CENTRAL TEXAS

CAMPO
CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

# Technical Advisory Committee Meeting

## November 18, 2024

# Item 1: Certification of Quorum

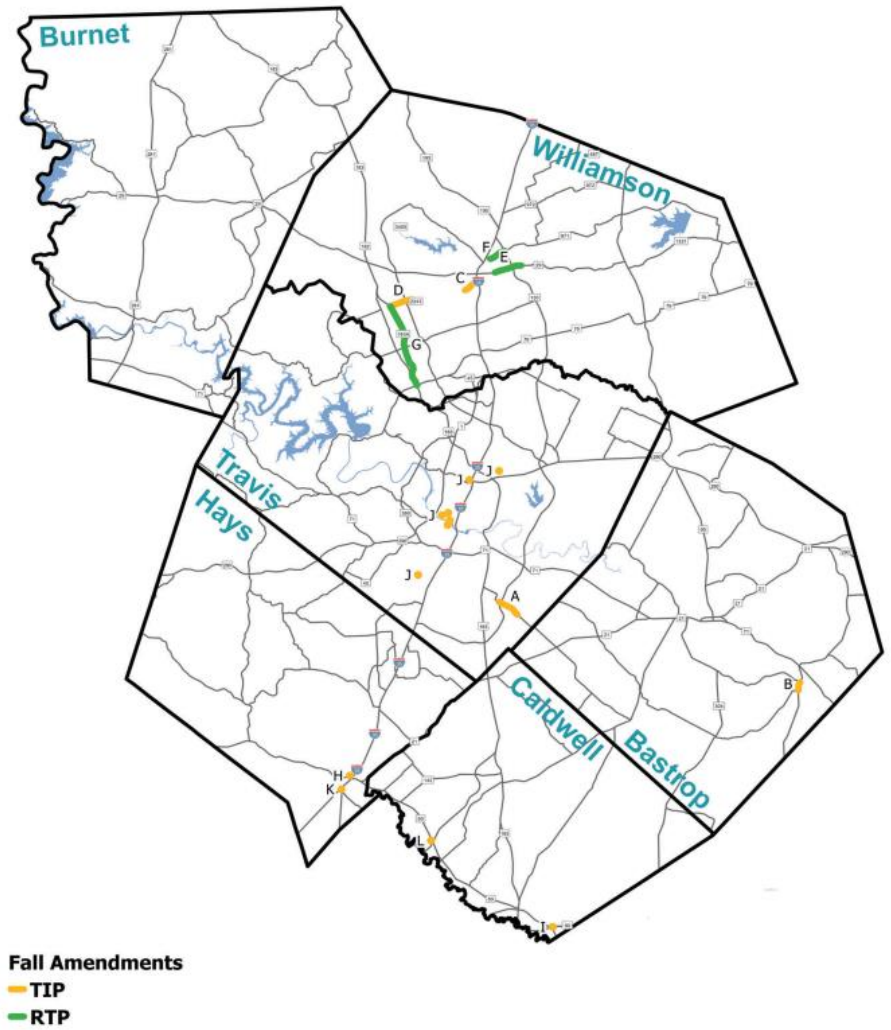
# Action

# Item 2: Approval of October 21, 2024 Meeting Summary

## Recommendation

**Staff requests the TAC approval of the October 21, 2024 meeting summary.**

# Item 3: Discussion and Recommendation on the Fall Amendment Cycle

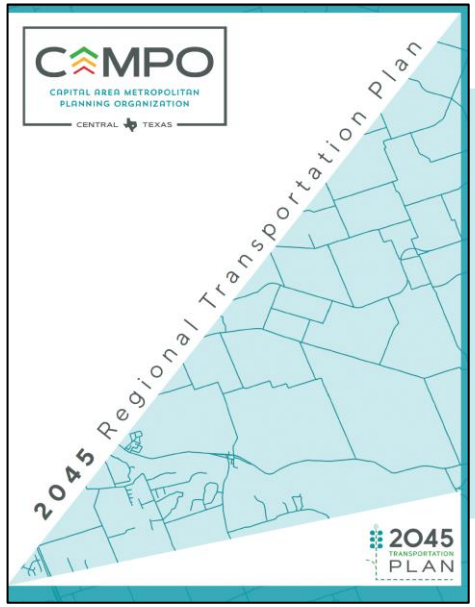



# Fall Amendment Cycle

The Fall Amendment Cycle is the regularly scheduled opportunity to make changes to the Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP).

| Amendment Cycle Schedule | |
|---|---|
| **Date** | **Milestone** |
| 10/21/2024 | TAC – Information |
| October 7 – November 8 | Community Outreach |
| 11/4/2024 | TPB – Information/Public Hearing |
| 11/18/2024 | TAC – Recommendation |
| 12/9/2024 | TPB – Adoption |

## Regional Transportation Plan




20 Year Horizon
Adopted Every 5 Years
**Amended Regularly**
Environmental Clearance
Federal Funding Eligibility

As projects in the Regional Transportation Plan receive a commitment of transportation funding, they are submitted for inclusion in the Transportation Improvement Program to obtain funding authorization by the Transportation Policy Board

