

Welcome to GIS Day 2022!

Taking Santa Clara County into the future with GIS technology

November 2, 2022



Agenda

- Road Slope Measurements Using GIS
- Maintstar Application for Work Request and Mobile App
- Traffic Cameras Online Using GIS Map



Road Slope Measurements Using GIS

Ananth Prasad





I want to...

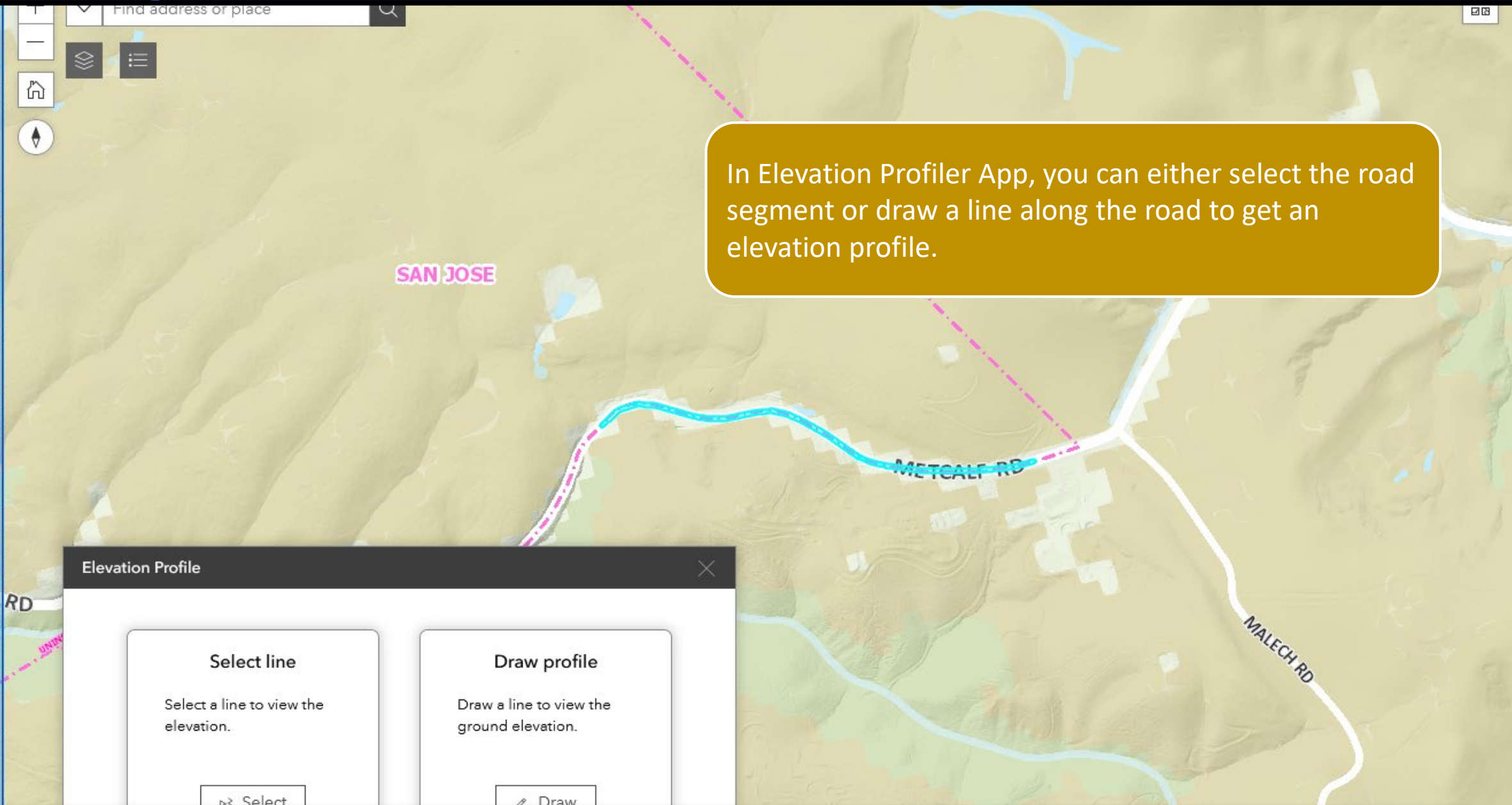
METCALF RD

[Go to Elevation Profiler](#)

[Add to Results](#) | [View Details](#) | [Show Buffer Options](#)

In SCCMap, find the road segment of the project. Click the road to bring up its popup window. Click "Go to Elevation Profiler" to open the App at the location of the road segment.







