

Today's Agenda

- (d) 1 – Citywide Data Strategy Update
- (d) 2 – Autonomous Vehicles Update

Smart Cities and Service Improvements Committee
September 3, 2020

Kip Harkness, Deputy City Manager

(d)1 – Citywide Data Strategy Update

Smart Cities and Service Improvements Committee

September 3, 2020

Andrew Ehrich, Assistant to the City Manager, City Data Analytics Lead

Olympia Williams, Operations Coordinator, BeautifySJ Response Branch

Amory Brandt, Senior Executive Analyst, BeautifySJ Response Branch

When We Last Left Our Heroes...

Importance of Data to Smart Cities



When We Last Left Our Heroes...

Building data capabilities requires investment...

Technology



People



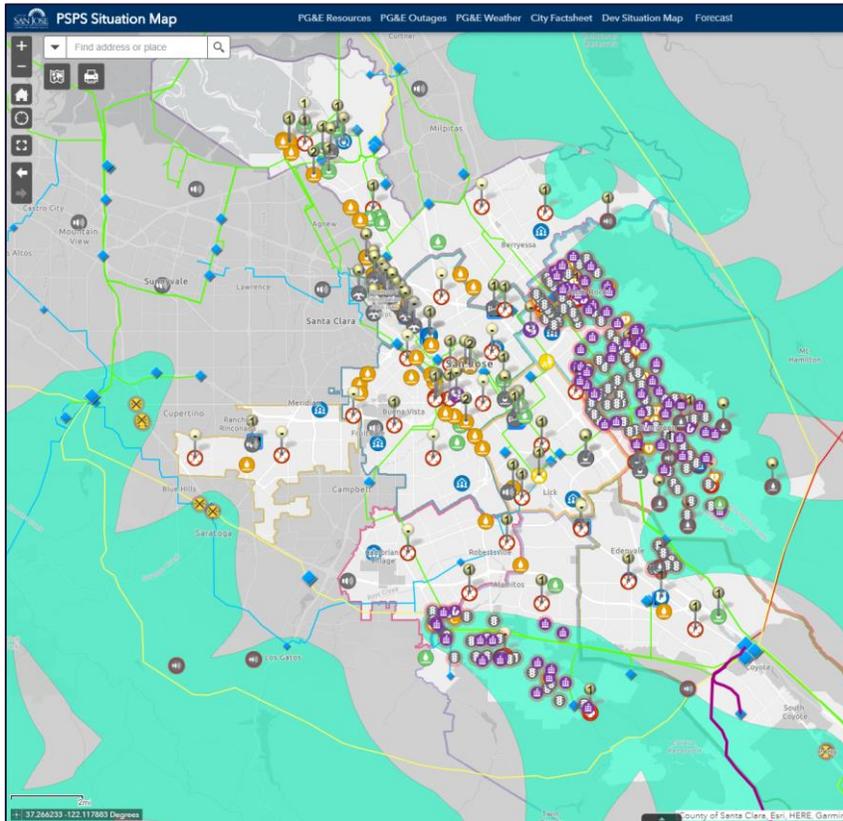
Processes



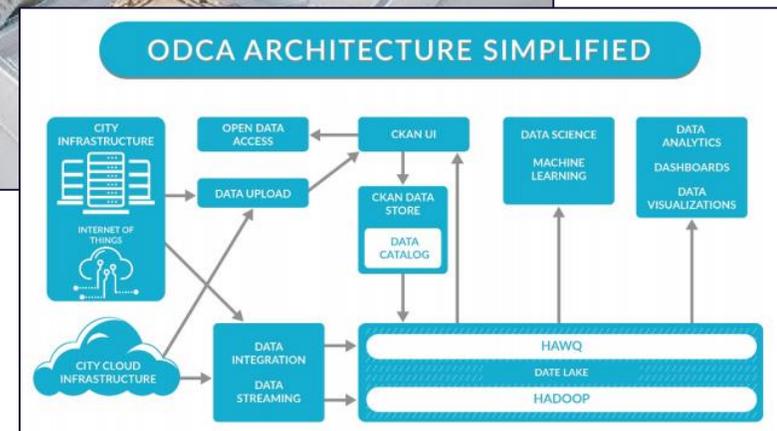
When We Last Left Our Heroes...

... and we have been investing

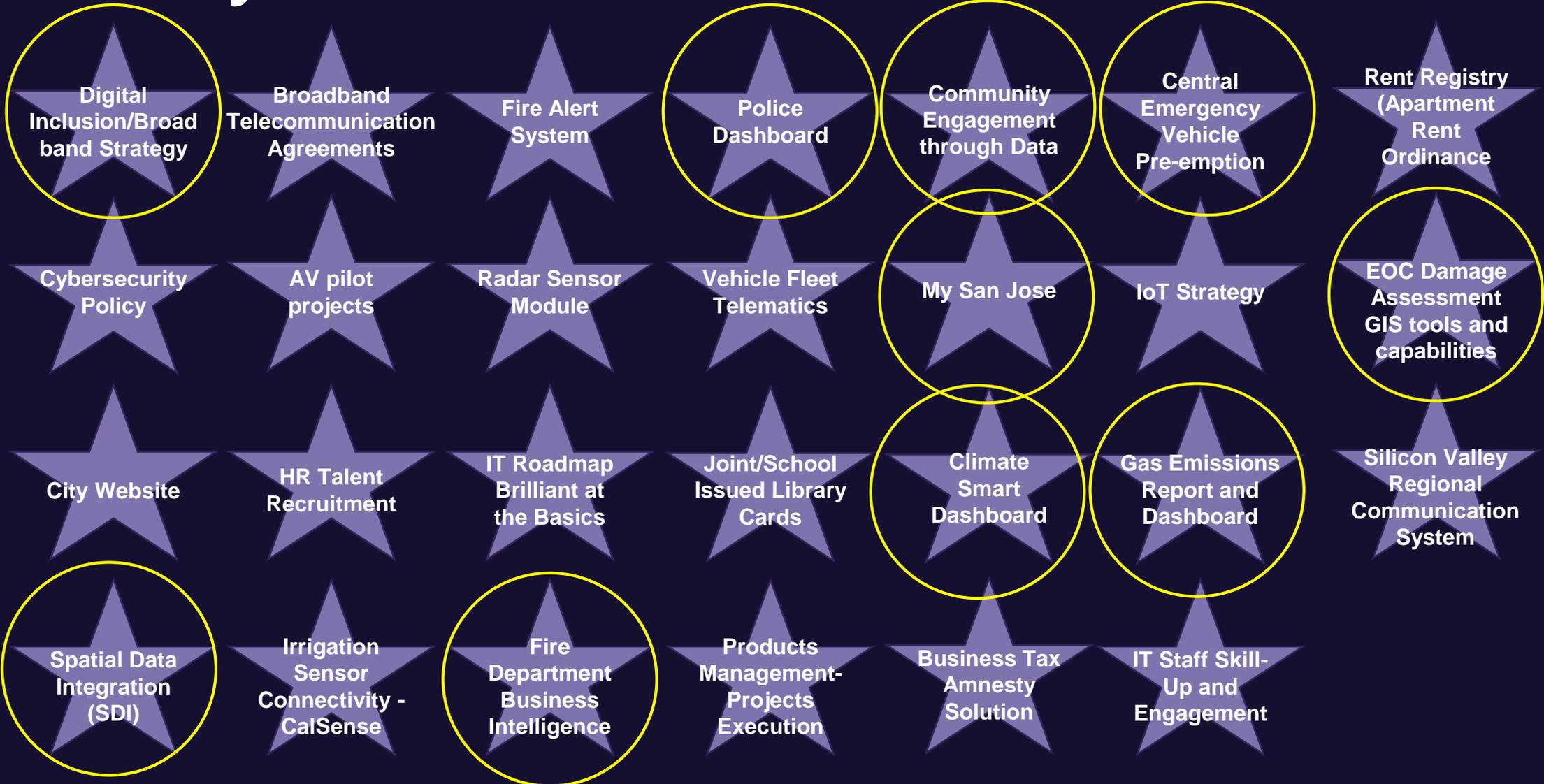
GIS Center of Excellence



Open Data Community Architecture



Victory List



SAN JOSE, CA

is a What Works Cities Silver Certified city!

