RITIS User Group

RITIS User Group Web Meeting

September 4, 2025

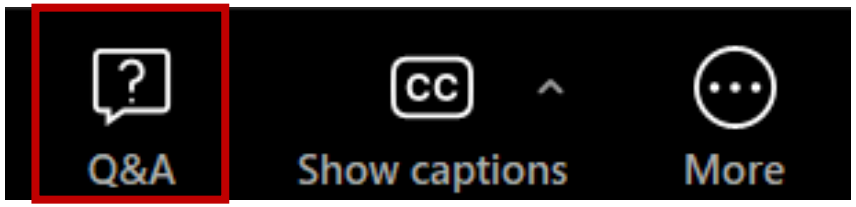
In collaboration with The Eastern Transportation Coalition

Welcome!

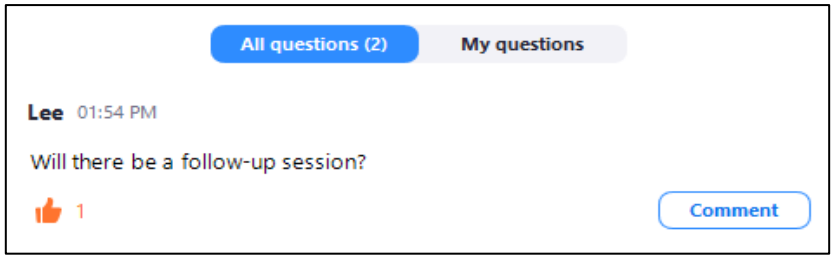
- We are using Zoom **Webinar**
- **AUDIO (Computer):** Use your computer speakers and microphone by clicking the "Join Audio" button at the bottom left of the screen. You will be muted.
- **Alternate Audio (Phone):** Call into the meeting by dialing the phone number based on your location (provided in the confirmation email) and enter the Meeting ID at the prompt. You will be muted.
- **This web meeting is being recorded.**
- **Questions** with the audio or web? Please contact Nicole directly via email (nforest@tetcoalition.org)
- Please use the **Q&A box** for questions to the presenters. The **Chatbox** is not available to participants.

Asking Questions in the Q&A Box

- Click on the Q&A icon at the bottom of your screen



- The questions in the Q&A box will be monitored and answered at the end of each presentation or at the end of the meeting
- You can keep track of your questions in the “My Questions” tab in the Q&A box



Asking Questions Verbally

- Please raise your hand *(click on the hand icon at the bottom of the screen)* and a host will unmute you.

- Please give your name and agency before asking your question
- **Please mute yourself when you are finished speaking**

Welcome from the Coalition and upcoming RITIS Events!

Nicole Forest
The Eastern Transportation Coalition
TSMO Program Associate

Event	Date
RITIS User Group Web Meeting	December 4, 2025 1:30pm-3:00pm

Welcome & Introductions

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

Jesse Buerk
Manager, Office of Capital Programs
DVRPC
RITIS User Group Co-chair

Today's Meeting

Presentation	Presenter	Time
RITIS Events Update Welcome & Introductions	Nicole Forest, The Eastern Transportation Coalition Jesse Buerk, DVRPC & RITIS User Group Co-chair	5 mins
Agency Spotlight Presentation: Measuring and Visualizing Performance for the Sparks Intelligent Corridors Project	Alex Wolfson, Regional Transportation Commission of Washoe County	30 mins
Trips Data for Calibrating Travel Demand Models	Greg Jordan, UMD CATT Lab	20 mins
Review of new features and capabilities along with work in progress	Michael Pack, UMD CATT Lab Charles Lattimer, UMD CATT Lab	20 mins
User Feedback Session & Wrap Up	Michael Pack & Jesse Buerk	10 mins

Today's Speakers

Michael Pack
University of Maryland
CATT Lab
Director

Greg Jordan
University of Maryland
CATT Lab
Assistant to the Director

Alex Wolfson
Regional Transportation Commission of Washoe County
Project Manager

Charles Lattimer
University of Maryland
CATT Lab
Signal Systems Analytics Lead & Outreach

Polls 1, 2, and 3

Poll 1: How often do you attend RITIS User Group Web Meetings?

a) 1-2 times per year
b) 3-4 times per year
c) This is my first meeting

Poll 2: How do you use the data and visualization results from RITIS tools (choose one)?

1. We use results directly from RITIS to develop products (reports, maps, etc.)
2. We download the data and use our own agency's in-house tools to create tables and visuals for product development
3. We do a little bit of both

Poll 3: Who is your primary audience for sharing information that was developed from RITIS and PDA Suite (choose one)?

1. Peers
2. Management
3. Executive Leadership
4. Elected Officials
5. General Public

Spotlight Presentation: Measuring and Visualizing Performance for the Sparks Intelligent Corridors Project

Alex Wolfson

Project Manager

Regional Transportation Commission of Washoe County

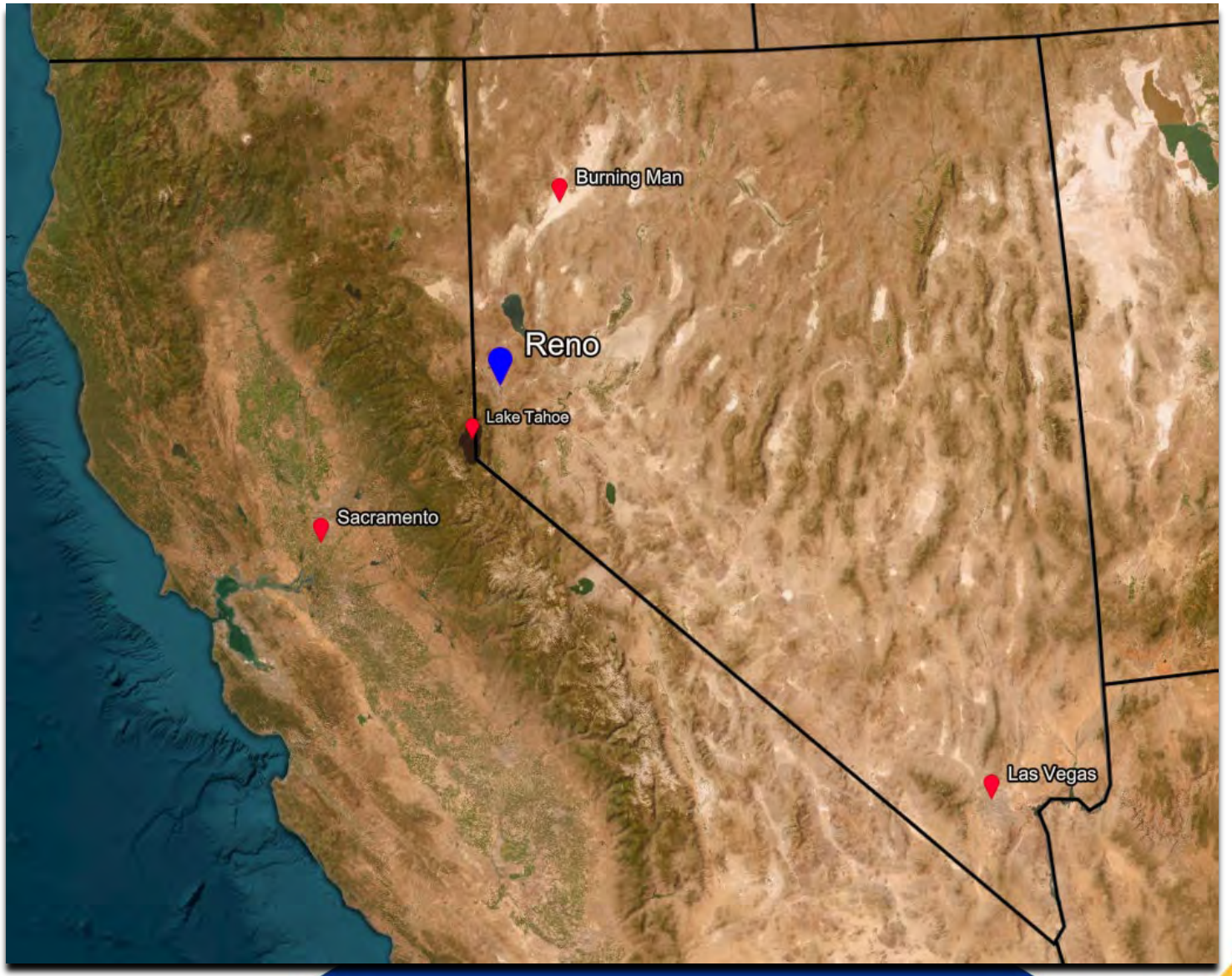
Sparks Intelligent Corridors

Determining Triggers and Measuring Performance

RITIS Users Group

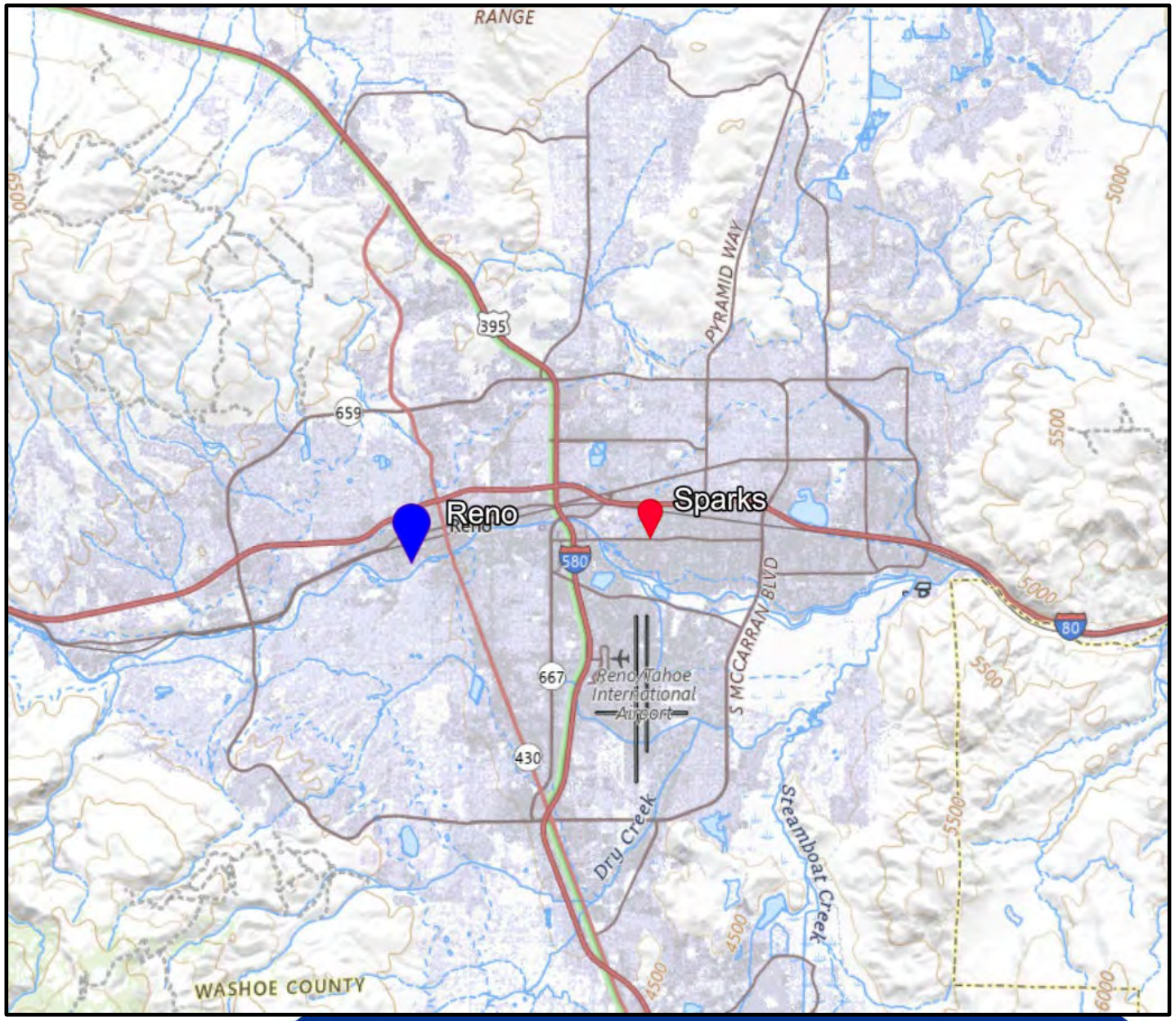
September 4, 2025

Metropolitan Transportation Planning
RTC
Public Transportation
Engineering & Construction


Burning Man
Reno
Lake Tahoe
Sacramento
Las Vegas

RTC Washoe Facts

- 3 local agencies
  - City of Reno
  - City of Sparks
  - Washoe County
- Metro population ~500,000
- 425 traffic signals



Project Location
Spanish Springs
Spanish Springs
Reno
Sparks
Golden Valley
Sun Valley
Sparks
RENO-STEAD
Dry Lake
Silver Lake
NORTH VALLEYS
STEAD
BLACK SPRINGS
RALEIGH HEIGHTS
HILLCREST EAST
PIONEER MEADOWS
KILEY RANCH
THE PINNACLES
LOS ALTOS PARKWAY
Rancho San Rafael County Park
North Reno VA Clinic
Mackay Stadium
Northern Nevada Medical Center
PAM Health Specialty Hospital of...
Futbol Sports Arena
MAE ANNE AVENUE
VISTA
395
445
659
580

Project Overview

The Goal

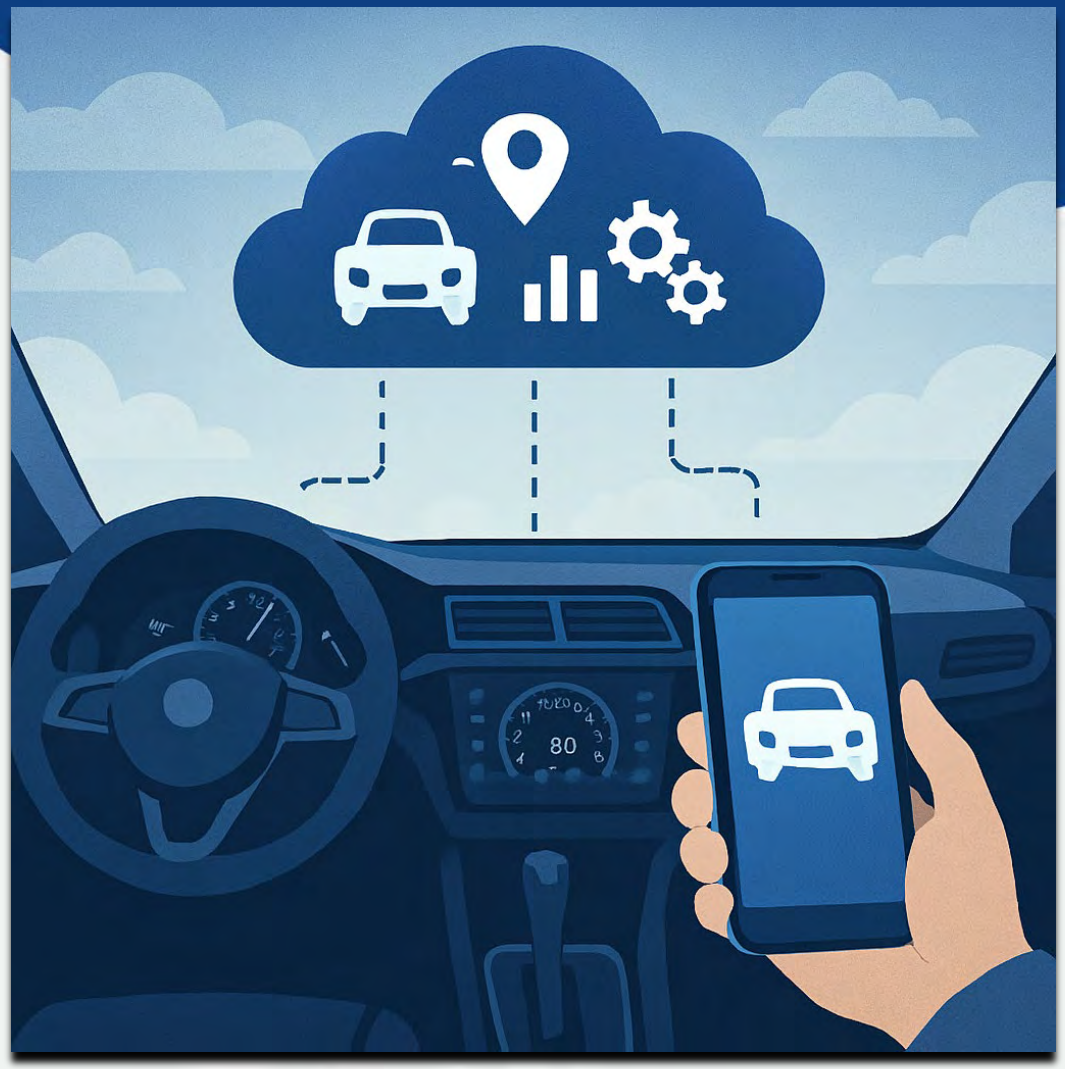
Actively manage traffic on the affected arterials

The Challenges

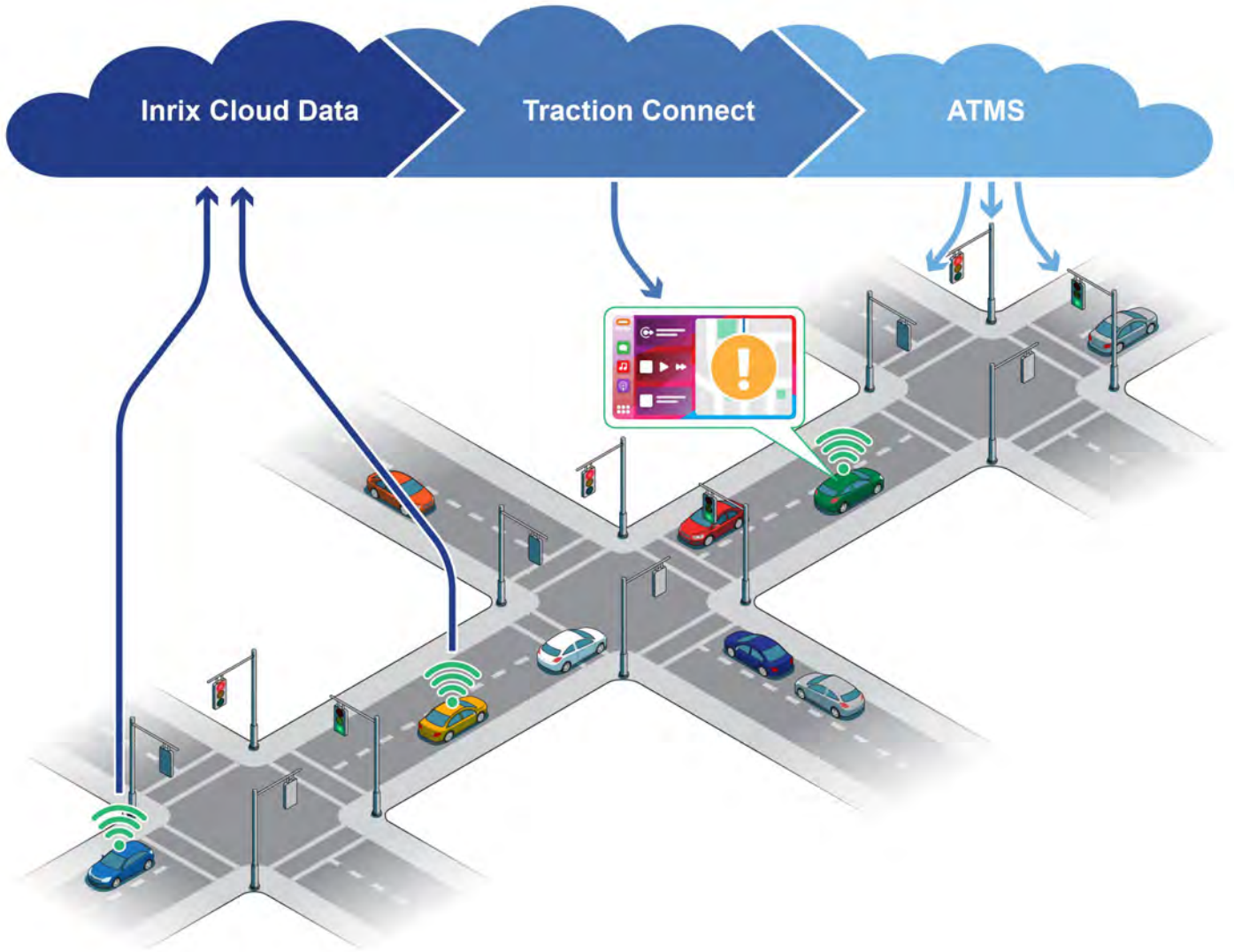
- Multiple jurisdictions
  - Local agencies
  - State DOT
- High costs
- Logistics

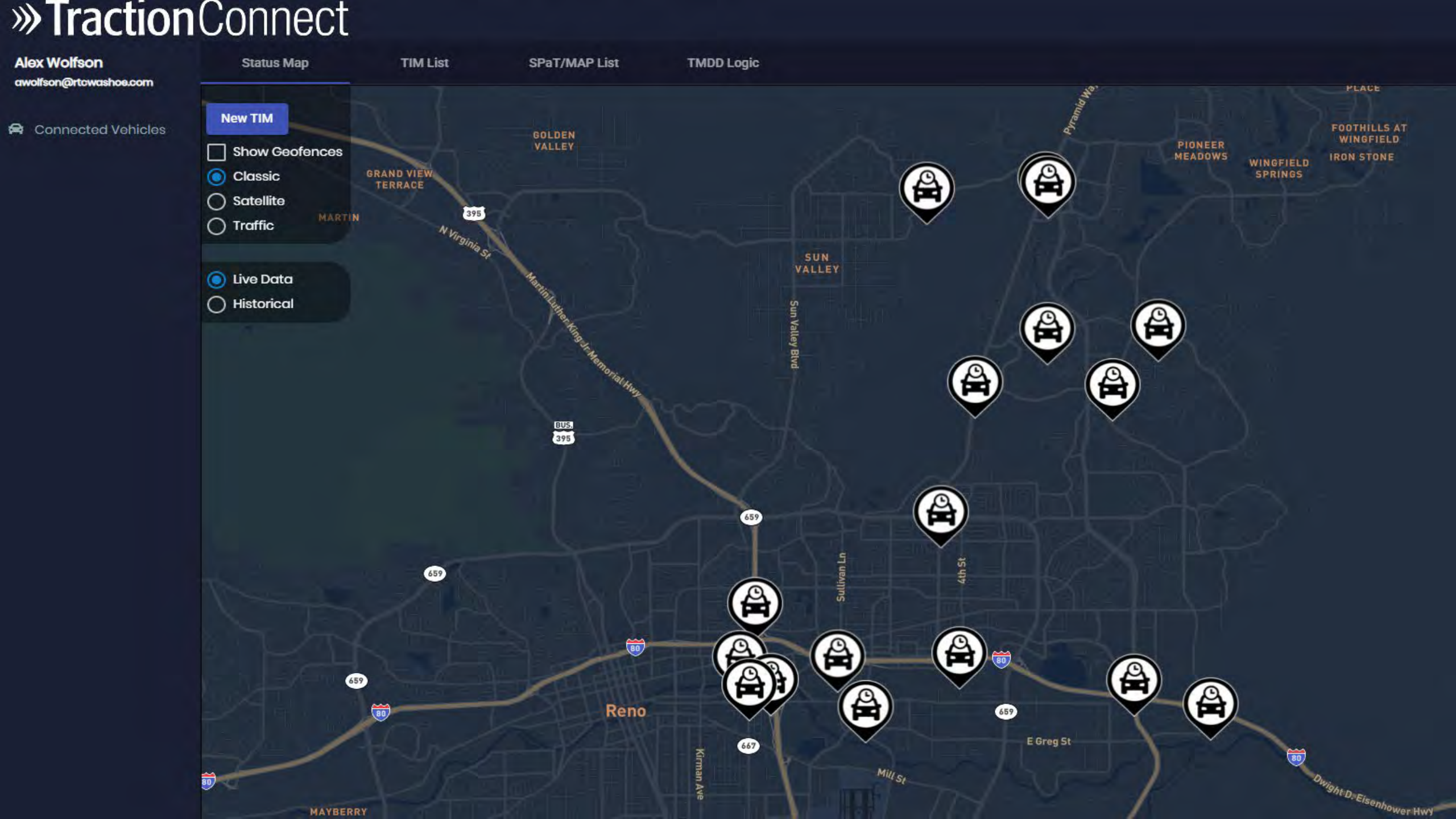
Solution

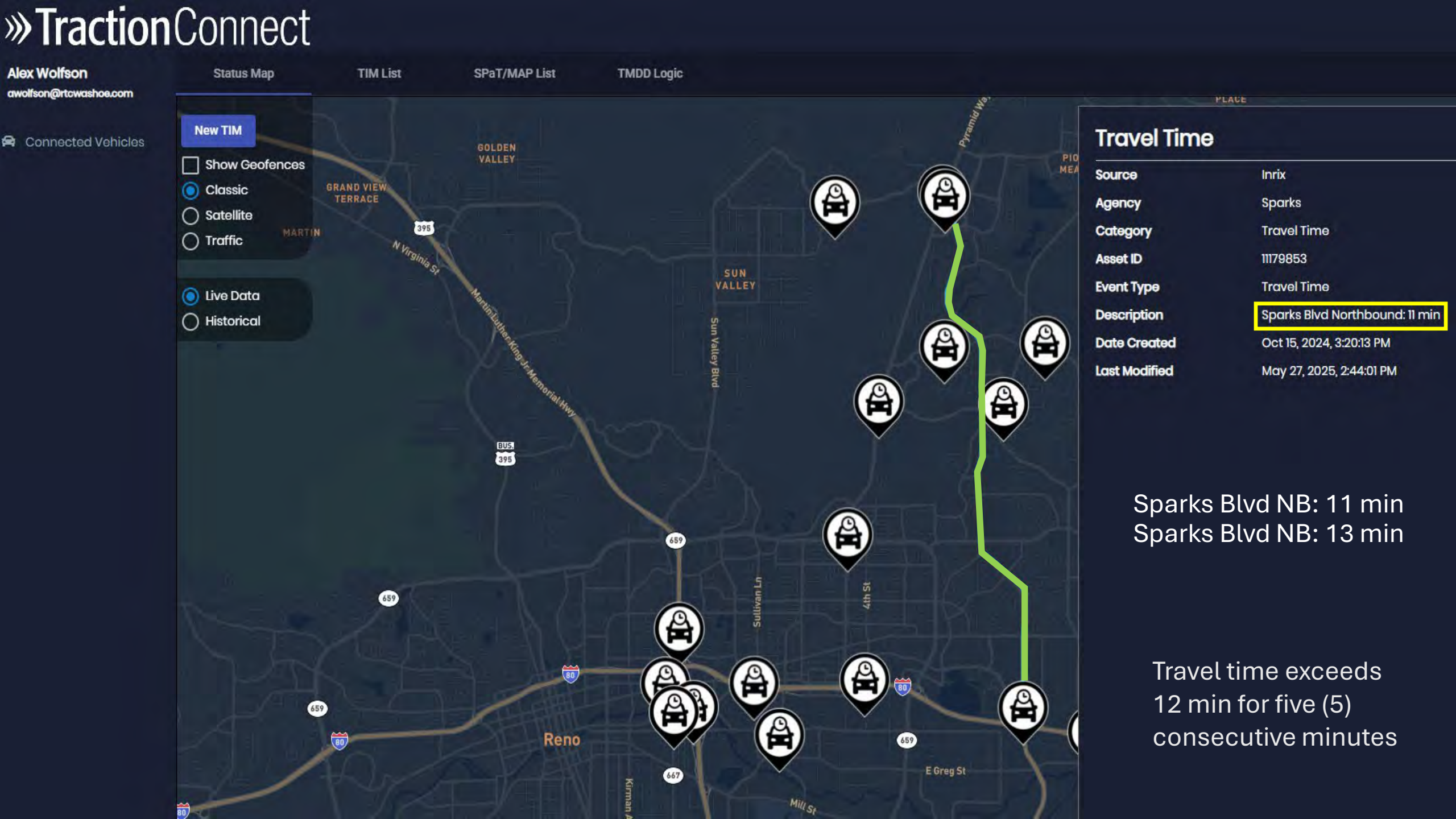
- Try out a virtual system
  - Vehicle trajectory data
  - Dynamic signal timing
  - Virtual message sign
    - Location-based alerts



How it works

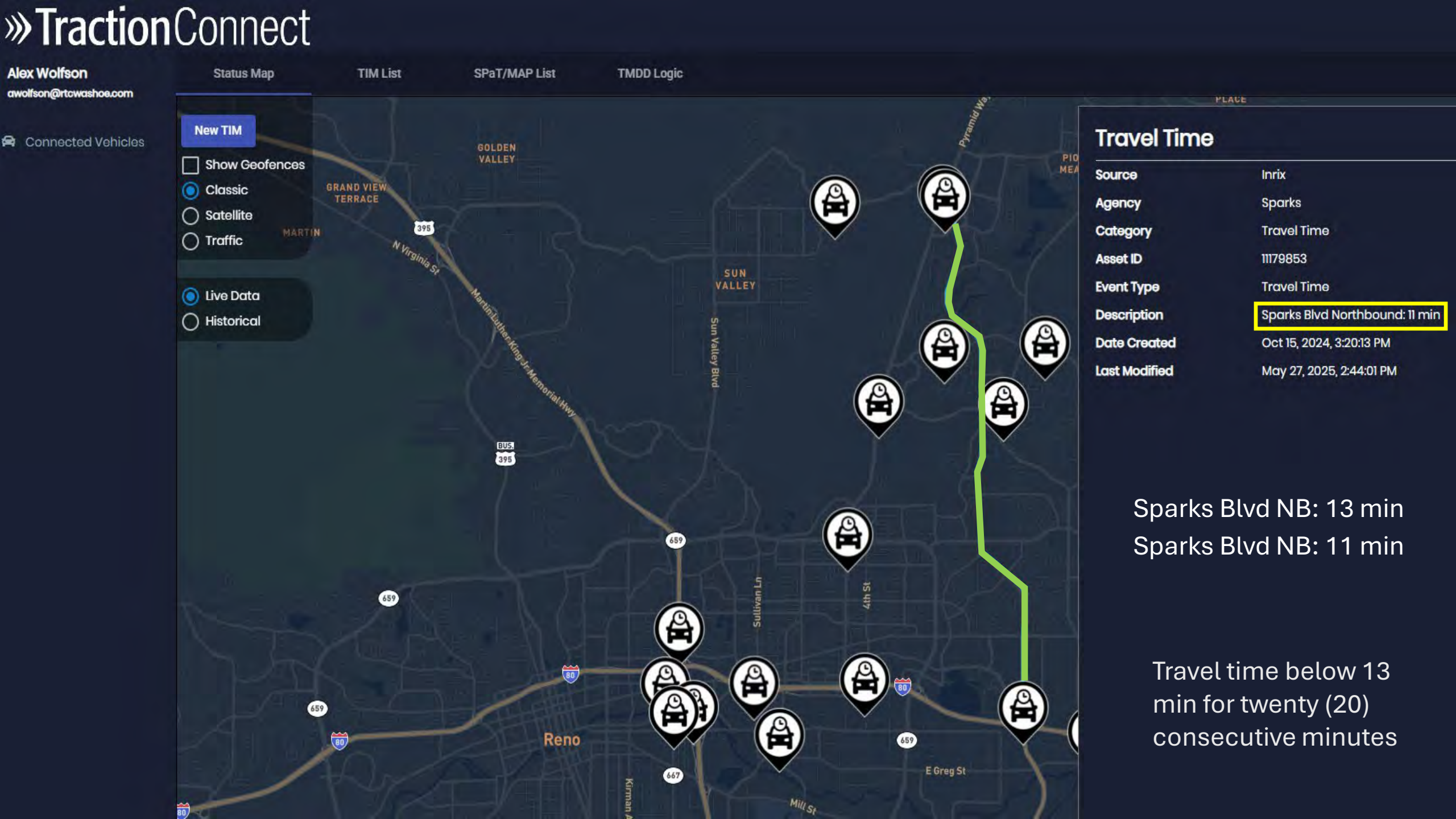



TractionConnect
Alex Wolfson
awolfson@rtcwashoe.com
Connected Vehicles
Status Map
TIM List
SPaT/MAP List
TMDD Logic
New TIM
Show Geofences
Classic
Satellite
Traffic
Live Data
Historical
GOLDEN VALLEY
GRAND VIEW TERRACE
MARTIN
N Virginia St
Martin Luther King Jr Memorial Hwy
SUN VALLEY
Sun Valley Blvd
PIONEER MEADOWS
WINGFIELD SPRINGS
FOOTHILLS AT WINGFIELD
IRON STONE
Pyramid Way
Sullivan Ln
4th St
Reno
E Greg St
Mill St
Kirman Ave
MAYBERRY
Dwight D Eisenhower Hwy
395
BUS 395
659
667
80