Santa Clara County Elevation Profiler

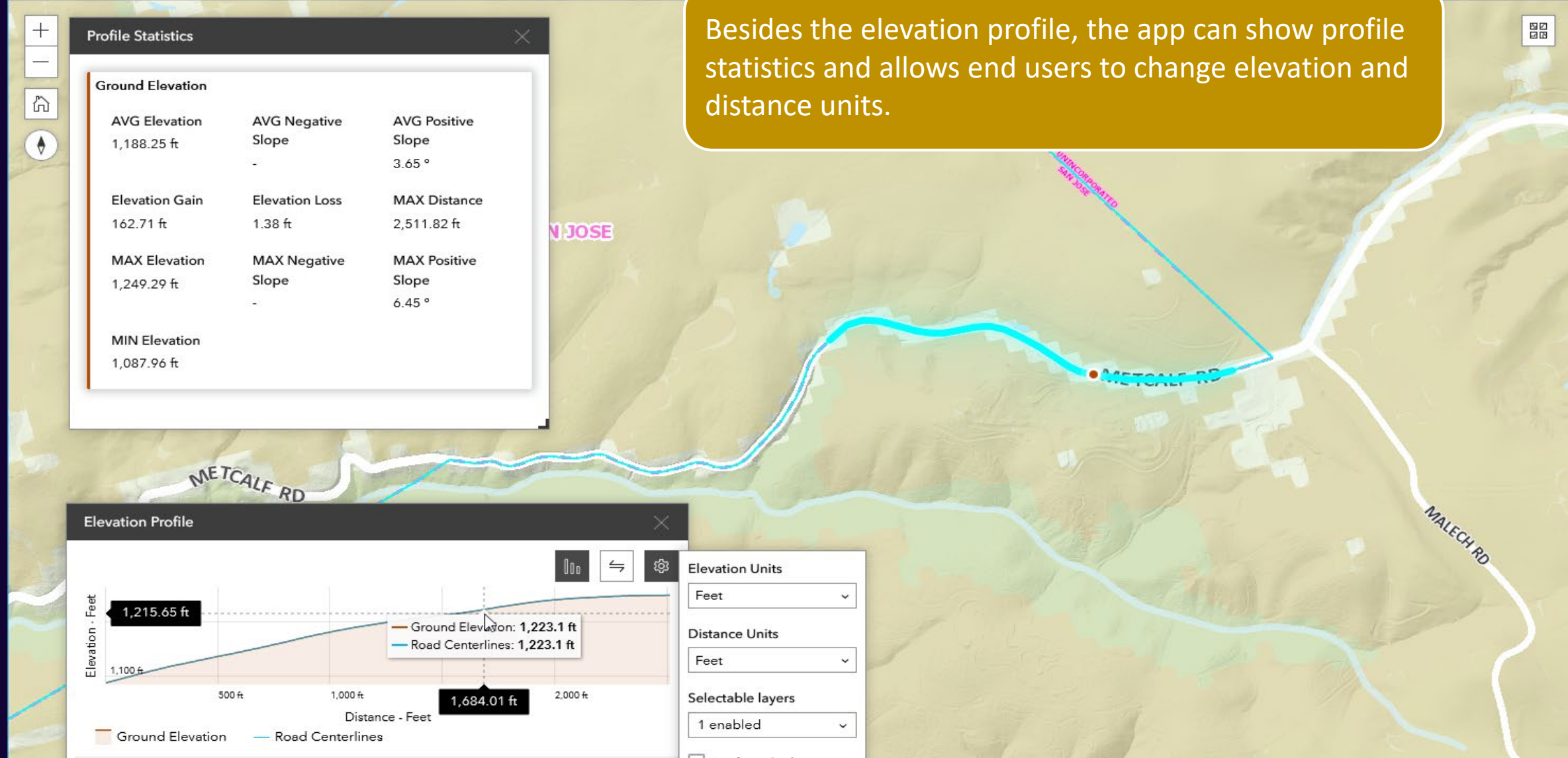


Profile Statistics

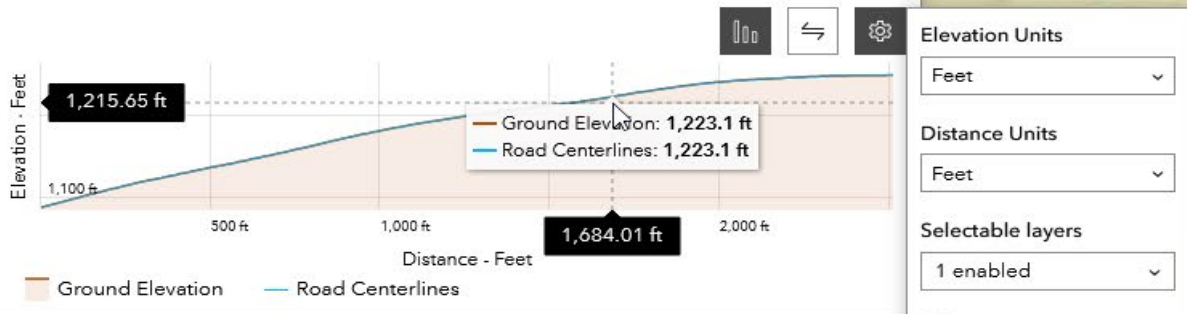
Ground Elevation

AVG Elevation	AVG Negative Slope	AVG Positive Slope
1,188.25 ft	-	3.65 °
Elevation Gain	Elevation Loss	MAX Distance
162.71 ft	1.38 ft	2,511.82 ft
MAX Elevation	MAX Negative Slope	MAX Positive Slope
1,249.29 ft	-	6.45 °
MIN Elevation		
1,087.96 ft		

Besides the elevation profile, the app can show profile statistics and allows end users to change elevation and distance units.



Elevation Profile



Elevation Units
Feet

Distance Units
Feet

Selectable layers
1 enabled

- The Elevation Profiler uses Esri's Terrain 3D layer and the data within Santa Clara County boundaries comes from Lidar data collected by the County in year 2020.

The screenshot displays the 'US INTERAGENCY ELEVATION INVENTORY' web application. The main map shows a 3D terrain view of Santa Clara County, California, with a red boundary indicating the county's extent. The map includes labels for various cities and regions such as Hayward, Fremont, Milpitas, San Jose, and Santa Cruz. A metadata panel on the right provides the following information:

Lidar-Topo		
2020 Santa Clara County CA Lidar		
COLLECTION DATE: Apr 3 - 22, 2020	STATUS: Complete	COLLECTION YEAR: 2020
Data Access NOAA Digital Coast The National Map	Metadata NOAA Digital Coast The National Map	Additional Resources Lidar Report USGS WP Report
3D Point Viewer Potree (USGS)	Entwine Point Tiles CA_SantaClaraCounty_2020	
Record Owner: USGS	For More Information Contact: tnm_help@usgs.gov	
Web Service Link: N/A		
3DEP Quality Level: 1		
Meets 3DEP: Yes		
Reason Data Does/Does Not Meet 3DEP: QL2 or better quality lidar data with USGS Base Spec v1.2 products		



Maintstar Application for Work Request and Mobile App

Ananth Prasad





SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT WORK REQUEST AND MOBILE APP

Two options for you to report Issues for the unincorporated areas of Santa Clara County.