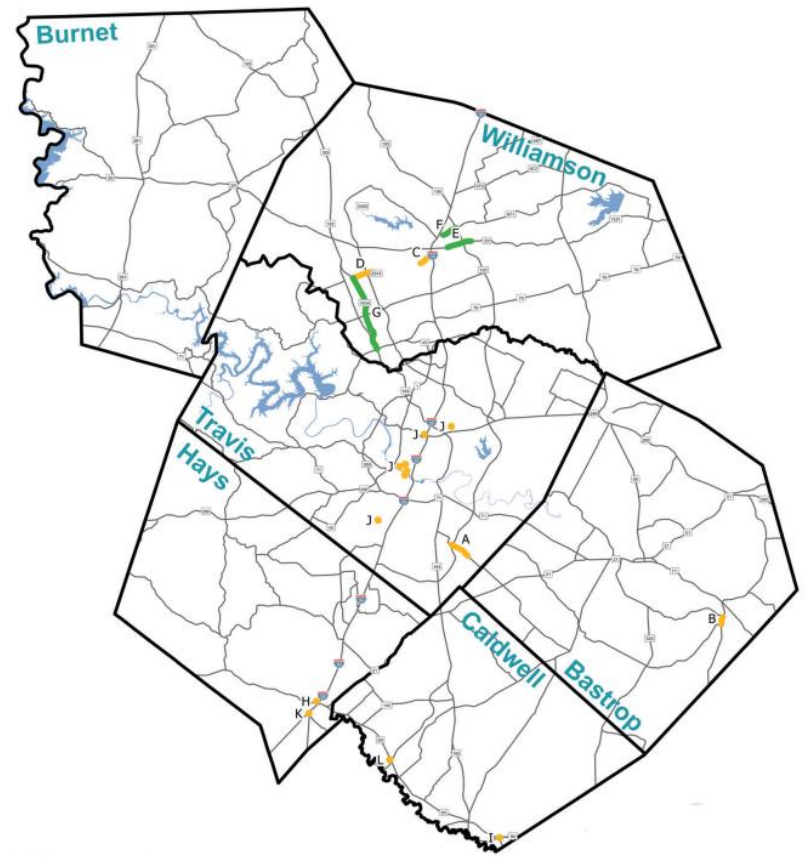
**Fall Cycle**

## Transportation Improvement Program

4 Year Horizon
Adopted Every 2 Years
**Amended Regularly**
Federal Funding Authorization
Letting Certification

## 2025-2028 Transportation Improvement Program Amendments - Fall 2024 (Draft)

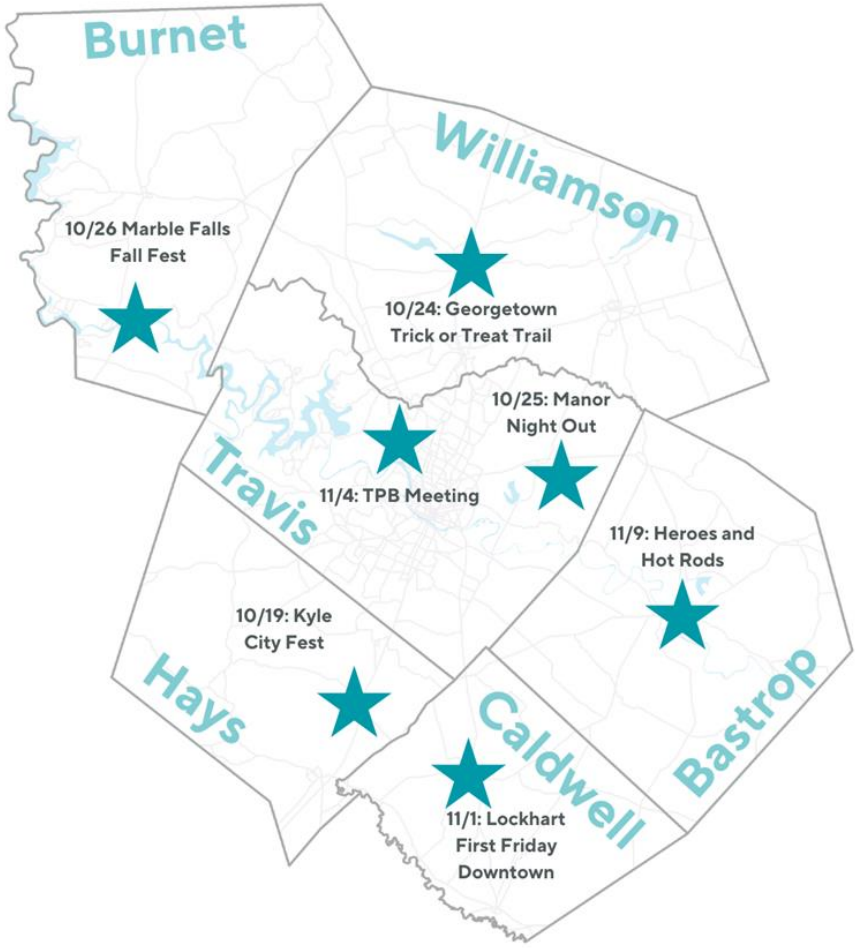
| MPO ID | CSJ | County | Sponsor | Project Name | Limits (From) | Limits (To) | Description | Phase | Fiscal Year | Cost (YOE) | Amendment Request |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TBD | 0914-00-539 | Travis, Hays, Williamson | TxDOT | VA | VA | VA | Hero Program Continuation in Hay, Williamson, and Travis County. Facilities include IH35, US 183, US 290, SH 71 & SL 1. | C | 2025 | $18,000,000 | Add New Project |
| TBD | 1149-01-033 | Travis | TxDOT | FM 812 | 0.02 Miles West of SH 130 Southbound Frontage Road | 0.32 Miles East of Elroy Rd | Upgrade from a 2-Lane roadway to a 4-Lane divided roadway with a continious left turn lane, curb and gutter, signals, striping and bicycle and pedestrian facilities. | C | 2028 | $55,871,910 | Add New Project |
| 11-00036-00 | 0323-01-028 | Bastrop | TxDOT | SH 95 | SL 230 | South of FM 535 | Upgrade from a 2-lane rural to a 3-lane urban roadway with continuous left-turn lane. | C | 2025 | $14,000,000 | Change Limits (To) from 'FM 535' to 'South of FM 535'; Increase Project Cost from $10,319,468 to $16,817,818; Increase Category 2 from $8,590,445 to $14,000,000 |
| 61-00191-00 | 2103-01-036 | Williamson | City of Georgetown | RM 2243 | SW Bypass | Norwood Drive | Upgrade from a two-lane to a four-lane divided with Center Turn Lane and new traffic signals and pedestrian improvements | C | 2026 | $17,791,407 | Switch Limits (From) and Limits (To); Scope Change from 'Upgrade from a two-lane to a four-lane divided with new traffic signals and pedestrian improvements' to Upgrade from a two-lane to a four-lane divided with center left turn lane and new traffic signals and pedestrian improvements'; Increase Project Cost from $8,482,019 to $21,233,426; Add $12,751,407 Category 3 |
| 61-00109-00 | 0914-05-222 | Williamson | Williamson County | Hero Way | 183A | RM 2243 | Reconstruct 2-Lane undivided roadway to 2 travel lanes with continuous left-turn lane, and extend existing Hero Way to RM 2243. | C | 2026 | $38,650,000 | Increase Project Cost from $15,370,487 to $44,781,508; Increase Category 3 from $12,788,091 to $13,650,000; Add $25,000,000 in Category 10 |
| 61-00109-01 | 2103-01-040 | Williamson | Williamson County | RM 2243 | W of Hero Way | 0.199 MI W of Escalera Pkwy | Realign and Reconstruct 2-Lane undivided roadway to 2 Travel Lanes and Continuous Left Turn Lane | C | 2026 | $0 | Remove Project |
| 11-00011-00 | 0265-03-041 | Bastrop | TxDOT | SH 71 | CR 206 (Colorado Circle) | SH 21 | Construct 4-lane overpass and add 2-lane eastbound and westbound frontage roads. | C | 2030 | $0 | Remove Project |
| TBD | 5000-00-201 | Hays | TxDOT | Various | VA | VA | Install 10 Direct Current Fast Charge ports within one mile of the Electric Alternative Fuel Corridors (IH 35). | C | 2025 | $943,569 | Add New Project - NEVI Program Award |
| TBD | 5000-00-236 | Caldwell | TxDOT | Various | VA | VA | Install 8 Direct Current Fast Charge ports along the Electric Alternative Fuel Corridors. (IH 10) | C | 2025 | $2,346,381 | Add New Project - NEVI Program Award |
| TBD | N/A | Travis | City of Austin | Various | VA | VA | Charging Station Replacement | C | 2025 | $337,500 | Add New Project - EV Charging Reliability Program |
| TBD | N/A | Hays | City of San Marcos | Various | IH 35 Northbound Frontage Road | SH 123 | Drainage and street improvements within the Sunset Acres Subdivision. | E, C | 2026 | $36,819,780 | Add New Project - PROTECT Program Award |
| TBD | N/A | Caldwell | Caldwell County | Truck Plaza | SH 130 | SH 80 | Construction of travel plaza and truck parking facility at SH 130 and SH 80 | E, C | 2025 | $30,725,000 | Add New Project - RAISE Program Award |
| 61-00025-00 | 0337-02-051 | Williamson | City of Georgetown / TxDOT | SH 29 | Haven Ln. | Patriot Way | Widen from 4 undivided to 5-lanes divided arterial with pedestrian improvements, signal and intersection improvements. | E | 2030 | $45,500,000 | Modify project limits, scope, and description. Increase funding from $18.5 million to $45.5 million. |
| 61-00024-00 | 2690-01-043 | Williamson | of Georgetown / Williamson Co | FM 971 | Gann St. | SH 130 | Widen from 2-lane undivided to 5-lane divided arterial with pedestrian improvements, signal and intersection improvements. | E | 2030 | $34,000,000 | Modify project scope, and description. Increase funding from $14 million to $34 million. |
| TBD | N/A | Williamson | CTRMA | 183A | SH 45 | Hero Way | Widen from 3 to 4 toll lanes northbound and southbound into the existing center median. | E | 2026 | $250,000,000 | Add New Project |



# 2025-2028 TIP Amendments Outreach

Comment Period:

**October 7 – November 8**




Mail comments:
**CAMPO c/o CD&P PO Box 5459 Austin, TX 78763**

Email comments:
**comments@campotexas.org**

Online Open House:
**campotexas.org**

Leave voicemail comments or request info by phone:
**737-229-0896**

CAMPO

## Recommendation

**Staff requests the TAC recommend adoption of amendments to the 2025-2028 TIP and 2045 RTP.**

# Information

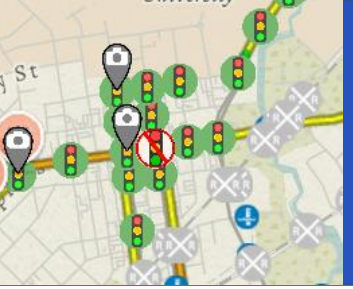
# Item 4: Presentation on Innovations in Traffic Management

# SMTX/Go

## A Real-Time, Multi-modal Traffic Monitoring and Traveler Information System

Sabas Avila, P.E., CFM
Director of Public Works
City of San Marcos

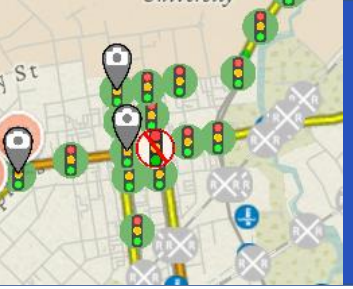
11/18/2024



# San Marcos, Texas

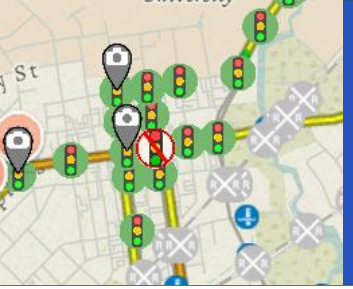
**About the Community.** San Marcos, TX is located on the I- 35 corridor between Austin and San Antonio. San Marcos is home to the 7th largest university in the state, TxState University, the San Marcos Outlet Malls, and the San Marcos River.

- **College Town:** Approximately 68% of TxState students are commuters
- **Commuters/Visitors:** approx. 14 million visitors/consumers a year.
- **Coordinated Transit system** between the City's Urban Transit system and TxState.
- Two **Union Pacific Railroads** bisect the city.



# Why SMTX/Go?

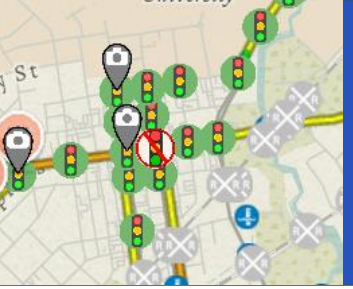
- **Limited man-power**
  - ✓ Mid-sized cities do not have personnel that can monitor traffic in a TMC
- **Limited funds**
  - ✓ System was developed in-house using off-the-shelf software
- **Need for coordination**
  - ✓ Share information between departments (Public Works, Police, Fire, EOC, etc.)
  - ✓ Share information from all multi-modal transportation partners
  - ✓ Share information with the public
  - ✓ Combine multiple sources into one viewer
  - ✓ Does not require specialized software training or administrative access
  - ✓ Improves coordination and efficiency



# What is SMTX/Go?

## A Real-Time Traffic Monitoring and Traveler Information System

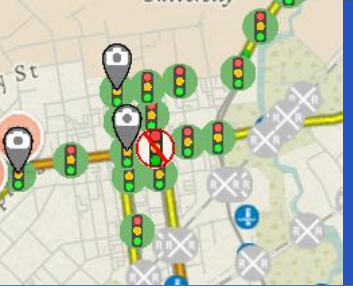
- Combines near real-time traffic information/events from multiple sources into one easy-to-use map viewer
- Real-time Traffic Information includes:
  - ✓ Traffic incidents (Waze)
  - ✓ Traffic Speeds (Waze)
  - ✓ Construction/Event Closures (Waze)
  - ✓ Railroad Crossing Closures
  - ✓ Traffic Signal Status
  - ✓ Low-water Crossing Closures
  - ✓ Traffic Cameras
  - ✓ Public Transit
  - ✓ Microtransit (Spin scooters and bikes)



# How Does SMTX/Go Work?

## How does the system work?

- The map utilizes:
  - ✓ Internet of Thing (IoT) model
  - ✓ CoSM Traffic Signal Radio Communication Network
  - ✓ GIS
  - ✓ APIs



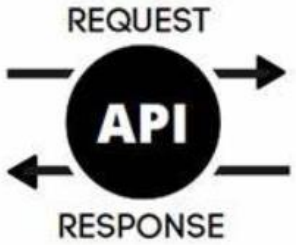
# GeoEvent Server & API Calls

- **Application Programming Interface (API)**

  An API allows different software applications to communicate and exchange data. It acts as an intermediary, defining how these applications should interact.

- **ArcGIS GeoEvent Server**

  A tool that allows organizations to integrate real-time event-based data streams into their enterprise geographic information system (GIS).