Recognized for excellence
in data-driven local governance

For more information, visit:

whatworkscities.bloomberg.org/certification

**WHAT
WORKS
CITIES**
SILVER 2020

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HOW DOES YOUR CITY MEASURE UP?

FOUNDATIONAL PRACTICES

A brief explanation of the 8 Foundational Practices.

Data Governance

The active presence of an authoritative body to lead and oversee data inventory in alignment with citywide technical, privacy, and strategic objectives.

Evaluations

Systematic assessments using standard research methods to help local governments gain insights into the design, implementation, or effects of a policy, program, or practice, and make continual improvements.

General Management

A strong foundation for the effective use of data and evidence to drive decision-making in local governments starts with the chief executive and local government leadership explicitly communicating and demonstrating to staff that governing with data and evidence is an organizational expectation.

Open Data

The practice of proactively making electronic data records publicly available - in whole or in part - and legally open without restriction on use or re-use. Included in this practice is the creation of sustainable open data systems that promote informed decision-making, transparency, and robust citizen engagement.

Performance & Analytics

The practice of studying how to perform better and inserting those insights into the operational decision-making process, solving local government problems through performance management systems, and creating a culture of accountability.

Repurposing

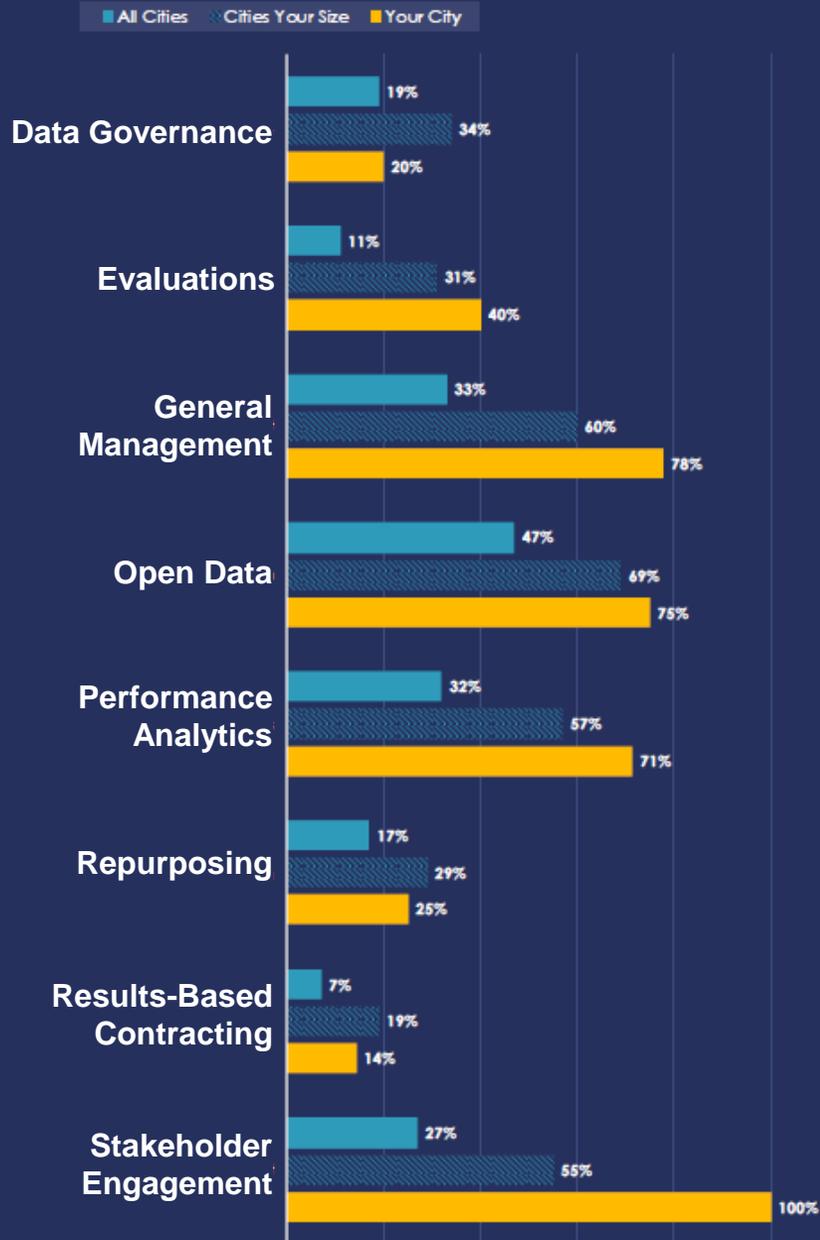
A strategic process that local governments use to shift funding and resources from ineffective programs and services, to those that are evidence-based and resident-focused.

Results-Driven Contracting

A set of strategies to structure, evaluate, and actively manage contracts strategically, using data to help local governments leverage procurement as a tool to make progress on their highest priority goals.

Stakeholder Engagement

The practice of facilitating opportunities for the community use of open data to solve pressing challenges, going beyond open data policies and portal.