Sparks Blvd NB: 11 min
Sparks Blvd NB: 13 min

Travel time exceeds 12 min for five (5) consecutive minutes



Sparks Blvd NB: 13 min

Sparks Blvd NB: 11 min

Travel time below 13 min for twenty (20) consecutive minutes

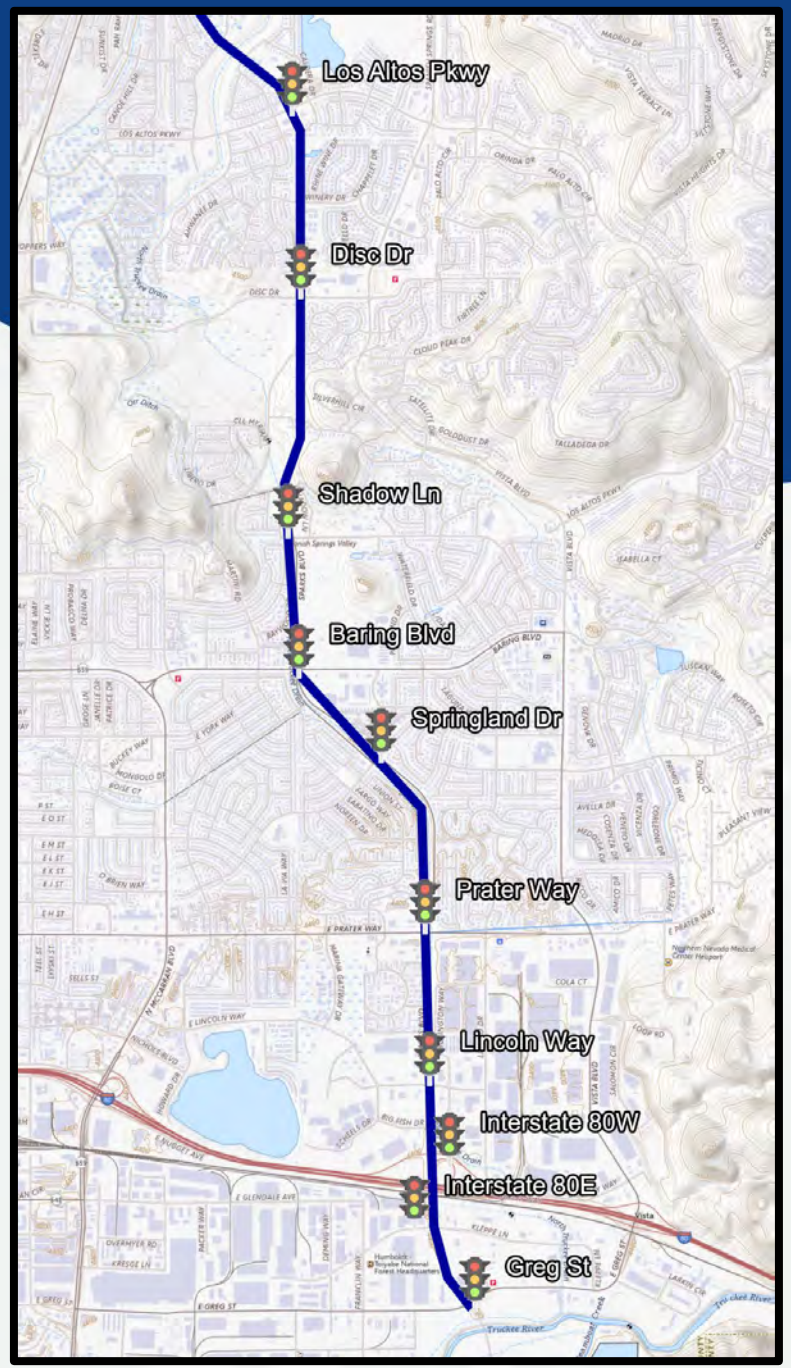
Pilot Corridor

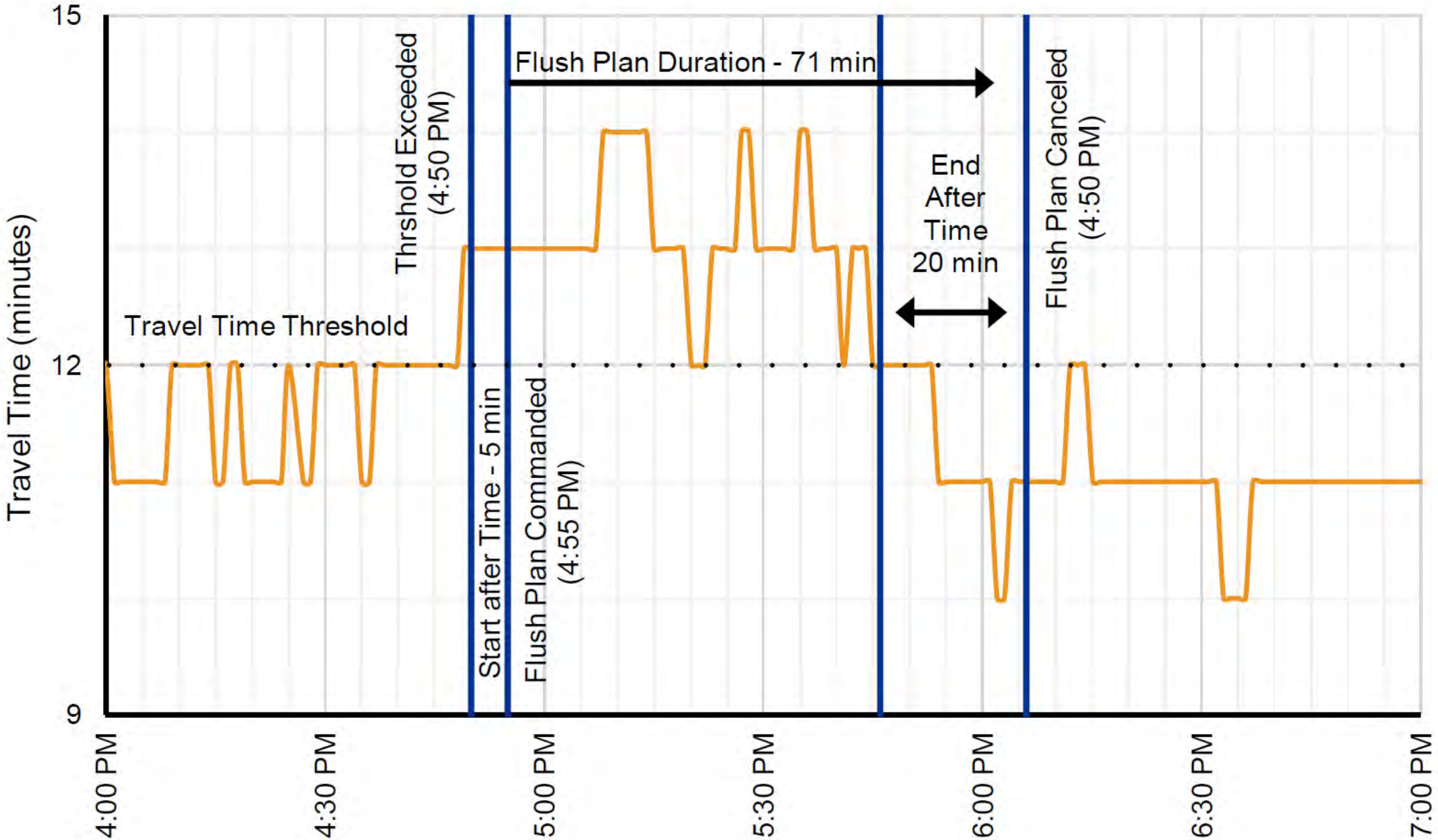
Sparks Blvd northbound

Greg St to Los Altos Pkwy

10 traffic signals

5 miles long




15
12
9
Travel Time (minutes)
Travel Time Threshold
Thrshold Exceeded
(4:50 PM)
Start after Time - 5 min
Flush Plan Commanded
(4:55 PM)
Flush Plan Duration - 71 min
End
After
Time
20 min
Flush Plan Canceled
(4:50 PM)
4:00 PM
4:30 PM
5:00 PM
5:30 PM
6:00 PM
6:30 PM
7:00 PM

Results

Ran system from February thru April in 2025

Compared data for Feb thru April in 2024 and 2025

Focused on 2 pm – 8 pm, Monday thru Friday

Travel Time

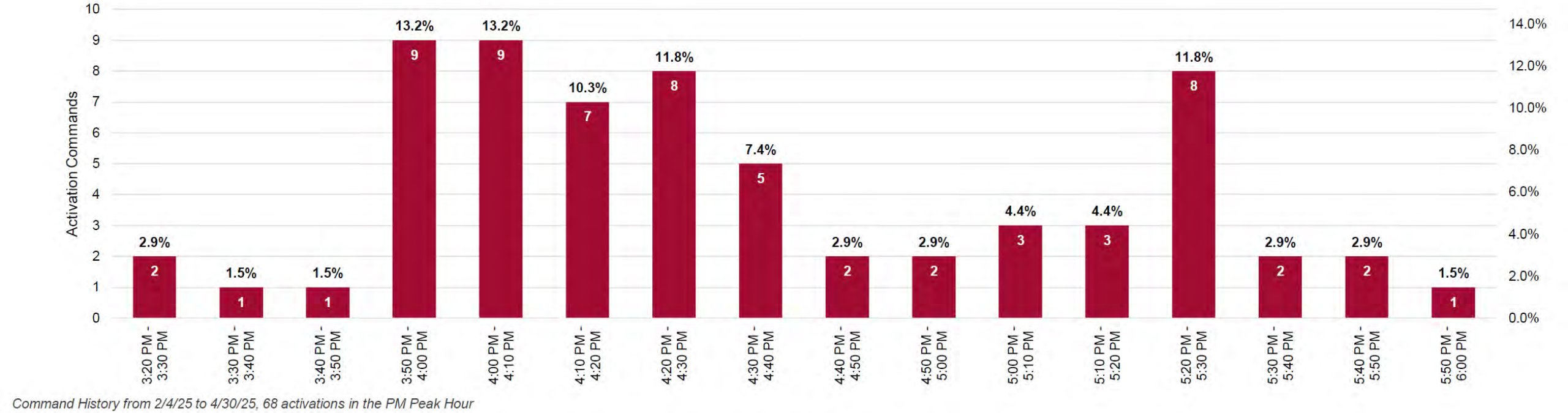
11.4%

Improvement in travel time

Buffer Time

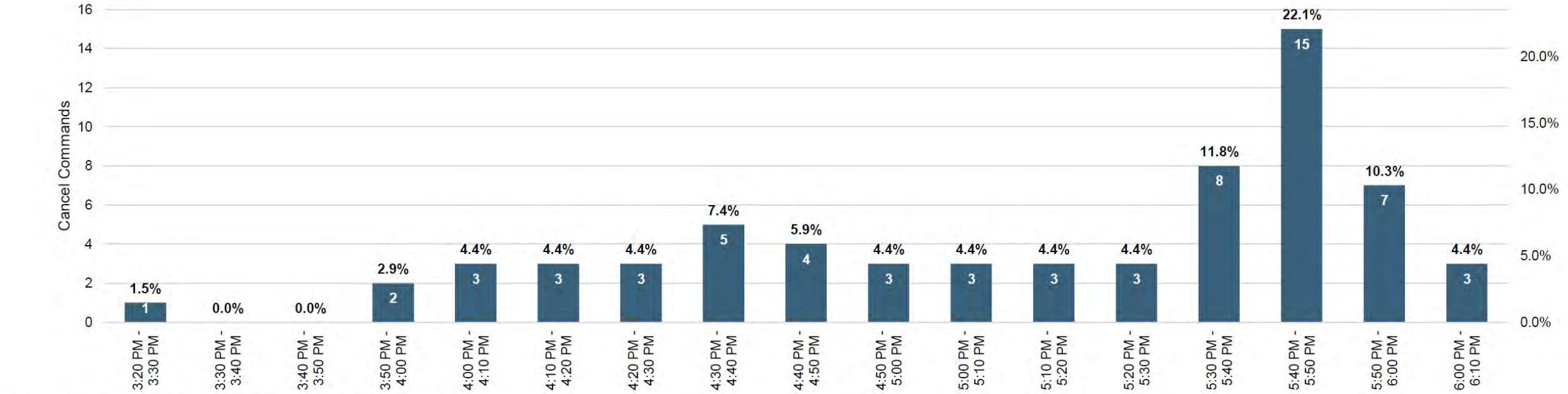
11%

Improvement in buffer time



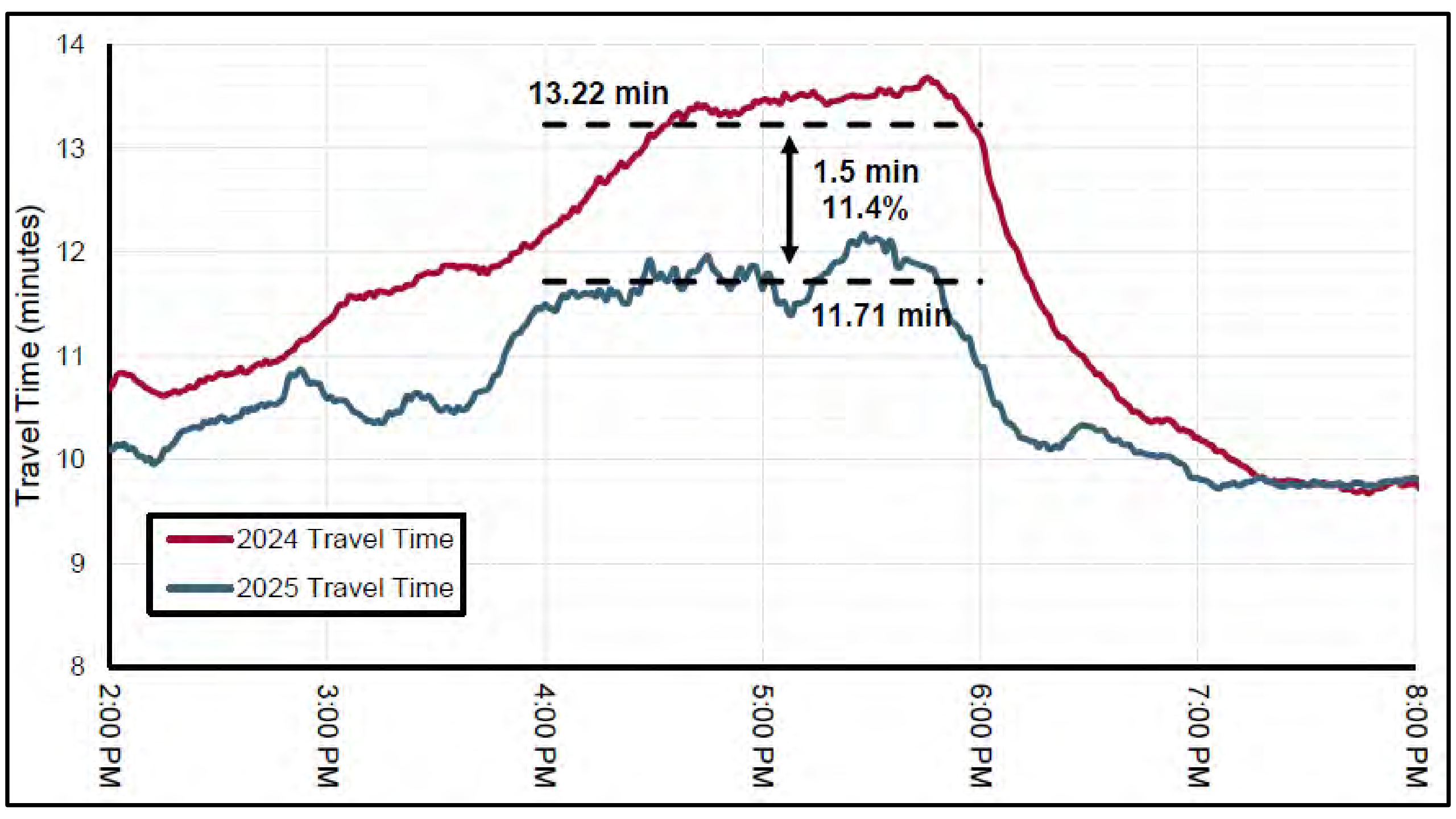
Command History from 2/4/25 to 4/30/25, 68 activations in the PM Peak Hour

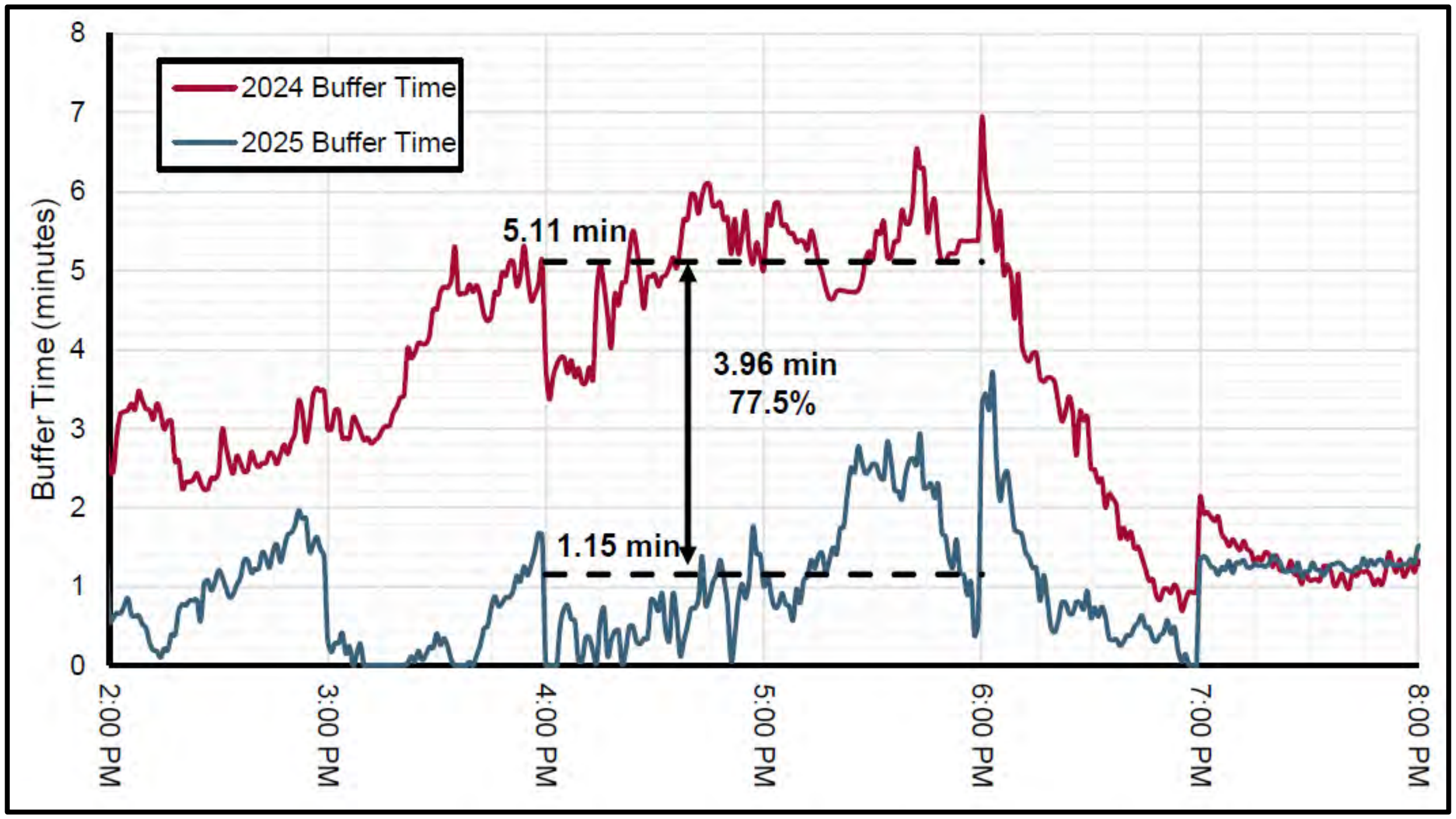
NB Sparks Boulevard Activation Frequency

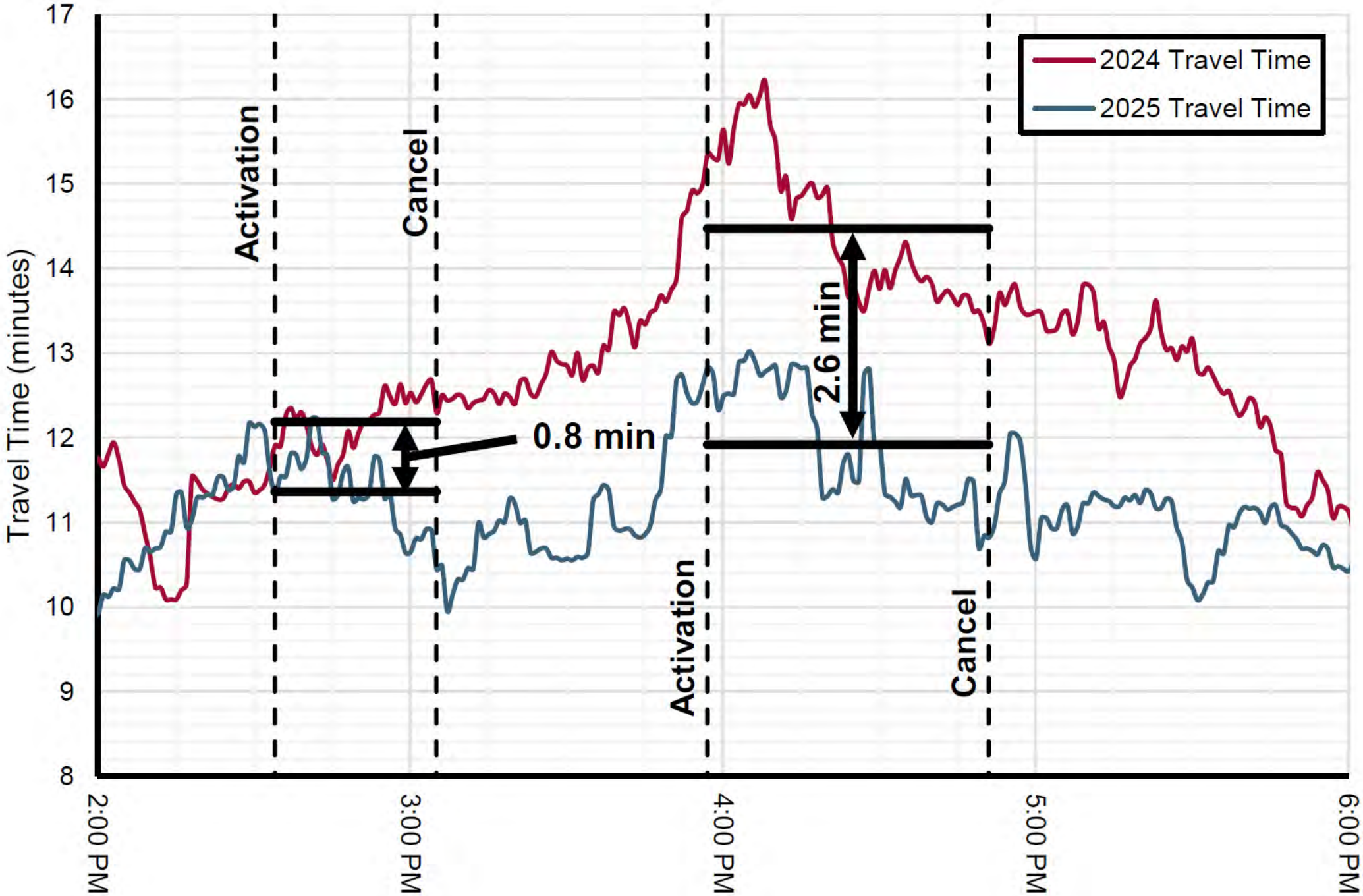


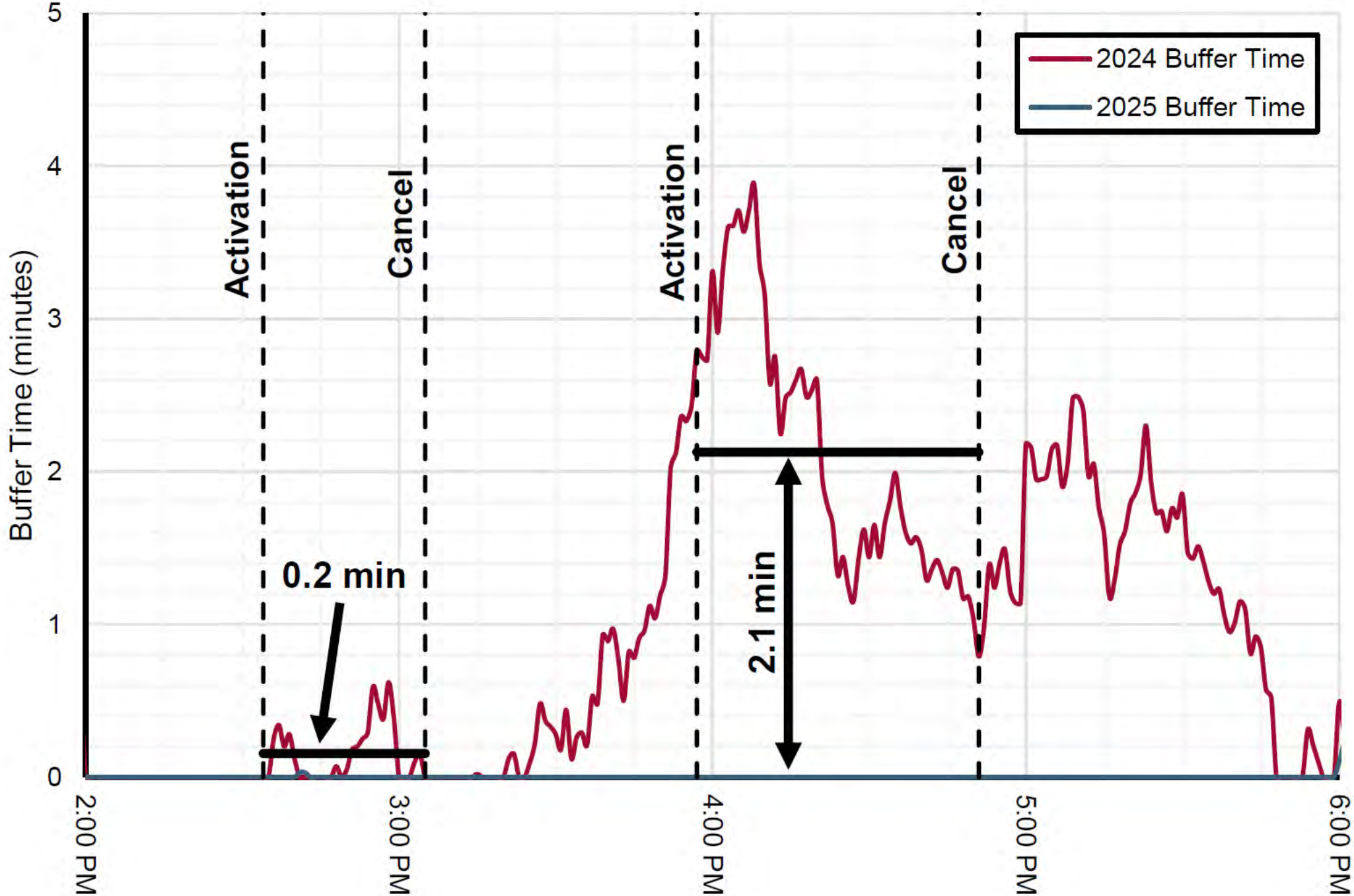
Command History from 2/4/25 to 4/30/25, 68 activations in the PM Peak Hour

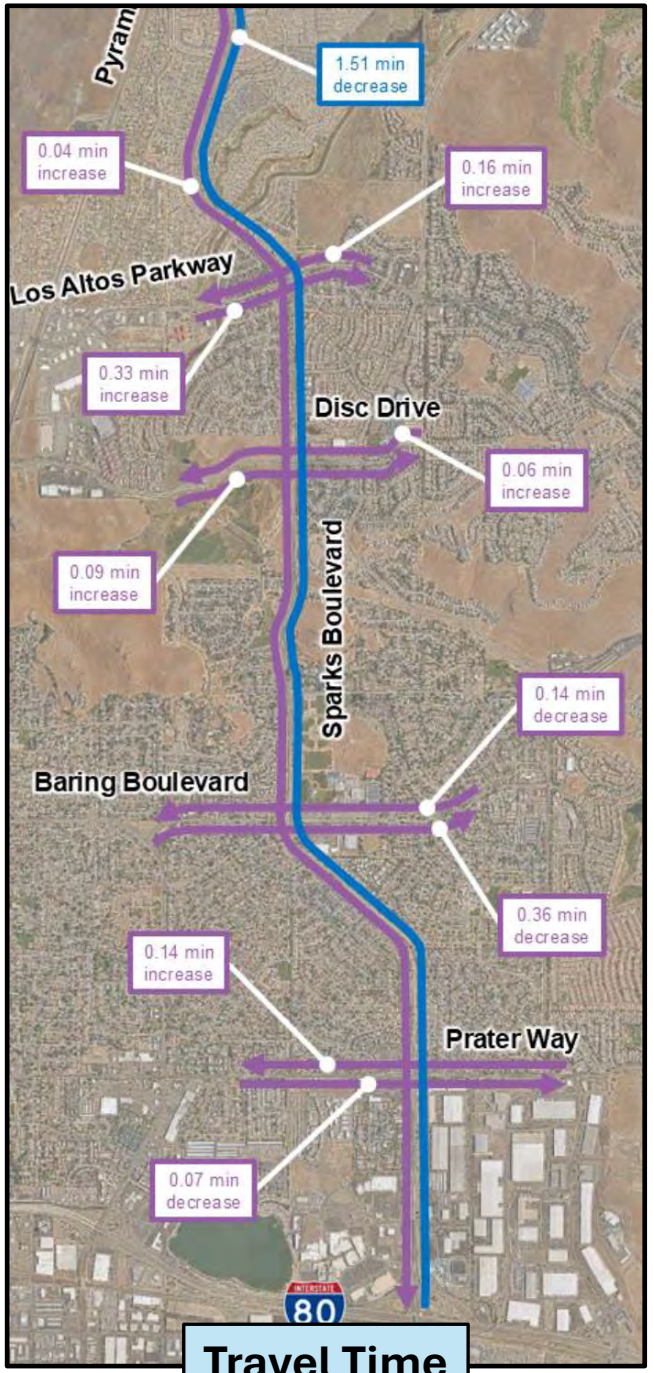
NB Sparks Boulevard Cancel Frequency


14
13
12
11
10
9
8
Travel Time (minutes)
13.22 min
1.5 min
11.4%
11.71 min
2024 Travel Time
2025 Travel Time
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM


2024 Buffer Time
2025 Buffer Time
Buffer Time (minutes)
0
1
2
3
4
5
6
7
8
5.11 min
3.96 min
77.5%
1.15 min
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM

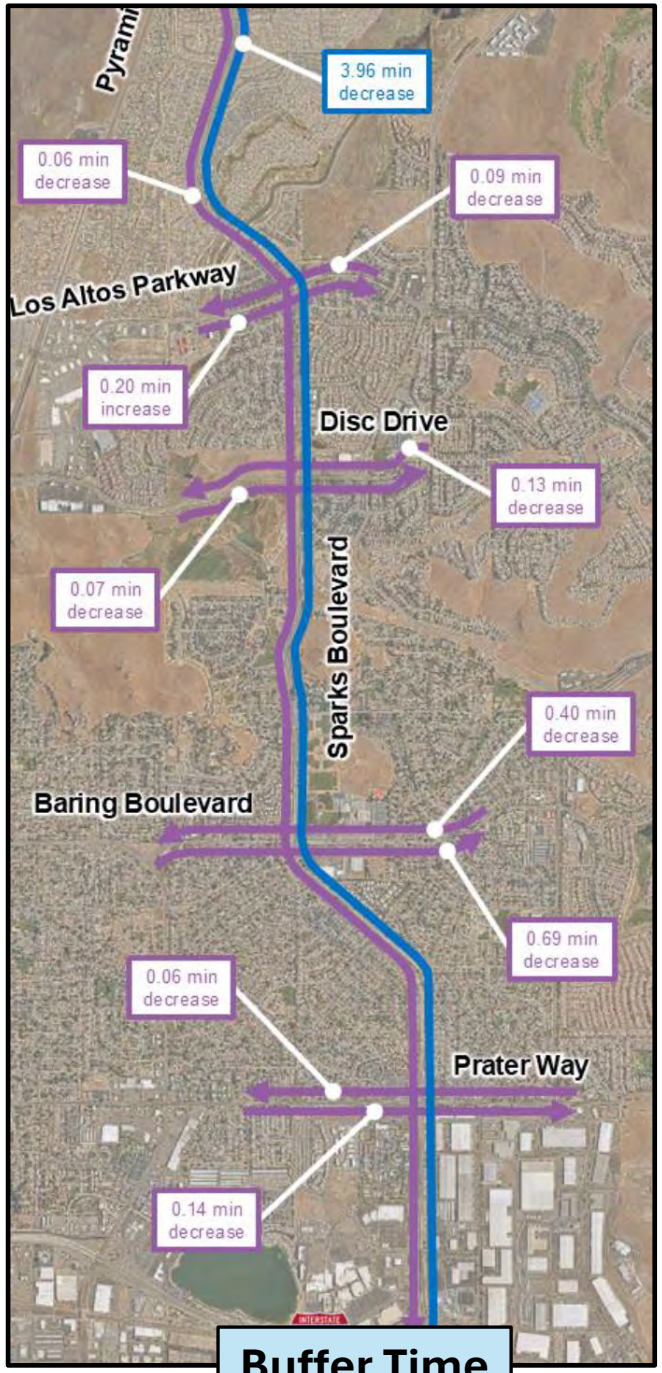

2024 Travel Time
2025 Travel Time
Travel Time (minutes)
17
16
15
14
13
12
11
10
9
8
Activation
Cancel
Activation
Cancel
0.8 min
2.6 min
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM


2024 Buffer Time
2025 Buffer Time
Buffer Time (minutes)
0
1
2
3
4
5
Activation
Cancel
Activation
Cancel
0.2 min
2.1 min
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM



Travel Time

What about the side streets?