https://gbfs.spin.pm/api/gbfs/v2_3/san_marcos/free_bike_status


```
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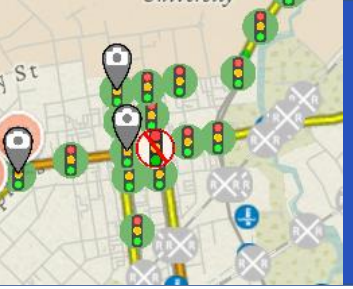
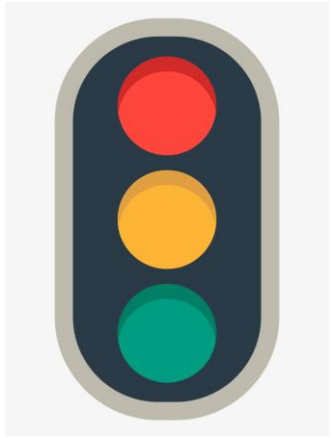
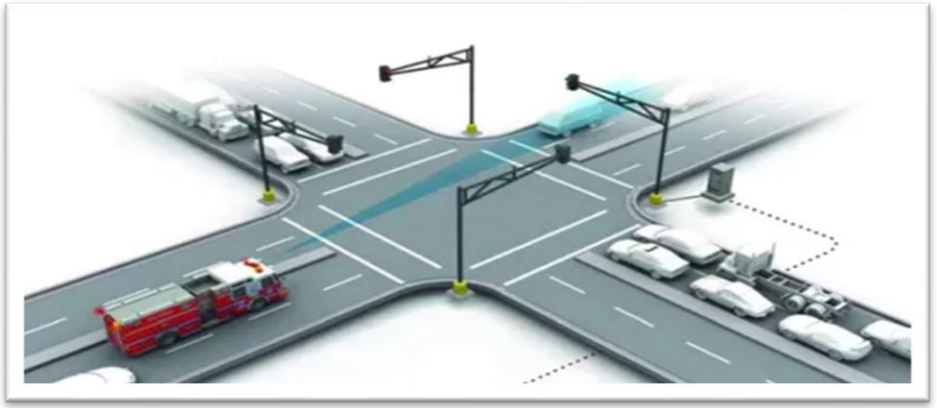


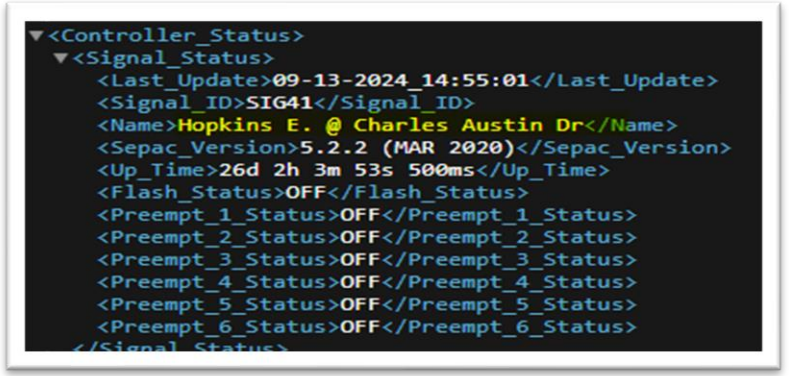
# SMTX/Go Highlights

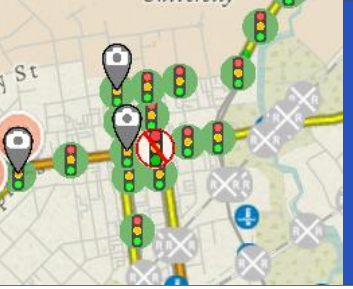
## Traffic Signal Flash & Emergency Preemption

- Traffic Signal Management System software (Tactics) updates API file on City network
- GeoEvent Server watches the API file and updates GIS with changes
- Utilizes existing traffic signal broadband radios
- Provides status for:
  - Traffic Signals on FLASH
  - Railroad Crossing Closure
  - Emergency Preemption Vehicles



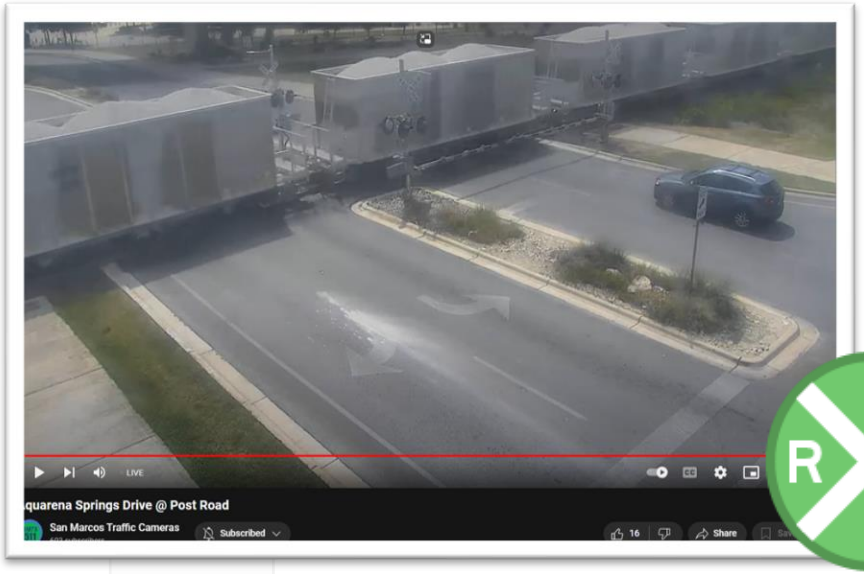


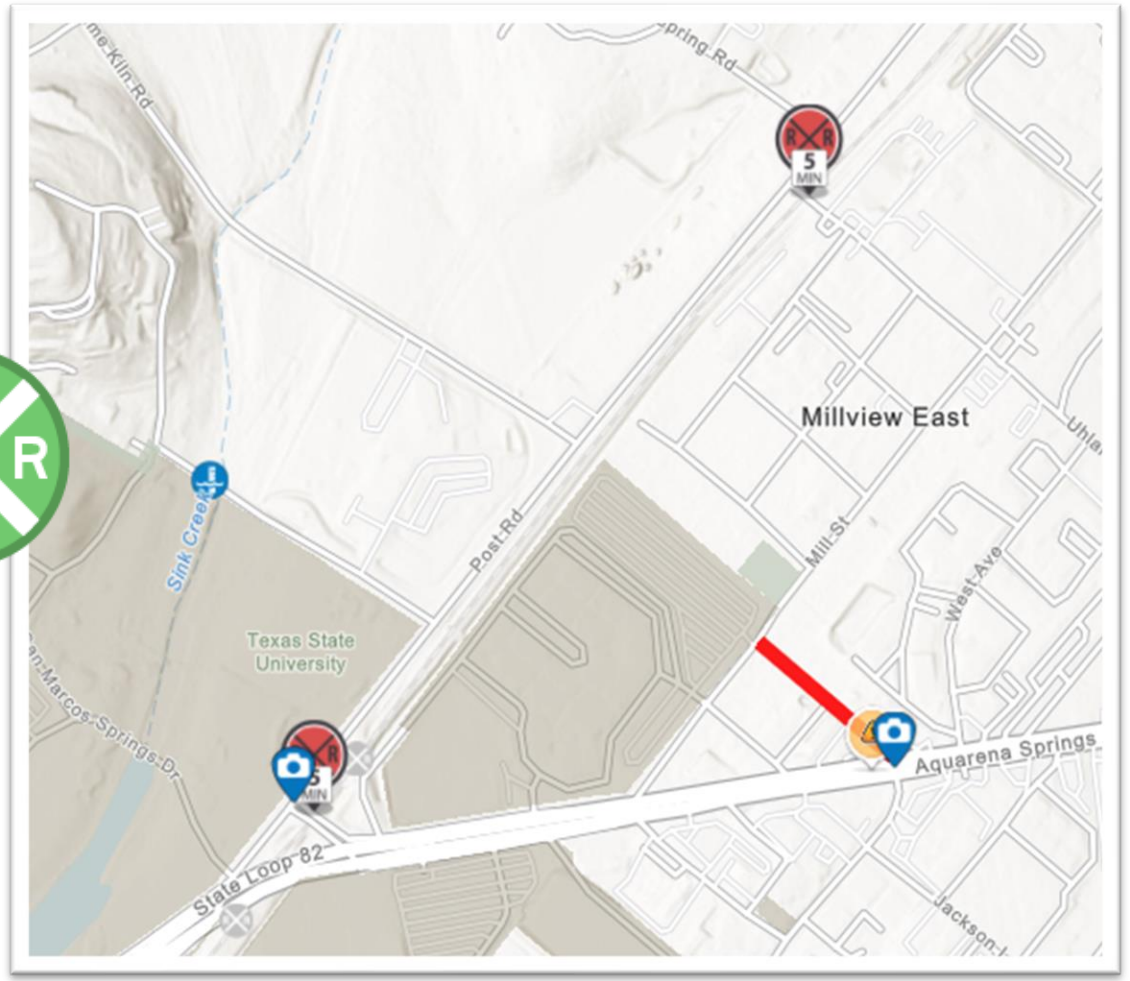


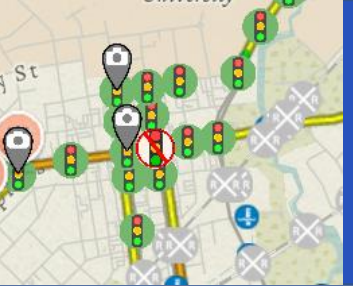


# SMTX/Go Highlights

## Railroad Crossing Closures







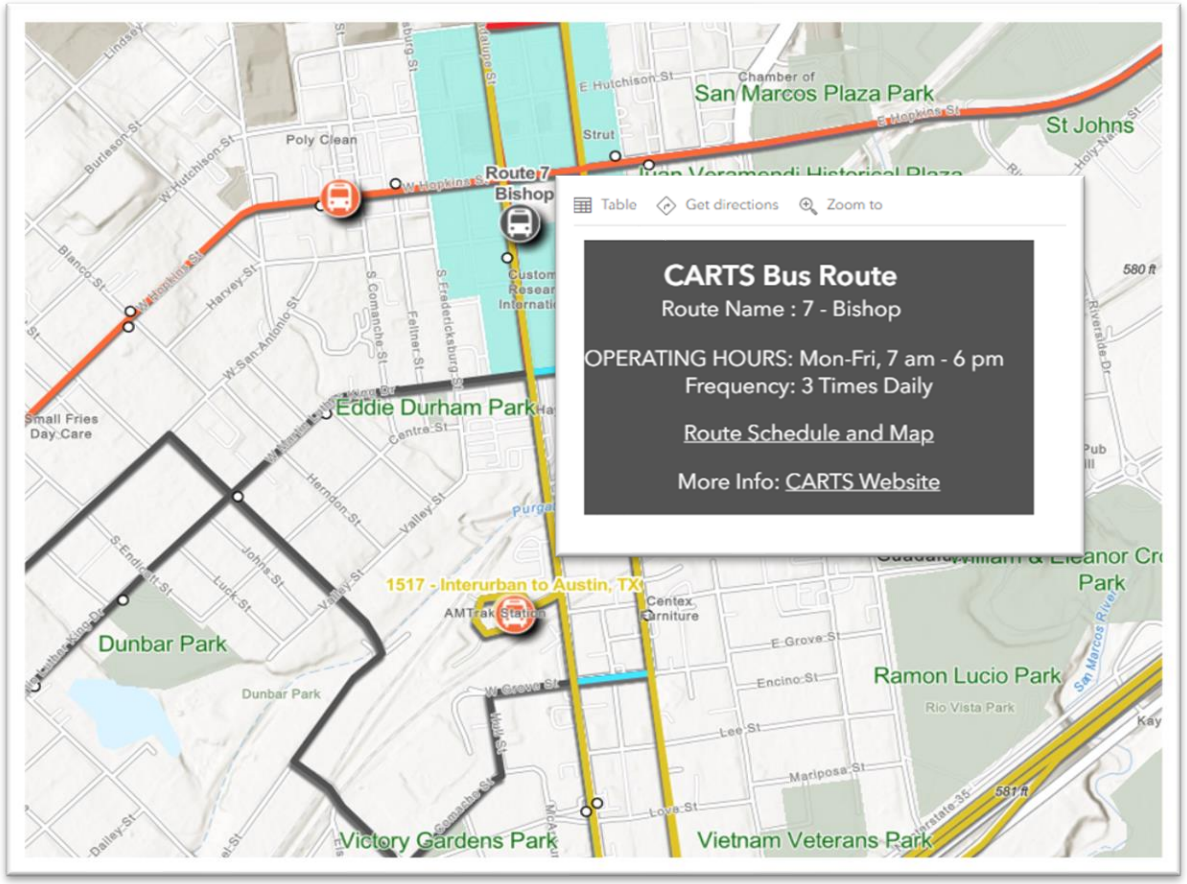
# SMTX/Go Highlights

## CARTS Bus Tracking

Real-time bus locations

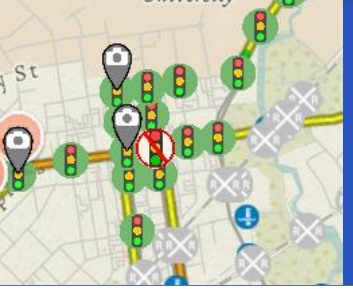
Information about routes schedules included

Links to schedules, CARTS website and Bus Stops