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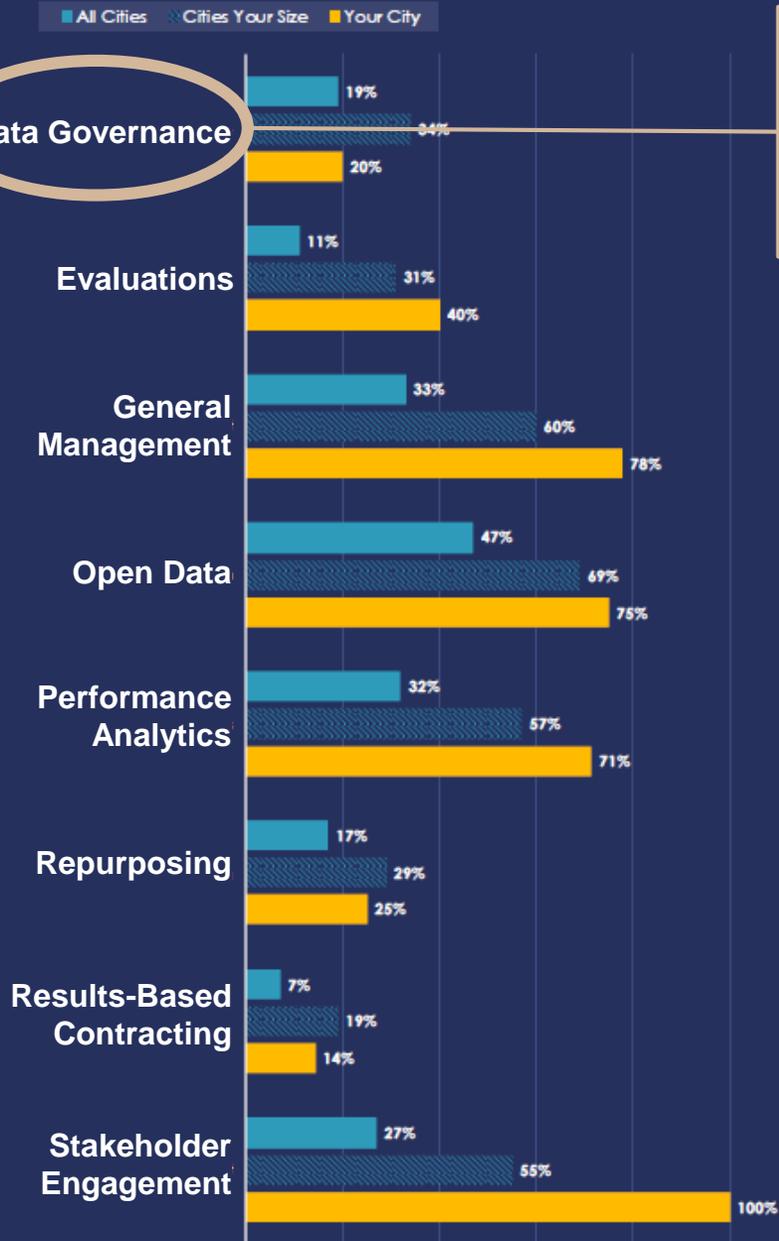
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Data Governance



Data Should Be:

- Easy to Find
- Trusted
- Easy to Share



Data in San José

OBJECTIVES AND KEY STRATEGIES

Objectives

Democratize the
Value of Data



Foster Communities
of Practice



Enable Data-Driven
Teams and Organizations



Key Strategies

Build Usable Data Assets

Transform raw data into correct, trusted, and understandable data assets that are protected when appropriate and otherwise easy to use by city, council, and public users

Provide Usable Analytic Tools

Make it easy for city staff to explore, analyze, and report on data in order to inform and aid their work

Enable Cross-Functional Insight

Encourage data sharing within and across internal and external stakeholders and partners by making it low-cost, low-risk, and valuable

Lower the Barrier

Increase the number of city staff who can use data analysis to inform their work

Raise the Ceiling

Expand the use of advanced data techniques in providing and evaluating programs

Grow the Tribe

Amplify our ability to tell and publicize quality-assured data stories to increase understanding of data's value and grow demand for future data work

Aid Data-Driven Analysis

Provide playbooks and assistance for measuring the effectiveness, efficiency, and equity of City policies, programs, and services

Support Organizational Change

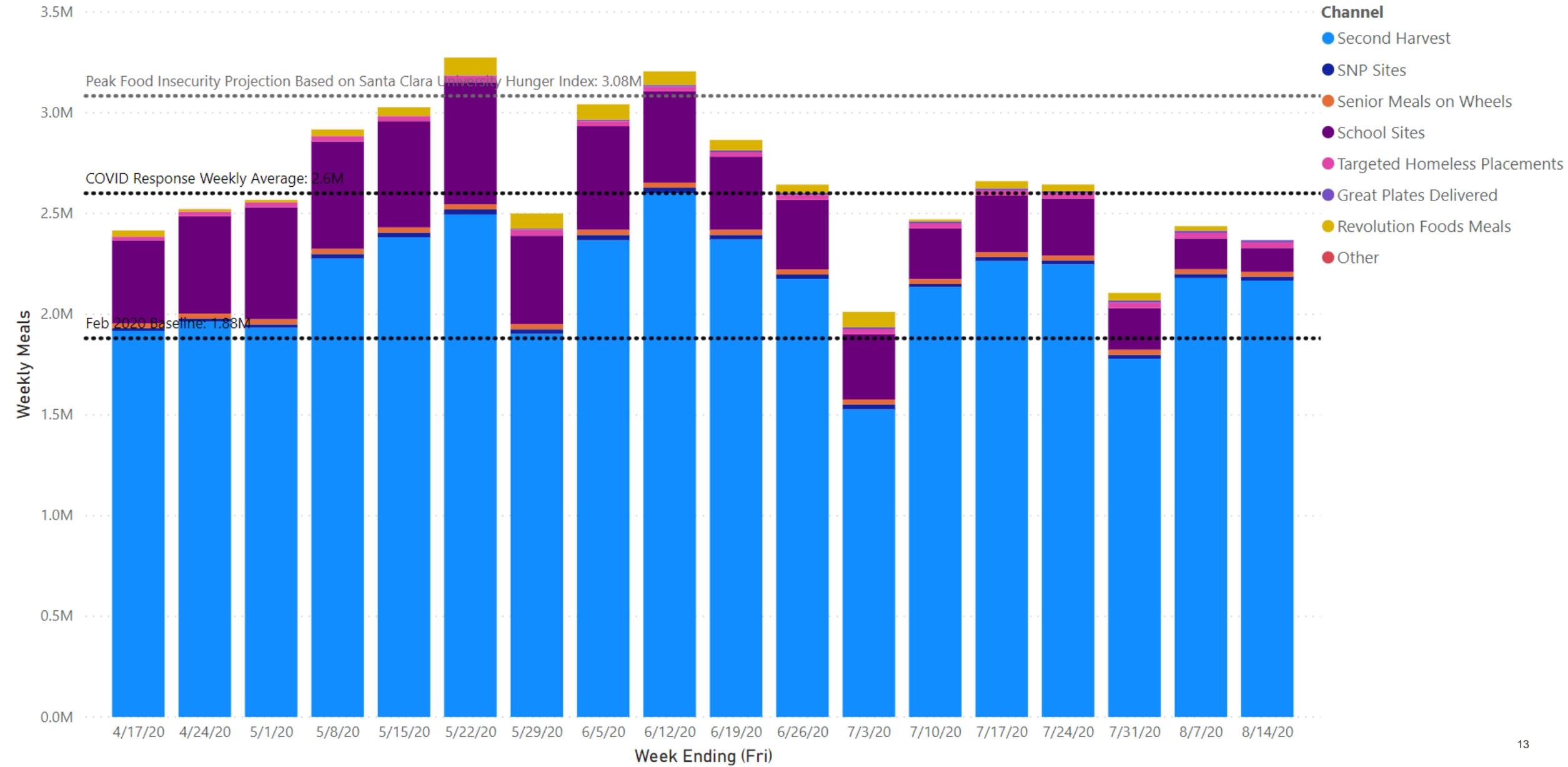
Build a bank of people-, process-, and technology-related resources and guidance to enable teams and departments who want to be more data-driven