Buffer Time

Lessons Learned

- LOTS of testing needed
- Virtual DMS was difficult
  - App store requirements
  - Public facing
  - There’s already too many apps!
- Fiber communications needed
- Lots of potential benefits

Benefits

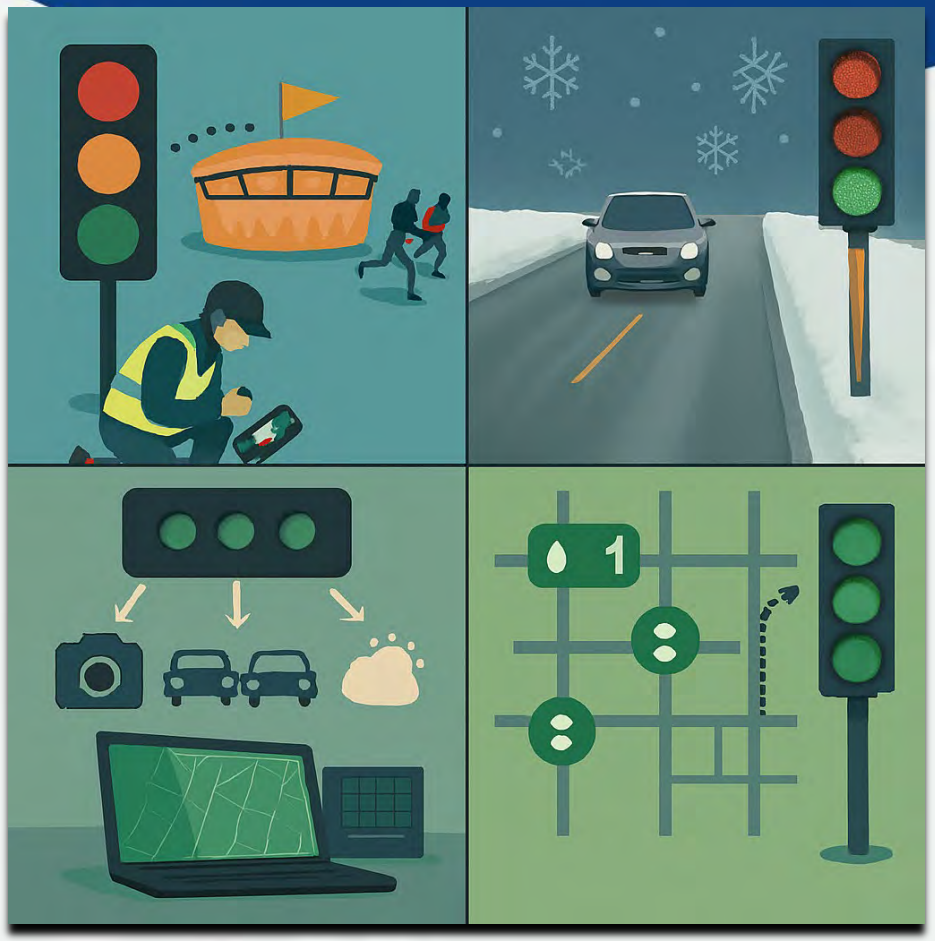
- Scalable!
- Reduced travel time and improved reliability
- Coordinates data across jurisdictions
- No sensors or permits required
- Agencies control operations

Recognitions

- 2025 ITE Mountain District TSMO Award
- 2025 ITE International TSMO Transportation Achievement Award

Next Steps

- Add more corridors
- Revisit virtual DMS
  - Push to established apps
- Special events
- Coordinate with pre-emption
- Investigate other data sources
  - Fleet vehicles
  - Weather data



Thanks to all involved

- RTC
- City of Sparks
- University of Nevada Reno
- Kimley Horn & Associates
- Altitude Signal
- Cubic
- INRIX
- University of Maryland – CATT Lab
- Fibertel

Thank You!

Alex Wolfson
Project Manager / Traffic Engineer

AWolfson@rtcwashoe.com

Trips Data for Calibrating Travel Demand Models

Greg Jordan, Assistant to the Director

University of Maryland CATT Lab

Why make transportation models?

DOT agencies and MPOs build models to:

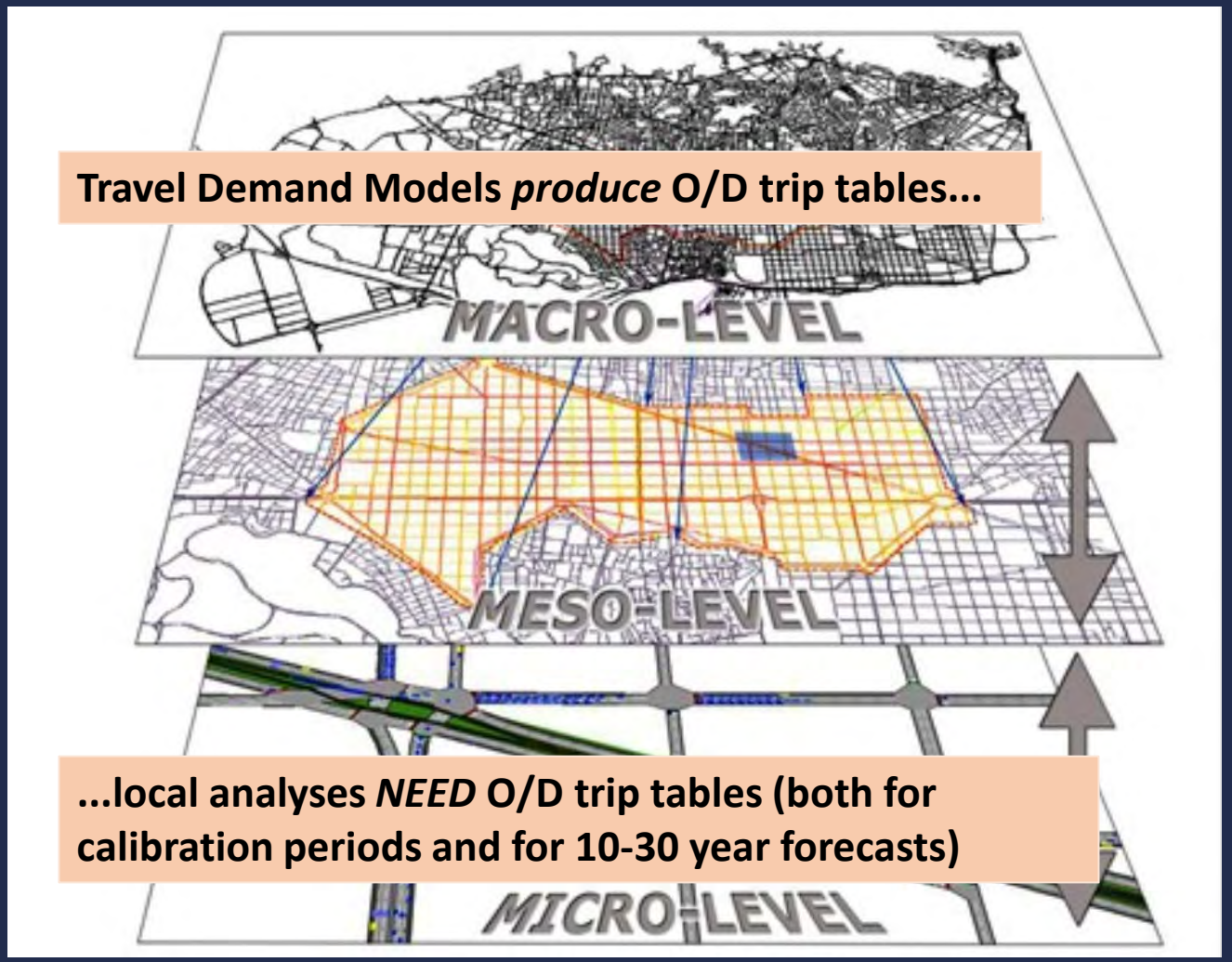
- **Evaluate the benefits & impacts of proposed projects**
- **Produce materials for partner agencies, stakeholders, and for public meetings**
- **Generate traffic flow data estimates for various investigations (including O/D tables for microsimulation models)**

(*Aimsun graphic*)

MACRO region (MPO area or statewide)

Symbiotic relationship

MICRO area (local project area)



Macro-model statewide example

Visualization of traffic volume forecast for 2040 across the State of Tennessee

Tennessee Statewide Model Visualization

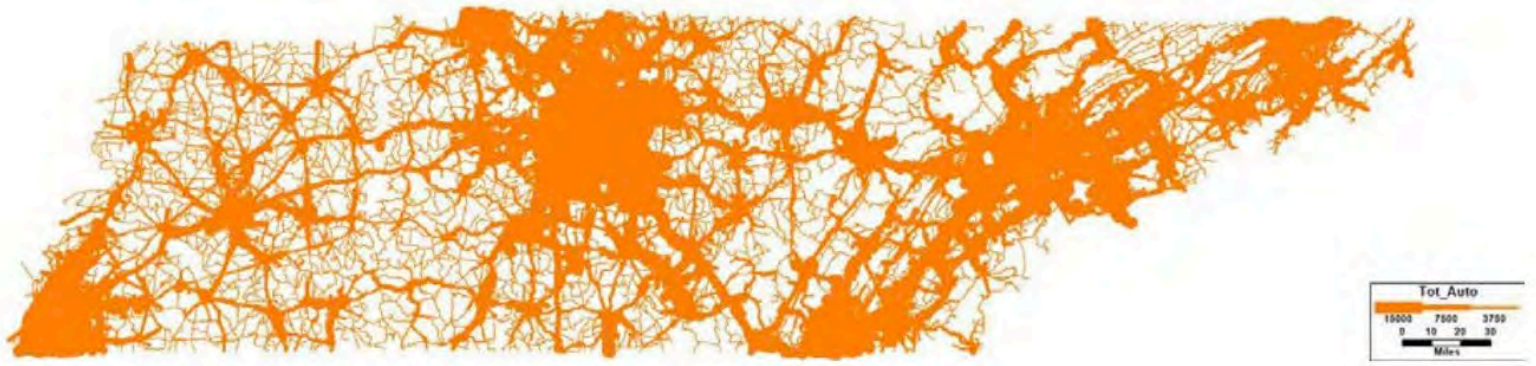


Figure 83: Auto's traffic volume on Tennessee's roads (2040)

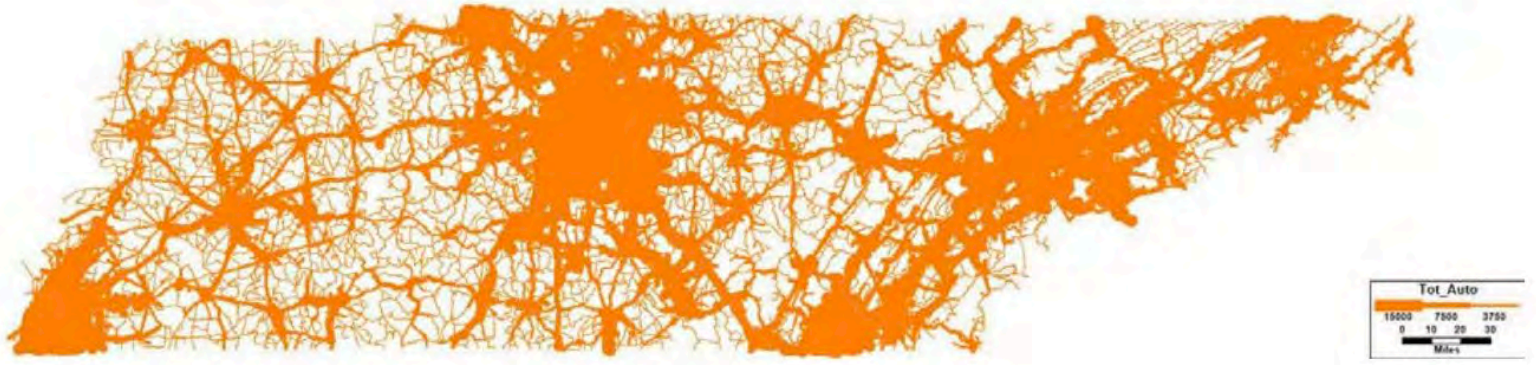


Figure 84: Total traffic volume on Tennessee's roads (2040)

(https://www.tn.gov/content/dam/tn/tdot/long-range-planning/TSM%20Visualization-Final.pdf

INVESTIGATION by the Dallas – Ft. Worth MPO:

North Central Texas Council of Governments

TAFT
Transportation Analytical Forecasting Tool

A travel demand model is a system of complex computer programs that includes inputs of roadway and transit networks and population/employment data used to output maps, statistics, and reports.

Can probe O/D data be used to help calibrate or validate regional travel demand models (TDMs)?

What goes into a regional model?

INFORMATION “IN” to TDM:

- Travel / household surveys & employment data
- Land-use patterns (commercial / industrial / residential, etc.)
- Population demographics / census data
- Highway and transit network infrastructure characteristics
- Network usage data (e.g., volumes, NPMRDS speeds, etc.)
- Forecasts for all of the above

Regional Travel Demand Model (TDM)

What comes out?

Regional Travel Demand Model (TDM)

INFORMATION “OUT” from TDM:

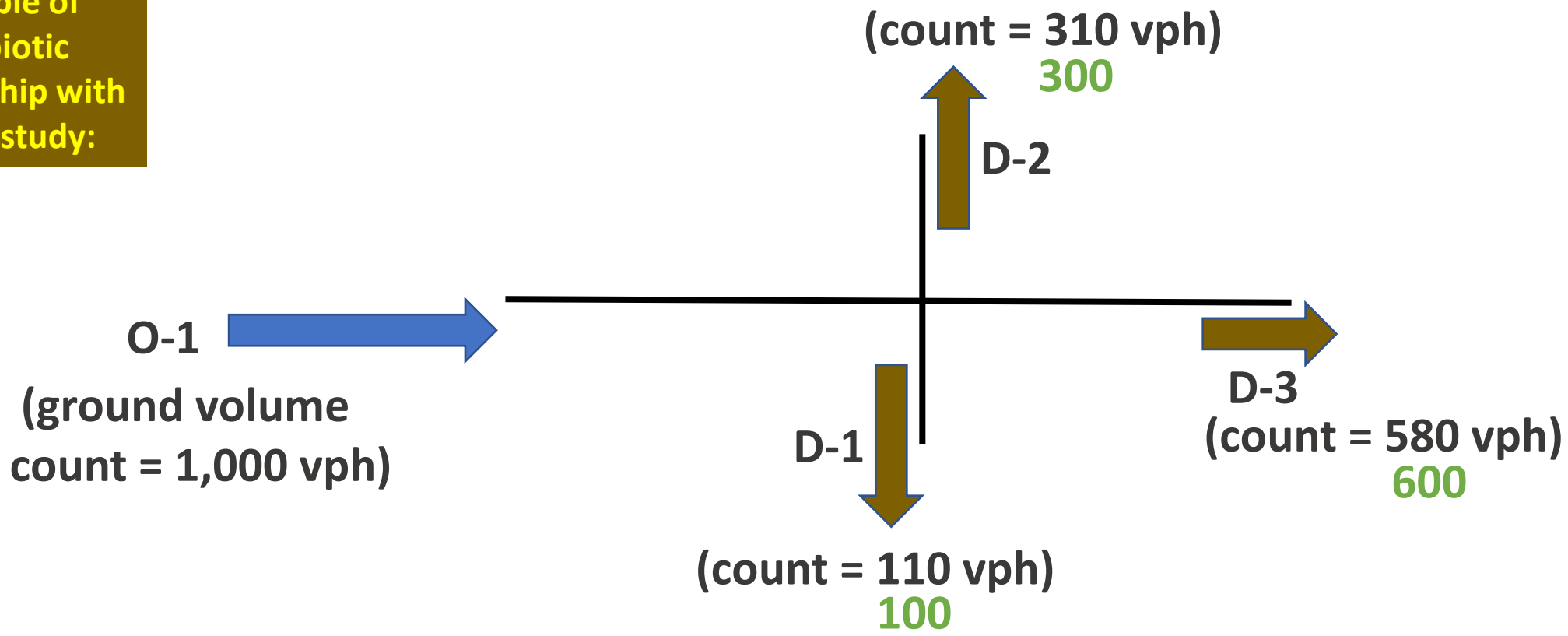
- Origin – Destination (zone-to-zone) trip counts, by mode
- Estimated vehicle volumes & speeds for highway segments
- Person-trip counts on transit, by link
- Pollutant emission estimates from mobile sources

Can probe O/D data be used to help calibrate or validate macro-level travel demand models (TDMs)?

Traditional validation method:

Compare volume, speed or travel time estimates produced by the model to easily-collected ground data

Example of symbiotic relationship with a local study:



Regional model estimates these splits:

- 10% to D-1 = 100 vph
- 30% to D-2 = 300 vph
- 60% to D3 = 600 vph

1) Regional model is valid in this location

2) Therefore can provide trustworthy forecasts for the local model

Can probe O/D data be used to help calibrate or validate macro-level travel demand models (TDMs)?

Traditional validation method:

Compare volume, speed or travel time estimates produced by the model to easily-collected ground data

Better method, where feasible:

Compare O/D trip tables produced by the model to field-measured (hard-to-get) O/D trip tables

(license-plate matching; tracing from overhead video; match Bluetooth IDs)

Example: Comparison of model O/D trip tables to O/D data from overhead (helicopter) imagery

MORNING Peak, Movements 1 and 2

	O-D Combinations (by Skycomp ID)	Description	2012 AM	Existing AM	ce leled vs)
From Racine (WB WIS 441 Ent Ramp) 768 vph	1-B	Racine (WB WIS 441 Ent Ramp) To NB US 41	41%	49%	8%
	1-C	Racine (WB WIS 441 Ent Ramp) To SB US 41 (south of CTH II)	19%	16%	-3%
	1-AA	Racine (WB WIS 441 Ent Ramp) To WB US 10 (Towards CTH CB)	36%	31%	-5%
	1-D/E	Racine (WB WIS 441 Ent Ramp) To Eastbound CTH II	2%	3%	1%
	1-D/W	Racine (WB WIS 441 Ent Ramp) To Westbound CTH II	2%	2%	0%
	Total		100%	100%	

Excellent match for these movements:
FIELD MODEL

	O-D Combinations (by Skycomp ID)	Description			ce leled vs)
From WB WIS 441 (East of CTH P) 2540 vph	2-B	WB WIS 441 (East of CTH P)-NB US 41	12%	14%	1%
	2-C	WB WIS 441 (East of CTH P)-SB US 41 (south of CTH II)	44%	49%	5%
	2-AA	WB WIS 441 (East of CTH P)-WB US 10 (Towards CTH CB)	38%	30%	-8%
	2-D/E	WB WIS 441 (East of CTH P)-Eastbound CTH II	5%	5%	0%
	2-D/W	WB WIS 441 (East of CTH P)-Westbound CTH II	1%	3%	2%
	Total		100%	100%	

Excellent match for these movements:
FIELD MODEL

Paramics overestimated weaving between Racine ramp and NB US 41 by 80 vehicles
Paramics underestimated weaving between WIS 441 and US 10 by 130 vehicles

Example: Comparison of model O/D trip tables to O/D data from overhead (helicopter) imagery

MORNING Peak, Movement 5

	O-D Combinations (by Skycomp ID)	Description	MORNING		erence Modeled vs tual)
From EB CTH II 259 vph	5-B	EB CTH II To NB US 41	65%	98%	32%
	5-E	EB CTH II To EB US 10 (East of CTH P)	24%	2%	-22%
	5-F	EB CTH II To CTH P (Racine)	11%	0%	-11%
	Total		100%	100%	

Unsatisfactory match for these movements:
FIELD MODEL

	O-D Combinations (by Skycomp ID)	Description			erence Modeled vs tual)
From WB CTH II 337 vph	5-B	WB CTH II To NB US 41	67%	66%	-1%
	5-E	WB CTH II To EB US 10 (East of CTH P)	32%	27%	-5%
	5-F	WB CTH II To CTH P (Racine)	1%	7%	6%
	Total		100%	100%	

Excellent match for these movements:
FIELD MODEL

Paramics underassigned the EB II movement ~ 50 vehicles
Paramics overestimated EB II to NB US 41 by ~35 vehicles
Paramics underestimated EB II to EB US 10 by ~ 60 vehicles, EB II to Racine by ~ 25

Example: Comparison of model O/D trip tables to O/D data from overhead (helicopter) imagery

EVENING Peak, Movement 5

Unsatisfactory match for these movements:
FIELD MODEL

EVENING

	O-D Combinations (by Skycomp ID)	Description			rence Modeled vs ual)
	5-B	EB CTH II To NB US 41	70%	100%	30%
From EB CTH II 460 vph	5-E	EB CTH II To EB US 10 (East of CTH P)	24%	0%	-24%
	5-F	EB CTH II To CTH P (Racine)	6%	0%	-6%
	Total		100%	100%	

	O-D Combinations (by Skycomp ID)	Description	SkyComp % Split	Paramics % split	Difference (Existing Modeled vs Actual)
	5-B	WB CTH II To NB US 41	70%	61%	-9%
From WB CTH II 807 vph	5-E	WB CTH II To EB US 10 (East of CTH P)	26%	36%	10%
	5-F	WB CTH II To CTH P (Racine)	4%	3%	-1%
	Total		100%	100%	

Paramics underassigned the WB II movement ~ 80 vehicles
Paramics overestimated EB II to NB US 41 by ~140 vehicles
Paramics underestimated WB II to NB US 41 by ~120 vehicles aka, ~20 for II ramp
Paramics underestimated CTH II to EB US 10 by ~ 60 vehicles, II to Racine by ~ 40

North Central Texas Council of Governments

Case Study: NCTCOG (the Dallas / Ft. Worth MPO)

NCTCOG objective

Given that INRIX's *Trip Paths* dataset is funded for MPO use by Texas DOT, is this a suitable source of data for validation of the region's 'TAFT' travel demand model?

TAFT
Transportation Analytical Forecasting Tool

North Central Texas Council of Governments

Validation testing of TAFT and probe O/D datasets:

1. (Done): A corridor-based microsimulation model used RITIS O/D trip tables for a successful calibration (calibration with TAFT O/D table was *not* successful)

2. (Done): LOCUS O/D trip tables reasonably matched TAFT trip tables

3. (In-process): RITIS O/D trip tables (so far) are reasonably matching TAFT trip tables

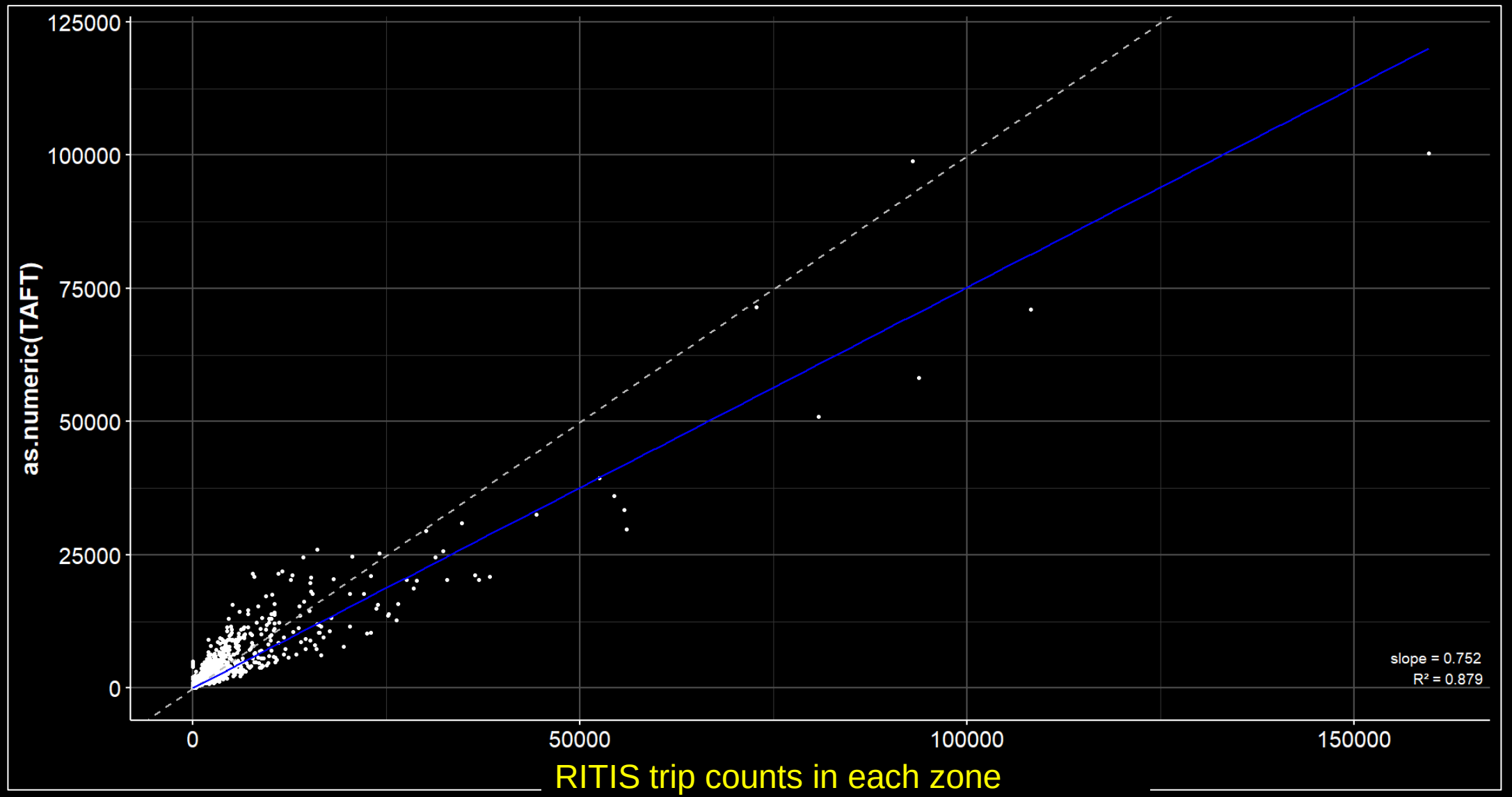
CAMBRIDGE SYSTEMATICS

INRIX

Trip Paths trajectory datasets via Trip Analytics in RITIS

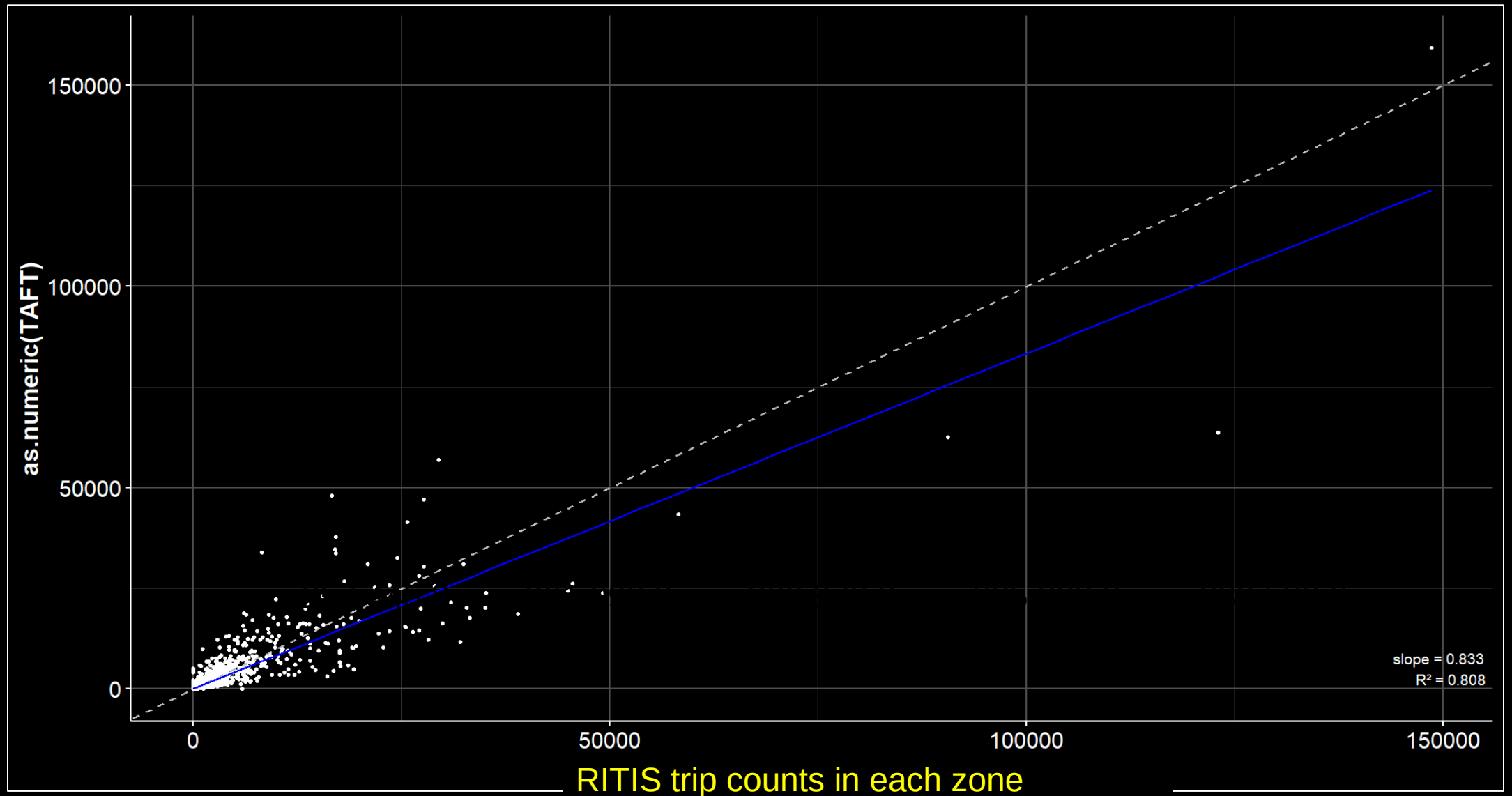
Zone-wise consistency check: Probe Data vs TAFT (origins / production)

TAFT trip counts in each zone



Zone-wise consistency check: Probe Data vs TAFT (destinations / attraction)

TAFT trip counts in each zone



North Central Texas Council of Governments

Validation testing of TAFT and probe O/D datasets:

1. A corridor-based microsimulation model used RITIS O/D trip tables for a successful calibration (calibration with TAFT O/D table was *not* successful)