SAN MARCOS, Texas (KXAN) — The City of San Marcos will launch a new bus tracker program to help transit users track down upcoming buses along their routes, city officials announced in a news release Monday. The tool has been developed in coordination between the City of San Marcos Public Works Department and Capital Area Rural Transportation Systems (CARTS), per the release.

kxan IN-DEPTH. INVESTIGATIVE.



# SMTX/Go Highlights

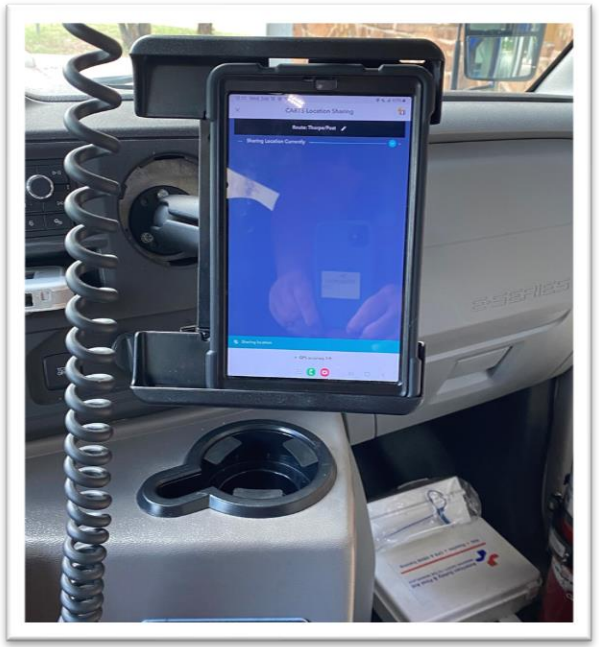
## CARTS Bus Tracking

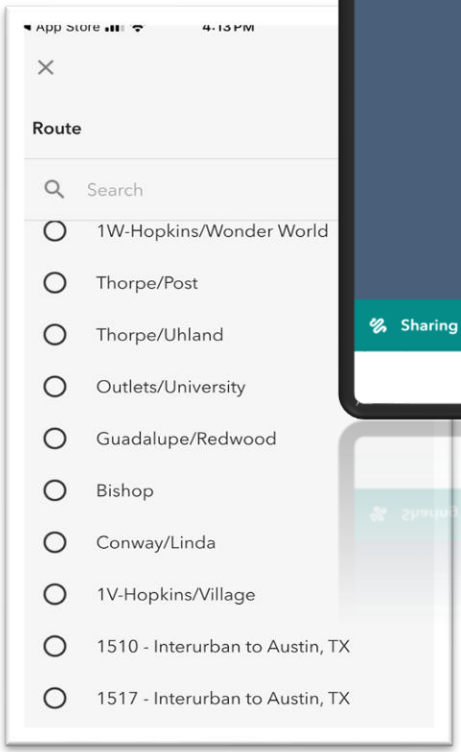
Buses outfitted with mobile devices, running ESRI Quick Capture

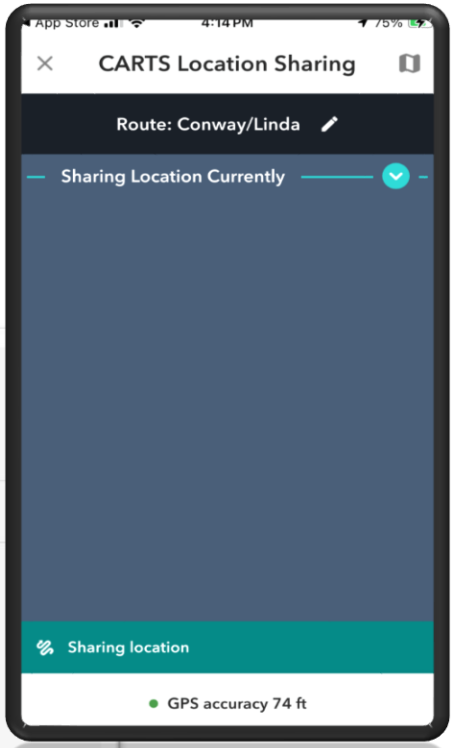
Quick Capture records bus latitude and longitude every 30 seconds

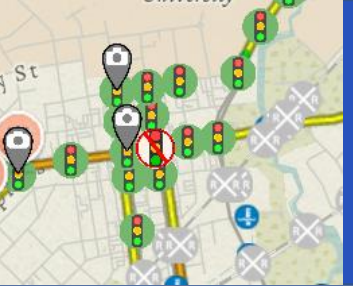
Bus location is sent to the Location Sharing layer in AGO

To make it publicly available, had to embed credentials, bit of a work-around







# SMTX/Go Highlights

## SPIN Scooters/Bikes

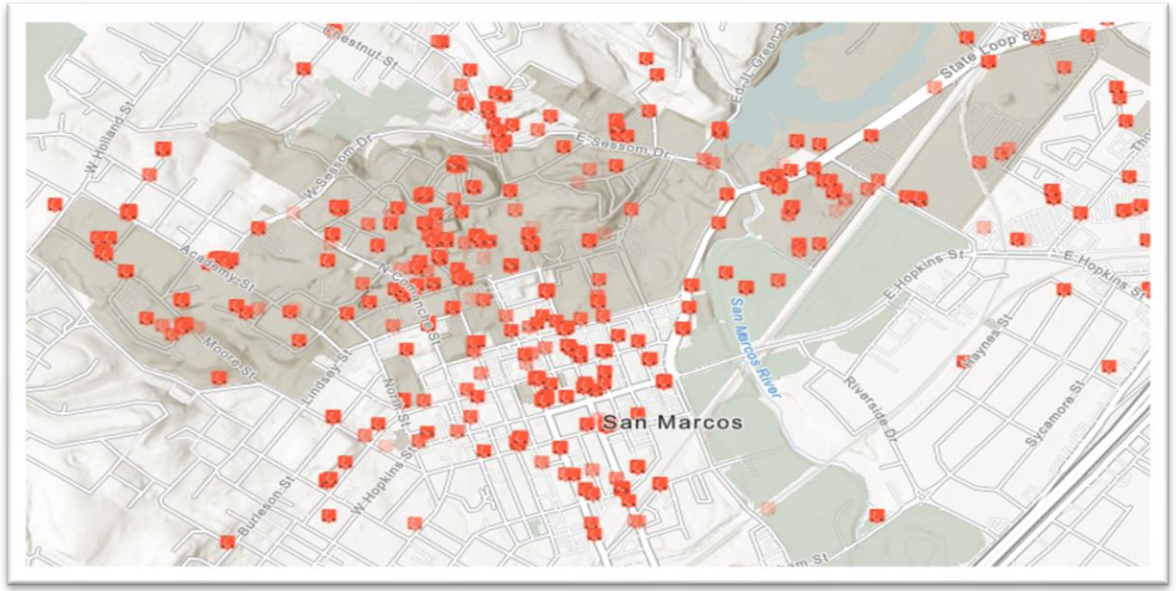
JSON data-feed provided by SPIN API – updates 60 sec.

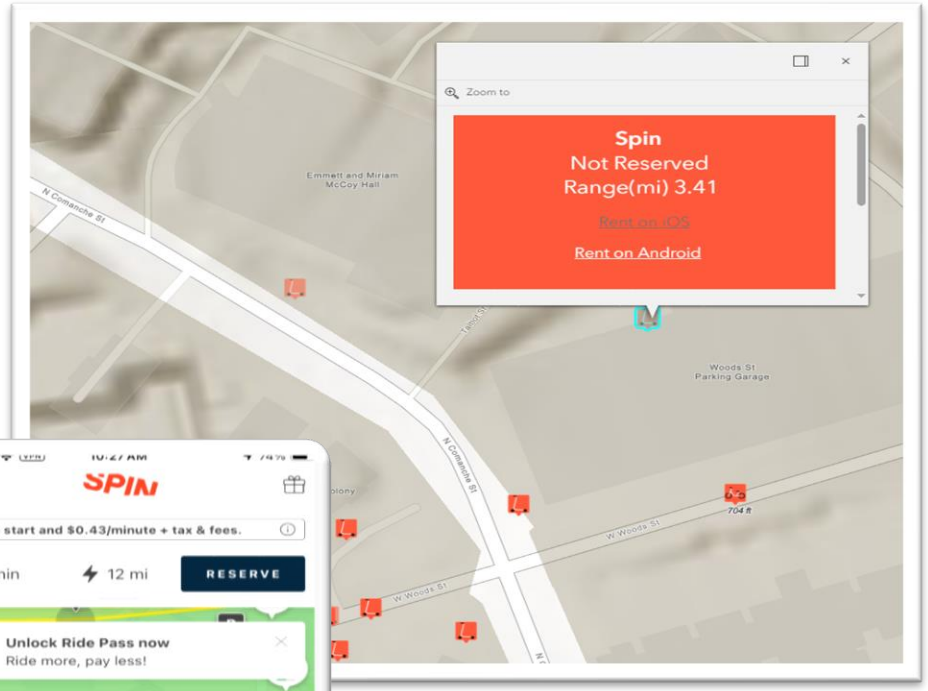
ESRI GeoEvent server populates GIS with SPIN data

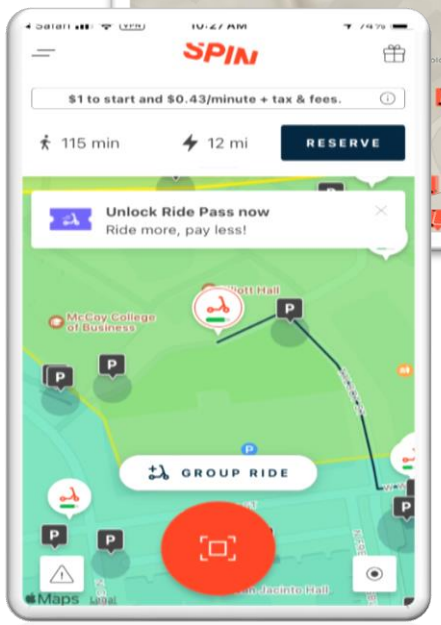
Shows locations of available scooters/bikes

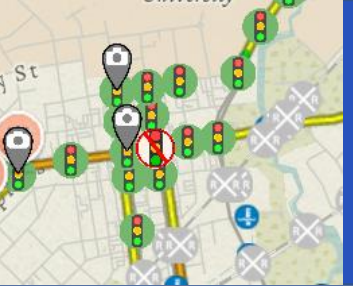
Scooter Symbol transparency based on battery range

Clicking a scooter presents a nice popup



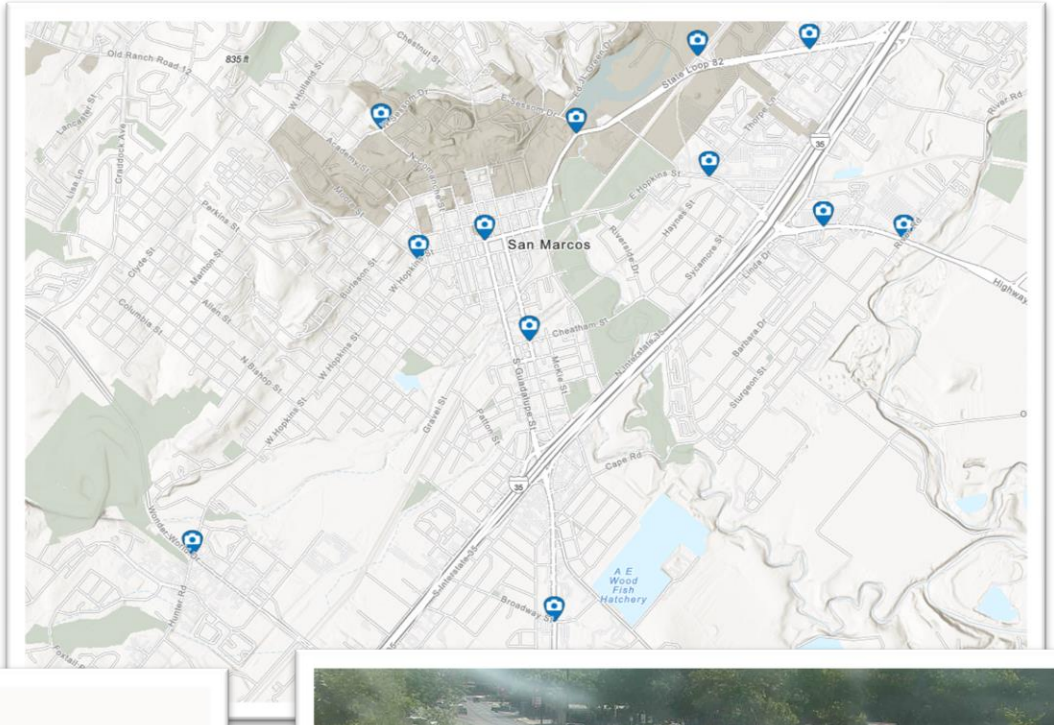



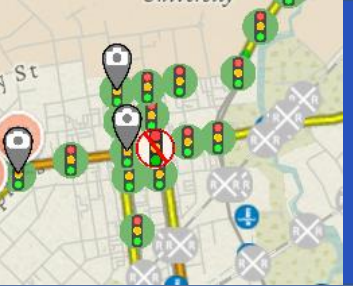


