strategy	Flood Water Monitoring
		AT&T - Structural Integrity Monitoring Pilot	Traffic video Analytics
		FirstNet Evaluation and Migration	Public Safety Audio Detection
		9-1-1/3-1-1 Contact Handling Assessment / Improvements	

Equity

Theme	In Progress	Initiating	Backlog
Equity	Landlord Registry	ESUHSD Wifi Community Pilot	Incubator Strategy
	Community Wi-Fi strategy	Census 2020	Homelessness
	STEM pilot	Educational Performance for Access Eastside	Online Interpretor tool for Community Meetings
	Tech for Good pilot		ESUHSD Wifi - Overfelt & Yerba Buena
	Digital Inclusion Strategy		
	Digital Inclusion Program Fund		
	Joint/School Issued Library Cards		
	Data Migration Tool - Library		
	Facebook Terragraph Wi-Fi *(minor delay)*		

Clean City & Smart Sustainability

Theme	In Progress	Initiating	Backlog
Clean City & Smart Sustainability		Develop Reporting Structure for Greenhouse Gas Emissions for the City	Develop Electric Vehicle (EV) Strategy to Advance Public and Private Charging
		Develop Data Tools and Online Dashboard-	Food Rescue/Homeless Response
		Climate Smart Pathway Model-	Source Reduction/Waste Reduction
		Develop Innovative Policies and Programs to Spur Energy Efficiency in Commercial	Outreach - Recycle Right
			Contamination
			Free Junk Pickup (In House)
			Fog Inspection Tool
			Mowing Route Optimization Application
			GHG/IWM Data/Dashboard
			Beautify San Jose Project Approval

Legend

- In Progress: On schedule, on-budget
- Initiating
- In-Progress: Minor Schedule or Budget Delay
- Backlog
- In-Progress: Major Schedule or Budget Delay

Theme	In Progress	Initiating	Backlog
Smart Infrastructure	Small Cell permitting team & process improvements	Citywide LED Streetlights	Battery storage solutions
	Small cell deployment	LED Lighting pilot and smart lighting nodes/controllers	Parking Management
	Small Cell street furniture asset managment application	Smart City Platform - Building Energy Usage Monitoring	Energy Resiliency Collaboration
	LED Replacement in Downtown	Senter Yard EV Charging Demonstration Project	Blockchain for Solar Power Exchange
	IoT Reference Architecture	Smart Infrastructure Nodes pilot	Volta Charging Stations
	Dig Once Policy	Vehicle Fleet Telematics - Verizon Connect	Structural Monitoring pilot
	Vehicle Fleet Telematics	Smart City Platform - Water Management	
	EV strategy	Vision Zero Intersection Monitoring Services Pilot	

Legend:
- In Progress: On schedule, on-budget
- In-Progress: Minor Schedule or Budget Delay
- In-Progress: Major Schedule or Budget Delay
- Initiating
- Backlog

Theme	Key Victory
Brilliant at the Basics	HR/Payroll/Talent/Budget Modernizations
	My San Jose/CRM/1.0-1.5
	Open Data Architecture
	Revenue System
	Treasury System
	Workers Comp System and Service
	IT Roadmap Brilliant at the Basics
Smart Infrastructure	Broadband Strategy
	IoT Strategy
	Broadband Agreements
	Vehicle Fleet Telematics
	AV Pilot Projects
User-Friendly Government	Open Data Environment Strategy
	HR Talent Recruitment
	Innovators Network
	Smart City Advisory Board
	Work Orders through Unity using Salesforce platform
Smart Mobility	Radar Sensor Module
	Lyft/Mobilize bikes and scooters policy
Equity	AirBnB Partnerships
Safe City	Emergency Management Roadmap
	Fire Alert System
	Police Dashboard

Sample goals, outcomes and results from strategy to projects

Theme — Smart Infrastructure

Strategy — Broadband Strategy

Strategy Goals —
Consumer choice
Digital inclusion
Preparing for Smart City

Operational Metrics

Location Screening
# of locations approved with average time to review

Permitting
Permitting time for structural and electrical sub-teams
Average turn-around time for City and Carriers
Average # of review cycles

Site License Agreement
in progress and # executed

Construction
pending final inspection
of sites activated

Project Outcomes —
Negotiated Large Scale Agreements with ATT, Verizon and Mobilite
Established small cell team
Development of Digital Inclusion Program Fund Design, Research & Recommendations