2. LOCUS O/D trip tables reasonably matched TAFT trip tables

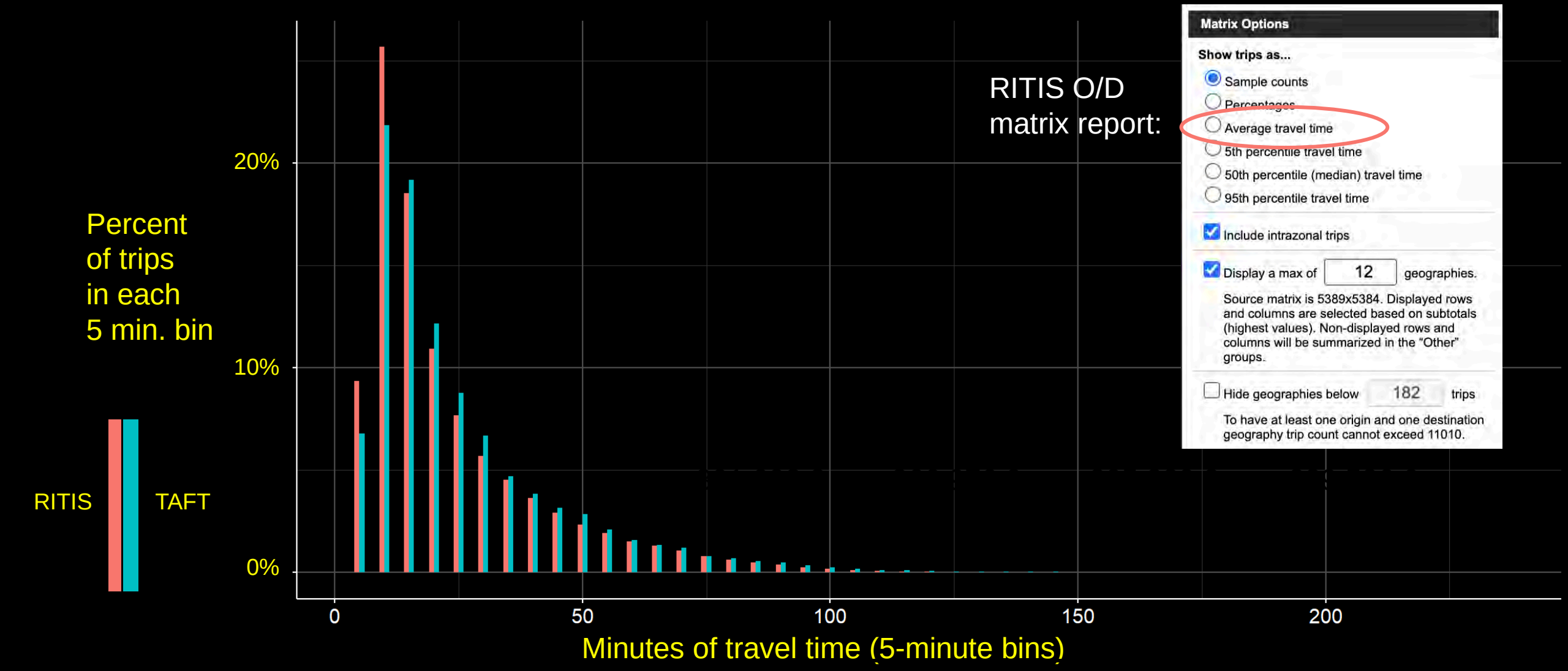
3. RITIS O/D trip tables are reasonably matching TAFT trip tables (so far / ongoing)

4. (In process) Trip travel times from RITIS O/D tables very close to TAFT travel times

INRIX

Trip Paths trajectory datasets via Trip Analytics in RITIS

Trip duration distribution: RITIS v. TAFT model

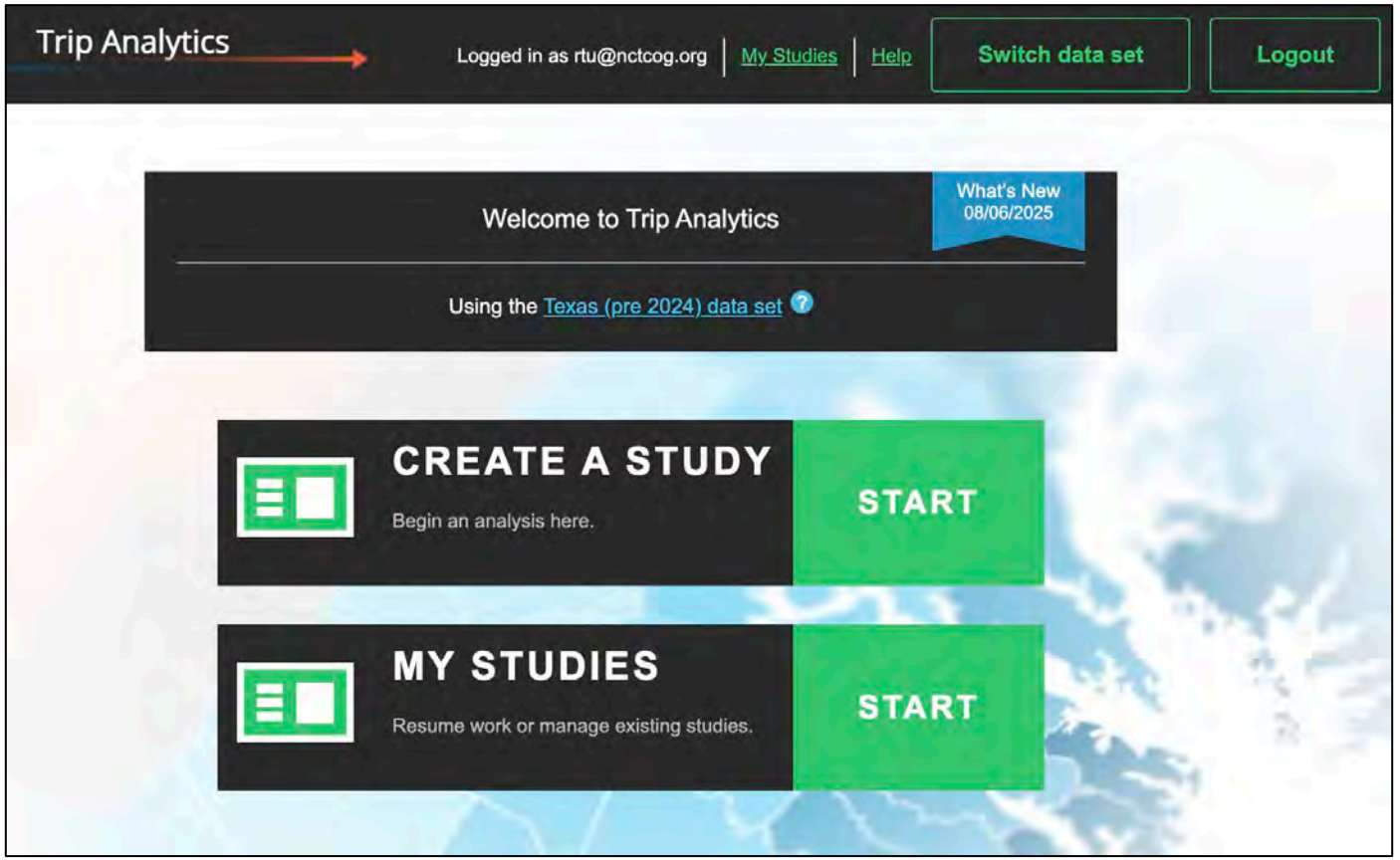


RITIS O/D matrix report:

Case Study: NCTCOG (the Dallas / Ft. Worth MPO)

North Central Texas Council of Governments

DEMONSTRATION OF NCTCOG USE OF TRIP ANALYTICS



Testing with the INRIX Trip Paths data products:

- A database with millions of actual, real-world vehicle trips (commonly, a 10-15% penetration rate for trucks)

- Data sources are GPS pings snapped to roadway networks; sources include cell phones (in autos), connected vehicles and trucking fleets

- Each trip has time & location stamps of where it started, where it ended, and the pathway road segments (endpoints mapped to a 200M grid for reduced precision (for carrier privacy)

- A statewide dataset typically includes all sampled trips that touched that state (full extents are provided for all trips, incl. out-of-state legs)

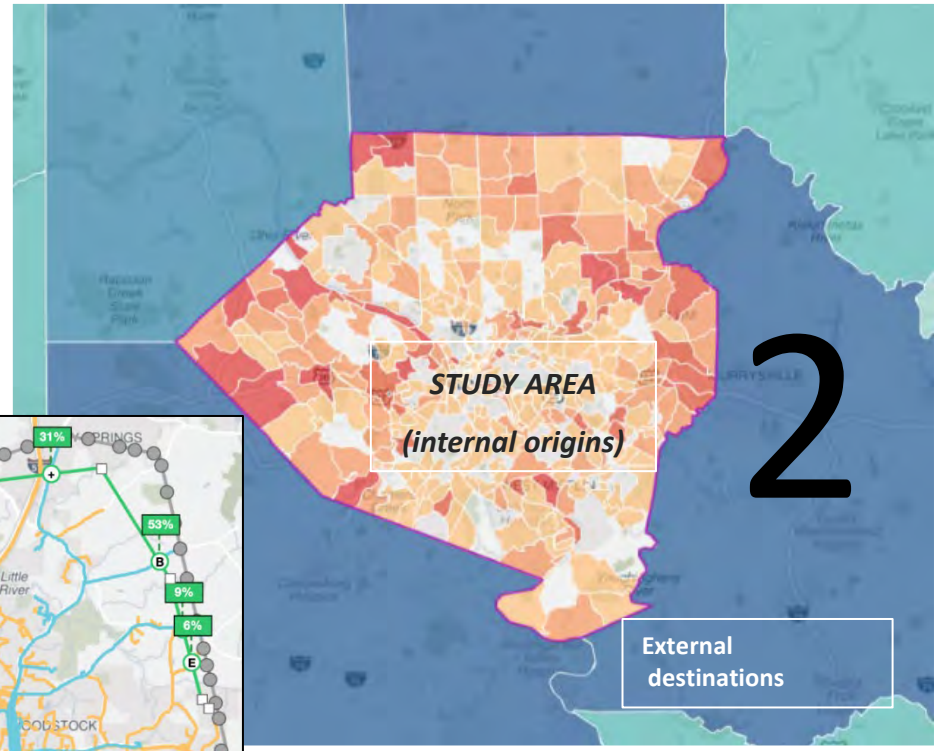
Method: Find similar trips based on <u>where</u> they went, <u>when</u> they went there, and <u>which ones</u> went there; and use those trips to make these reports for insights:

1. OD Matrix

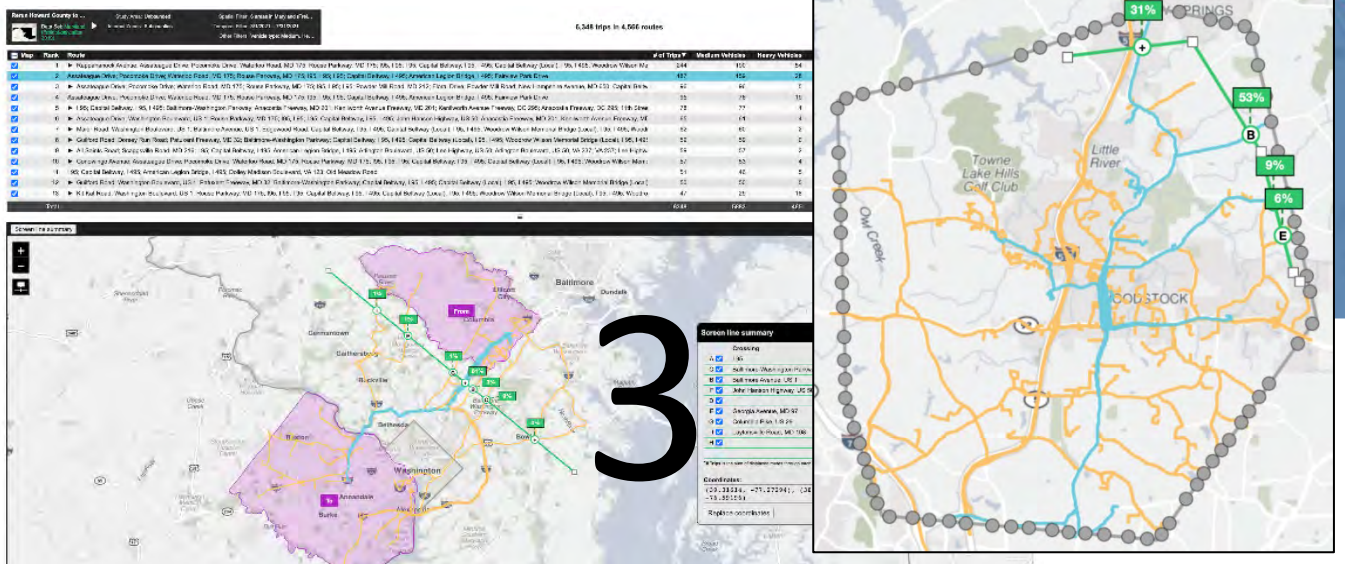
Origins			1305700000073	1305700000074	1305700000077	1305700000078	1305700000081
Internal	Georgia	1305700000069	0	0	1	0	40
		1305700000081	1	1	0	0	56
		1305700000082	5	0	59	19	41
		1305700000084	184	0	10	20	26
		1305700000085	0	0	7	6	2
		1305700000086	5	0	4	1	7
		1305700000087	90	2	1	1	19
		1306700000270	3	0	13	0	95
External	Georgia	Alabama Road, GA 92	0	2	0	2	4
		Alabama Road, GA 92	199	1	2	16	94
		Canton Road *(east)*	0	7	0	1	195
		Shallowford Road Northeast	17	70	4	30	15
		Other	89	32	40	48	124
		Total	593	115	211	144	721

1

2. Zone Map

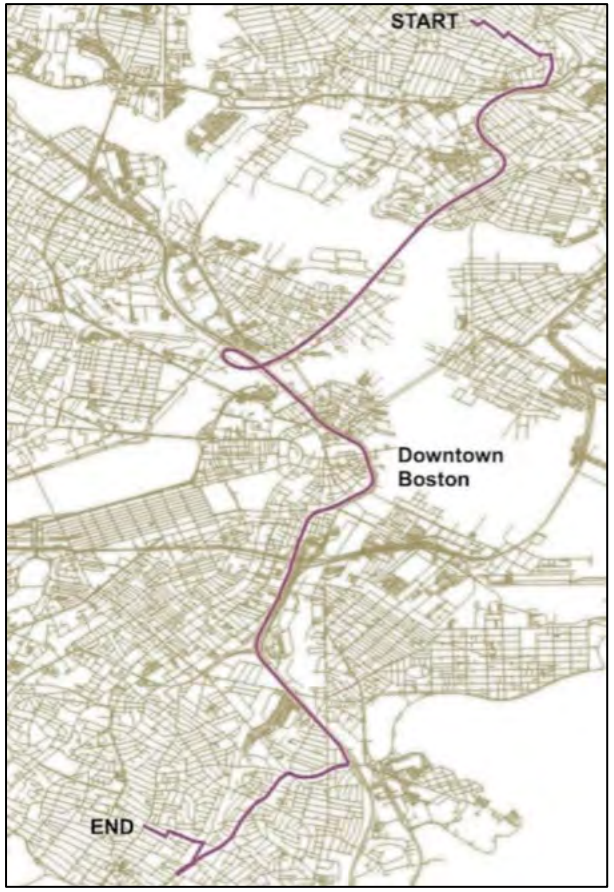


3. Route Map & Table



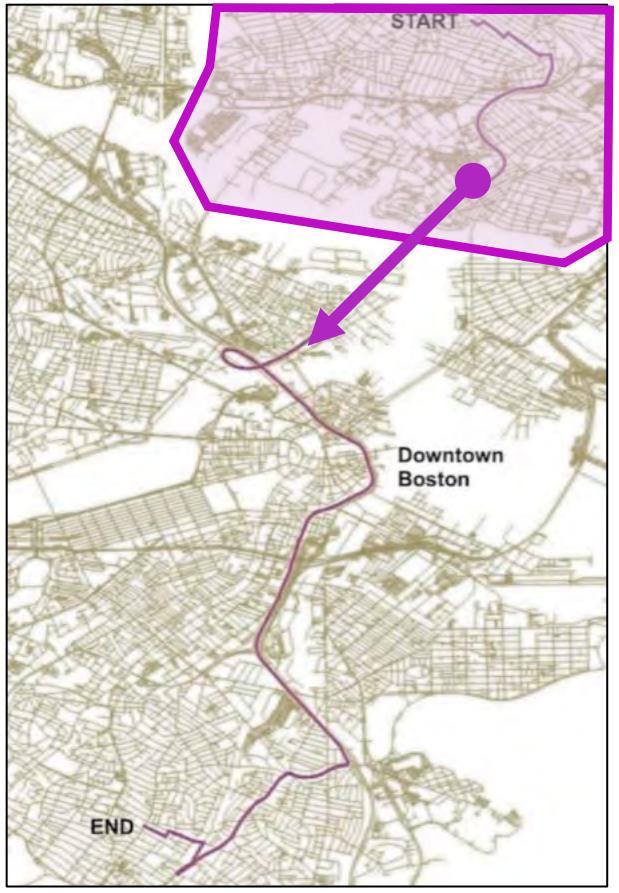
This trip has a starting point, pathway, and ending point.

Here are four ways to use spatial filter polygons to find this trip:

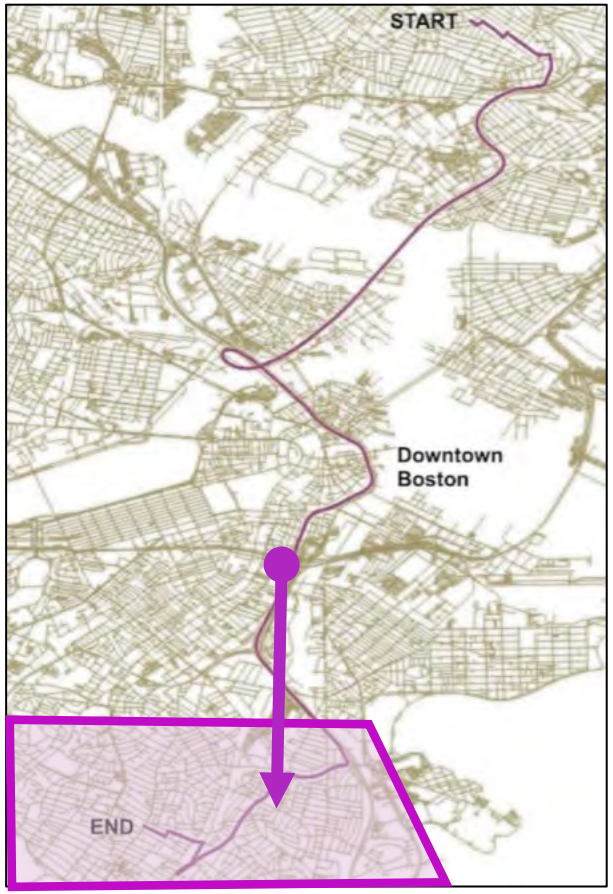


Four ways to use spatial filter polygons to find *this* trip:

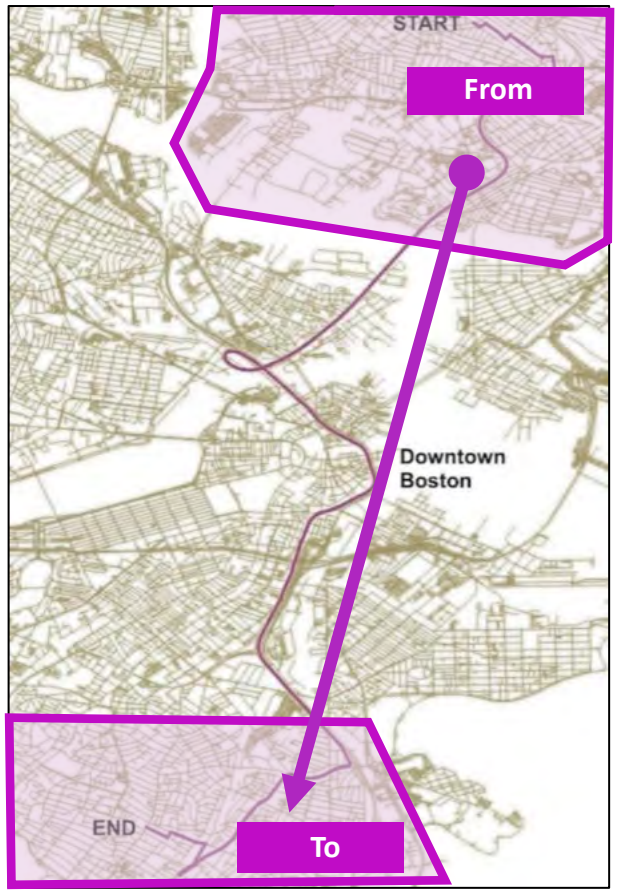
(Single area polygon)
Started inside;
Ended outside:



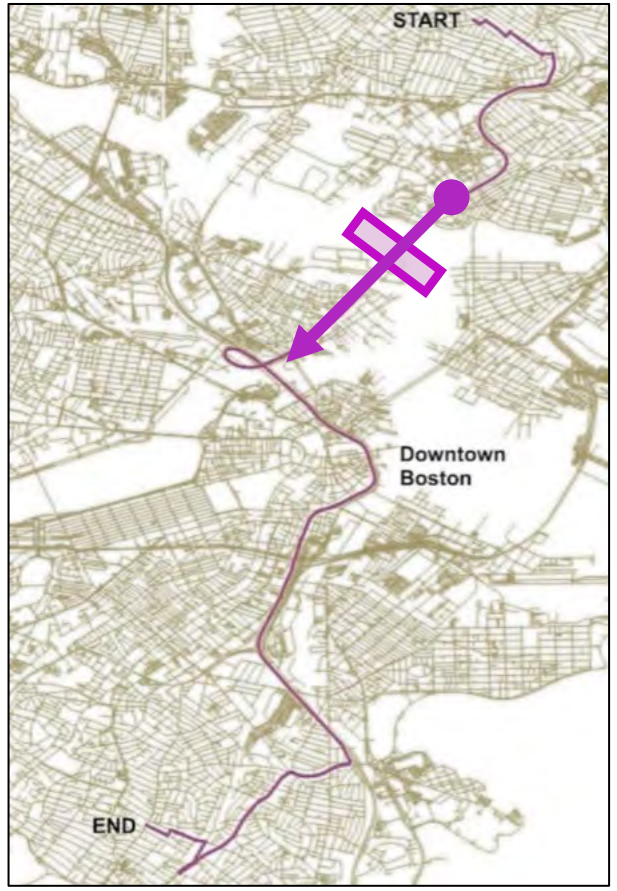
(Single area polygon)
Started outside;
Ended inside:



(From / to pair)
Started inside #1;
Ended inside #2:



Select-link (Tobin Bridge)
(Single gate-type polygon)
Started outside;
Ended outside:



Trip Paths data availability for analyses by NCTCOG

Trip Analytics

Texas (pre 2024) Data Set

Base Geography: **Texas (pre 2024)**

Zoom to base geography | Zoom to full coverage

Base Geography Road Crossings: **1409** ☐ Show

Data Provider: **INRIX**

Date Range

- **2019: March – May, September – November**
- **2020: February – April, September – November**
- **2021: February – April, September – November**
- **2022: All months**
- **2023: All months**

Trip Types Included

- **Internal** (trips starting and ending in TX)
- **From - To** (trips starting in TX and ending outside of TX)
- **To - From** (trips starting outside of TX and ending in TX)
- **Pass Through** (trips starting and ending outside of TX that have at least one waypoint in TX)

Vehicle Types Included: **Cars and Trucks** (separated or aggregated)

Unit of length: **Mile**

Zone Map is available: **Yes**

Route Map is available: **Yes**

Available geographic resolutions:

- **State**, provided by U.S. Census
- **County**, provided by U.S. Census
- **Subcounty**, provided by U.S. Census
- **Transportation Analysis Zone (TAZ)**, provided by U.S. Census
- **ZIP Code**, provided by U.S. Census

Spatial granularity: **Latitude/Longitude**

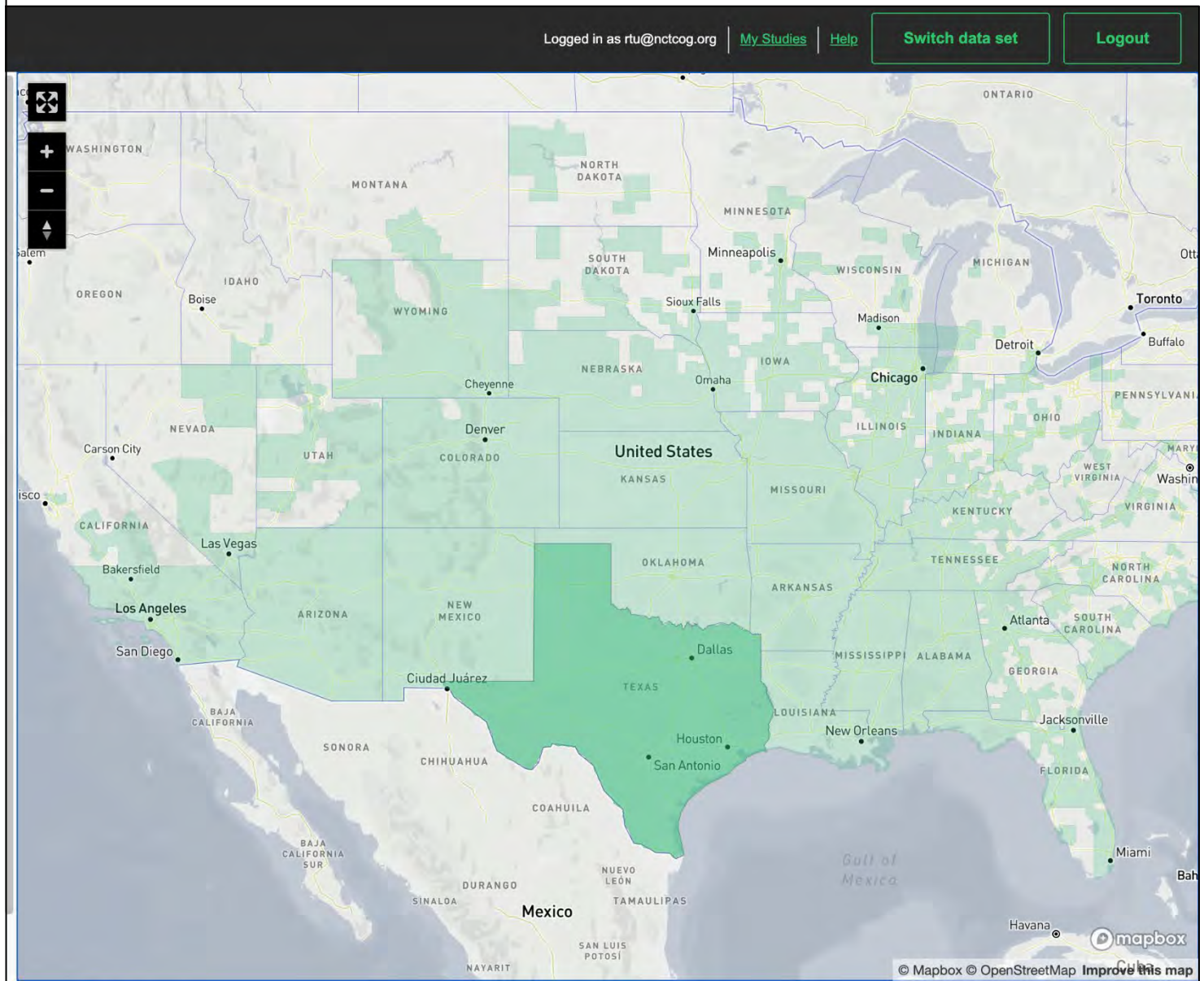
Temporal granularity: **Time, date, day of week, month, year**

Filters

▸ Vehicle type

Advanced filters

▸ Probe source type



2019 morning (6-10 a.m.) scenarios for O/D data extraction:

My Studies

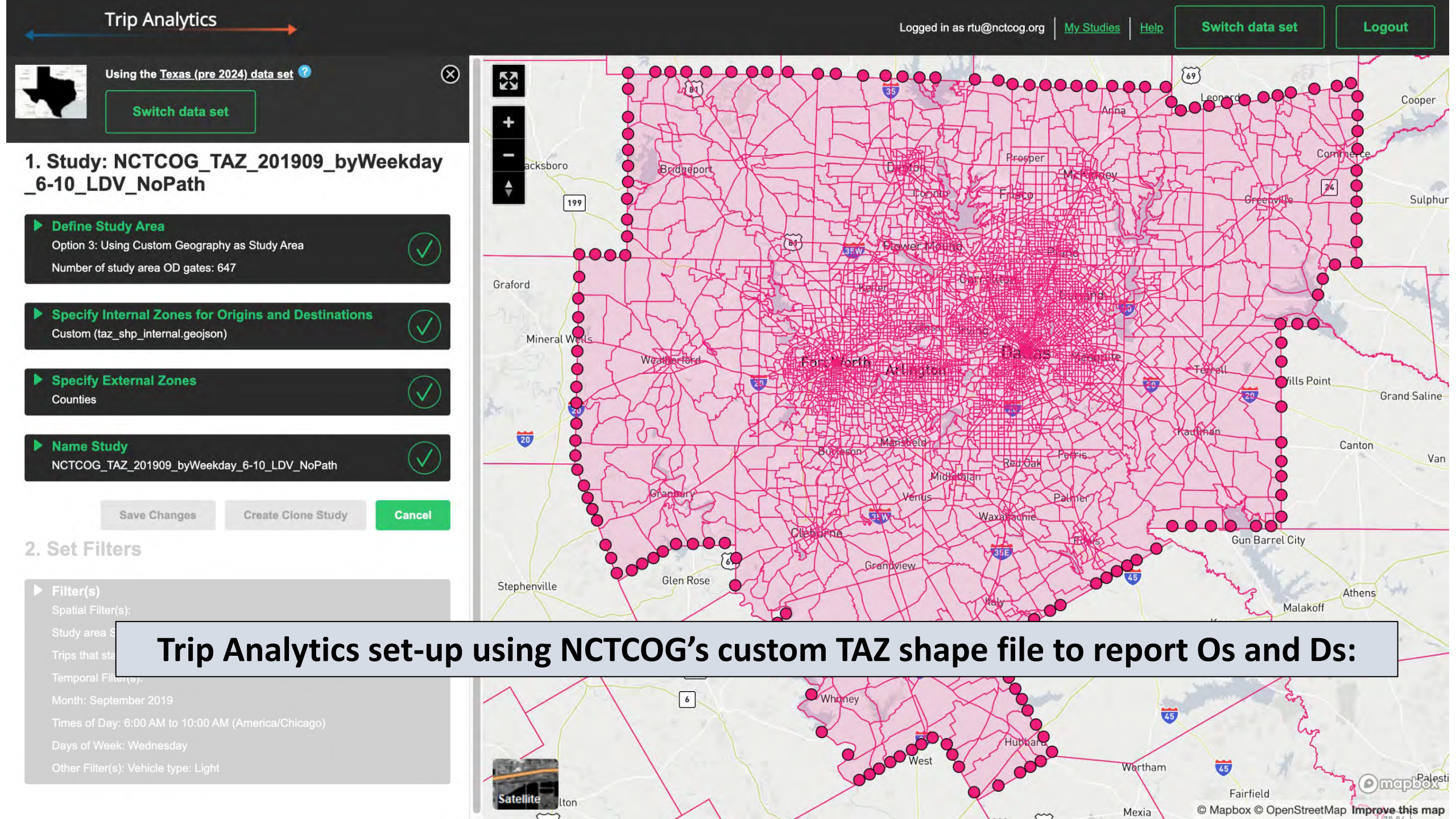
1 - 6 (of 6 studies)