Mobile Application



Mobile Citizen by **MAINTSTAR**

Available for smartphones and tablets using **Android** or **iOS**

Search for Mobile Citizen and look for the hammer and wrench

You

• Graffiti	• Illegal Dumping
• Potholes	• Traffic Signals
• Traffic Studies	• Street Lights

Work Request Web Page

Just visit www.countyroads.org

And select Service Requests

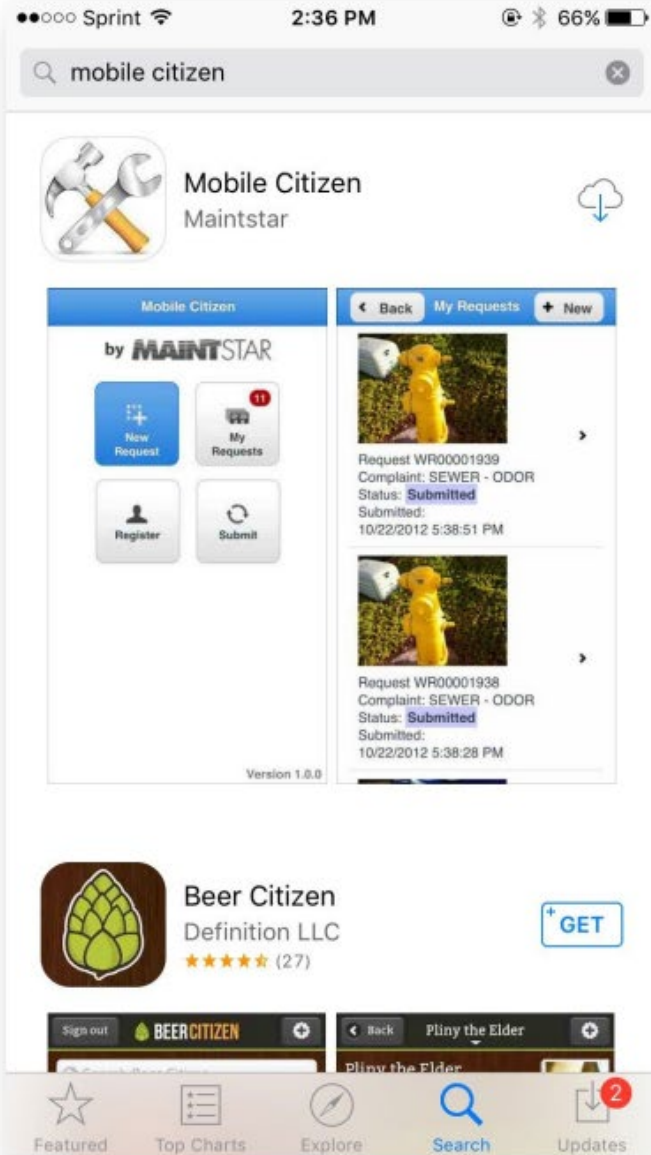


SANTA CLARA COUNTY ROADS AND AIRPORTS WORK REQUEST MOBILE APP

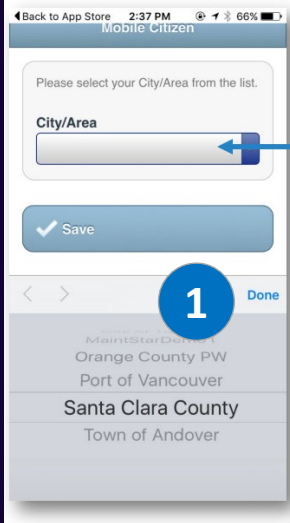


Mobile App directly linked to the County's
internal Maintenance Management and Work
Order System





Available for
smartphones and
tablets using
Android or iOS.

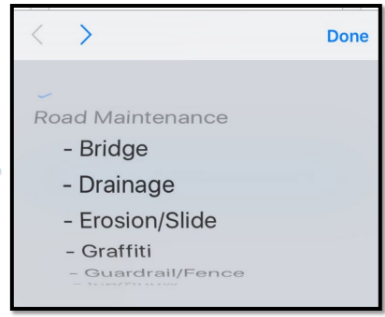
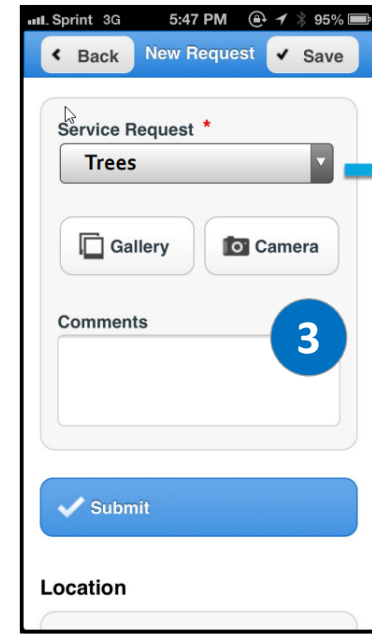
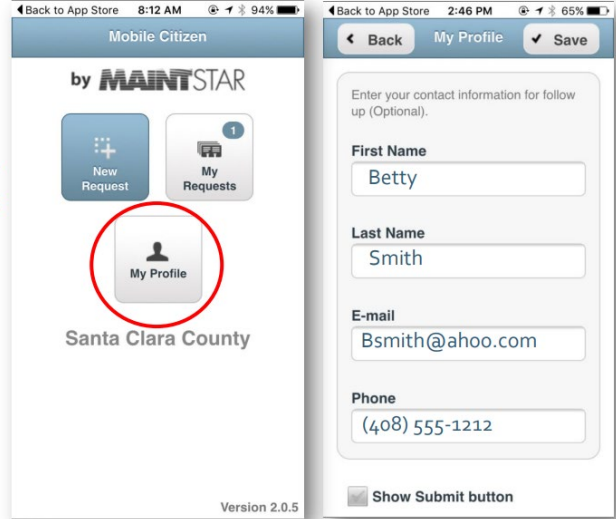