Desired End Result —
Launch and scale deployment of 4,000 Small cells and 1,000 miles of fiber
Improve small cell process and technology
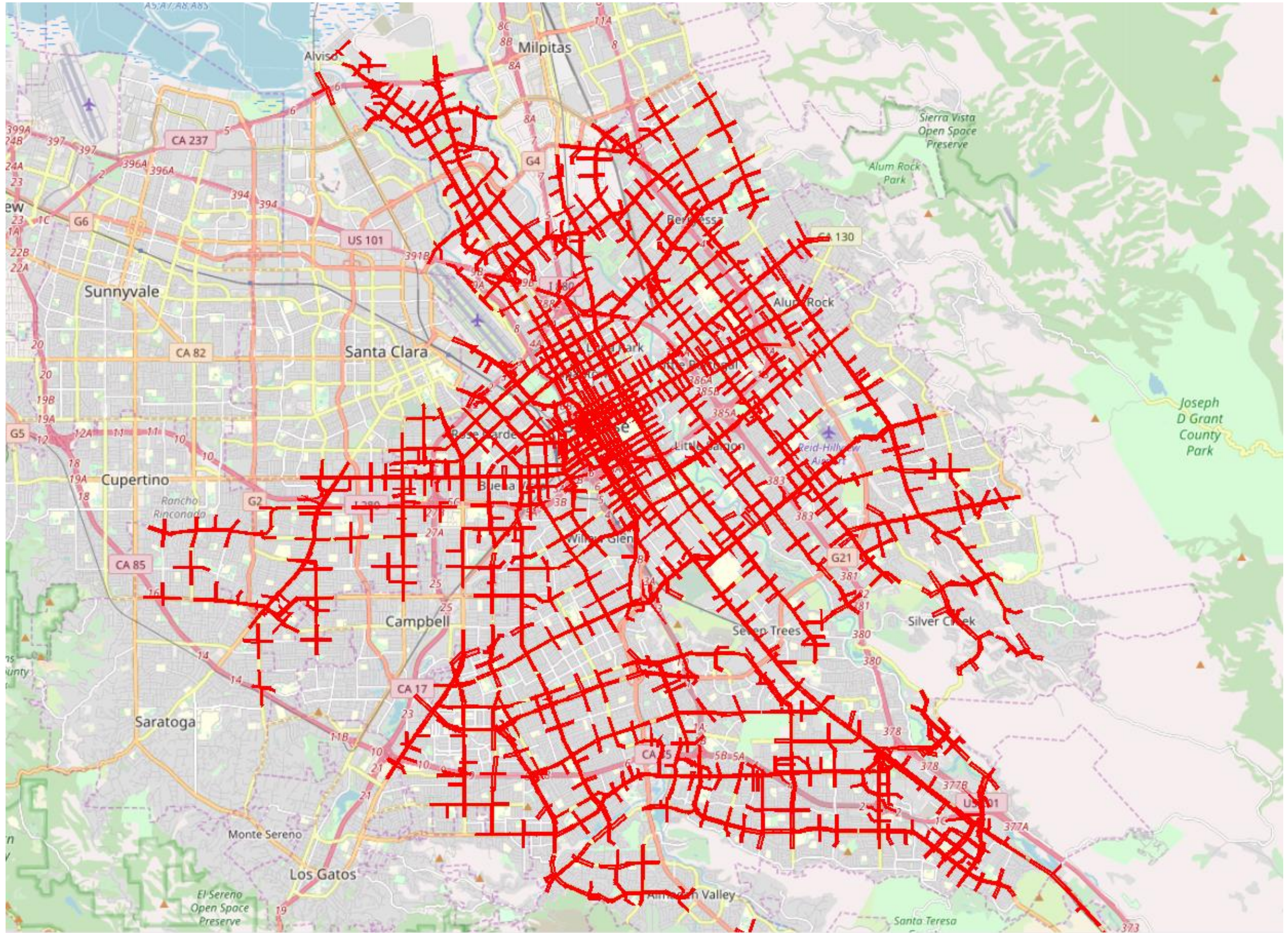Launch Smart City zones & Digital Inclusion Strategy