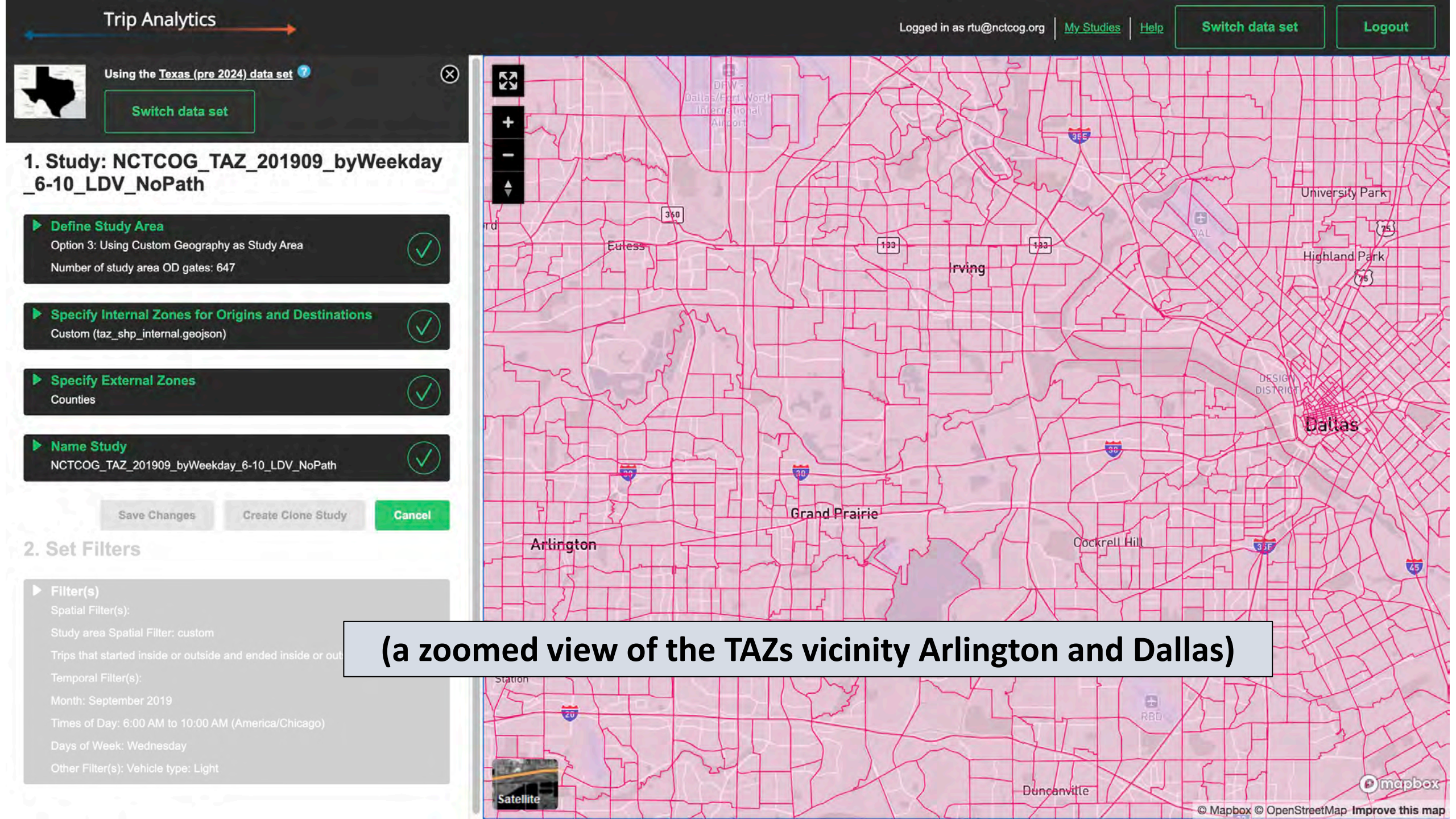
Previous Page 1 of 1 Next

Study	Dataset	Study Area	OD Gates	Zones	▼Date Created	Notes	
NCTCOG_TAZ_2019_byMonth_6-10_HDV_NoPath	Texas (pre 2024)	Custom	647	Internal: Custom External: Counties	Jul 29, 2025 02:41 PM	Spring+Fall heavy trucks by month Add Note	Edit Study Clone Study Delete Study
NCTCOG_TAZ_2019_byMonth_6-10_MDV_NoPath	Texas (pre 2024)	Custom	647	Internal: Custom External: Counties	Jul 29, 2025 02:38 PM	Spring+Fall medium trucks by month Add Note	Edit Study Clone Study Delete Study
NCTCOG_TAZ_201910_byWeekday_6-10_LDV	Texas (pre 2024)	Custom	647	Internal: Custom External: Counties	Jul 29, 2025 10:34 AM	October light vehicles, by weekday Add Note	Edit Study Clone Study Delete Study
NCTCOG_TAZ_2019_byMonth_6-10_LDV_NoPath	Texas (pre 2024)	Custom	647	Internal: Custom External: Counties	Jul 23, 2025 11:04 AM	Spring+Fall light vehicles by month Add Note	Edit Study Clone Study Delete Study
NCTCOG_TAZ_201905_byWeekday_6-10_LDV_NoPath	Texas (pre 2024)	Custom	647	Internal: Custom External: Counties	Jul 17, 2025 04:38 PM	June light vehicles, by weekday Add Note	Edit Study Clone Study Delete Study
NCTCOG_TAZ_201909_byWeekday_6-10_LDV_NoPath	Texas (pre 2024)	Custom	647	Internal: Custom External: Counties	Jul 16, 2025 01:50 PM	September light vehicles, by weekday Add Note	Edit Study Clone Study Delete Study

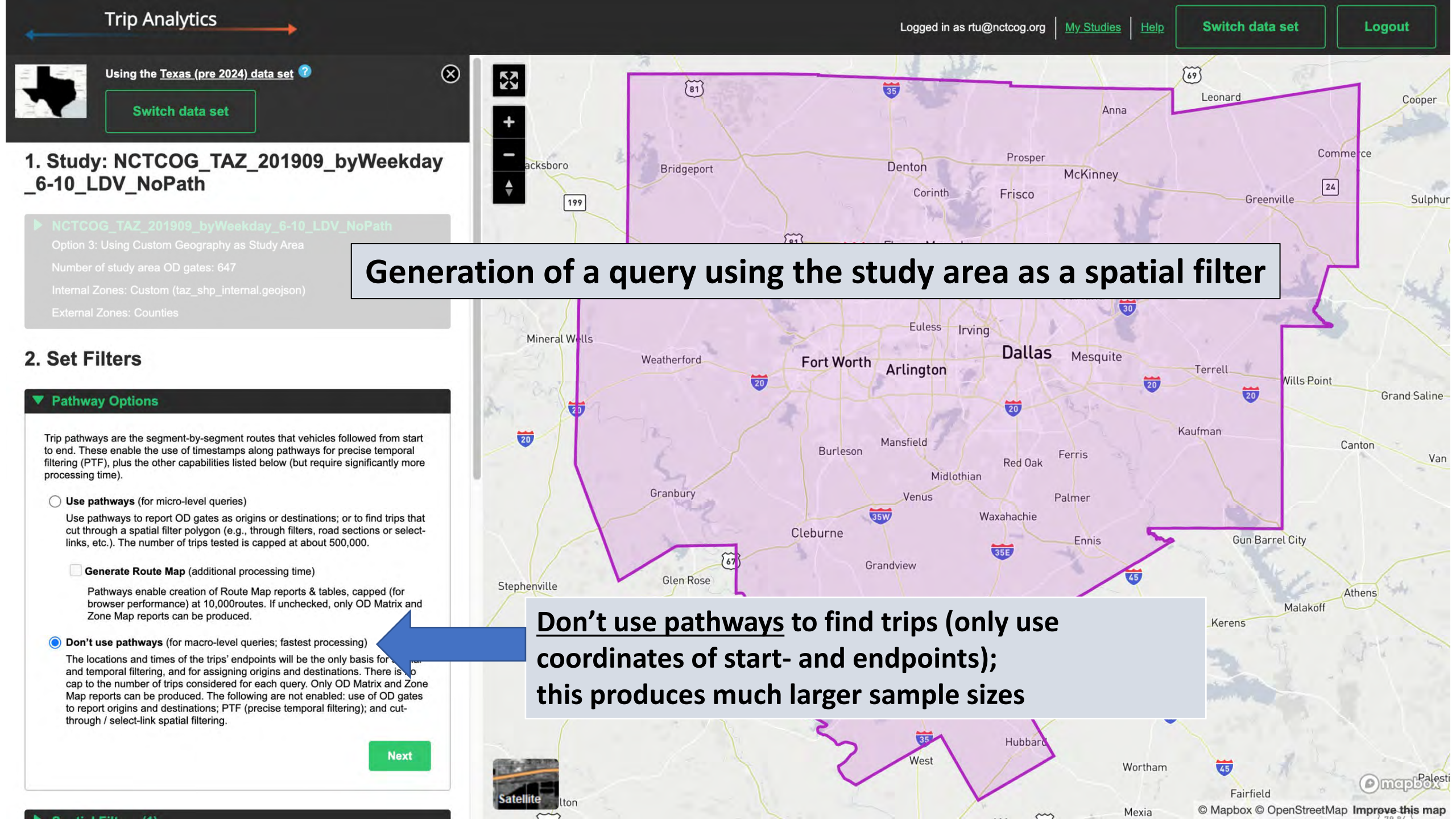
Previous Page 1 of 1 Next

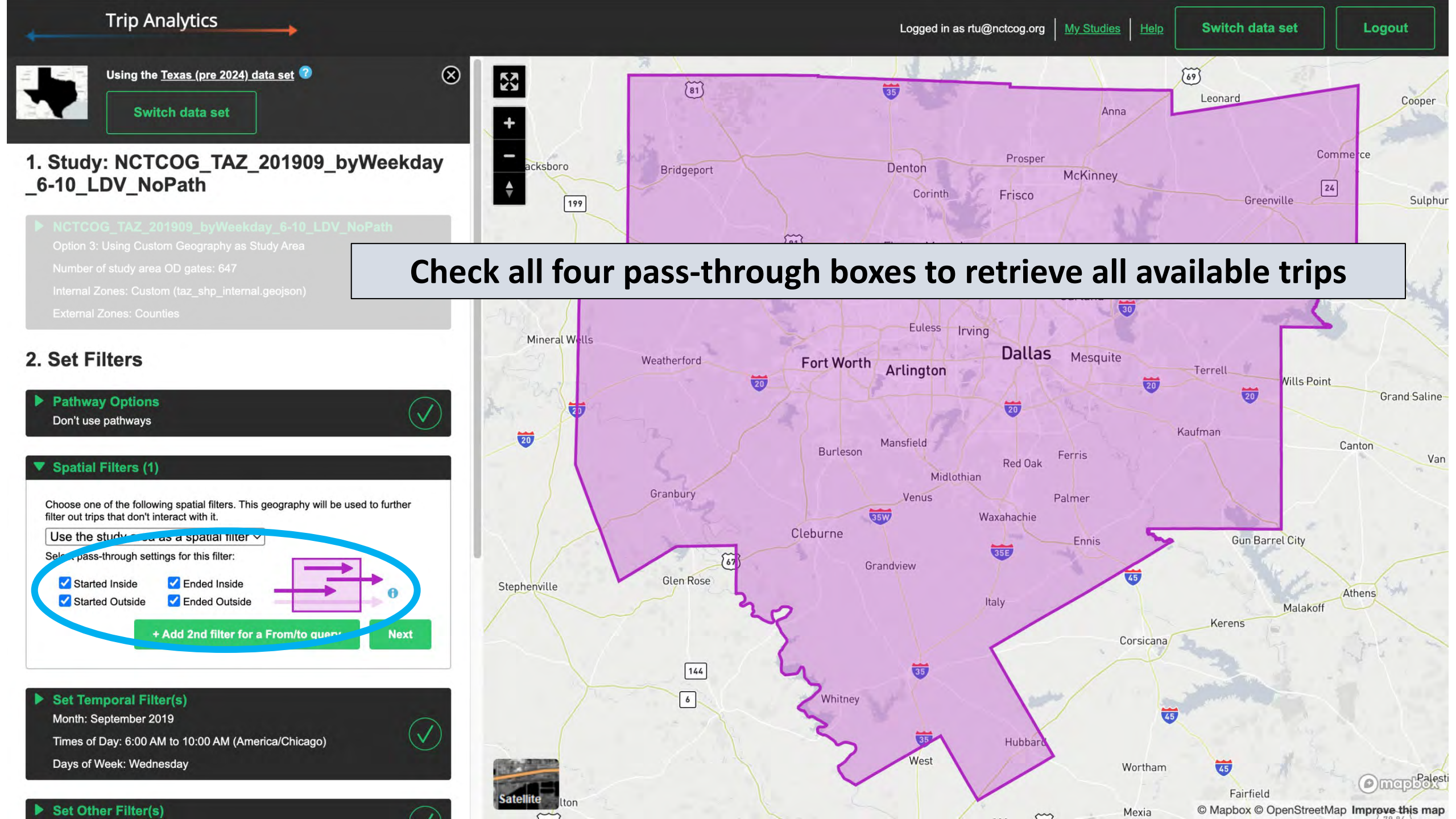
▼ NCTCOG_TAZ_201909_byWeekday_6-10_LDV_NoPath	Texas (pre 2024)	Custom	647	Internal: Custom External: Counties	Jul 16, 2025 01:50 PM	
Open OD Matrix Open Zone Map	Spatial Filter: **1 area in Texas (pre 2024) Data Set** Temporal Filter: **Precise temporal filtering: Off, 9/1/2019 – 9/30/2019, 6:00 AM – 10:00 AM (America/Chicago), F** Other Filters: **Vehicle type: Light** Advanced settings: **Probe source type: all** External Zones: **Counties** Trips: **1,534,787**	**FRIDAY**			Jul 29, 2025 10:21 AM Total processing time: 5 minutes	Fri no path
Open OD Matrix Open Zone Map	Spatial Filter: **1 area in Texas (pre 2024) Data Set** Temporal Filter: **Precise temporal filtering: Off, 9/1/2019 – 9/30/2019, 6:00 AM – 10:00 AM (America/Chicago), T** Other Filters: **Vehicle type: Light** Advanced settings: **Probe source type: all** External Zones: **Counties** Trips: **1,546,112**	**THURSDAY**			Jul 29, 2025 10:20 AM Total processing time: 5 minutes	Thu no path
Open OD Matrix Open Zone Map	Spatial Filter: **1 area in Texas (pre 2024) Data Set** Temporal Filter: **Precise temporal filtering: Off, 9/1/2019 – 9/30/2019, 6:00 AM – 10:00 AM (America/Chicago), W** Other Filters: **Vehicle type: Light** Advanced settings: **Probe source type: all** External Zones: **Counties** Trips: **1,932,174**	**WEDNESDAY**			Jul 29, 2025 10:20 AM Total processing time: 6 minutes	Wed no path
Open OD Matrix Open Zone Map	Spatial Filter: **1 area in Texas (pre 2024) Data Set** Temporal Filter: **Precise temporal filtering: Off, 9/1/2019 – 9/30/2019, 6:00 AM – 10:00 AM (America/Chicago), T** Other Filters: **Vehicle type: Light** Advanced settings: **Probe source type: all** External Zones: **Counties** Trips: **1,914,021**	**TUESDAY**			Jul 29, 2025 10:20 AM Total processing time: 6 minutes	Tue no path
Open OD Matrix Open Zone Map	Spatial Filter: **1 area in Texas (pre 2024) Data Set** Temporal Filter: **Precise temporal filtering: Off, 9/1/2019 – 9/30/2019, 6:00 AM – 10:00 AM (America/Chicago), M** Other Filters: **Vehicle type: Light** Advanced settings: **Probe source type: all** External Zones: **Counties** Trips: **2,000,055**	**MONDAY**			Jul 29, 2025 10:19 AM Total processing time: 6 minutes	Mon no path

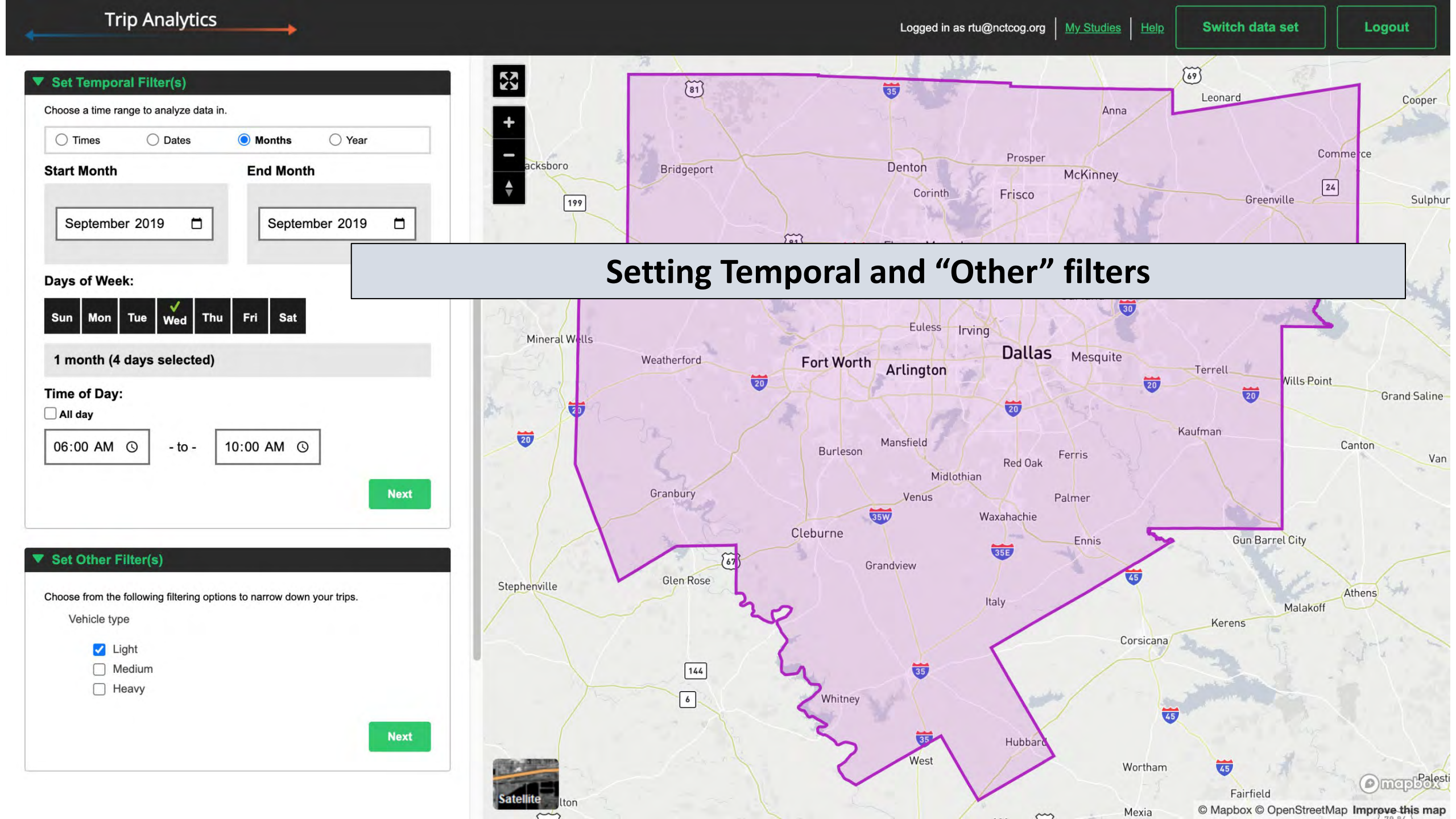

Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
Using the Texas (pre 2024) data set
Switch data set
1. Study: NCTCOG_TAZ_201909_byWeekday_6-10_LDV_NoPath
Define Study Area
Option 3: Using Custom Geography as Study Area
Number of study area OD gates: 647
Specify Internal Zones for Origins and Destinations
Custom (taz_shp_internal.geojson)
Specify External Zones
Counties
Name Study
NCTCOG_TAZ_201909_byWeekday_6-10_LDV_NoPath
Save Changes
Create Clone Study
Cancel
2. Set Filters
Filter(s)
Spatial Filter(s):
Study area S
Trips that sta
Temporal Filter(s):
Month: September 2019
Times of Day: 6:00 AM to 10:00 AM (America/Chicago)
Days of Week: Wednesday
Other Filter(s): Vehicle type: Light
Trip Analytics set-up using NCTCOG's custom TAZ shape file to report Os and Ds:
Satellite
© Mapbox © OpenStreetMap Improve this map

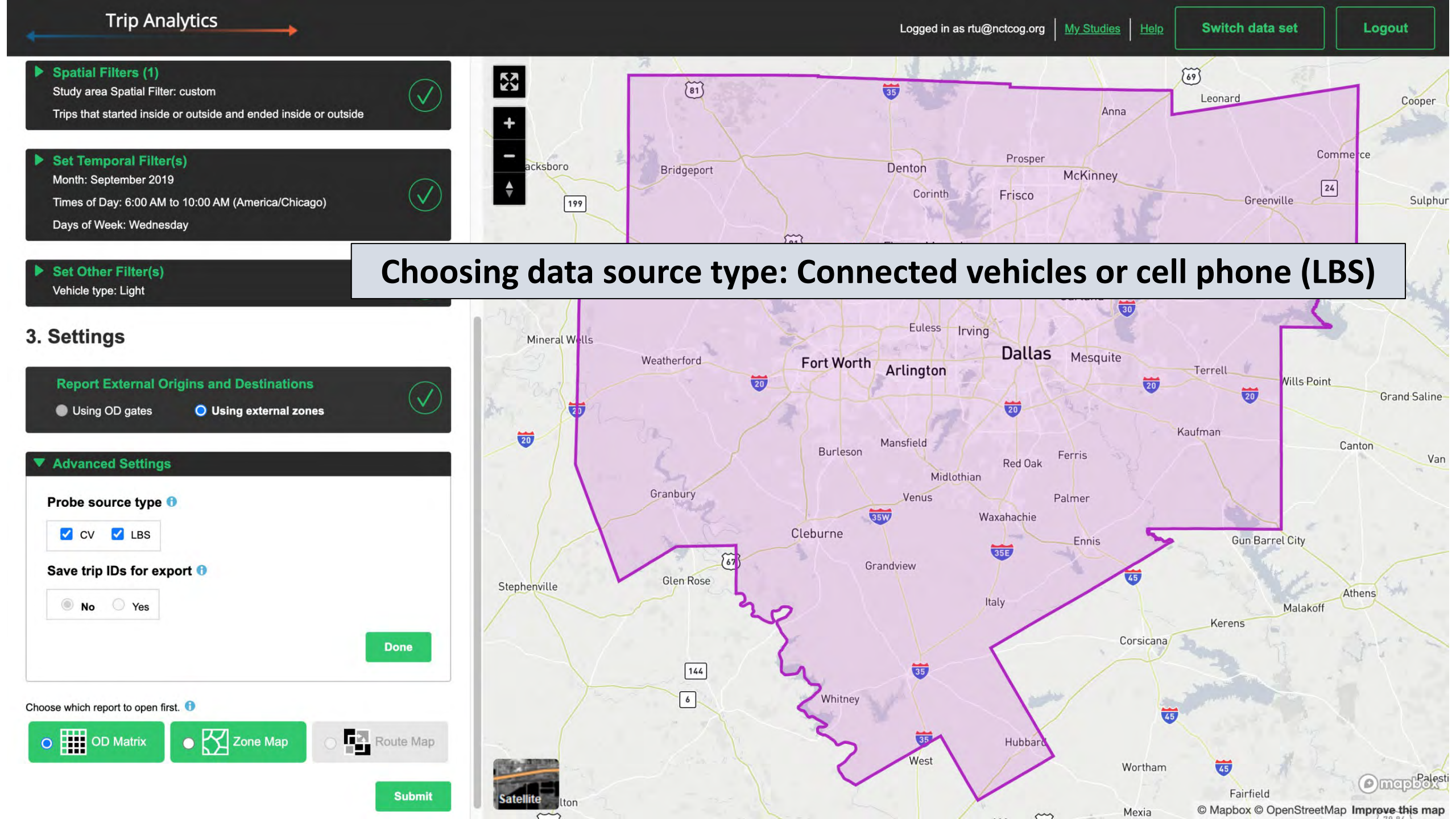


(a zoomed view of the TAZs vicinity Arlington and Dallas)


Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
Using the Texas (pre 2024) data set
Switch data set
1. Study: NCTCOG_TAZ_201909_byWeekday_6-10_LDV_NoPath
NCTCOG_TAZ_201909_byWeekday_6-10_LDV_NoPath
Option 3: Using Custom Geography as Study Area
Number of study area OD gates: 647
Internal Zones: Custom (taz_shp_internal.geojson)
External Zones: Counties
2. Set Filters
Pathway Options
Trip pathways are the segment-by-segment routes that vehicles followed from start to end. These enable the use of timestamps along pathways for precise temporal filtering (PTF), plus the other capabilities listed below (but require significantly more processing time).
Use pathways (for micro-level queries)
Use pathways to report OD gates as origins or destinations; or to find trips that cut through a spatial filter polygon (e.g., through filters, road sections or select-links, etc.). The number of trips tested is capped at about 500,000.
Generate Route Map (additional processing time)
Pathways enable creation of Route Map reports & tables, capped (for browser performance) at 10,000routes. If unchecked, only OD Matrix and Zone Map reports can be produced.
Don't use pathways (for macro-level queries; fastest processing)
The locations and times of the trips' endpoints will be the only basis for
and temporal filtering, and for assigning origins and destinations. There is
cap to the number of trips considered for each query. Only OD Matrix and Zone Map reports can be produced. The following are not enabled: use of OD gates to report origins and destinations; PTF (precise temporal filtering); and cut-through / select-link spatial filtering.
Next
Generation of a query using the study area as a spatial filter
Don't use pathways to find trips (only use coordinates of start- and endpoints); this produces much larger sample sizes
Satellite
Leonard
Cooper
Anna
Prosper
McKinney
Denton
Bridgeport
Corinth
Frisco
Greenville
Sulphur
Commerce
Mineral Wells
Weatherford
Euless
Irving
Fort Worth
Arlington
Dallas
Mesquite
Terrell
Wills Point
Grand Saline
Kaufman
Canton
Van
Burleson
Mansfield
Red Oak
Ferris
Midlothian
Granbury
Venus
Palmer
Waxahachie
Cleburne
Ennis
Gun Barrel City
Grandview
Glen Rose
Stephenville
Athens
Malakoff
Kerens
Hubbard
West
Wortham
Fairfield
Mexia
© Mapbox © OpenStreetMap Improve this map


Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
Using the Texas (pre 2024) data set
Switch data set
1. Study: NCTCOG_TAZ_201909_byWeekday_6-10_LDV_NoPath
NCTCOG_TAZ_201909_byWeekday_6-10_LDV_NoPath
Option 3: Using Custom Geography as Study Area
Number of study area OD gates: 647
Internal Zones: Custom (taz_shp_internal.geojson)
External Zones: Counties
2. Set Filters
Pathway Options
Don't use pathways
Spatial Filters (1)
Choose one of the following spatial filters. This geography will be used to further filter out trips that don't interact with it.
Use the study area as a spatial filter
Select pass-through settings for this filter:
Started Inside
Ended Inside
Started Outside
Ended Outside
+ Add 2nd filter for a From/to query
Next
Set Temporal Filter(s)
Month: September 2019
Times of Day: 6:00 AM to 10:00 AM (America/Chicago)
Days of Week: Wednesday
Set Other Filter(s)
Check all four pass-through boxes to retrieve all available trips
Leonard
Anna
Cooper
Bridgeport
Denton
Prosper
McKinney
Commerce
Corinth
Frisco
Greenville
Sulphur
Mineral Wells
Euless
Irving
Weatherford
Fort Worth
Arlington
Dallas
Mesquite
Terrell
Wills Point
Grand Saline
Kaufman
Burleson
Mansfield
Canton
Red Oak
Ferris
Midlothian
Granbury
Venus
Palmer
Waxahachie
Cleburne
Ennis
Gun Barrel City
Grandview
Stephenville
Glen Rose
Italy
Athens
Malakoff
Kerens
Corsicana
Whitney
Hubbard
West
Wortham
Fairfield
Mexia
Satellite
© Mapbox © OpenStreetMap Improve this map


Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
Set Temporal Filter(s)
Choose a time range to analyze data in.
Times
Dates
Months
Year
Start Month
End Month
September 2019
September 2019
Days of Week:
Sun
Mon
Tue
Wed
Thu
Fri
Sat
1 month (4 days selected)
Time of Day:
All day
06:00 AM
- to -
10:00 AM
Next
Set Other Filter(s)
Choose from the following filtering options to narrow down your trips.
Vehicle type
Light
Medium
Heavy
Next
Setting Temporal and "Other" filters
Satellite
Leonard
Anna
Cooper
Bridgeport
Denton
Prosper
McKinney
Corinth
Frisco
Greenville
Sulphur
Mineral Wells
Weatherford
Euless
Irving
Fort Worth
Arlington
Dallas
Mesquite
Terrell
Wills Point
Grand Saline
Kaufman
Canton
Burleson
Mansfield
Red Oak
Ferris
Midlothian
Granbury
Venus
Palmer
Waxahachie
Cleburne
Ennis
Gun Barrel City
Grandview
Glen Rose
Stephenville
Italy
Athens
Malakoff
Kerens
Corsicana
Whitney
Hubbard
West
Wortham
Fairfield
Mexia
© Mapbox © OpenStreetMap Improve this map


Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
Spatial Filters (1)
Study area Spatial Filter: custom
Trips that started inside or outside and ended inside or outside
Set Temporal Filter(s)
Month: September 2019
Times of Day: 6:00 AM to 10:00 AM (America/Chicago)
Days of Week: Wednesday
Set Other Filter(s)
Vehicle type: Light
Choosing data source type: Connected vehicles or cell phone (LBS)
3. Settings
Report External Origins and Destinations
Using OD gates
Using external zones
Advanced Settings
Probe source type
CV
LBS
Save trip IDs for export
No
Yes
Done
Choose which report to open first.
OD Matrix
Zone Map
Route Map
Submit
Satellite
Leonard
Cooper
Anna
Bridgeport
Denton
Prosper
McKinney
Commerce
Corinth
Frisco
Greenville
Sulphur
Mineral Wells
Weatherford
Fort Worth
Arlington
Euless
Irving
Dallas
Mesquite
Terrell
Wills Point
Grand Saline
Kaufman
Canton
Van
Burleson
Mansfield
Red Oak
Ferris
Midlothian
Granbury
Venus
Palmer
Waxahachie
Cleburne
Ennis
Gun Barrel City
Grandview
Glen Rose
Stephenville
Italy
Athens
Malakoff
Kerens
Corsicana
Whitney
Hubbard
West
Wortham
Fairfield
Mexia
Palesti
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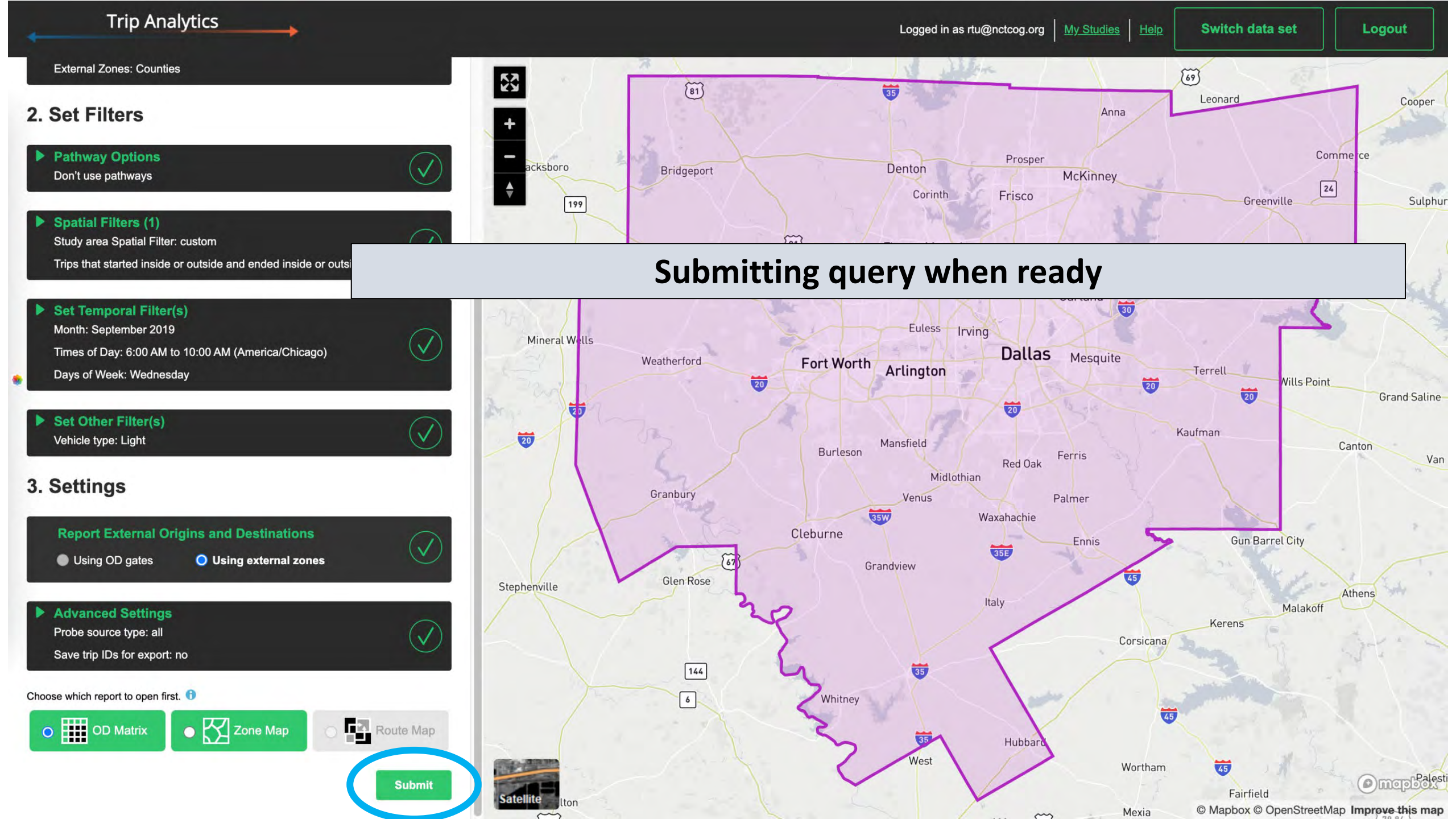
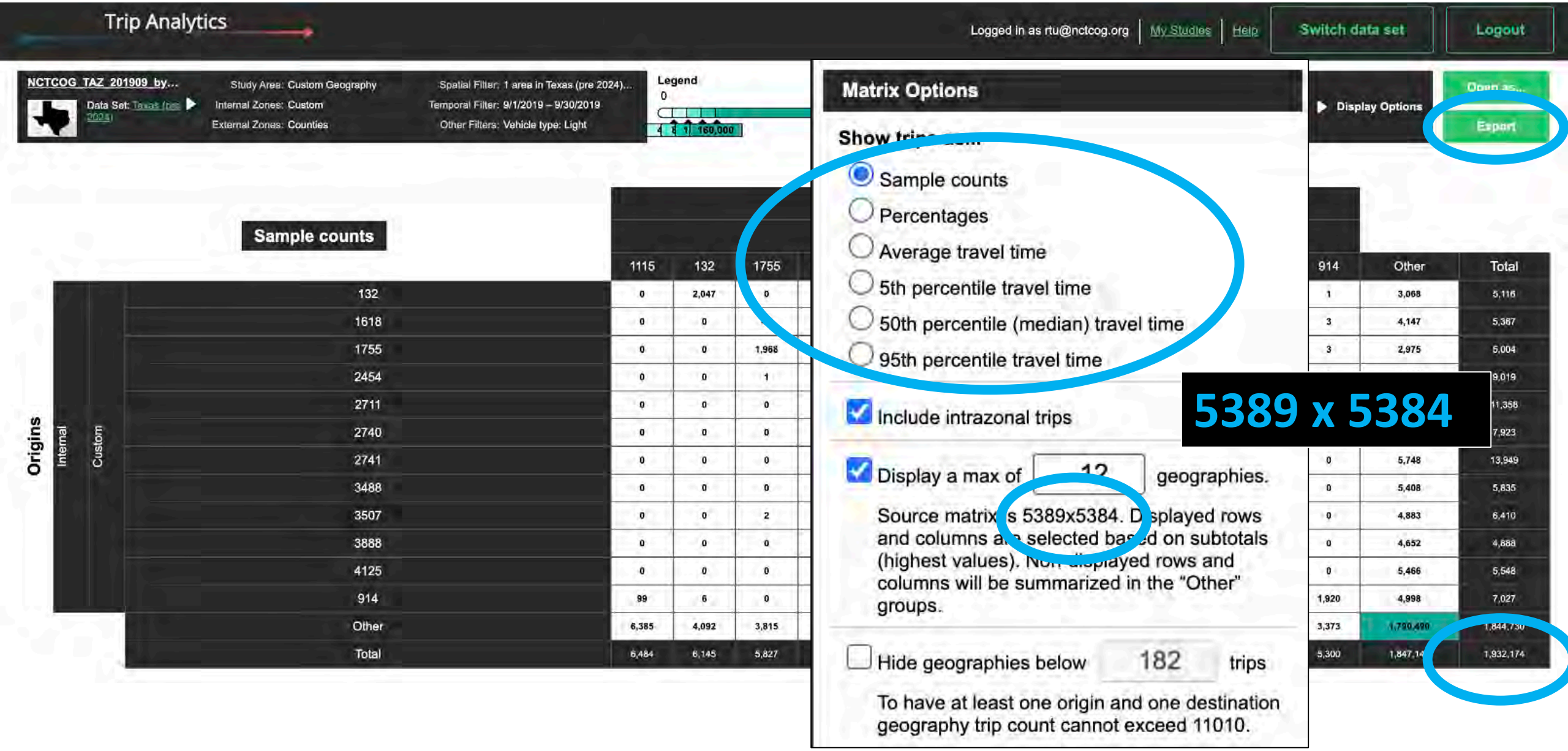
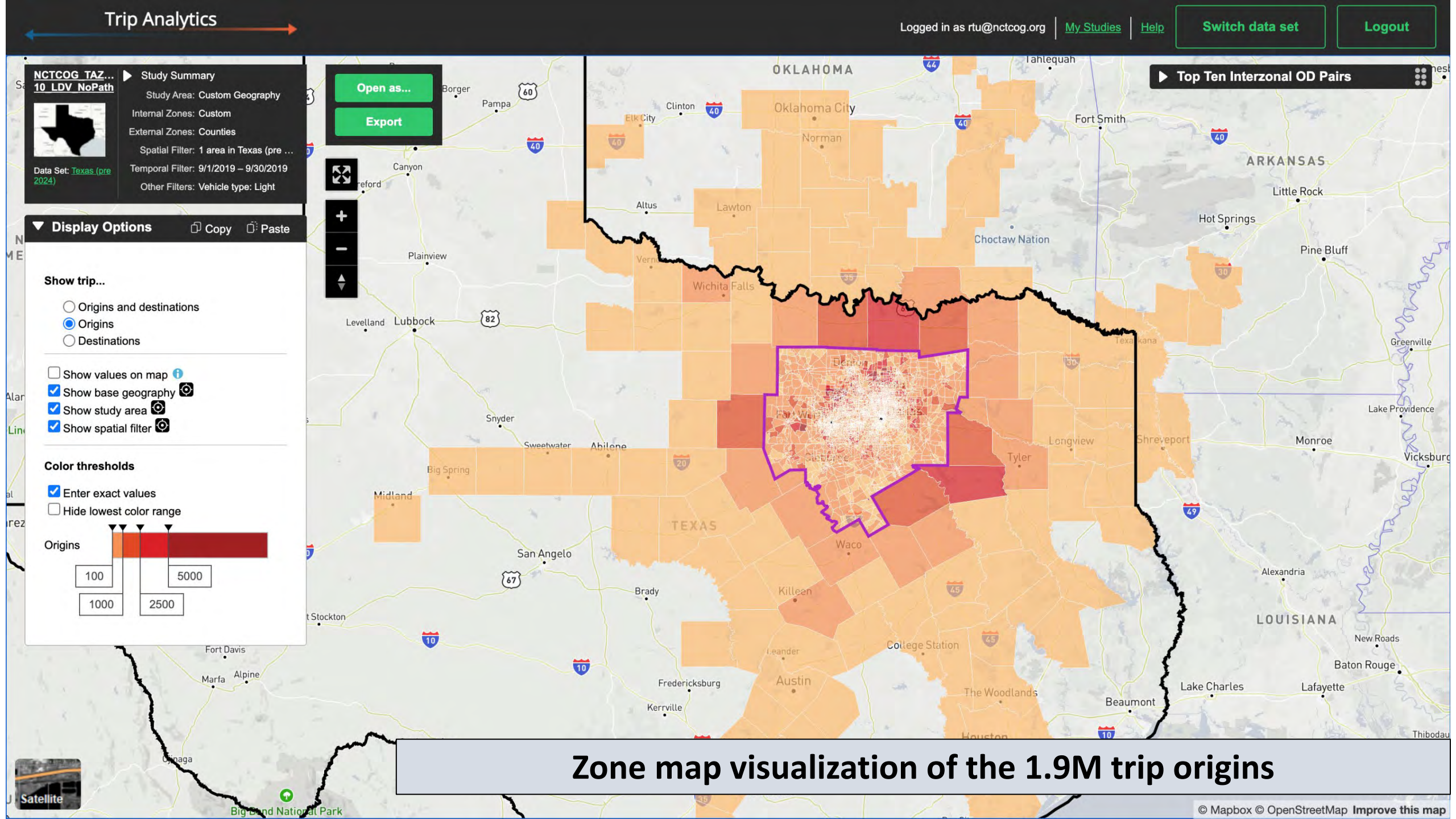
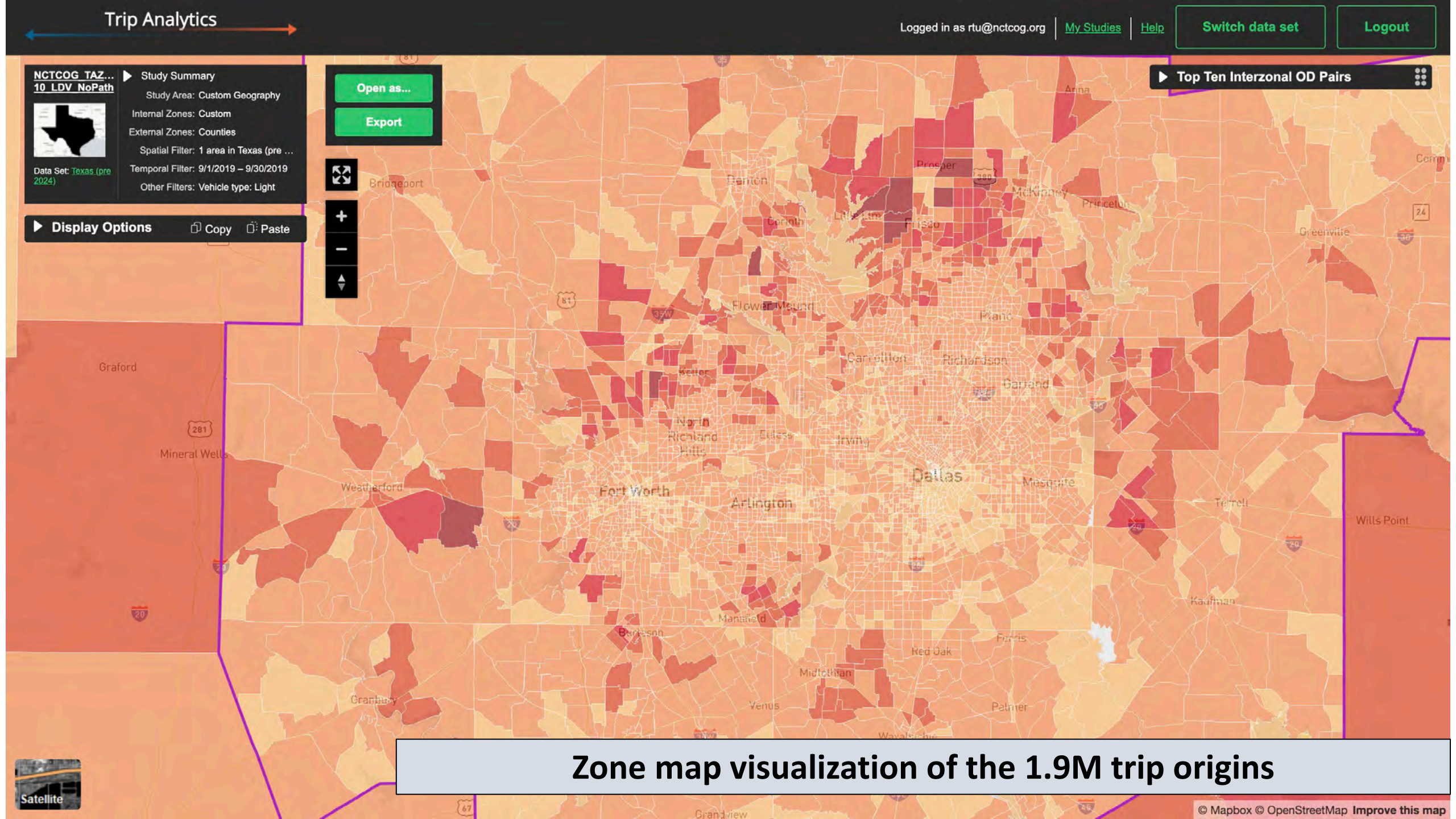
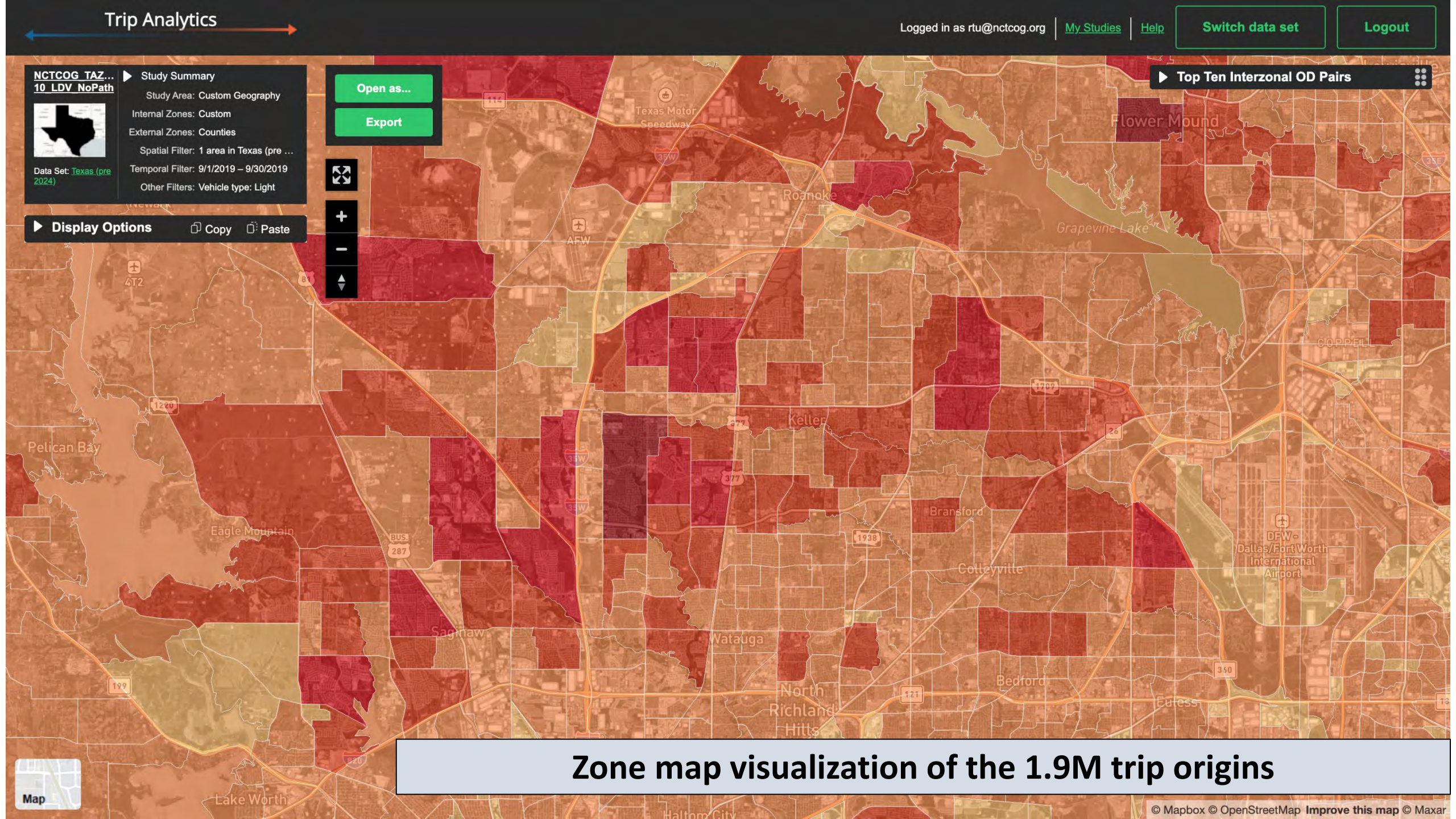

Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
External Zones: Counties
2. Set Filters
Pathway Options
Don't use pathways
Spatial Filters (1)
Study area Spatial Filter: custom
Trips that started inside or outside and ended inside or outsi
Set Temporal Filter(s)
Month: September 2019
Times of Day: 6:00 AM to 10:00 AM (America/Chicago)
Days of Week: Wednesday
Set Other Filter(s)
Vehicle type: Light
3. Settings
Report External Origins and Destinations
Using OD gates
Using external zones
Advanced Settings
Probe source type: all
Save trip IDs for export: no
Choose which report to open first.
OD Matrix
Zone Map
Route Map
Submit
Submitting query when ready
Satellite
Leonard
Cooper
Anna
Commerce
Bridgeport
Denton
Prosper
McKinney
Corinth
Frisco
Greenville
Sulphur
Mineral Wells
Weatherford
Fort Worth
Arlington
Euless
Irving
Dallas
Mesquite
Terrell
Wills Point
Grand Saline
Kaufman
Canton
Van
Burleson
Mansfield
Red Oak
Ferris
Midlothian
Granbury
Venus
Palmer
Waxahachie
Cleburne
Ennis
Gun Barrel City
Grandview
Glen Rose
Stephenville
Italy
Athens
Malakoff
Kerens
Corsicana
Whitney
Hubbard
West
Wortham
Fairfield
Mexia
Palesti
© Mapbox © OpenStreetMap Improve this map

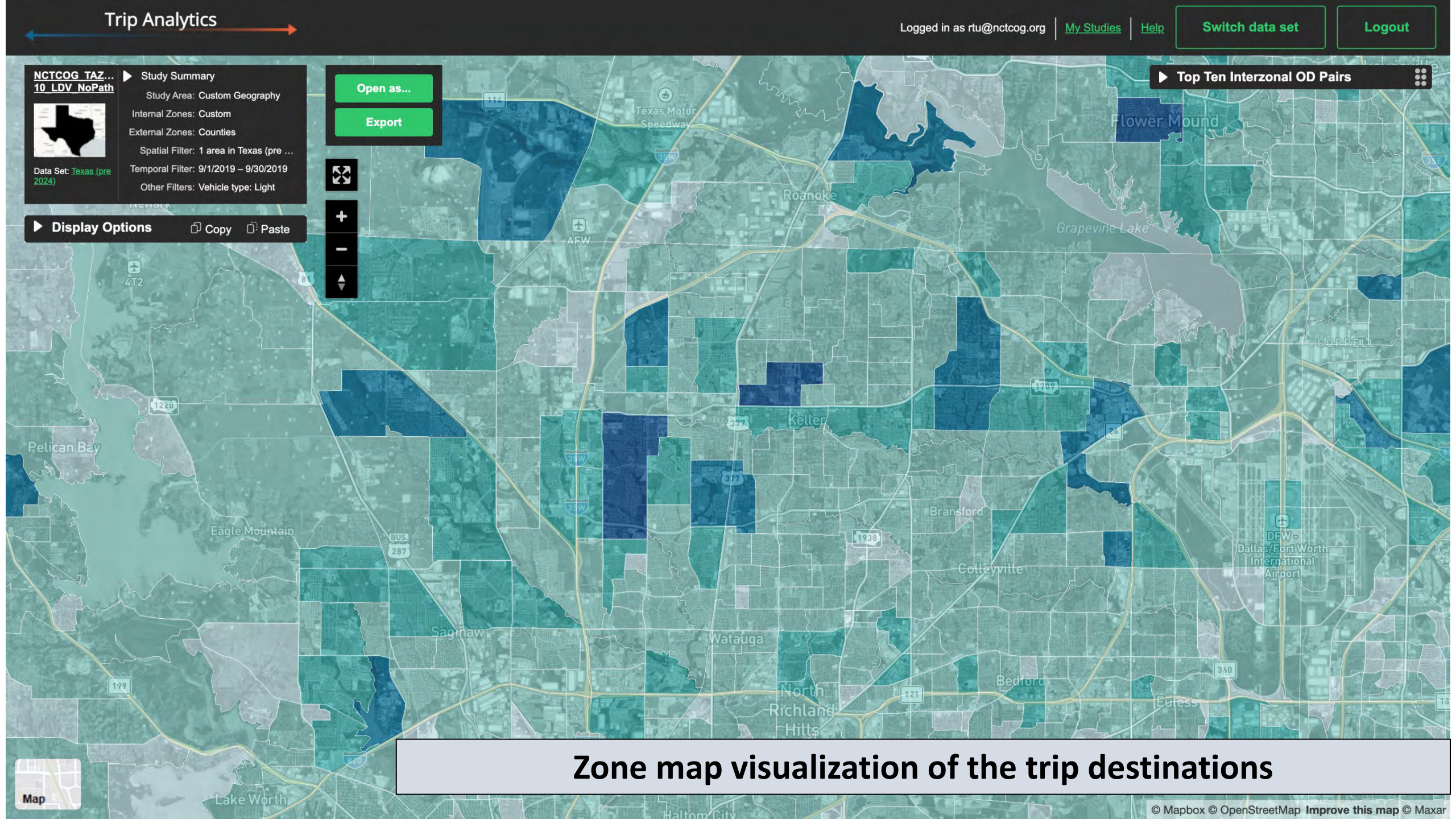

Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
NCTCOG_TAZ_201909_by...
Data Set: Texas (pre 2024)
Study Area: Custom Geography
Internal Zones: Custom
External Zones: Counties
Spatial Filter: 1 area in Texas (pre 2024)...
Temporal Filter: 9/1/2019 – 9/30/2019
Other Filters: Vehicle type: Light
Legend
0
160,000
Display Options
Export
Sample counts
Origins
Internal
Custom
1115
132
1755
914
Other
Total
132 0 2,047 0 1 3,068 5,116
1618 0 0 3 4,147 5,387
1755 0 0 1,968 3 2,975 5,004
2454 0 0 1 9,019
2711 0 0 0 1,356
2740 0 0 0 7,923
2741 0 0 0 0 5,748 13,949
3488 0 0 0 0 5,408 5,835
3507 0 0 2 0 4,883 6,410
3888 0 0 0 0 4,652 4,888
4125 0 0 0 0 5,466 5,548
914 99 6 0 1,920 4,998 7,027
Other 6,385 4,092 3,815 3,373 1,790,490 1,844,730
Total 6,484 6,145 5,827 5,300 1,847,14 1,932,174
Matrix Options
Show trip
Sample counts
Percentages
Average travel time
5th percentile travel time
50th percentile (median) travel time
95th percentile travel time
Include intrazonal trips
Display a max of 12 geographies.
Source matrix is 5389x5384. Displayed rows and columns are selected based on subtotals (highest values). Non-displayed rows and columns will be summarized in the "Other" groups.
Hide geographies below 182 trips
To have at least one origin and one destination geography trip count cannot exceed 11010.
5389 x 5384


Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
NCTCOG_TAZ... 10_LDV_NoPath
Study Summary
Study Area: Custom Geography
Internal Zones: Custom
External Zones: Counties
Spatial Filter: 1 area in Texas (pre ...
Temporal Filter: 9/1/2019 – 9/30/2019
Other Filters: Vehicle type: Light
Data Set: Texas (pre 2024)
Open as...
Export
Top Ten Interzonal OD Pairs
Display Options
Copy
Paste
Show trip...
Origins and destinations
Origins
Destinations
Show values on map
Show base geography
Show study area
Show spatial filter
Color thresholds
Enter exact values
Hide lowest color range
Origins
100
1000
2500
5000
OKLAHOMA
TEXAS
ARKANSAS
LOUISIANA
Oklahoma City
Norman
Lawton
Wichita Falls
Choctaw Nation
Fort Smith
Little Rock
Hot Springs
Pine Bluff
Lubbock
Abilene
Midland
San Angelo
Waco
Killeen
Austin
College Station
Tyler
Longview
Shreveport
Monroe
Lake Providence
Vicksburg
Greenville
Alexandria
New Roads
Baton Rouge
Lake Charles
Lafayette
Beaumont
The Woodlands
Houston
Satellite
Zone map visualization of the 1.9M trip origins
© Mapbox © OpenStreetMap Improve this map

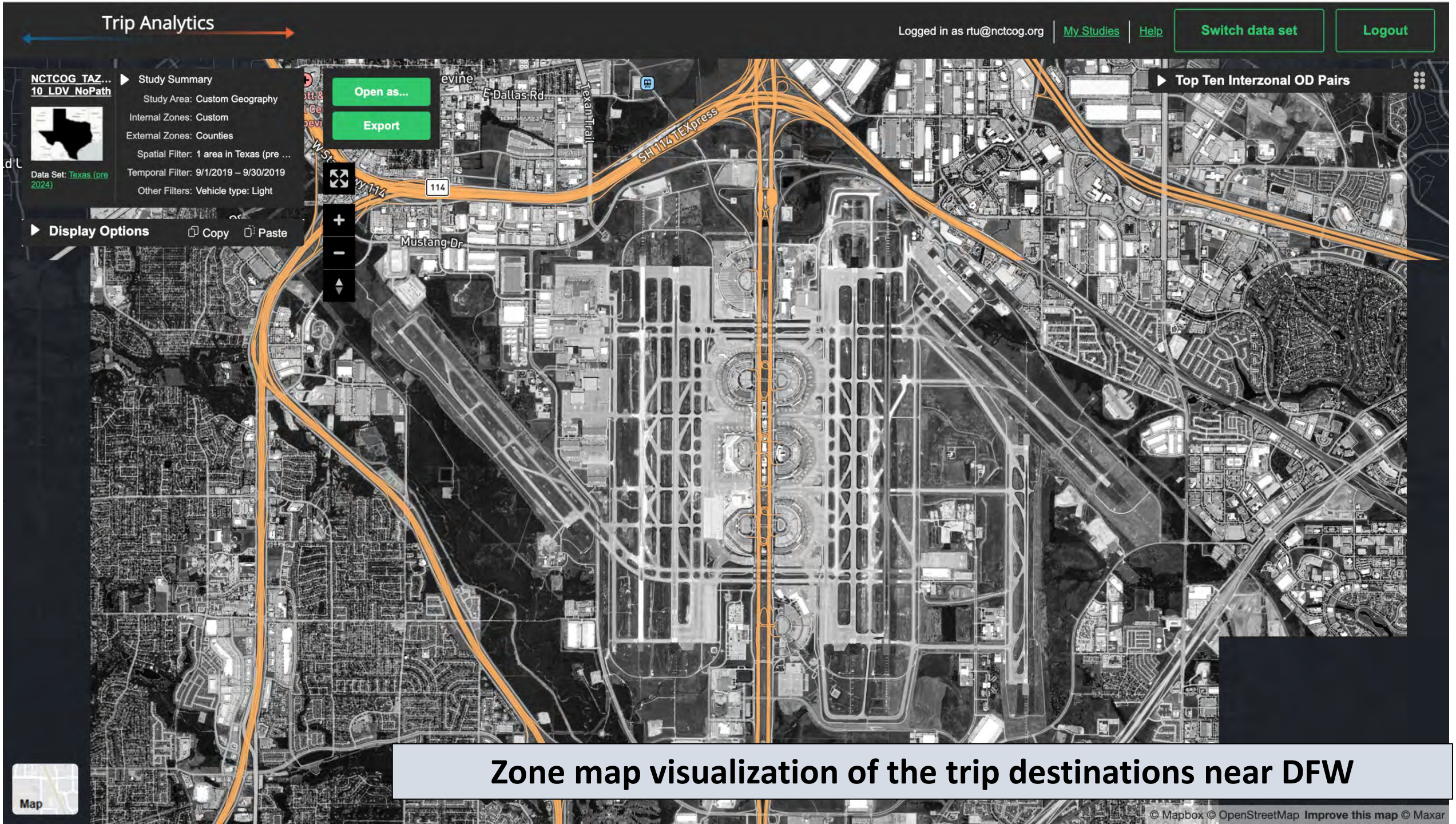


Zone map visualization of the 1.9M trip origins

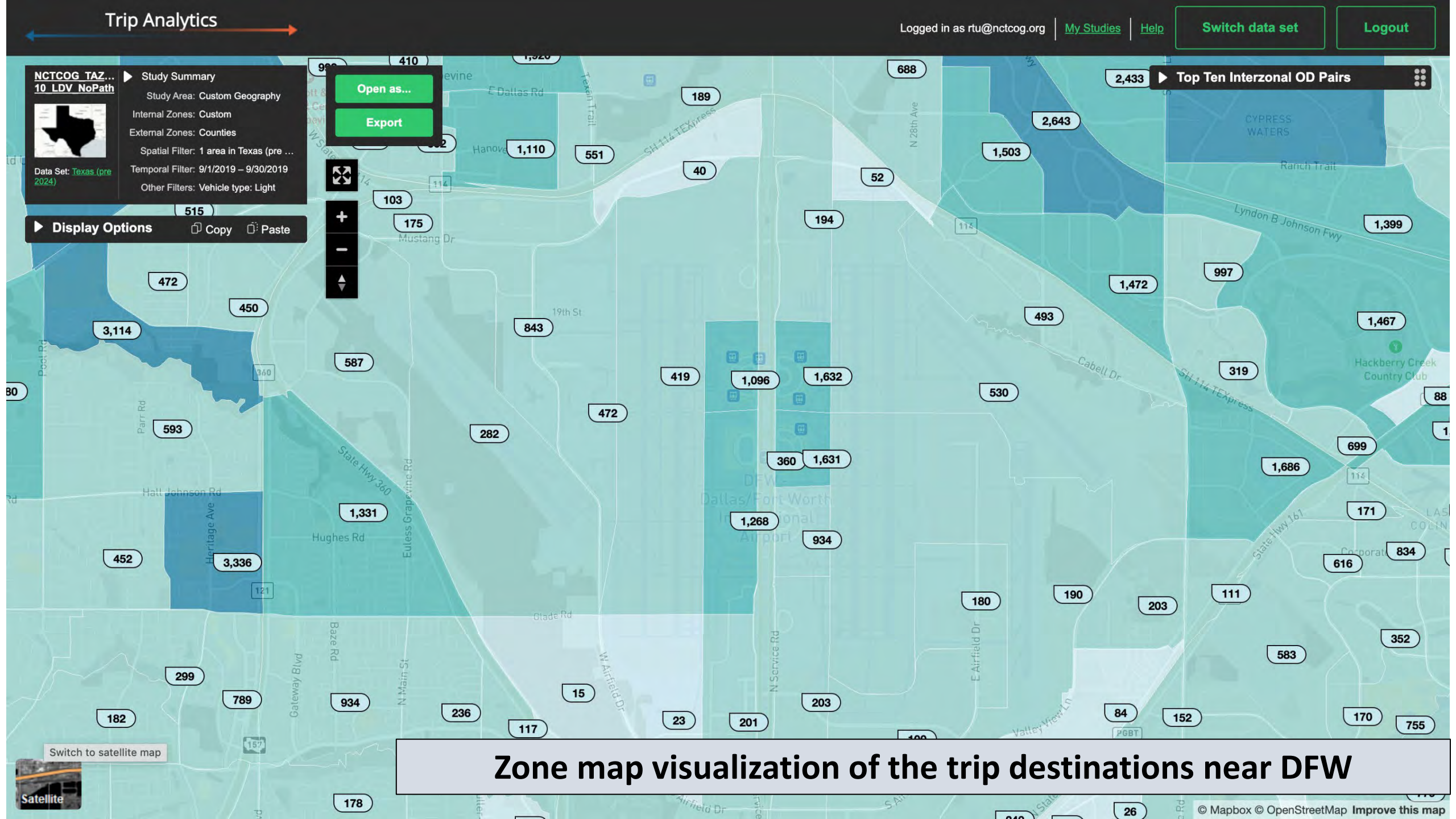

Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
NCTCOG_TAZ...
10_LDV_NoPath
Data Set: Texas (pre 2024)
Study Summary
Study Area: Custom Geography
Internal Zones: Custom
External Zones: Counties
Spatial Filter: 1 area in Texas (pre ...
Temporal Filter: 9/1/2019 – 9/30/2019
Other Filters: Vehicle type: Light
Open as...
Export
Top Ten Interzonal OD Pairs
Display Options
Copy
Paste
Map
Zone map visualization of the 1.9M trip origins
© Mapbox © OpenStreetMap Improve this map © Maxar



Zone map visualization of the trip destinations



Zone map visualization of the trip destinations near DFW


Trip Analytics
Logged in as rtu@nctcog.org
My Studies
Help
Switch data set
Logout
NCTCOG_TAZ...10_LDV_NoPath
Data Set: Texas (pre 2024)
Study Summary
Study Area: Custom Geography
Internal Zones: Custom
External Zones: Counties
Spatial Filter: 1 area in Texas (pre ...
Temporal Filter: 9/1/2019 – 9/30/2019
Other Filters: Vehicle type: Light
Open as...
Export
Display Options
Copy
Paste
Top Ten Interzonal OD Pairs
Switch to satellite map
Satellite
Zone map visualization of the trip destinations near DFW
© Mapbox © OpenStreetMap Improve this map

North Central Texas Council of Governments

What next?