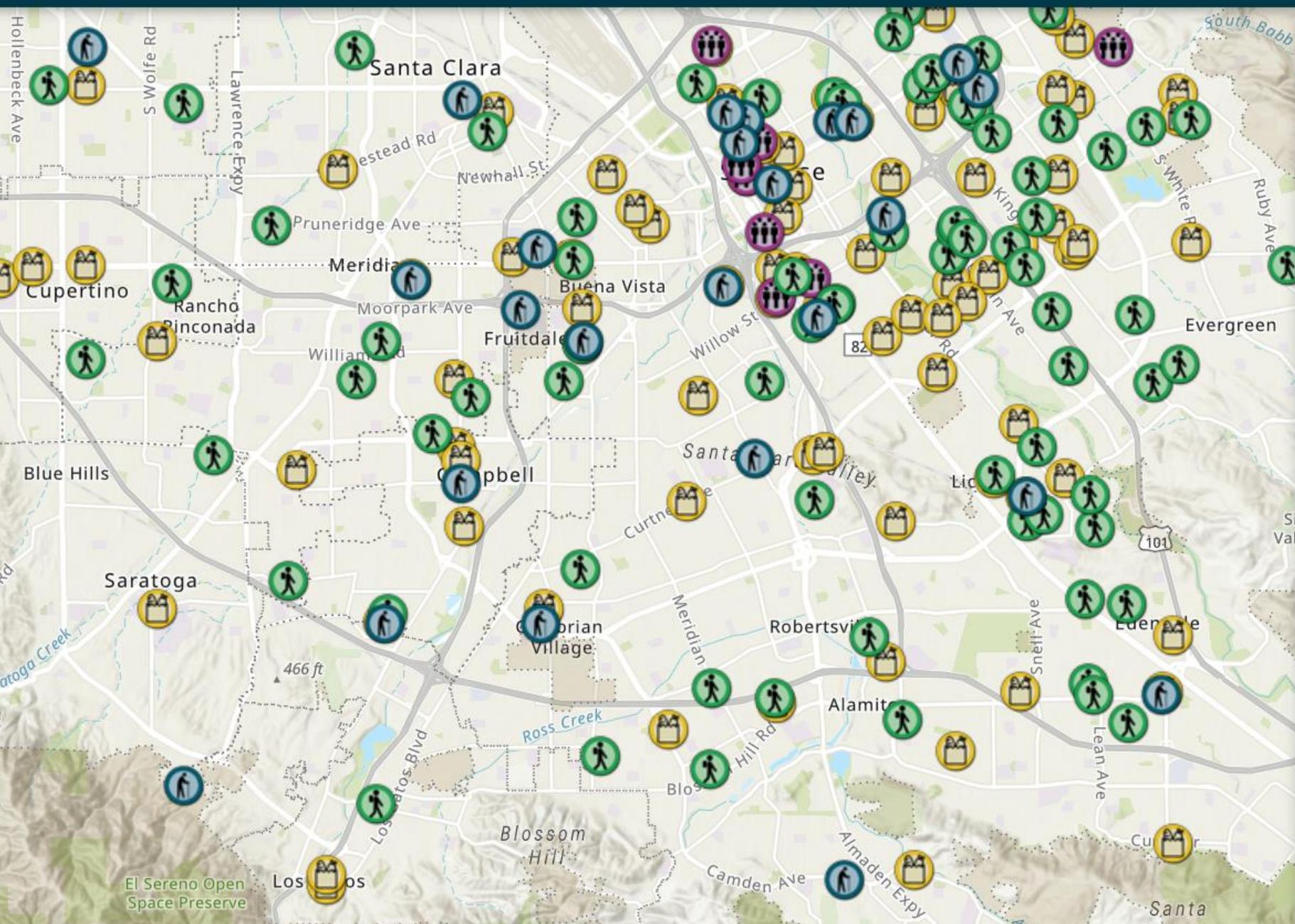
DATA IN THE COVID RESPONSE

- Food and Necessities Distribution
- BeautifySJ

Increased Food Distribution Need During COVID-19 Response

Weekly Meals by Channel



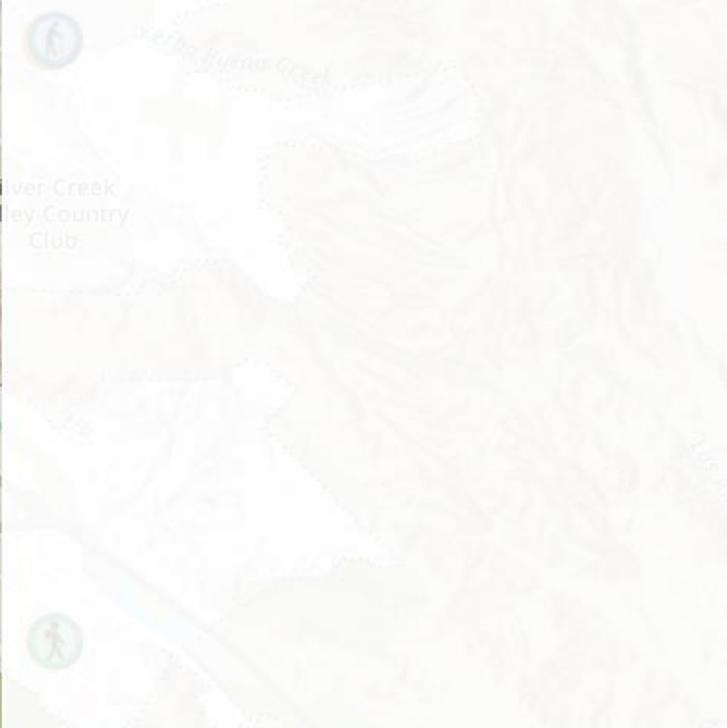


Find Free Food Near Me

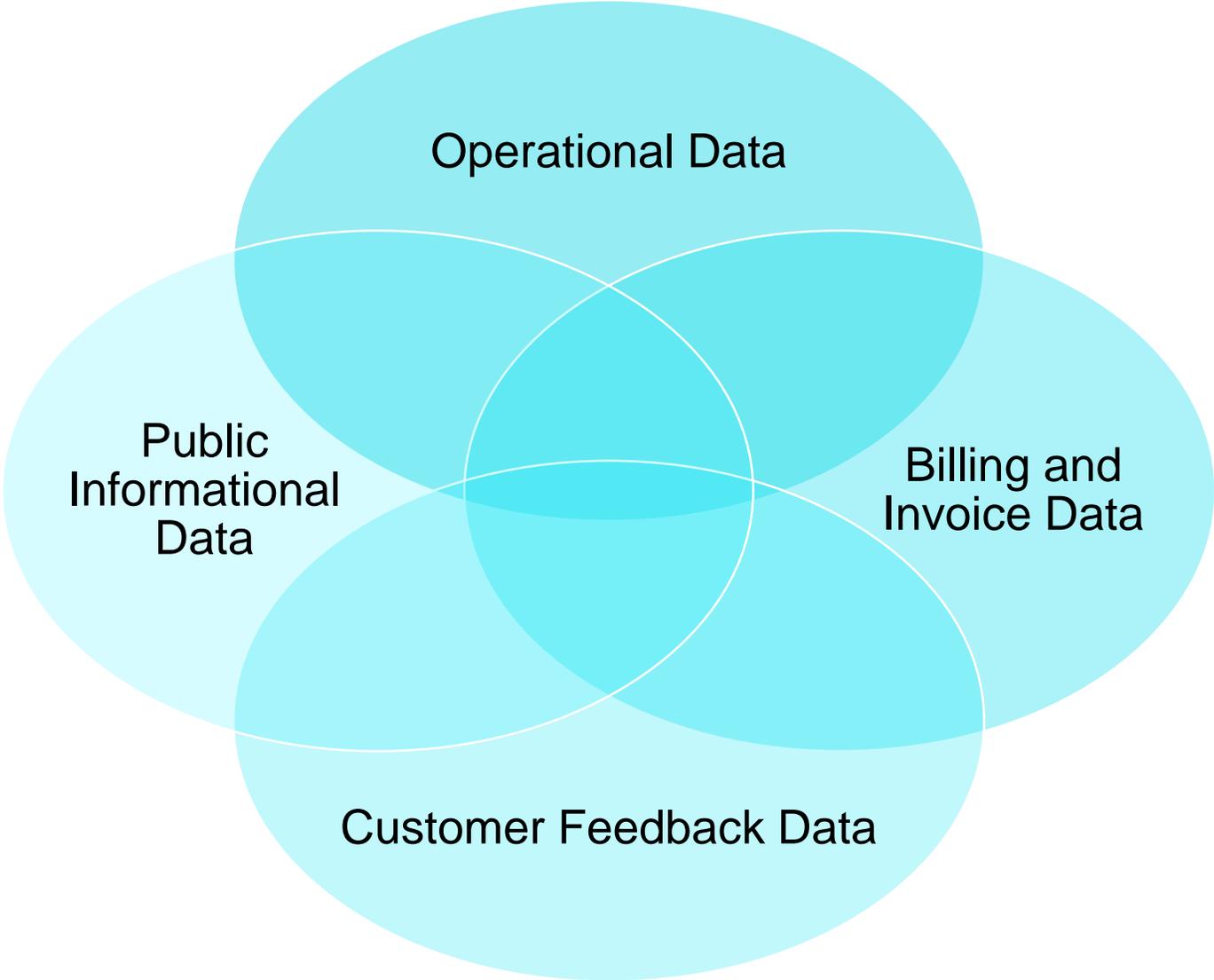
Search Your Address

Enter Your Address

Show results within (Miles)



Food Data



Operational and Invoice Data

Second Harvest

Schools

Rev Foods

Senior Nutrition

Meals on Wheels