# SMTX/Go Highlights

## Traffic Cameras

- 20 locations
- Axis 6000 Series Cameras
- Traffic Manager can control them from the office, Pan Tilt Zoom
- Do not store footage, only real-time streaming video

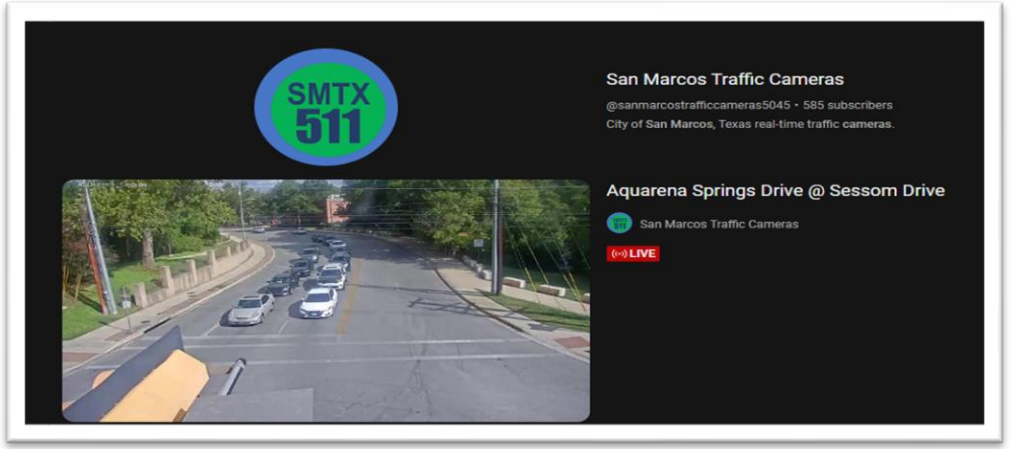


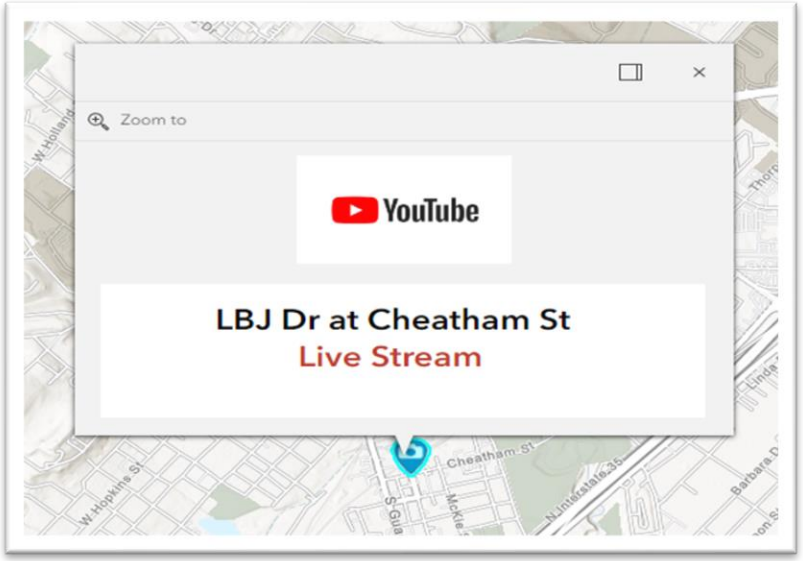


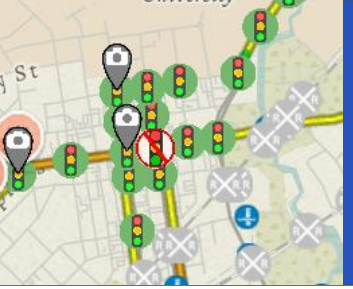
# SMTX/Go Highlights

## YouTube Solution

- Camstreamer App
- $300 per camera.  No reoccurring fees
- YouTube Channel "San Marcos Traffic Cameras"
- Linked to signal layer in SMTX/Go
- Streaming to YouTube allows us to utilize YouTube's servers
- YouTube Recorded video, 12 hours back



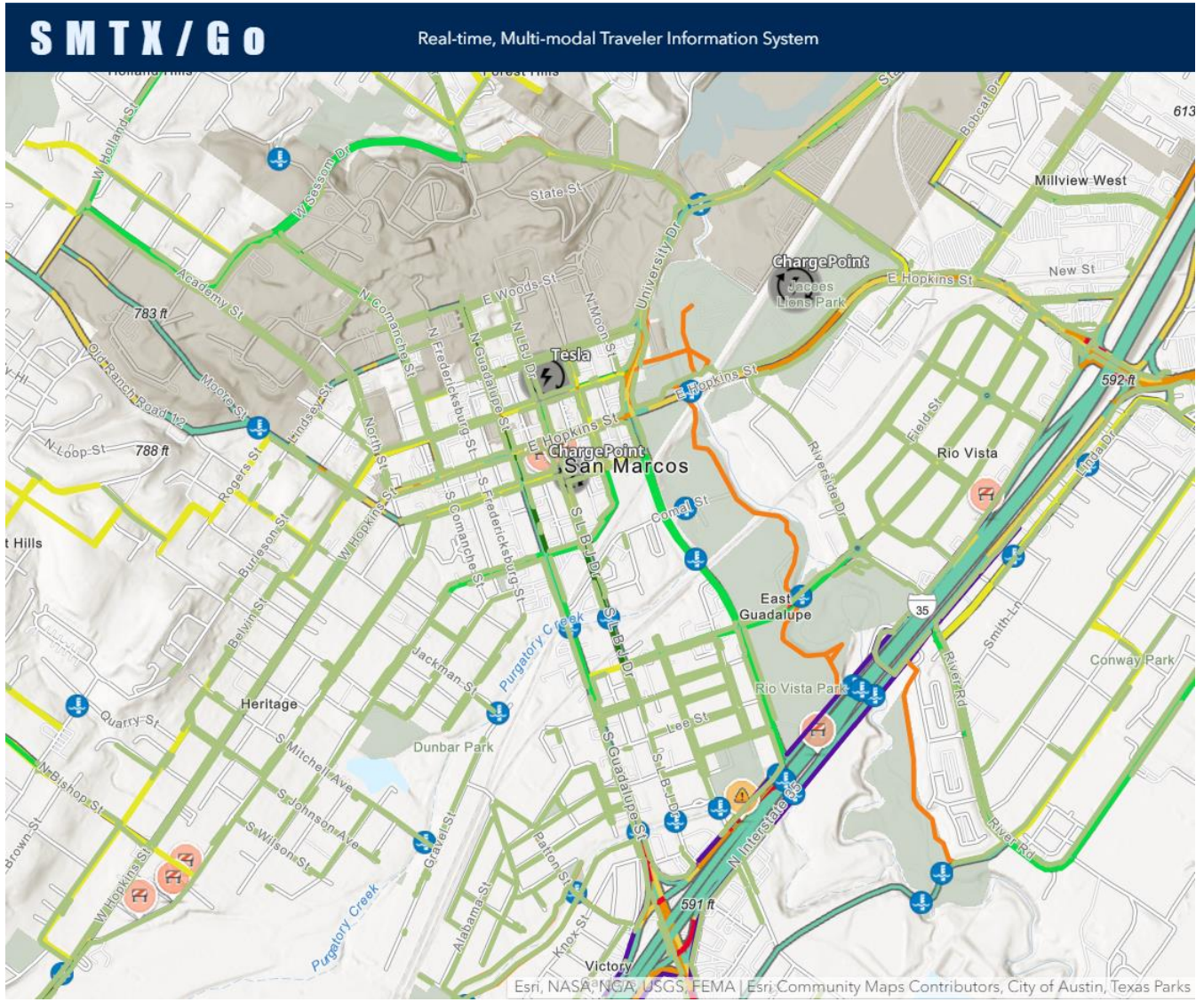



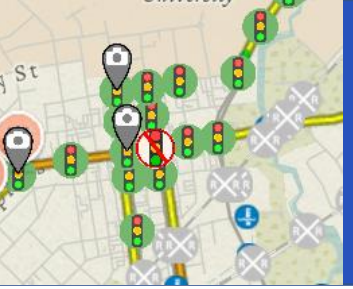


# SMTX/Go Highlights

Additional Features include:

- Low-water Crossing Closures
- Sidewalk Layers
- Bike Lanes
- Traffic incidents (Waze)
- Traffic Speeds (Waze)
- Construction/Event Closures
- Drive Texas Road Closures





# SMTX/Go

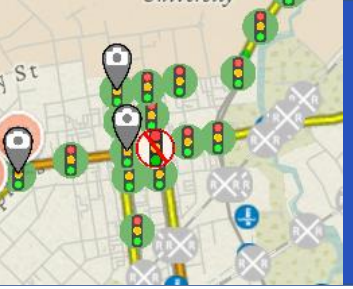
SMTX/Go Real-time, Multi-modal Traveler Information System

Legend Share

**smtxgo.sanmarcostx.gov**

LAYERS

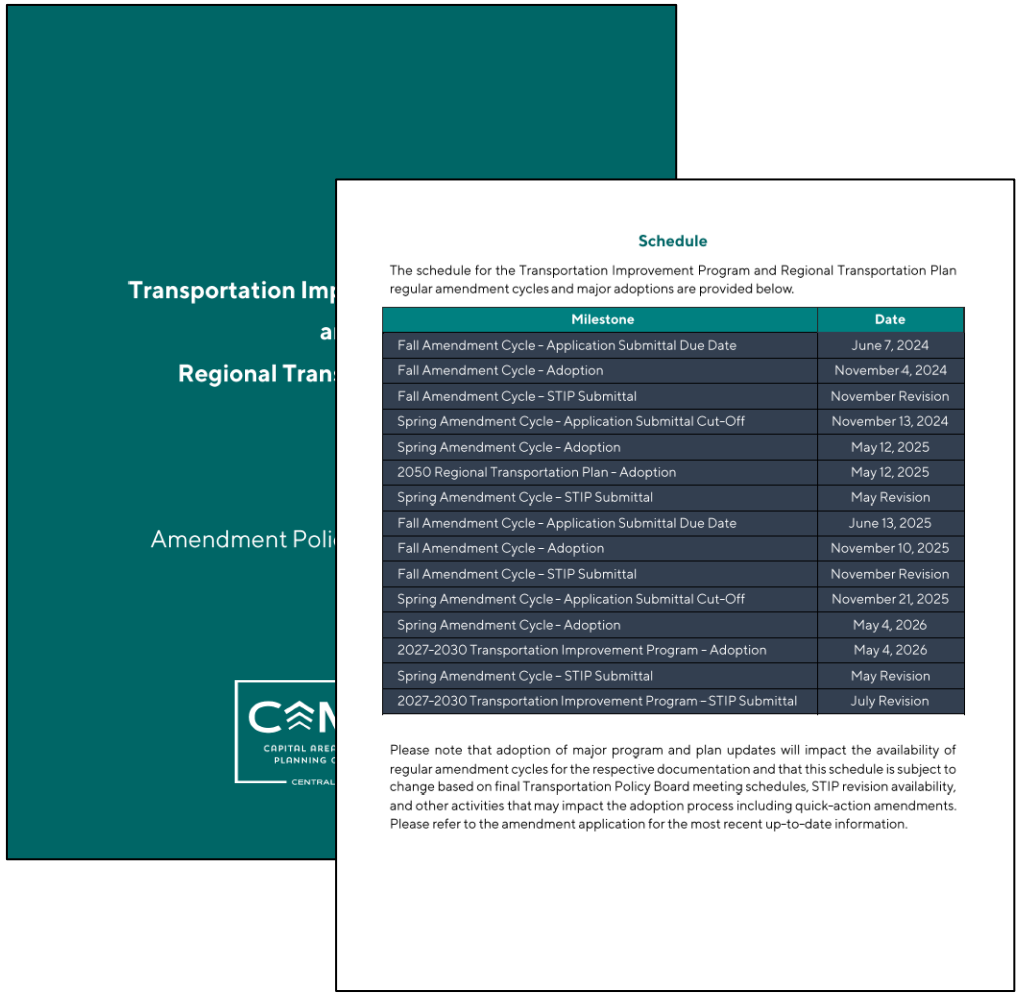
- Bus Tracker, Routes, and Stops
- SPIN Scooters and Bikes
- Sidewalk Closed
- Sidewalk
- Downtown Benches
- Downtown ADA Ramps
- Traffic Signals on Flash