Select Santa Clara County

Profile

Users can simply submit a request or register to track their requests.

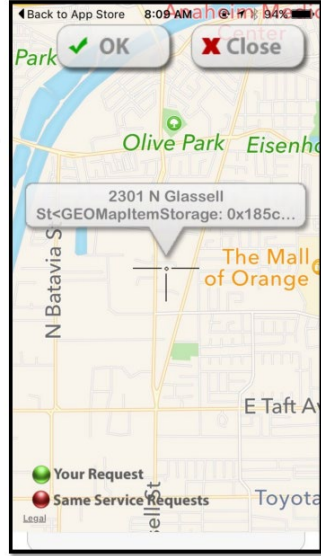
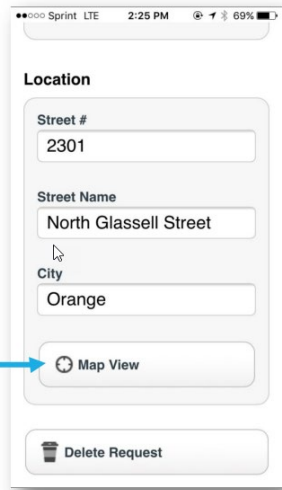
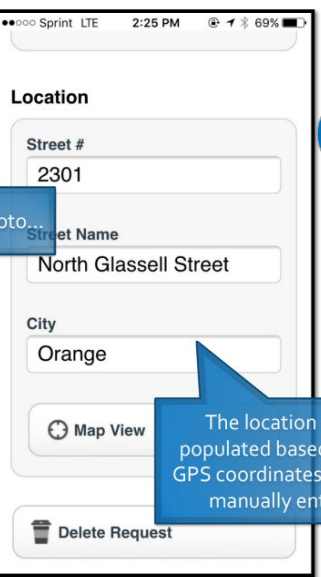
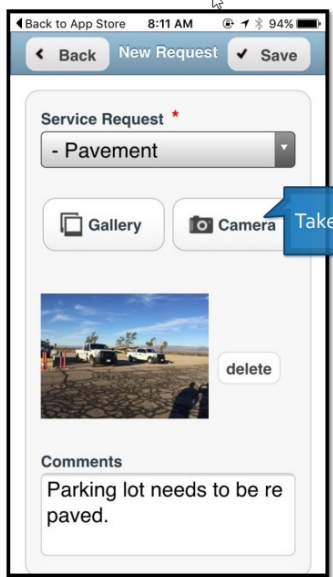
2



1. Select the problem type.
2. Snap a photo or select from your own gallery.
3. Type in a comment and press submit.

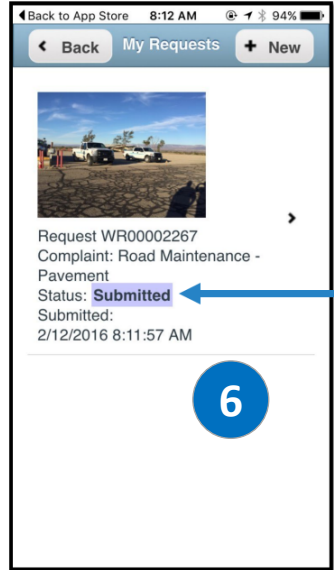
It's that easy!

5



Click on the Map View button to view the location and drag the pin to correct the location.

7



Requests are submitted directly to the County's work order system and email notification is sent when the status changes.

8

Work Requests

List Filter: [All Requests \(245\)](#) [My Requests](#) [Dawna's Search](#)

[Save](#) [+ Save As](#) [Reset Filter](#)

Hide Duplicates

Open Closed Both

Source All MC Portal Desktop

Status

Operation <input type="text"/>	Issue <input type="text"/>
Assigned To <input type="text"/>	WR # <input type="text"/>
WO # <input type="text"/>	Request <input type="text"/>
WO Description <input type="text"/>	Address <input type="text"/>
Priority <input type="text"/>	Location <input type="text"/>
Asset Type <input type="text"/>	Asset Id <input type="text"/>
Customer Type <input type="text"/>	Customer ID <input type="text"/>
Customer Info <input type="text"/>	Issued From <input type="text"/> To <input type="text"/>
Subsystem <input type="text"/>	Approved By <input type="text"/>
Attachments <input type="text"/>	