Sheltered Homeless

Other Meal Delivery

Great Plates Delivered

Challenge

8 Different Distribution Channels

500+ Organizations

No Data Approach at the Outset

Large and Shifting Scope

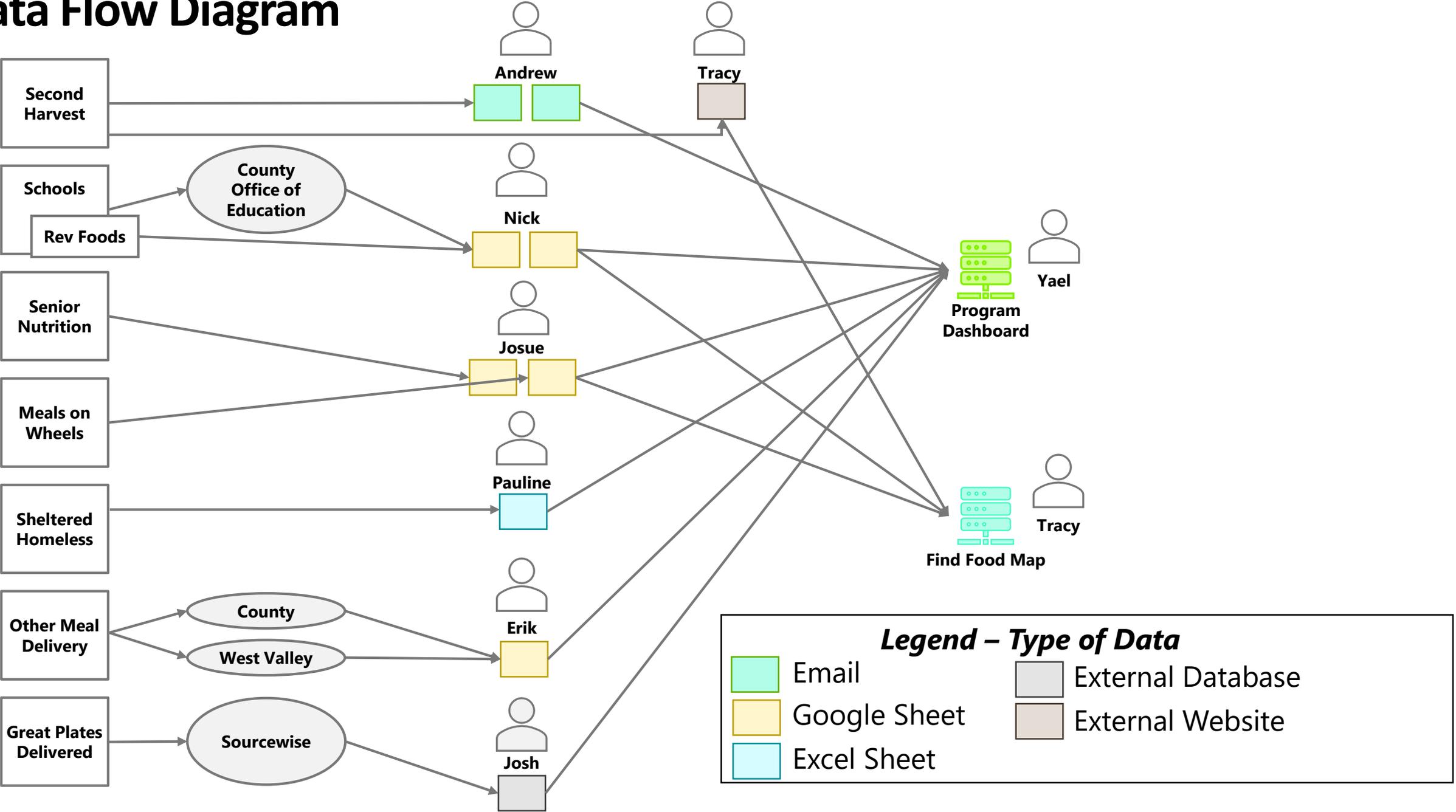
Approach

Unified Data Governance

Narrow Scope to Key Deliverables

Embed Data Staff with Operations Staff

Data Flow Diagram



Dashboard Demonstration

[Food Distribution Dashboard](#)

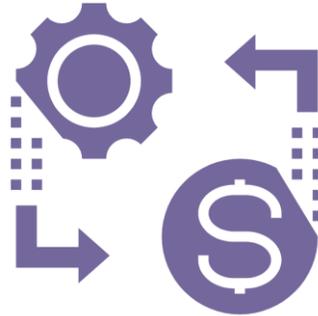
Data Efforts Pay Off In More Ways Than One