  - On Flash
- Traffic Cameras
- Rail Road Crossings



# SMTX/Go

## QUESTIONS?

# Item 5: Report on Transportation Planning Activities




# Additional Out-of-Cycle Amendment

Submissions for the Spring Amendment Cycle, due on November 13, 2024, will be requested to be processed on December 9 through an Out-of-Cycle Amendment Request (Quick Action Option).

This request is being made to ensure several projects are included in the TIP before the end of the year and are ready for the February STIP Revision due in mid-January.

For the future amendment schedule, the Amendment Policies and Procedures includes a two-year schedule through to the 2027-2030 TIP.

# Additional Out-of-Cycle Amendment

| MPO ID | CSJ | County | Sponsor | Project Name | Limits (From) | Limits (To) | Description | Phase | Fiscal Year | Cost (YOE) | Total Project Cost | Amendment Request |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TBD | TBD | Travis | City of Austin/TxDC | IH 35 | Cesar Chavez | 4th Street | Highway cap over reconstructed IH-35 | C | 2025 | $167,515,000 | $167,515,000 | New Listing |
| TBD | TBD | Travis | City of Austin | Barton Springs Road | Lou Neff | Azie Morton | Bridge replacement with pedestrian and bicycle accomodations. | C | 2028 | $40,000,000 | $40,000,000 | New Listing |