Next Steps

Continuing collaboration and prioritization of projects with City Departments

Developing and evaluating small wonders prioritization process and selecting small wonders projects
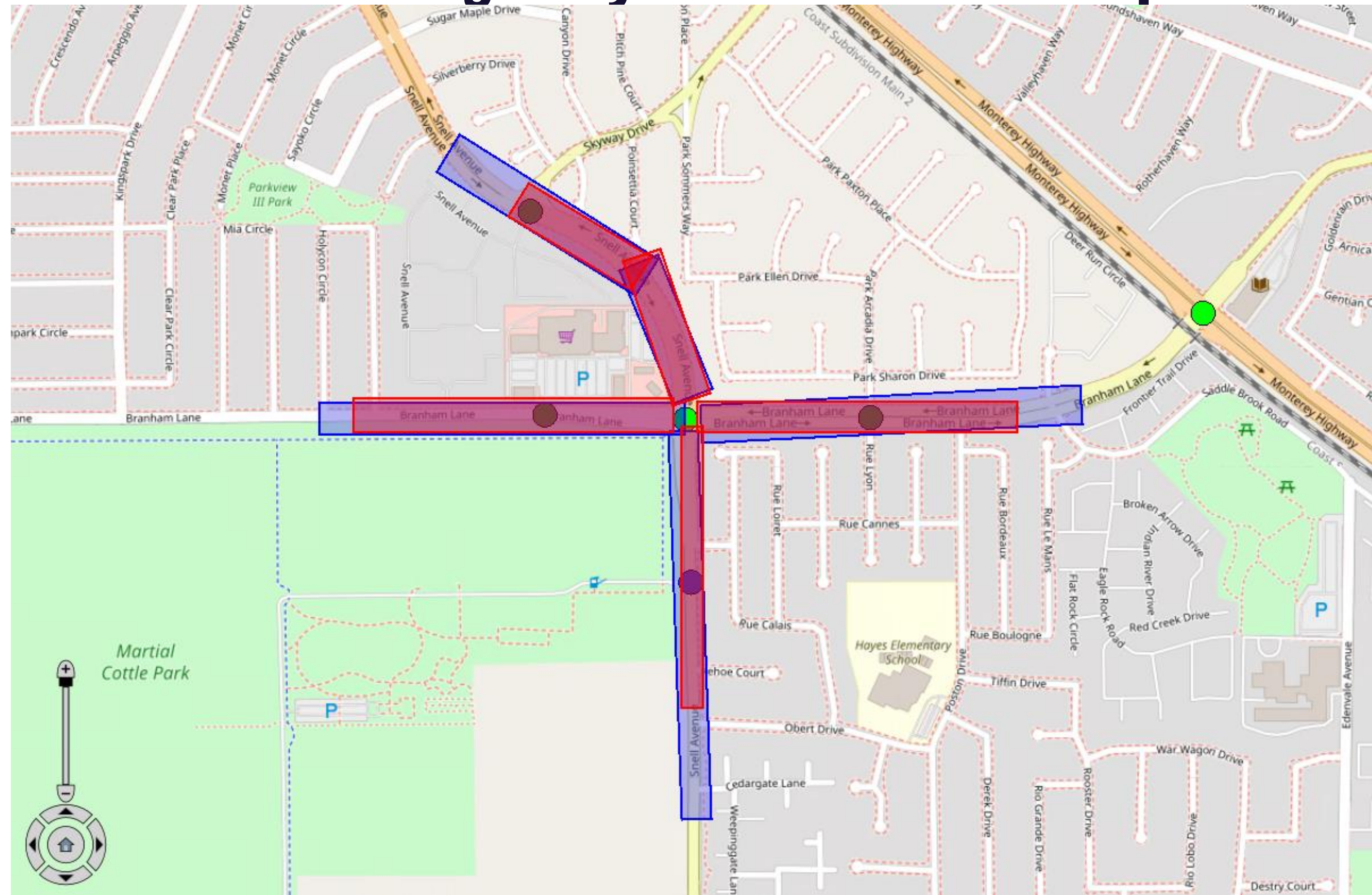
Identifying Resources/Funding for execution at scale