Feed Our Most Vulnerable



60M Meals
500+ Organizations
15 Jurisdictions

Protect our Fiscal Health



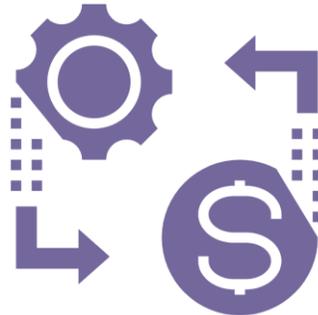
\$38M in Funding
22 Contracts/Grants

Data Efforts Pay Off In More Ways Than One

Feed Our Most Vulnerable



Protect our Fiscal Health



Track Our Climate Impact



Protect Residents From Eviction



Reduce Climate Pollutants



BEAUTIFYSJ

EOC – BeautifySJ COVID-19 Response Branch Goals

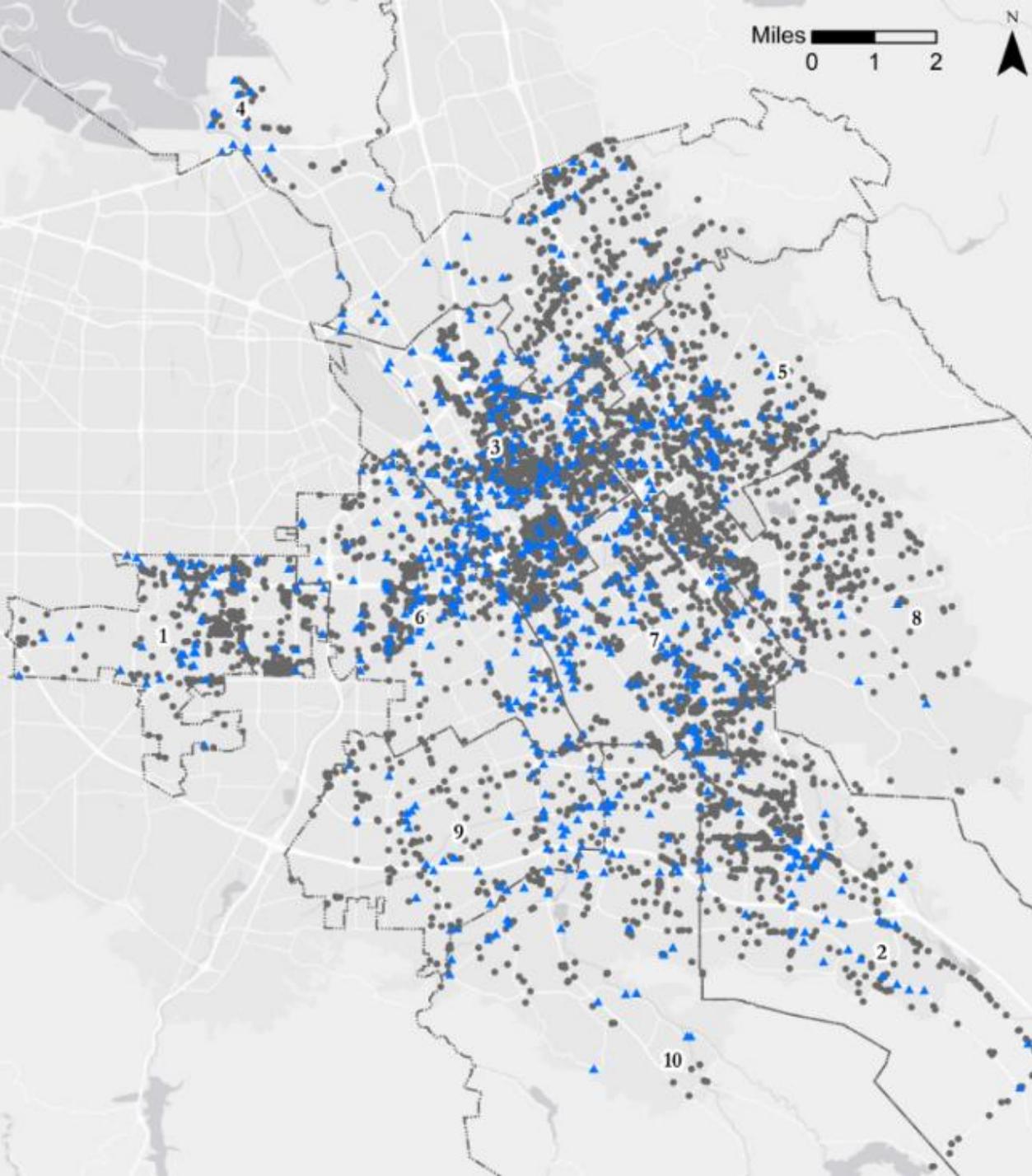


SG1 Develop systematic waste disposal for San Jose encampment residents

SG2 Ensure continuity of existing BeautifySJ initiatives and program

Long-term (next 6mo)

SG3 Redefine, Unify, and Deliver BeautifySJ programs & Develop Plan to address critical service gaps



Scoping the Encampment and Illegal Dumping Challenges

The problems intersect, yet are **distinct**.

They are individually **complex, widespread**, and touch every part of City.

Limited resources creates **service gaps**, requires **prioritized response**, and results in **poor conditions**.

With limited resources, we wanted to look for:



Where is trash
and blight
located?

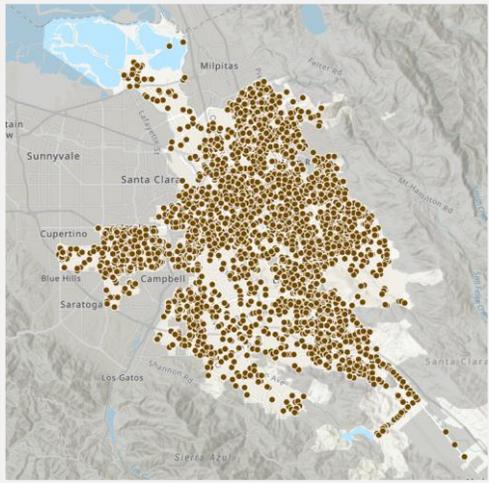
AND

Where are
people living
outdoors?



Where do
these
issues
intersect?