<input type="checkbox"/>	WR # ↑	WR Status	Operation	Issue	Assigned To	Issued	Request
<input type="checkbox"/>	WR00015485	In Work	Road Mai...	Signs	60089	28 min. ago	Pete Perez requested the newly i
<input type="checkbox"/>	WR00015484	New	Facilities	West Yard		08:55 AM	Hour timer for Radiant heater is b
<input type="checkbox"/>	WR00015483	New	Road Mai...	Graffiti		08:53 AM	Graffiti still on back of "Welcome t
<input type="checkbox"/>	WR00015482	New	Road Mai...	Graffiti	57970	Oct 18	Please abate graffiti
<input type="checkbox"/>	WR00015481	In Work	Road Mai...	Pothole/Pave...	60089	Oct 18	there is a pothole in front of 504 F
<input type="checkbox"/>	WR00015480	New	Road Mai...	Street Sweep...	60089	Oct 18	Northbound bike lane / shoulder i
<input type="checkbox"/>	WR00015479	New	Road Mai...	Signs	12752	Oct 18	22-83 Install 15 new double-sided
<input type="checkbox"/>	WR00015478	In Work	Traffic Sig...	Street Light	83676	Oct 18	Pole # 1183 is day burning
<input type="checkbox"/>	WR00015476	In Work	Road Mai...	Tree	42471	Oct 18	Tree blocking road Uvas and Kell
<input type="checkbox"/>	WR00015475	New	Road Mai...	Trash	53465	Oct 18	Freezer mt pleasant x norwood