The NCTCOG evaluation is ongoing. When completed, a presentation will be made by the NCTCOG investigators

Questions:

Greg Jordan (gjordan1@umd.edu)
Arash Mirzaei (amirzaei@nctcog.org)
Ran Tu (RTu@nctcog.org)

TAFT
Transportation Analytical Forecasting Tool

Calibration vs. Validation?

Calibration

- Adjust model parameters and assumptions so that outputs are consistent with field measurements or other trusted metrics

Calibration example:

*Adjust the model so that it produces **volume** counts – and/or **travel time** estimates – that are consistent with field volume counts or the NPMRDS*

How are calibration and validation different?

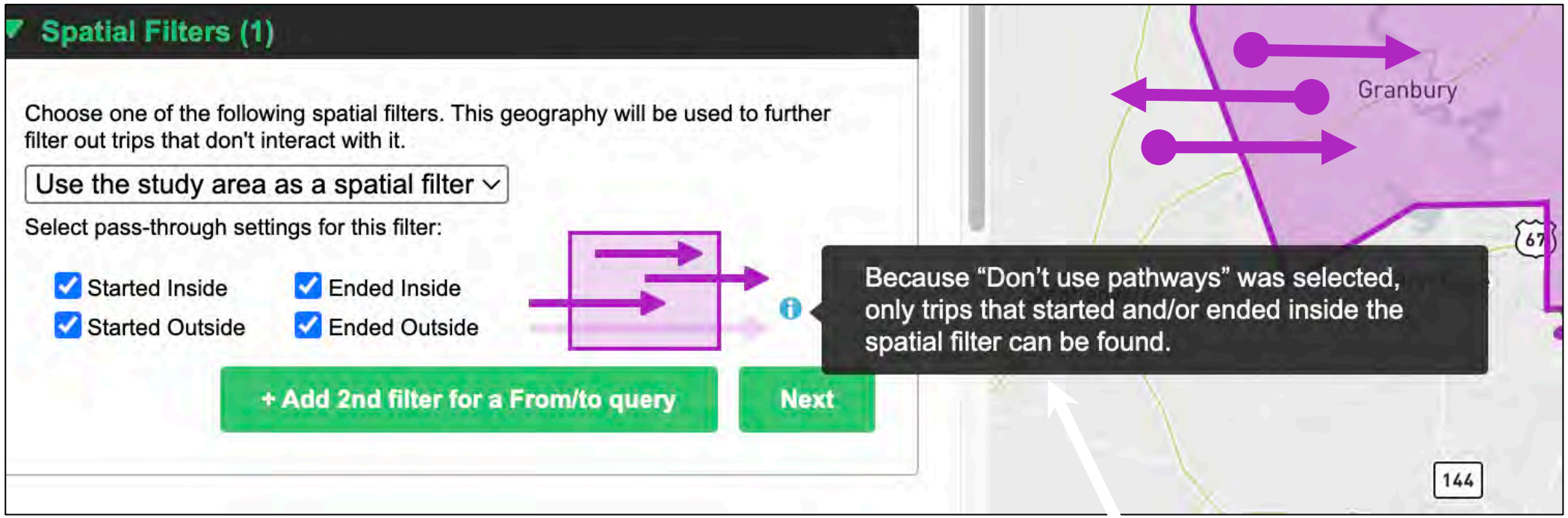
Validation

- Compare calibrated model outputs to trusted metrics that were not used for model development or calibration

TDM Validation example 1:

*Collect field **volume counts** at specific locations (or across screen lines, or along freeways) that were not used for model development or calibration, and compare to model outputs.*

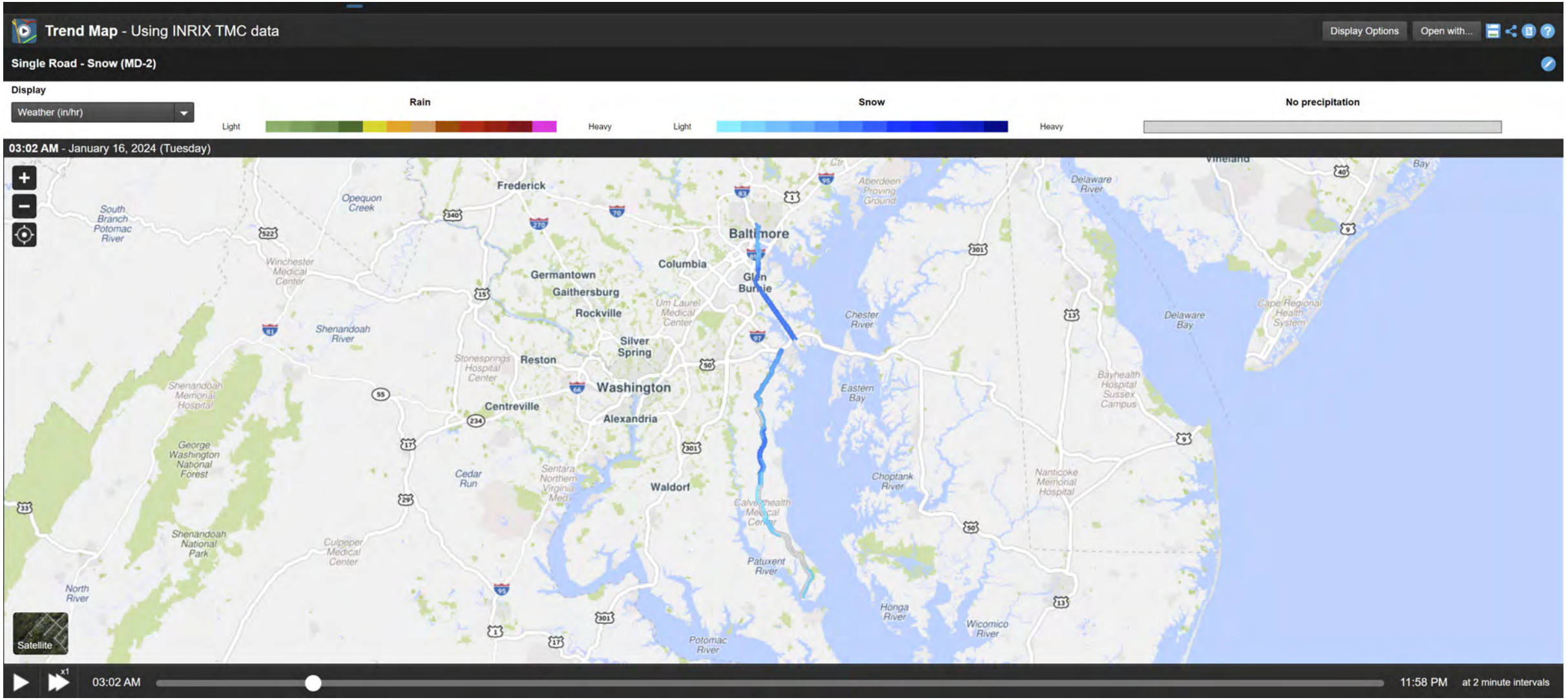
*Also commonly used: **Corridor travel times; trip lengths; bottleneck locations***


Spatial Filters (1)
Choose one of the following spatial filters. This geography will be used to further filter out trips that don't interact with it.
Use the study area as a spatial filter
Select pass-through settings for this filter:
Started Inside
Ended Inside
Started Outside
Ended Outside
+ Add 2nd filter for a From/to query
Next
Because “Don’t use pathways” was selected, only trips that started and/or ended inside the spatial filter can be found.
Granbury
67
144

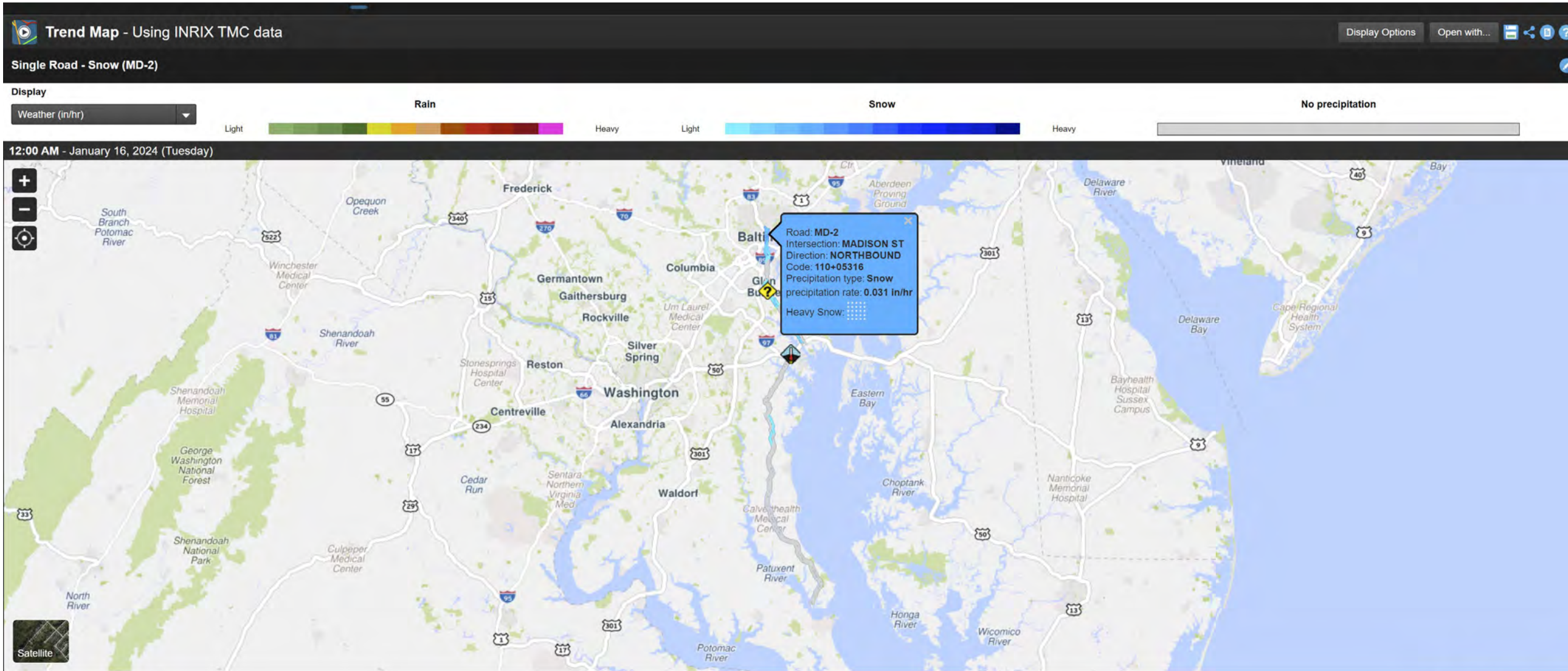
Review of New Features and Capabilities along with work in progress

Michael Pack
Director
University of Maryland CATT Lab

Weather in Trend Map

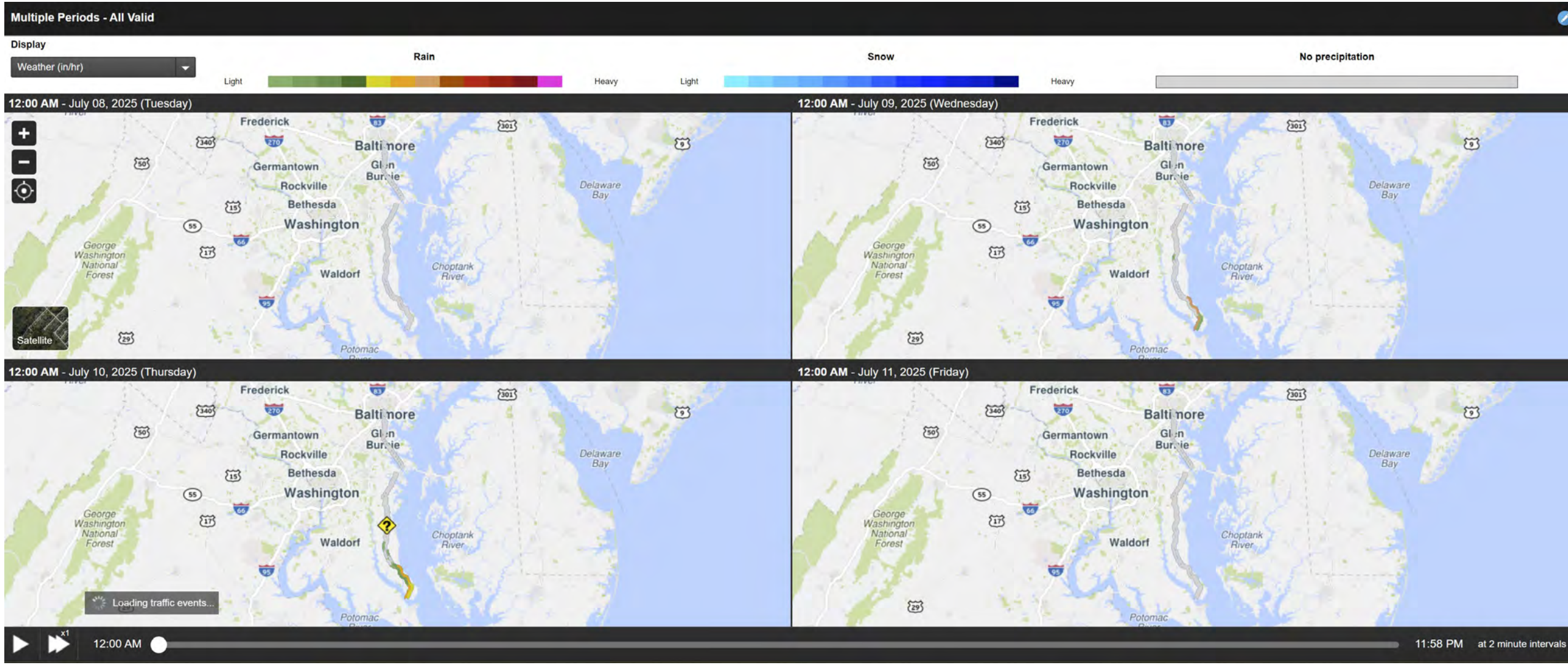


Weather in Trend Map



Weather in Trend Map

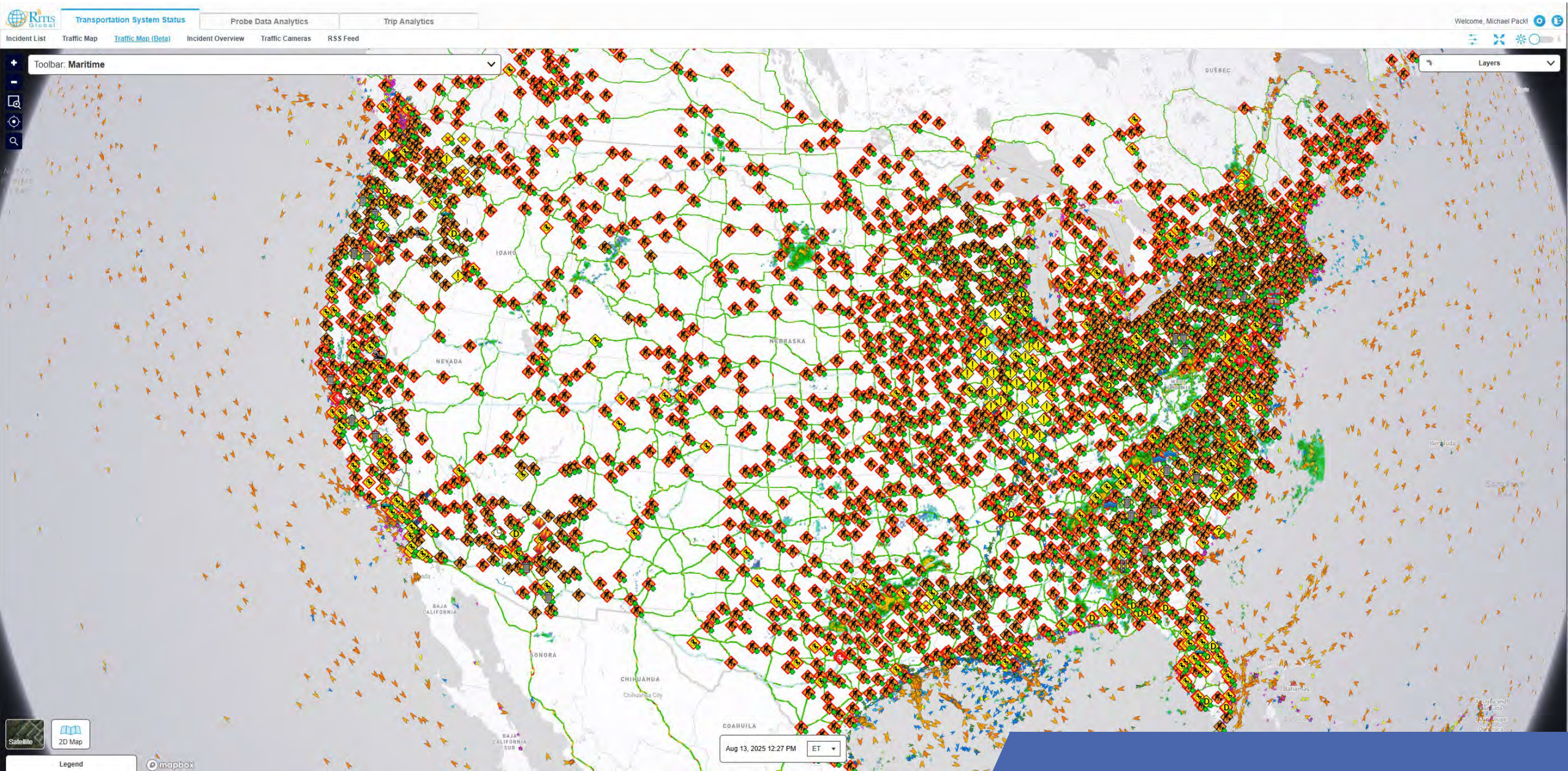
Weather in Trend Map



Next Steps with Weather in PDA

- Integrate radar data into Trend Map and Region Explorer

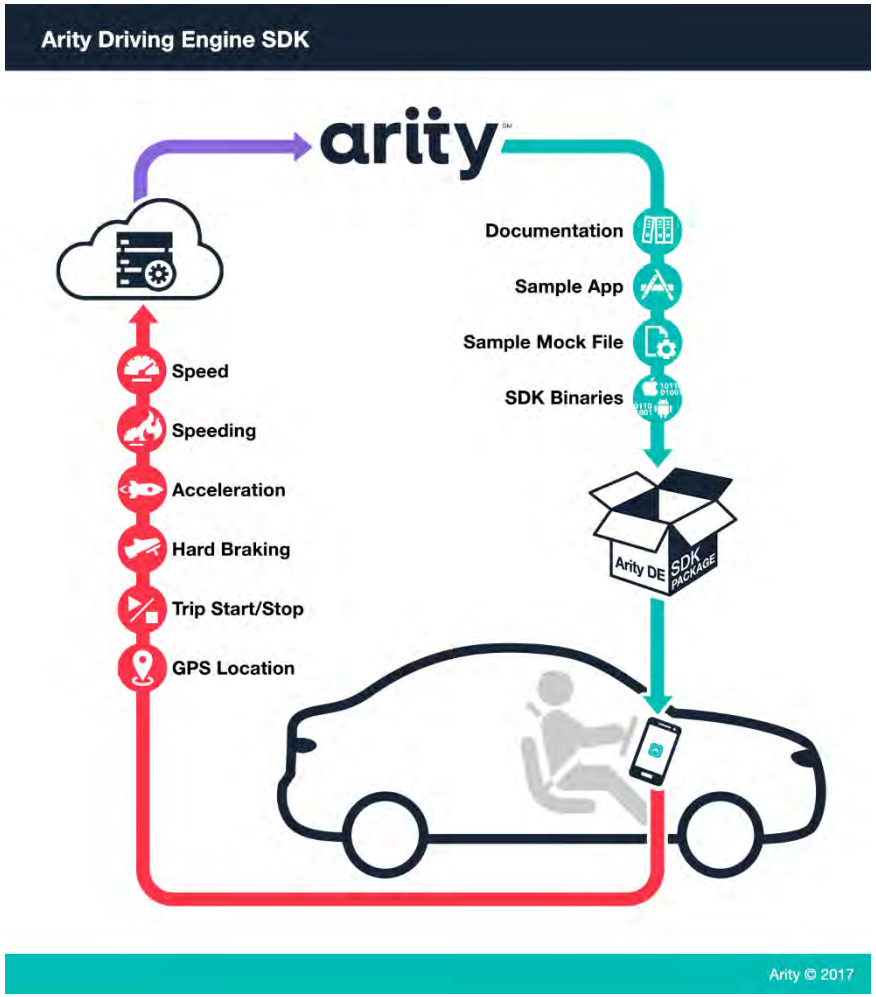
Larger-Scale Mapping: Seeking Early Adopters



Progress and/or deployments made related to:

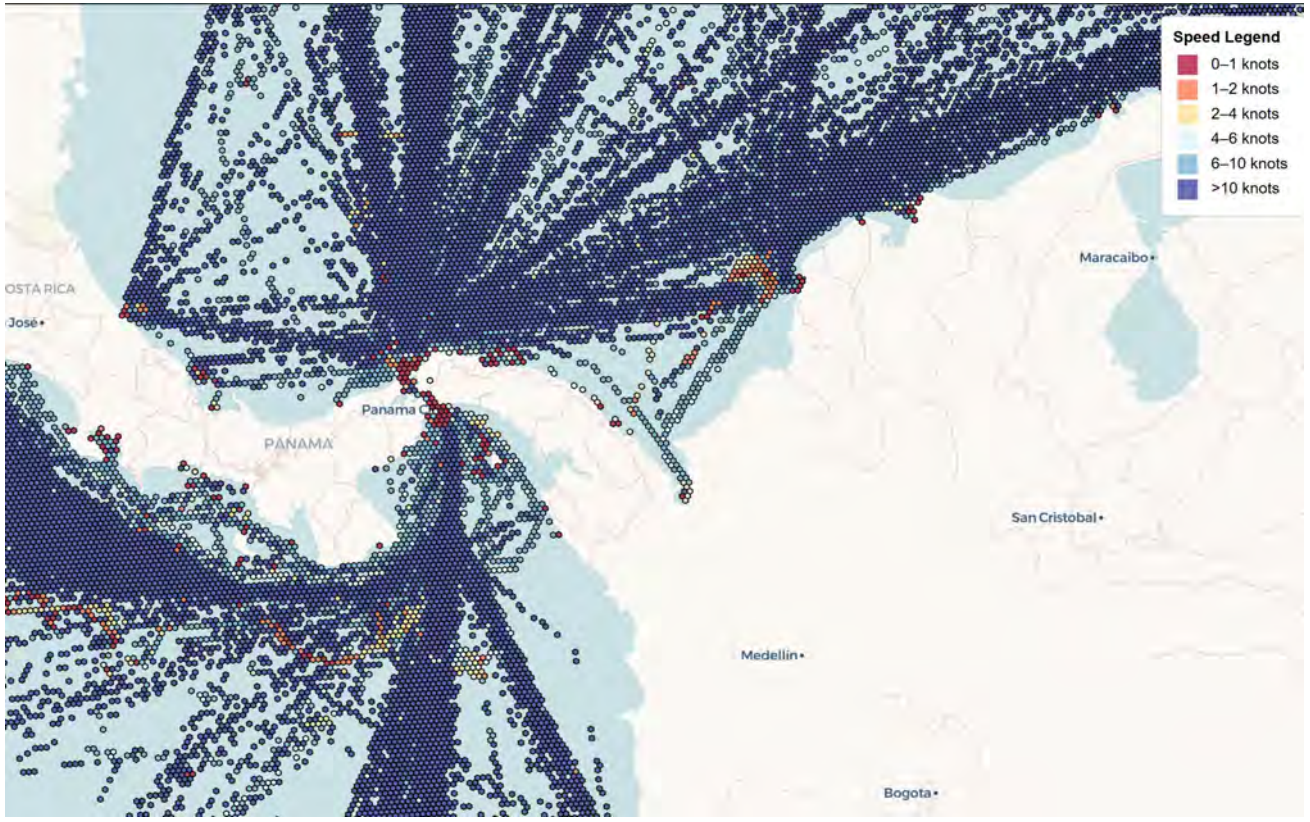
- Access to new data sets for testing purposes
- Build out of a generalized animation engine (see next slides)

COMPASS

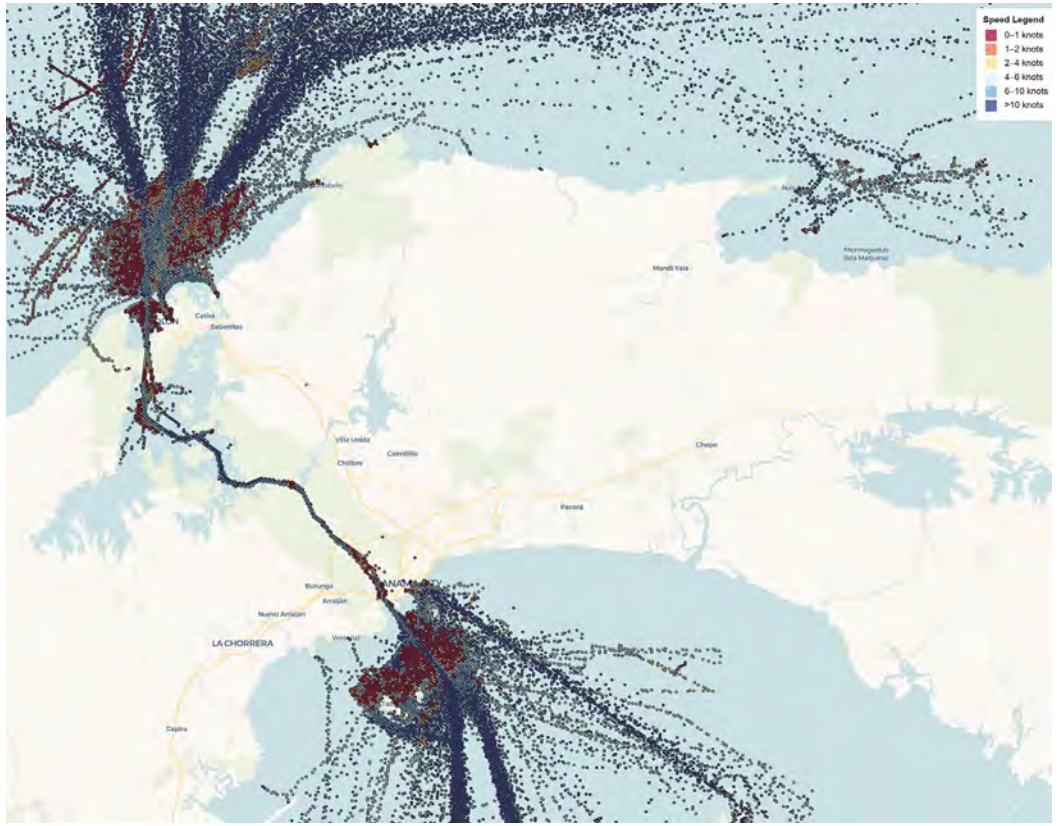


Movements off of known travel networks: Maritime Bottlenecks

H3-resolution 6



H3-resolution 9



Movements off of known travel networks: Aviation OD

Automated Work Zone Reporting Tool

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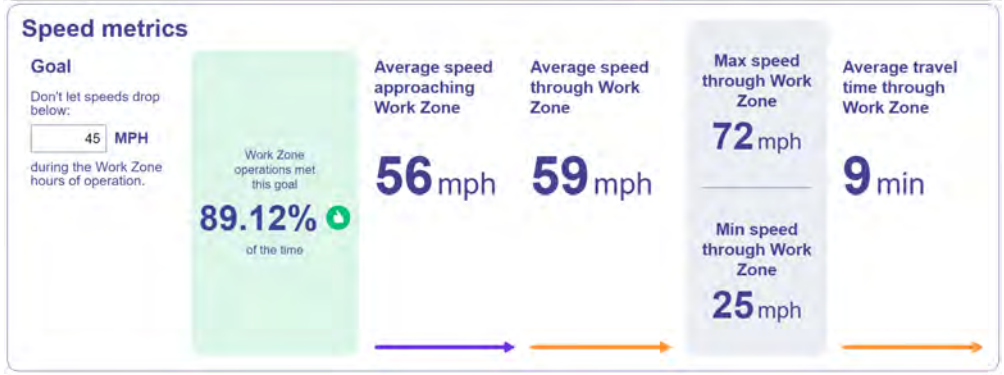
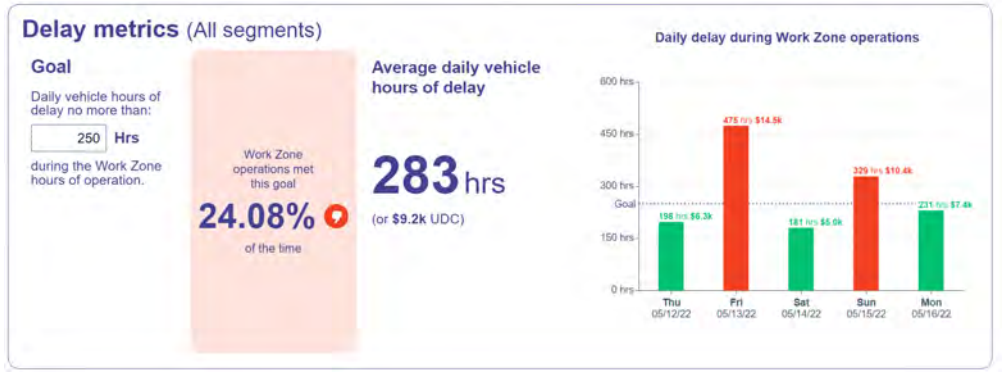
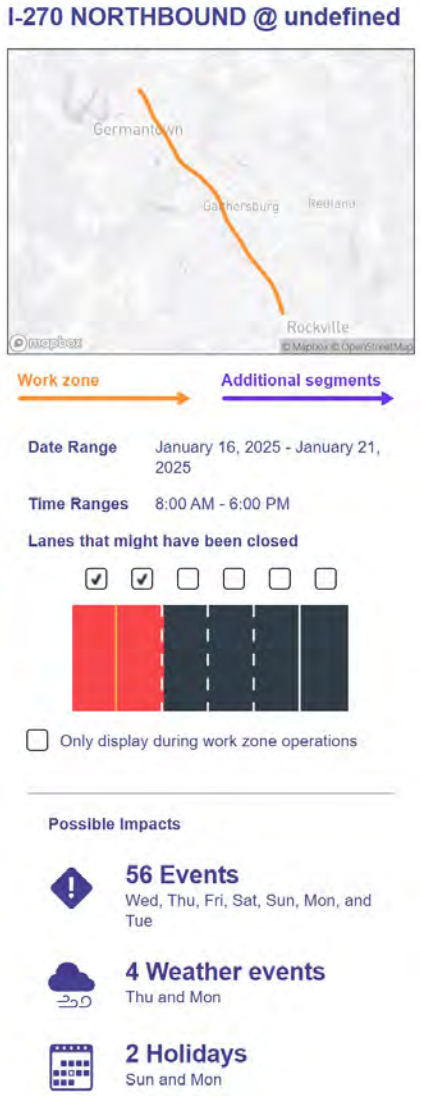
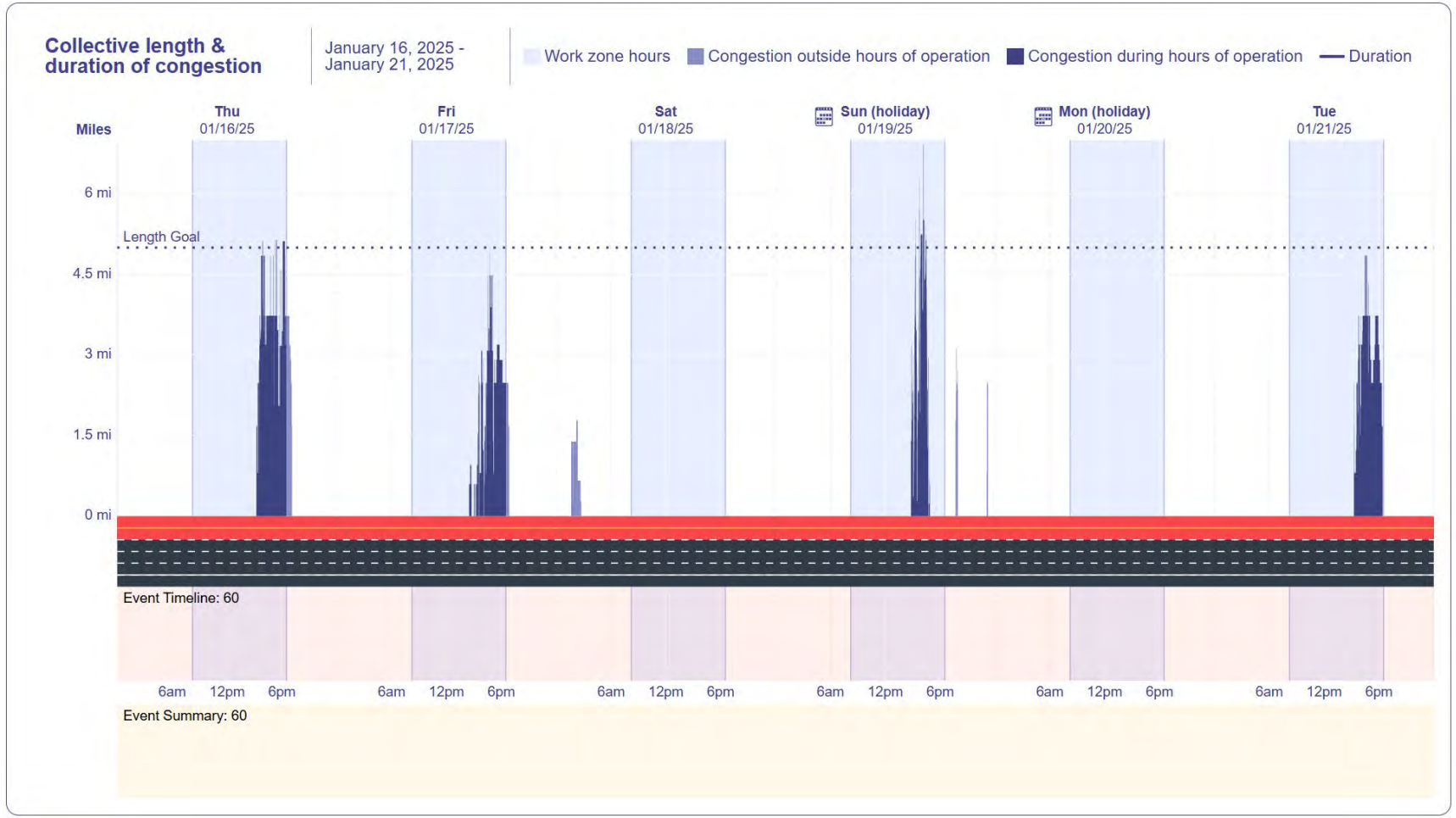
Work Zone Performance Report Update