| 61-00086-01 | 0440-05-015 | Williamson | TxDOT | SH 130 | IH 35 | Gattis School Rd | Add one lane in each direction | C | 2027 | $250,000,000 | $250,000,000 | New Listing |
| 51-00205-01 | 0440-06-030 | Travis | TxDOT | SH 130 | Gattis School Rd | RM 685 | Add one lane in each direction | C | 2027 | $51,923,077 | $51,923,077 | New Listing |
| 61-00103-00 | TBD | Williamson | Williamson County | Corridor A2 | FM 973 | CR 406 | Construct new 2-lane roadway with continuous left-turn lane. | C | 2026 | $39,400,000 | $39,400,000 | New Listing |
| TBD | 0535-03-027 | Caldwell | TxDOT | IH 10 | Guadalupe County Line | Gonzales County Line | Expand from 4-Lane to 6-Lane Expresseway | | 2033 | | $107,142,857 | Add New Project. |
| 61-00111-00 | 2103-01-038 | Williamson | Williamson County | RM 2243 | 183A | Southwest Bypass | Widen 2-lane undivided to 4-lane controlled access facility with 3-lane frontage roads in each direction. | | 2035 | | $48,740,000 | Modify limits and project description |

Submissions and project details are under review as of the Technical Advisory Committee (TAC) meeting and subject to change.

# Item 6: Announcements

# Upcoming Meetings

- TPB → December 9, 2024 in Georgetown

100 Wilco Way, Room 226, Georgetown, TX 78626

- TAC → December 16, 2024

# Adjournment