Developing a framework for identifying strategic outcomes and metrics for strategies with Department support
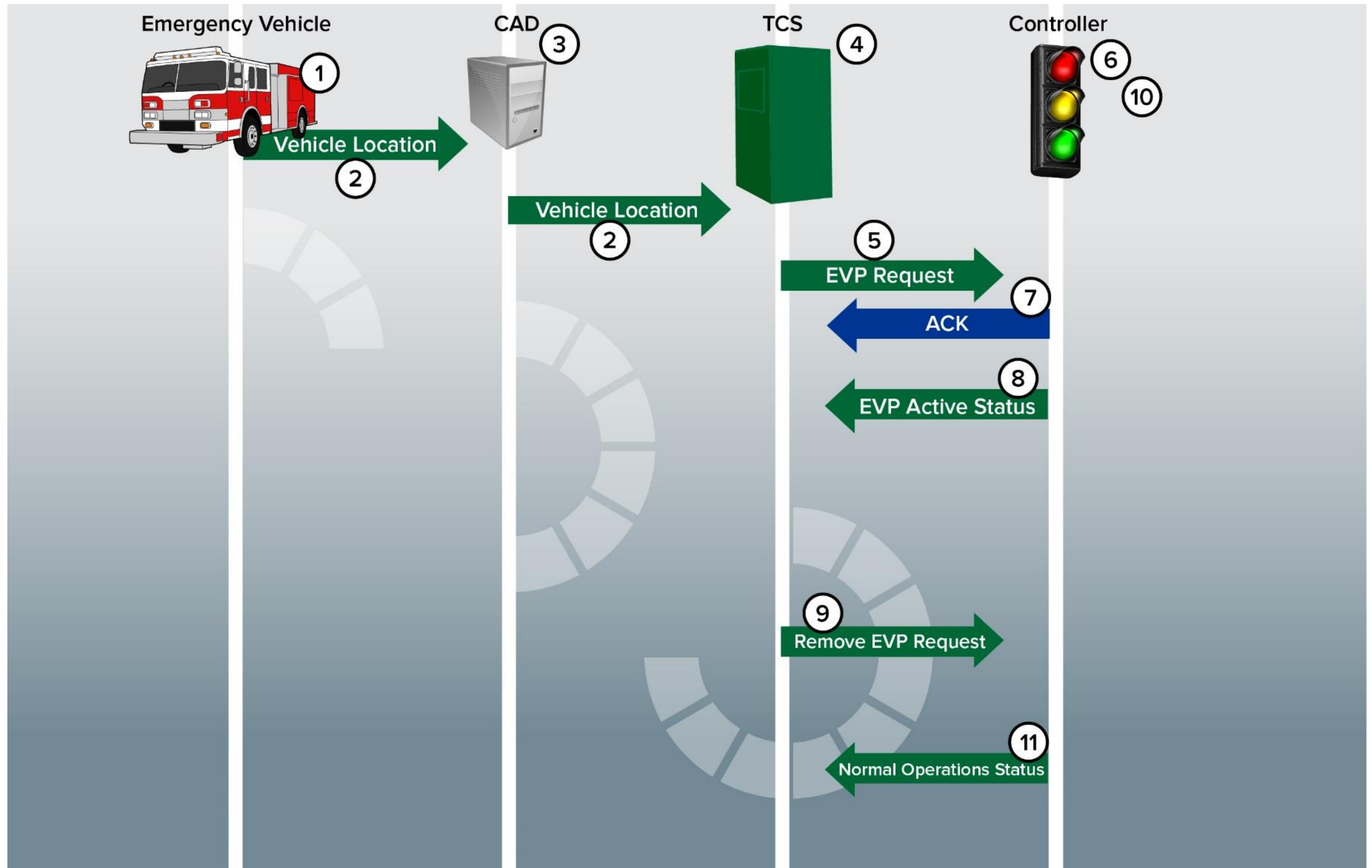
Central Emergency Vehicle Pre-emption

Central Emergency Vehicle Pre-emption

Central Emergency Vehicle Pre-emption

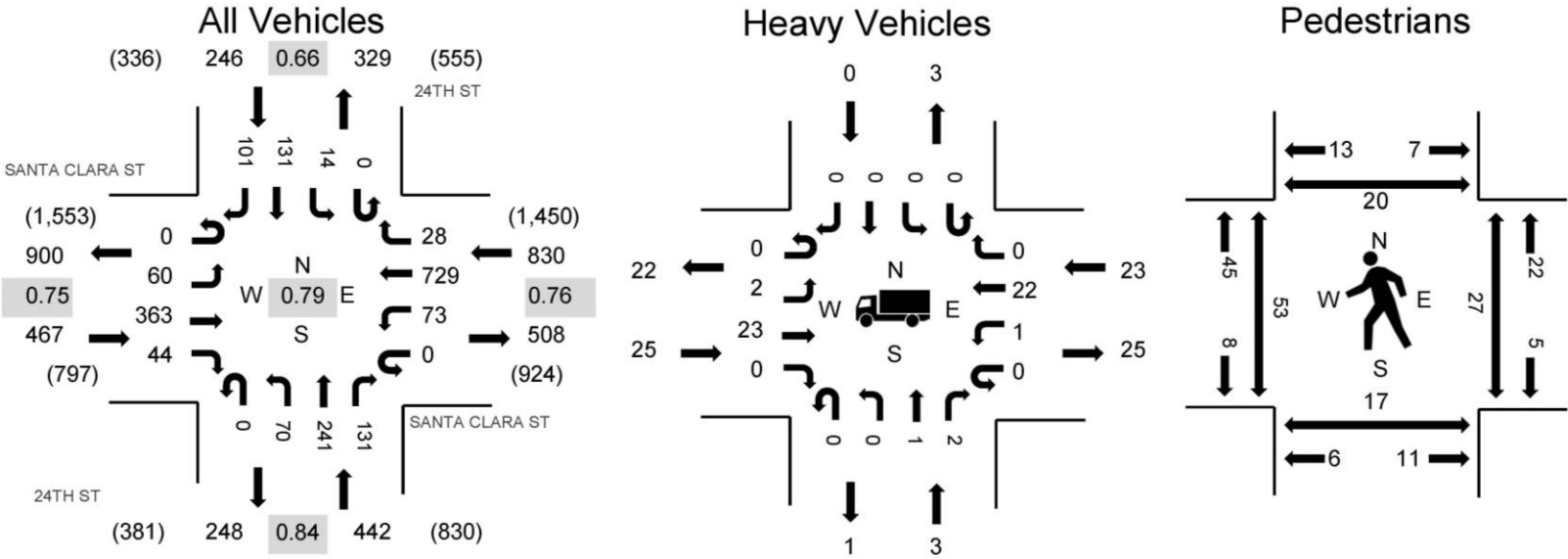Placeholder
"Video of CEVP"