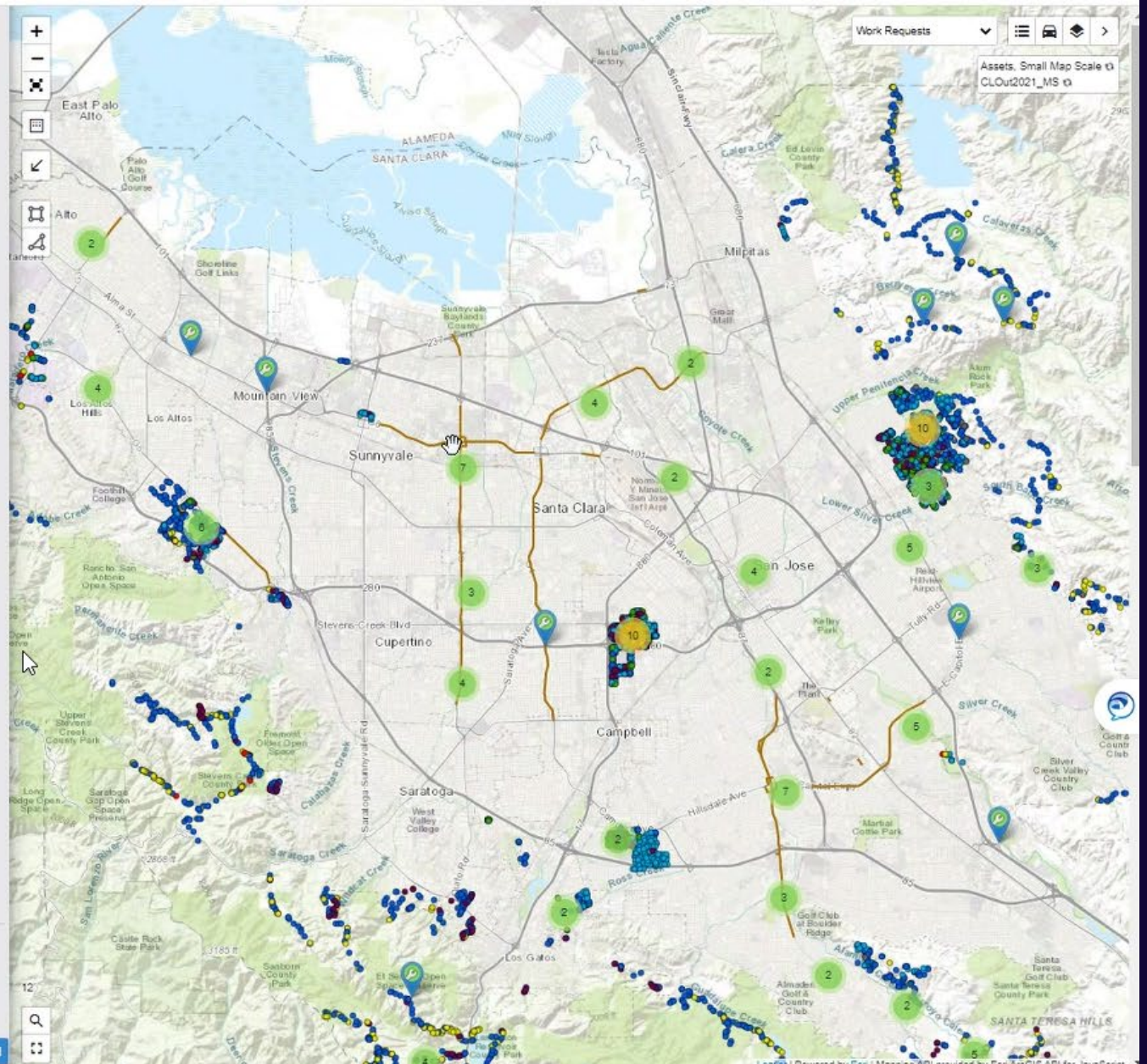
Work Request Open

WR00015483

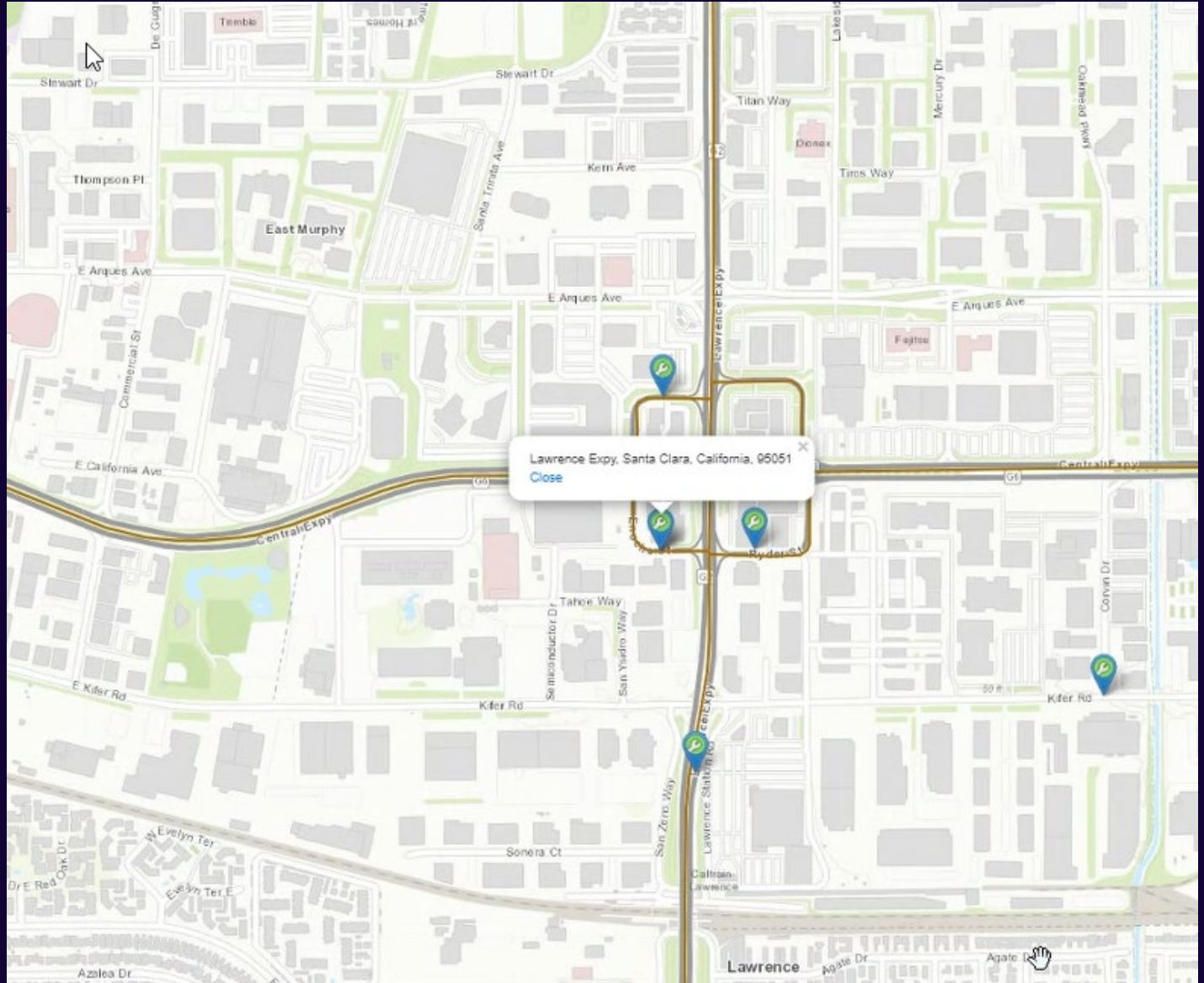
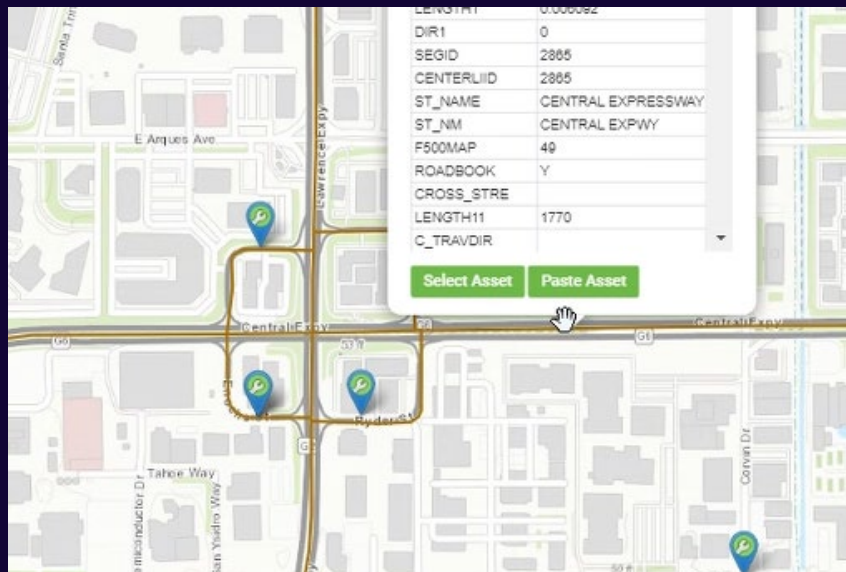