BeautifySJ Data



Challenge

Cross-Departmental Datasets

Some Siloed, and Static Data

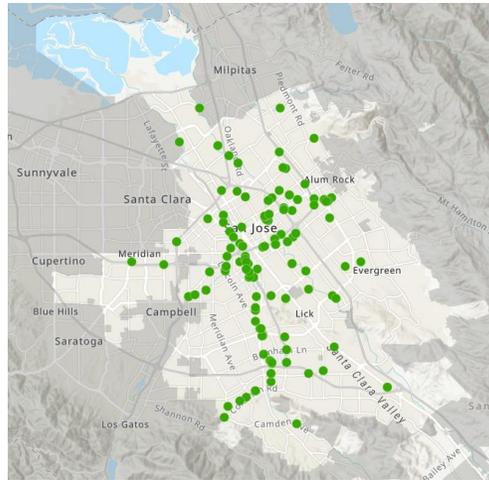
Broad and Complex Scope

Approach

Data-Informed From the Beginning

Involve Data Experts From the Outset

Scope the Problem from the Start



Data Informed From the Beginning & Involve Data Experts

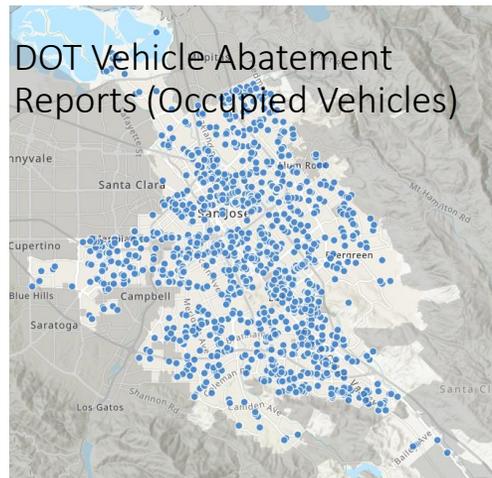
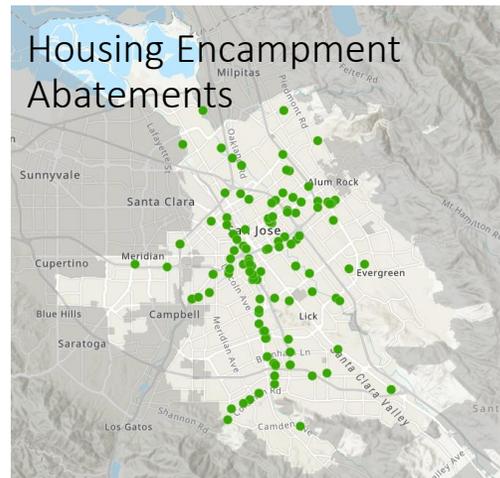
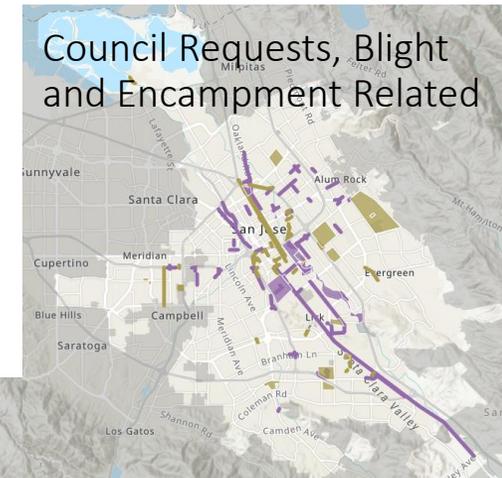
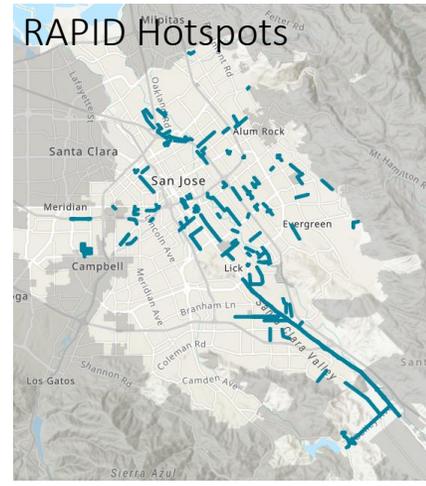
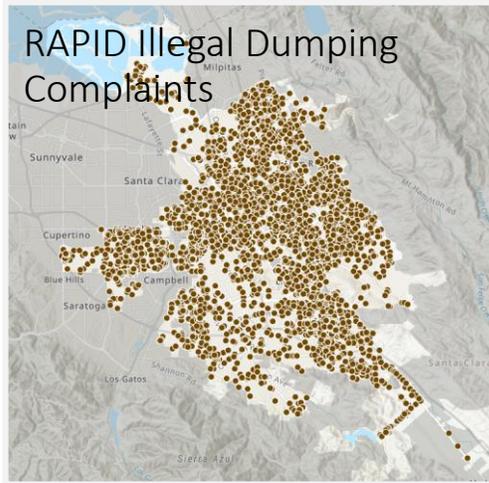
- Technology Enabler
 - Captures GPS location
 - Fast to create
 - Free to create for the individual department (licensing paid by DPW)
 - Easily customizable

The screenshot displays the ArcGIS Survey123 interface for a survey titled "COVID-19 Trash Collection". The interface is divided into several sections:

- Header:** "COVID-19 Trash Collection" with navigation options for "Overview", "Analyze", and "Data".
- Toolbar:** Includes a refresh icon, a date range filter set to "3/18/20 - 8/18/20", a "Filter" dropdown, "Feature Report", "Export", "Open in Map Viewer", and a "Form view" toggle.
- Map:** A map of San Jose, California, showing numerous red circular data points representing trash collection locations. Labels on the map include "Santa Clara", "San Jose", "Columbus Park", and "W Taylor St".
- Details Panel:** Displays the following information:
 - Count: 866/866
 - Submitted by: covid19.csj
 - Submitted time: Aug 6, 2020, 2:04:52 PM
 - Location: Lat: 37.34553 Lon: -121.90726
 - A zoomed-in map view of the collection site at Columbus Park.
 - Information entered by: (field partially visible)
- Summary Panel:** Located on the right side, it shows:
 - Trash bags collected: 56
 - Large items collected: 31
 - Photos: A section titled "Other photos" containing a thumbnail image of a trash collection site with the filename "photo-20200814-155...".

Scope the Problem From the Start

Challenge: Cross Departmental Datasets



Scope the Problem From the Start

Challenge: Some Siloed and Static Data

Local Copy

Excel, or personal computer

- 3 datasets

Siloed Database

Doesn't "talk" to other databases

- 3 datasets

Centralized (DPW GIS Center for Excellence)