Urbanlogiq

Urbanlogiq

Location: 3790 24TH ST & SANTA CLARA ST AM
Date: Thursday, September 20, 2018
Peak Hour: 07:25 AM - 08:25 AM
Peak 15-Minutes: 07:40 AM - 07:55 AM

Peak Hour

All Vehicles

Heavy Vehicles

Pedestrians

Note: Total study counts contained in parentheses.

	HV%	PHF
EB	5.4%	0.75
WB	2.8%	0.76
NB	0.7%	0.84
SB	0.0%	0.66
All	2.6%	0.79

Traffic Counts - All Vehicles

Interval Start Time	24TH ST Northbound				SANTA CLARA ST Eastbound				24TH ST Southbound				SANTA CLARA ST Westbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	3	20	12	0	0	27	1	0	2	4	0	0	7	40	0	116	1,793
7:05 AM	0	6	14	11	0	2	6	2	0	1	5	2	0	3	26	1	79	1,830
7:10 AM	0	3	13	12	0	7	21	3	0	0	5	0	0	6	28	3	101	1,877
7:15 AM	0	8	20	16	0	1	17	1	0	1	4	5	0	4	45	2	124	1,941
7:20 AM	0	4	12	11	0	2	26	1	0	0	6	2	0	3	54	5	126	1,956
7:25 AM	0	7	27	9	0	4	24	4	0	0	7	6	0	2	40	3	133	1,985
7:30 AM	0	3	27	16	0	5	33	1	0	0	4	7	0	2	62	1	162	1,983
7:35 AM	0	1	27	15	0	8	25	3	0	2	9	11	0	3	50	1	155	1,965
7:40 AM	0	5	19	11	0	9	44	8	0	2	13	13	0	14	89	6	233	1,921
7:45 AM	0	4	21	8	0	9	34	3	0	1	17	9	0	5	58	2	171	1,824
7:50 AM	0	8	25	8	0	6	36	6	0	2	13	17	0	11	92	4	228	1,764
7:55 AM	0	4	10	15	0	7	23	3	0	2	20	14	0	4	60	3	165	1,677
8:00 AM	0	7	10	6	0	6	27	3	0	2	11	11	0	7	61	2	153	1,620
8:05 AM	0	8	21	9	0	0	28	2	0	1	14	5	0	3	35	0	126	
8:10 AM	0	4	22	12	0	2	34	4	0	1	7	2	0	6	69	2	165	
8:15 AM	0	8	16	11	0	3	25	3	0	1	14	5	0	6	45	2	139	
8:20 AM	0	11	16	11	0	1	30	4	0	0	2	1	0	10	68	1	155	
8:25 AM	0	11	15	8	0	1	28	2	0	0	5	1	0	6	53	1	131	
8:30 AM	0	5	11	7	0	3	34	0	0	0	6	3	0	6	66	3	144	
8:35 AM	0	19	19	12	0	5	24	1	0	0	2	1	0	4	23	1	111	
8:40 AM	0	8	17	10	0	0	25	0	0	0	5	1	0	3	65	2	136	
8:45 AM	0	8	12	5	0	0	21	3	0	0	7	3	0	5	45	2	111	
8:50 AM	0	12	13	12	0	2	40	1	0	0	4	4	0	6	46	1	141	
8:55 AM	0	1	11	7	0	3	18	2	0	2	6	3	0	4	49	2	108	
Count Total	0	158	418	254	0	86	650	61	0	20	190	126	0	130	1,269	51	3,413	
Peak Hour	0	70	241	131	0	60	363	44	0	14	131	101	0	73	729	28	1,985	

Urbanlogiq