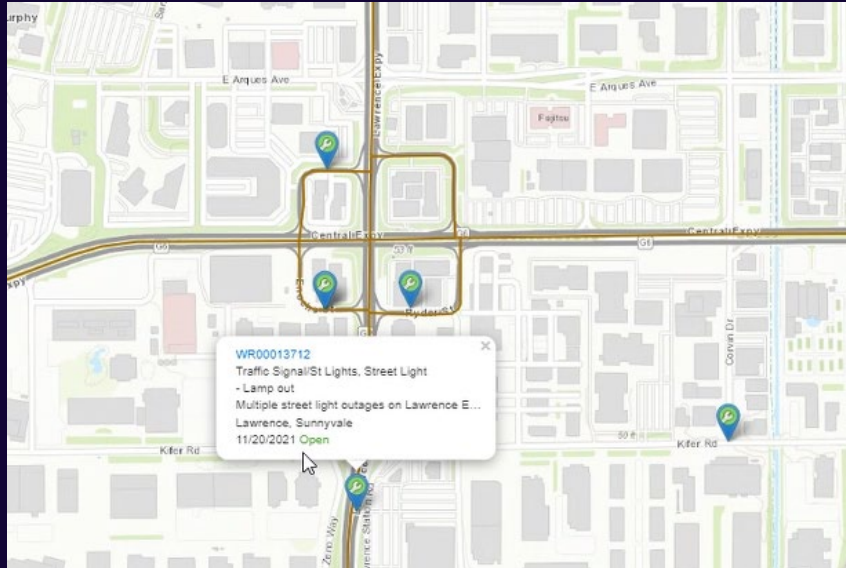
[Details](#) [Assets](#) [Related](#) [Attachments \(1\)](#) [Duplicates](#) [Notifications](#) [Status](#) >>