Everyone accesses the most up to date version, automatically updated

- 4 datasets

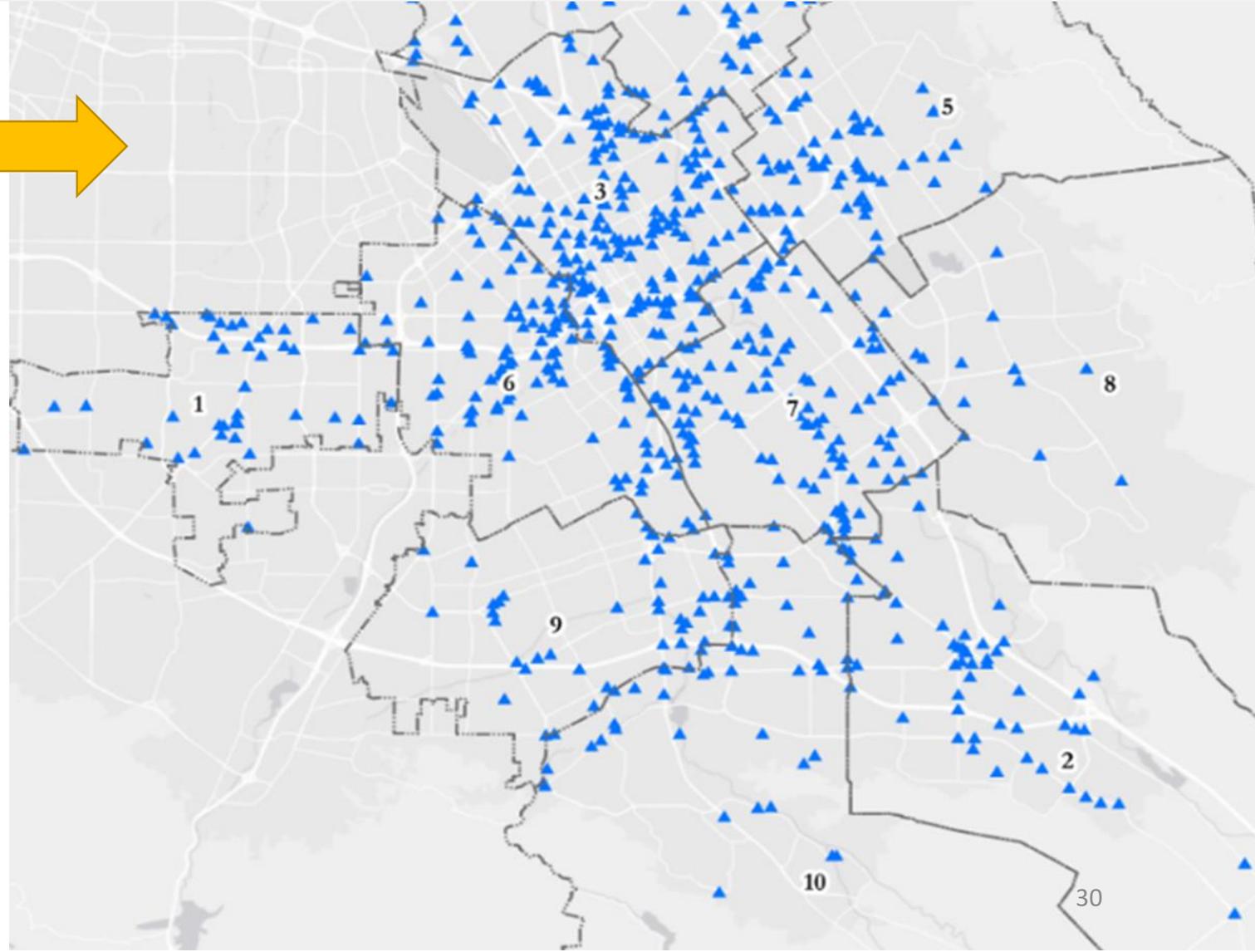
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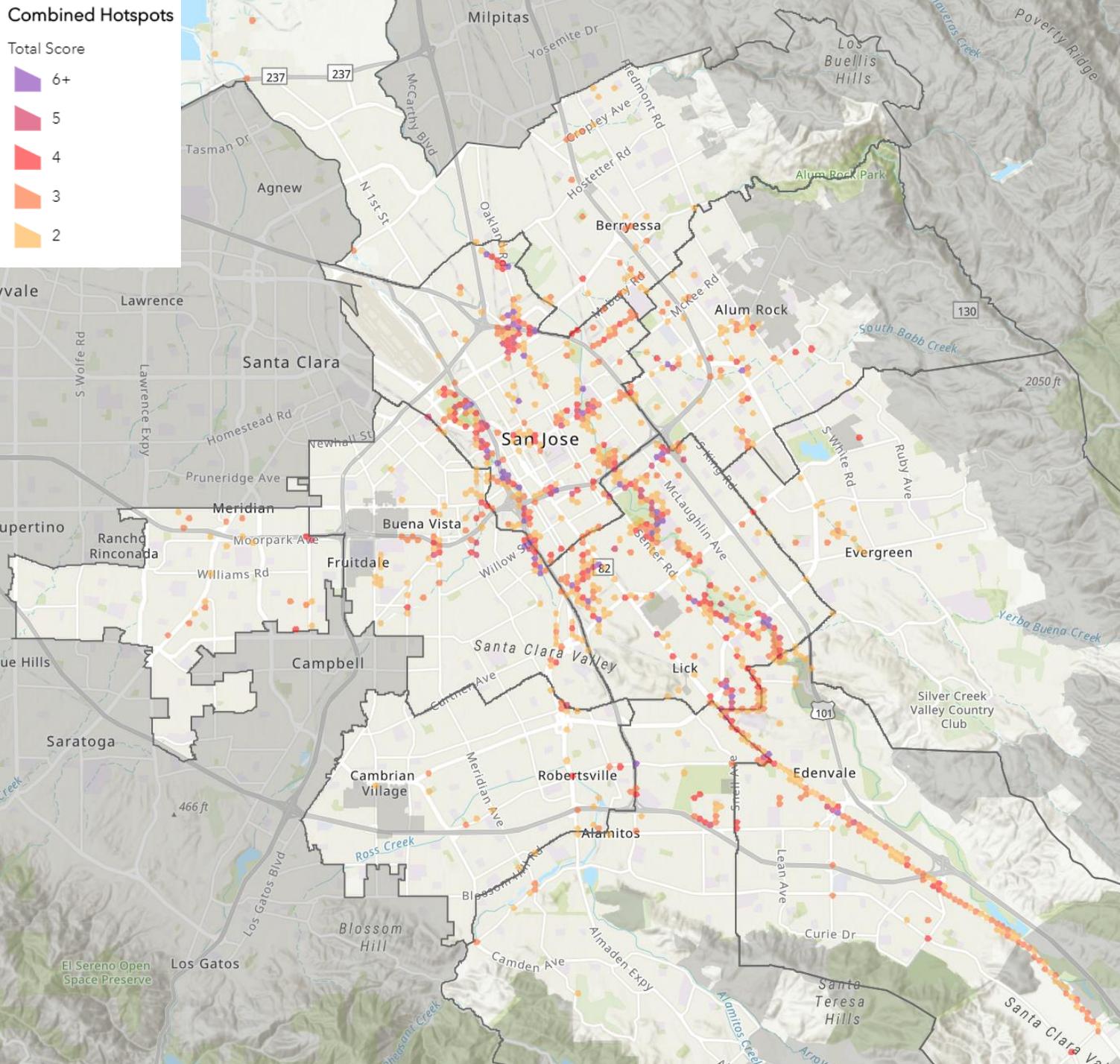
Challenge: Static Data

Homeless Concerns Hotline



# of Reporting Parties	Encamp Location	Council District	Priority	Encampment Site: Unique ID
	Los Gatos Creek Trail b/w Auzerais (W Home St) and San 54 Carlos		Level 4 - (1-3) 6 business days	Encamp-1075
	Scottsdale Park (Branham (between Tampico & Casa De 1 Ponselle)		Level 4 - (1-3) 9 business days	Encamp-2238





Outcome:

Efficient and
Equitable
Resource
Allocation

Technology Demonstration

Successes and Thank You!

Successes

- We are able to use data to remain accountable to and reliable for the public and encampment residents
- Our technology platforms (e.g. Survey123) will continue to be used past COVID-19 for encampment data and beautify

Continued Challenges

- Sources of data are still separate, which poses ongoing difficulties
- Long-term investment is still needed in data and technology solutions

Thank you!

- Beautify SJ staff entering data regularly
- GIS Center for Excellence (Harsh Gautam, Tracy Tisbo, Matt Loesch)
- Jay Van Biljouw, GIS Specialist, DOT

Data in San José

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