[New WR](#) [Save](#) [←](#) [→](#) [Create WO](#) [📍](#)

This Road is maintained by "The Town of Los Altos Hills" please click [Link](#) or call 650-941-7222 to report your issue.



Work Requests Assets, Small Map Scale CLOut2021_MS



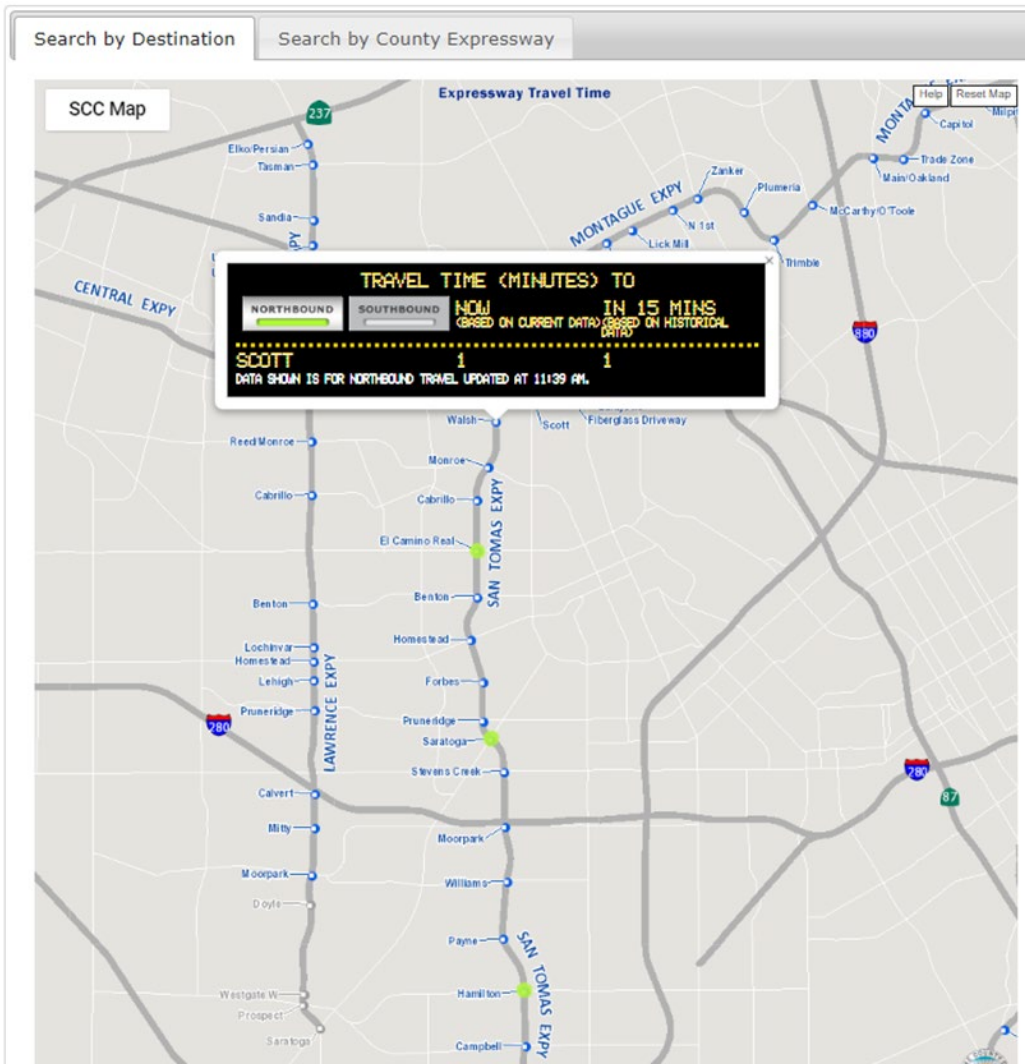


Traffic Cameras Online Using GIS Map

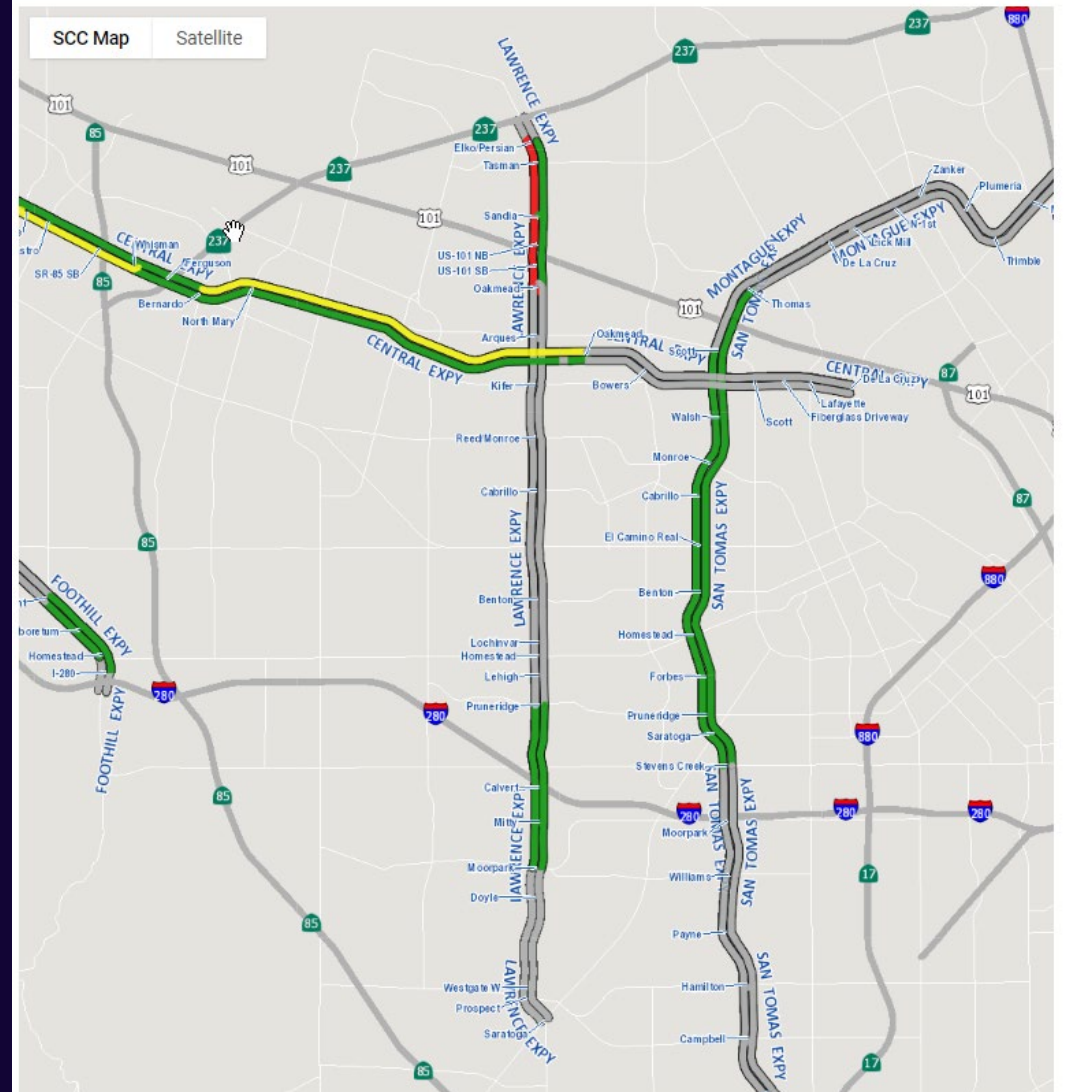
Ananth Prasad



Predictive Travel Time Map



SCC Real-Time Congestion Map



Search by Camera Location | Search by County Expressway

SCC Map | Satellite

Expressway Intersection Traffic Cameras

Help | Reset Map

<p>1622 San Tomas (NB View)</p>	<p>1622 Traffic moving toward the camera is traveling NB on San Tomas</p>	<p>1623 San Tomas (SB View)</p>
<p>1624 Williams (EB View)</p>	<p>1625 Williams (WB View)</p>	

Available Cameras | Future: Capitol

Google

NOTICE: These video images are for informational purposes only. Image may be subject to copyright. 100 m

Search by Camera Location | Search by County Expressway

SCC Map | Satellite

Expressway Intersection Traffic Cameras

Help | Reset Map

Available Cameras | Future: Capitol

Google

NOTICE: These video images are for informational purposes only. Image may be subject to copyright. 2 km

Questions	Answers
Can you post the Elevation profiler app link again?	https://experience.arcgis.com/experience/13b706e929494ce8a73ffe9a1410cb73
Is this MaintStar Mobile Citizen specific to Road and Airports, or can it be tailored for programs such as Clean Water, Weed Abatement, etc?	App is certainly capable to handle Clean Water or any other public service requests. Weed Abatement is already part of our application. I do not know if Clean water is using this application. I suspect that they are using something similar if not the exactly the same one. If we receive requests that are not for our agency and we cannot transmit electronically, we let the user know and if it is an anonymous request then we try to send the information to the right agency.
What's the difference b/w MaintStar vs. another government agency app similar to this (for example: SJ311?) Does SJ311 plan on integrating this system into its own crowdsourcing system? I think it would be pretty useful as someone who lives in San Jose.	Mainstar is an application built by a company that provides tools tailored for government agencies, and they have a large customer pool throughout the nation. Individual cities may choose different vendor, but all are similar. We choose this Mobile Citizen app as it is integrated into our workorder system. I am presenting this application here to showcase new capabilities using GIS to check for the correct jurisdiction and inform the user before they submit the request. This capability was custom designed by our own GIS team. It serves as an education tool for the user to know which jurisdiction it belongs to so their request reaches the correct agency.

Q & A

Questions	Answers
Do you still require user to create account in order to submit or did you change that recently (you said can submit anonymously)	We still want you to create an account, so that we can communicate with you on the status of the request or questions if any. If you submit anonymously, you will not receive any follow-up. If you have an account, we can make sure that we respond to the submitter before closing the case. With an account, you can also actively track it. You receive the unique Work Request Number from us, you can reference to the Work Request Number when inquiring the status.
I just brought up mobile citizen on my phone and it requires me to log in	yes, it requires you to register and have an account so that your requests can receive a unique work request number which can be used to track on status of your request.
The traffic camera online tool is for public consumption ?	Yes. Link: https://countyroads.sccgov.org/scc-live-traffic

Q & A