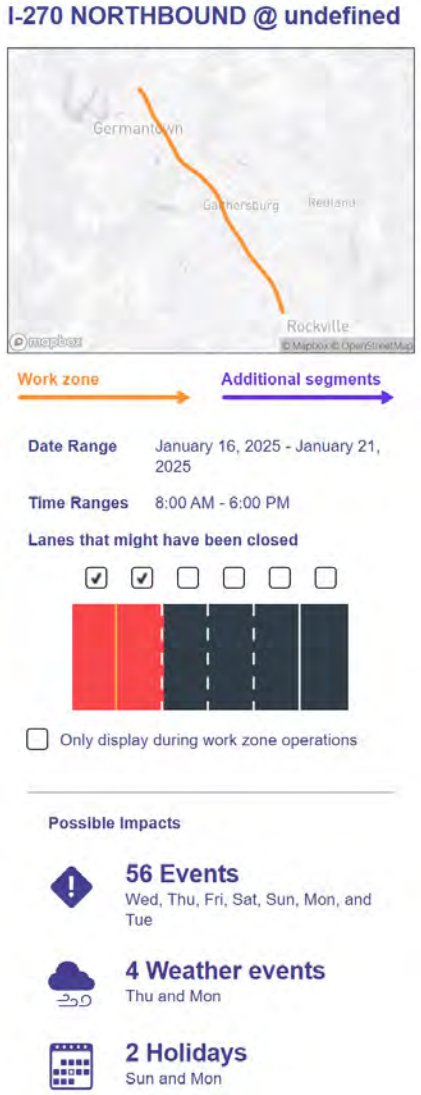


Work Zone Performance Report Update





Work Zone Performance Report Update



Work Zone Performance Report Update

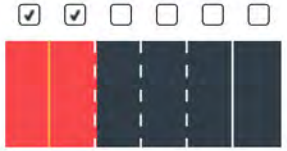
I-270 NORTHBOUND @ undefined

Work zone → Additional segments

Date Range January 16, 2025 - January 21, 2025

Time Ranges 8:00 AM - 6:00 PM

Lanes that might have been closed



☐ Only display during work zone operations

Possible Impacts

56 Events
Wed, Thu, Fri, Sat, Sun, Mon, and Tue

4 Weather events
Thu and Mon

2 Holidays
Sun and Mon

Goal

Daily vehicle hours of delay no more than:

250 hrs

(or **$8.1k** UDC)

during the Work Zone hours of operation.

Work Zone operations met this goal

24.08%

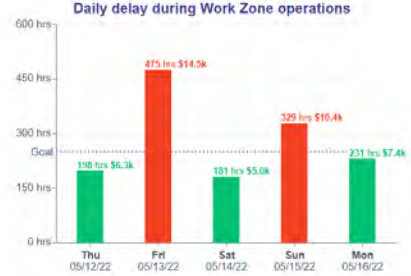
of the time

Average daily vehicle hours of delay

283 hrs

(or **$9.2k** UDC)

Daily delay during Work Zone operations



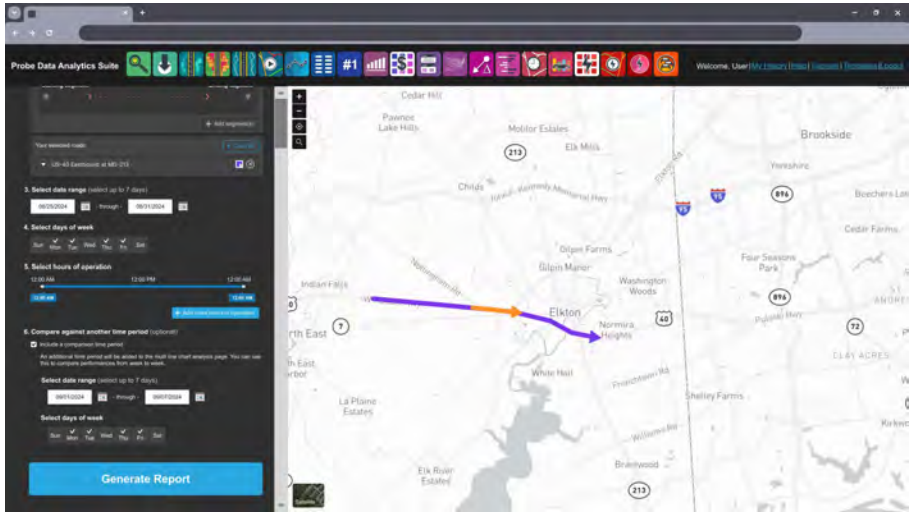
Vehicle hours of delay & user delay cost

Lowest hours/cost → Highest hours/cost

	12am	1am	2am	3am	4am	5am	6am	7am	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	11pm	
01/16/25 Thu	4 h	2 h	10 h	8 h	8 h	2 h	2 h	1 h	0 h	3 h	0 h	0 h	0 h	0 h	0 h	243 h	375 h	528 h	495 h	32 h	1 h	0 h	1 h	4 h	1.7K h
01/17/25 Fri	1 h	4 h	13 h	2 h	7 h	1 h	2 h	3 h	3 h	0 h	0 h	0 h	0 h	0 h	22 h	106 h	287 h	336 h	214 h	8 h	5 h	0 h	0 h	0 h	1K h
01/18/25 Sat	0 h	36 h	62 h	3 h	3 h	2 h	1 h	0 h	0 h	4 h	1 h	0 h	7 h	15 h	2 h	2 h	3 h	5 h	11 h	8 h	3 h	1 h	0 h	0 h	170 h
01/19/25 Sun (holiday)	1 h	2 h	0 h	2 h	2 h	0 h	1 h	0 h	0 h	0 h	0 h	0 h	6 h	24 h	139 h	490 h	595 h	86 h	69 h	99 h	42 h	22 h	11 h	25 h	1.6K h
01/20/25 Mon (holiday)	6 h	2 h	5 h	7 h	15 h	4 h	10 h	1 h	1 h	0 h	0 h	0 h	1 h	0 h	0 h	0 h	0 h	0 h	0 h	0 h	1 h	2 h	1 h	1 h	57 h
01/21/25 Tue	2 h	1 h	1 h	7 h	4 h	2 h	4 h	3 h	0 h	1 h	0 h	1 h	0 h	0 h	0 h	141 h	353 h	260 h	81 h	13 h	5 h	0 h	0 h	1 h	873 h
VHD	14 h	47 h	91 h	27 h	38 h	12 h	19 h	8 h	4 h	9 h	2 h	2 h	15 h	40 h	164 h	971 h	1.6K h	1.2K h	870 h	160 h	58 h	26 h	14 h	31 h	5,448.9 hours
01/16/25 Thu	$168.33	$91.69	$388.73	$252.04	$261.46	$90.75	$81.48	$36.18	$15.00	$121.90	$12.03	$10.87	$0	$3.38	$0	$10.2K	$15.7K	$22.1K	$20.7K	$1.9K	$42.62	$13.70	$27.87	$151.33	$71.8K
01/17/25 Fri	$30.62	$151.14	$561.00	$104.35	$301.38	$30.30	$70.35	$105.69	$108.93	$14.26	$13.90	$9.56	$4.61	$0	$916.07	$4.4K	$12K	$14.1K	$8.9K	$317.63	$207.71	$7.18	$3.01	$1.30	$42.4K
01/18/25 Sat	$3.05	$1.5K	$2.6K	$109.76	$140.13	$98.31	$36.27	$3.69	$11.42	$169.09	$27.92	$15.66	$312.93	$628.64	$103.24	$78.43	$115.20	$220.45	$451.96	$332.70	$105.18	$40.04	$2.93	$0.14	$7.1K
01/19/25 Sun (holiday)	$45.90	$69.43	$6.59	$85.18	$102.58	$20.13	$50.71	$0.15	$0	$0	$0	$0	$261.30	$1K	$5.8K	$20.5K	$24.9K	$3.6K	$2.9K	$4.1K	$1.8K	$917.25	$480.53	$1.1K	$67.8K
01/20/25 Mon (holiday)	$254.24	$97.34	$191.64	$287.98	$607.43	$163.21	$405.97	$81.23	$39.67	$5.16	$0.74	$0.43	$28.37	$13.01	$0	$0	$0	$0	$0	$5.61	$55.22	$96.79	$50.63	$28.80	$2.4K
01/21/25 Tue	$88.96	$40.68	$45.67	$294.34	$163.87	$93.45	$155.67	$113.09	$1.80	$61.11	$14.24	$48.52	$0.82	$9.59	$0	$5.8K	$14.8K	$10.9K	$3.4K	$562.58	$225.92	$0.79	$14.05	$53.52	$36.5K
UDC	$591.10	$1.9K	$3.8K	$1.1K	$1.6K	$494.16	$808.45	$320.24	$174.76	$371.52	$68.83	$85.23	$608.03	$1.7K	$6.8K	$40.6K	$67.5K	$50.9K	$36.4K	$6.7K	$2.4K	$1.1K	$579.02	$1.3K	$227,971.89

Work Zone Performance Report Update

- Remaining major features:
  - Comparison line chart page
  - Road diagram component
  - Event integration into report visualizations
  - Query form
  - Work zone event linkage to tools across RITIS

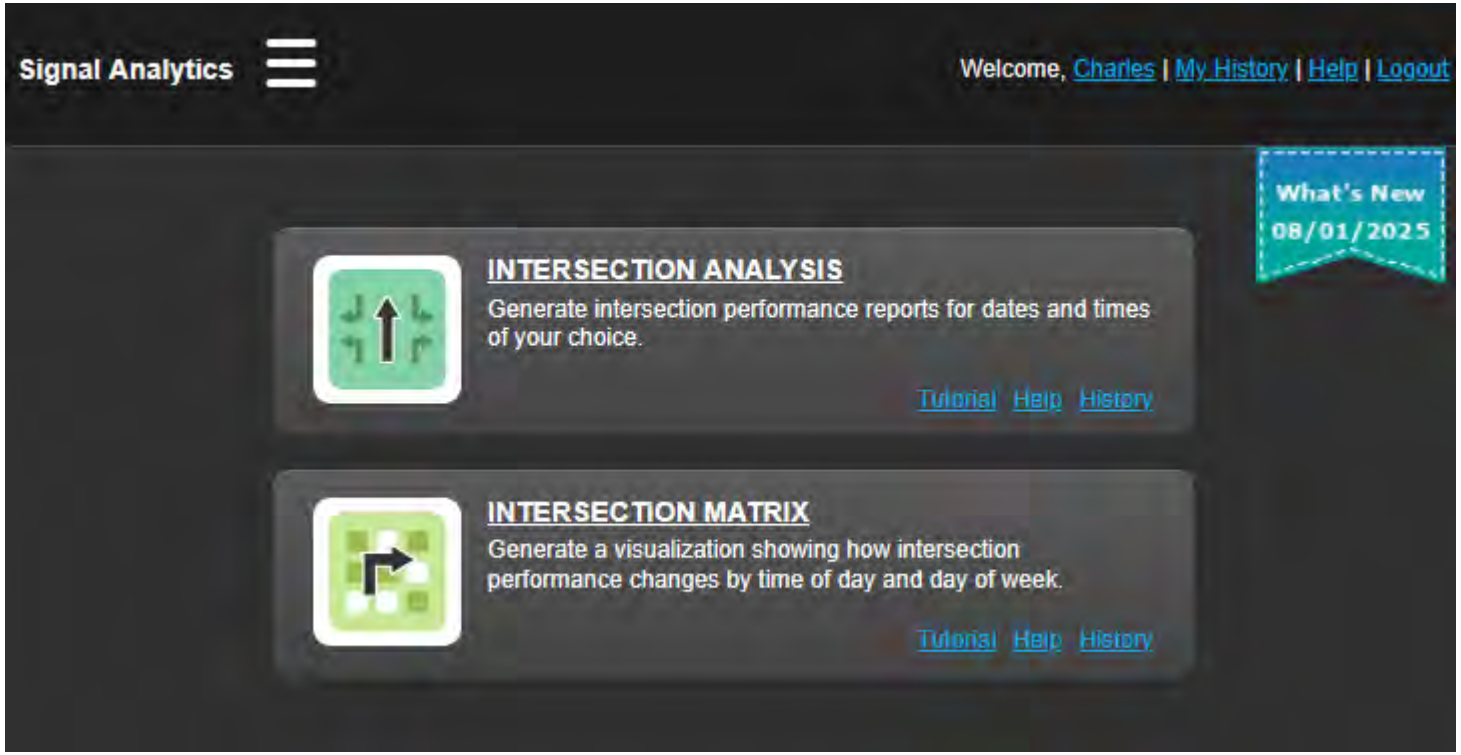


Two-Factor Authentication (end of the year)

Signal Analytics
(New & Coming Soon)

Signal Analytics: new and coming soon

- Simple use cases
- Recently added features
  - Intersection Analysis presets
- Tools on the way
  - Signals Templates
  - Trend Charts



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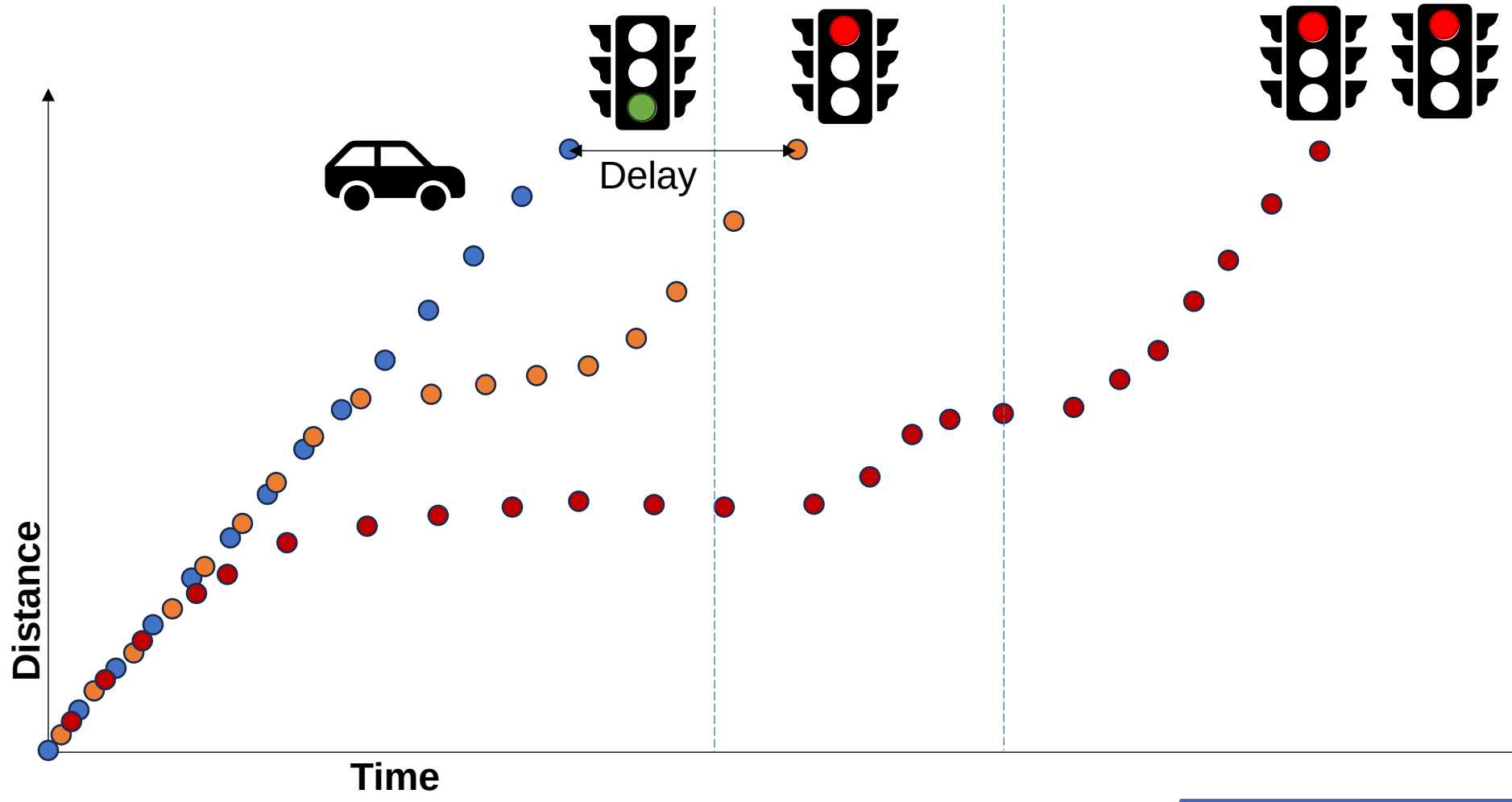
Signal Analytics uses trajectory data to determine traffic signal performance



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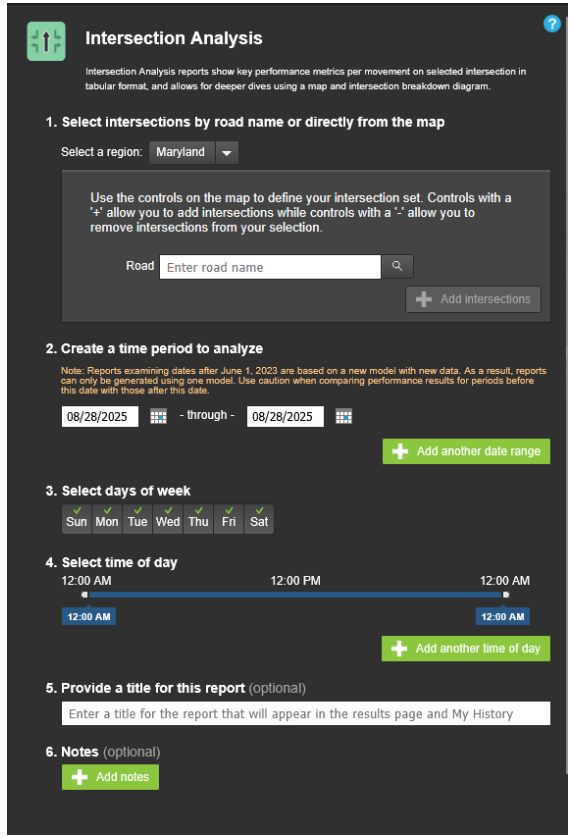
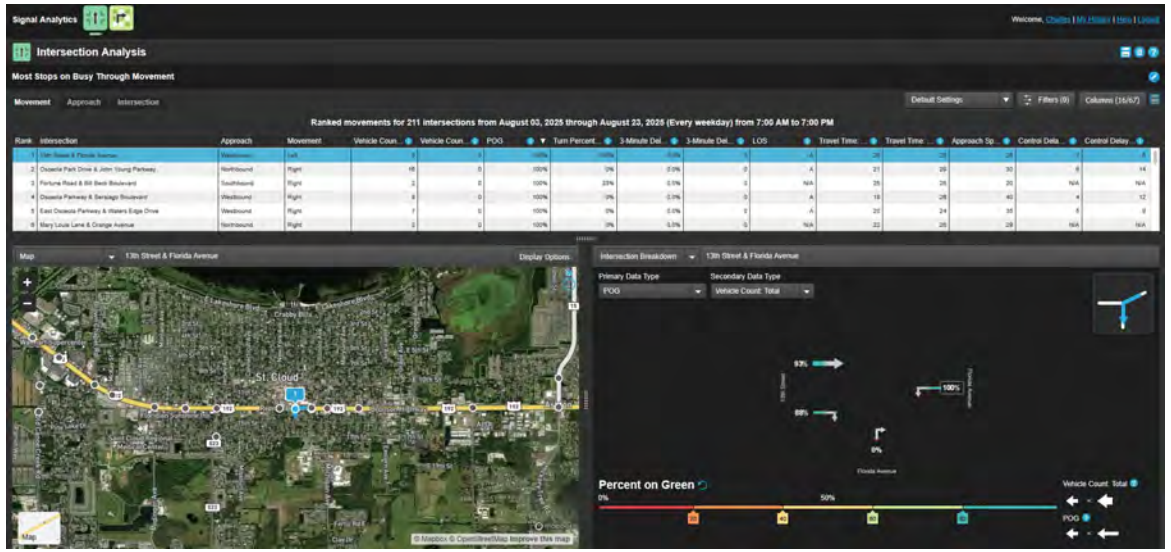


Step 1: Build your query



Step 2: View and interact with your report (including applying filters)

Use case: Longest Delays Late Night

- High delays could be caused by stuck detection, or could be opportunities to improve timing
- **Query settings:**
  - Most recent two weeks of data
  - Weekdays only
  - 12:00 AM – 5:00 AM
- **Filters to include:**
  - Vehicle Count: Total → Greater than 5
  - Movement → Contains left
  - Movement → Contains through

- **Results**
  - Look for control delays higher than 45-60 seconds
  - Ask yourself: “Is this reasonable or unexpected for this movement?”

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Use case: Highest Speeds on Approach

- High speeds approaching signals could indicate potential safety issues.
- **Query settings:**
  - Most recent two weeks of data
  - All days of week
  - 12:00 AM – 6:00 AM
  - 6:00 PM – 12:00 AM
- **Filters to include:**
  - Vehicle Count: Total → Greater than 100
  - Movement → Contains through

- **Results**
  - Look for higher differentials between average and max approach speeds.
  - Ask yourself: “Should yellow-red clearance times for these intersections be adjusted?”

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Use case: Most Stops on Busy Through Movements

- To achieve good progression, it's good to monitor the arrival on green performance of your busiest movements.
- **Query settings:**
  - Most recent two weeks of data
  - Weekdays
  - 7:00 AM – 7:00 PM
- **Filters to include:**
  - Vehicle Count: Total → Greater than 2,000
  - Movement → Contains through

- **Results**
  - Look for the lowest percent on green (POG). Is it below 40%?
  - Ask yourself: "Could I improve offset optimization?"

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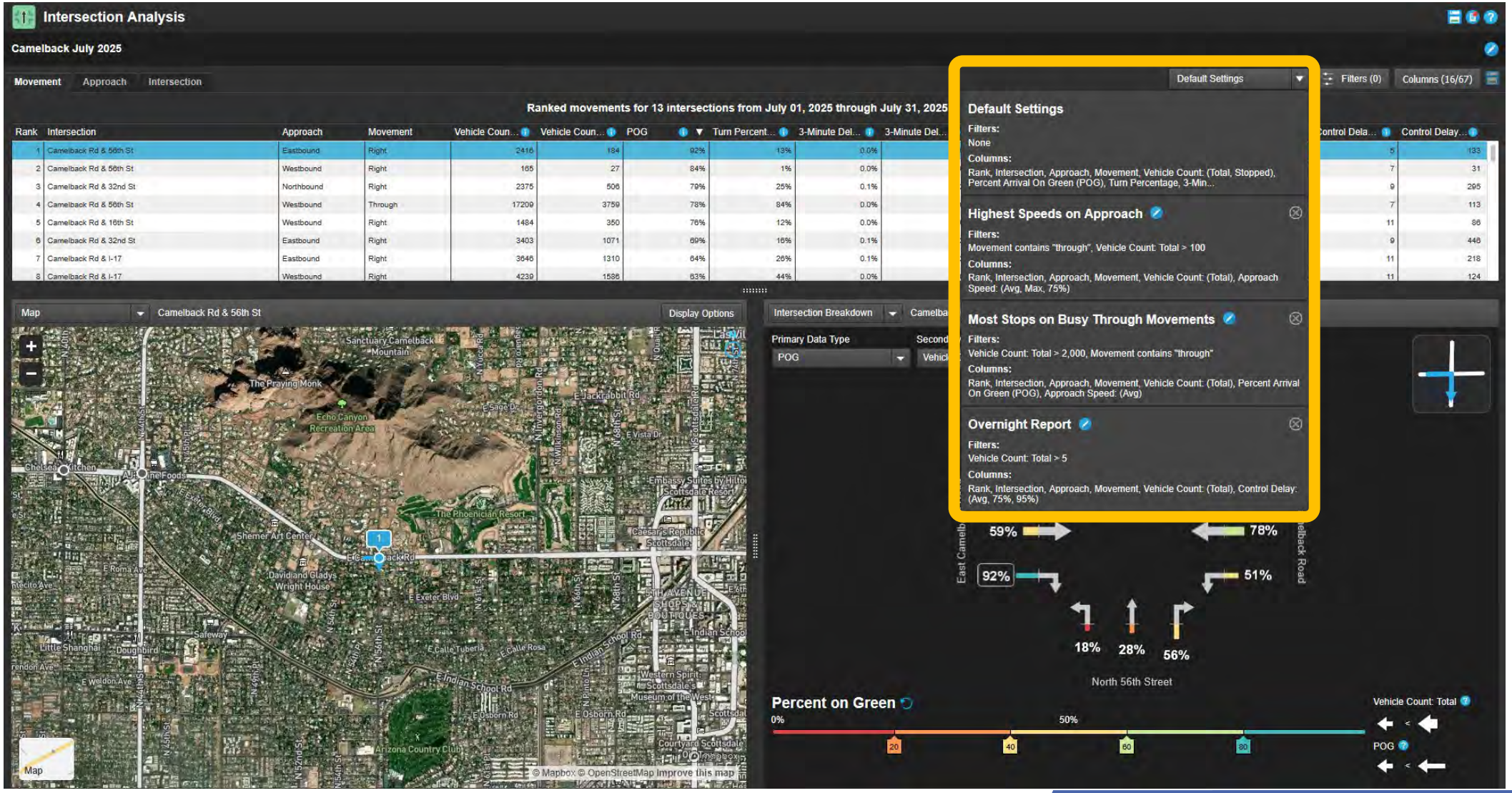
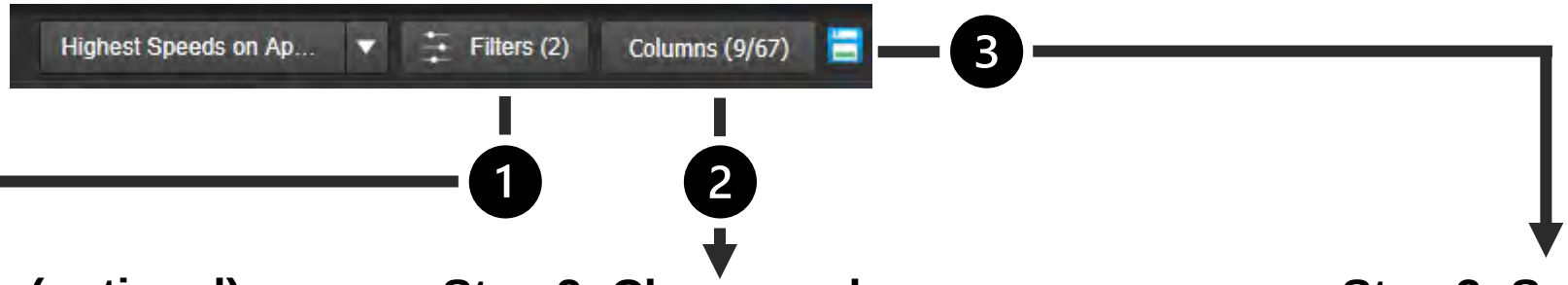
Intersection Analysis: Custom Presets

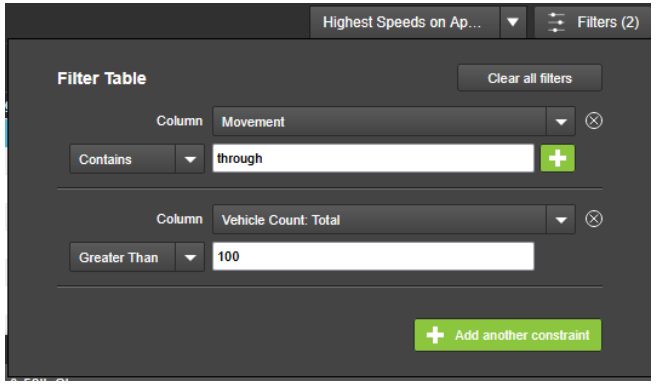


Intersection Analysis: Custom Presets

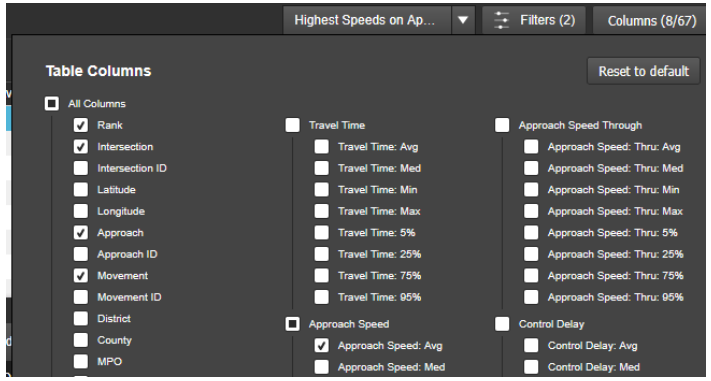
Note: all presets are user-created—here's how to build your own.



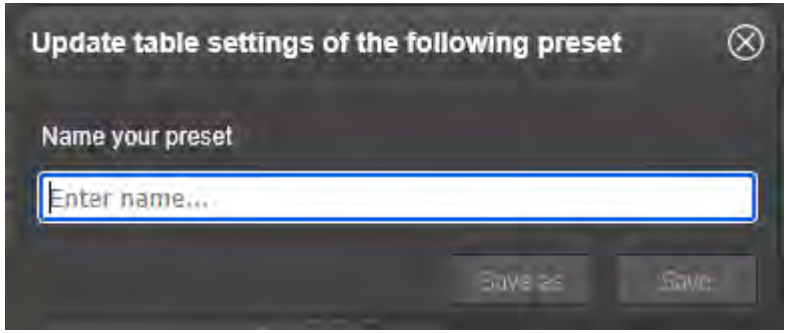
Step 1: Apply filters (optional)



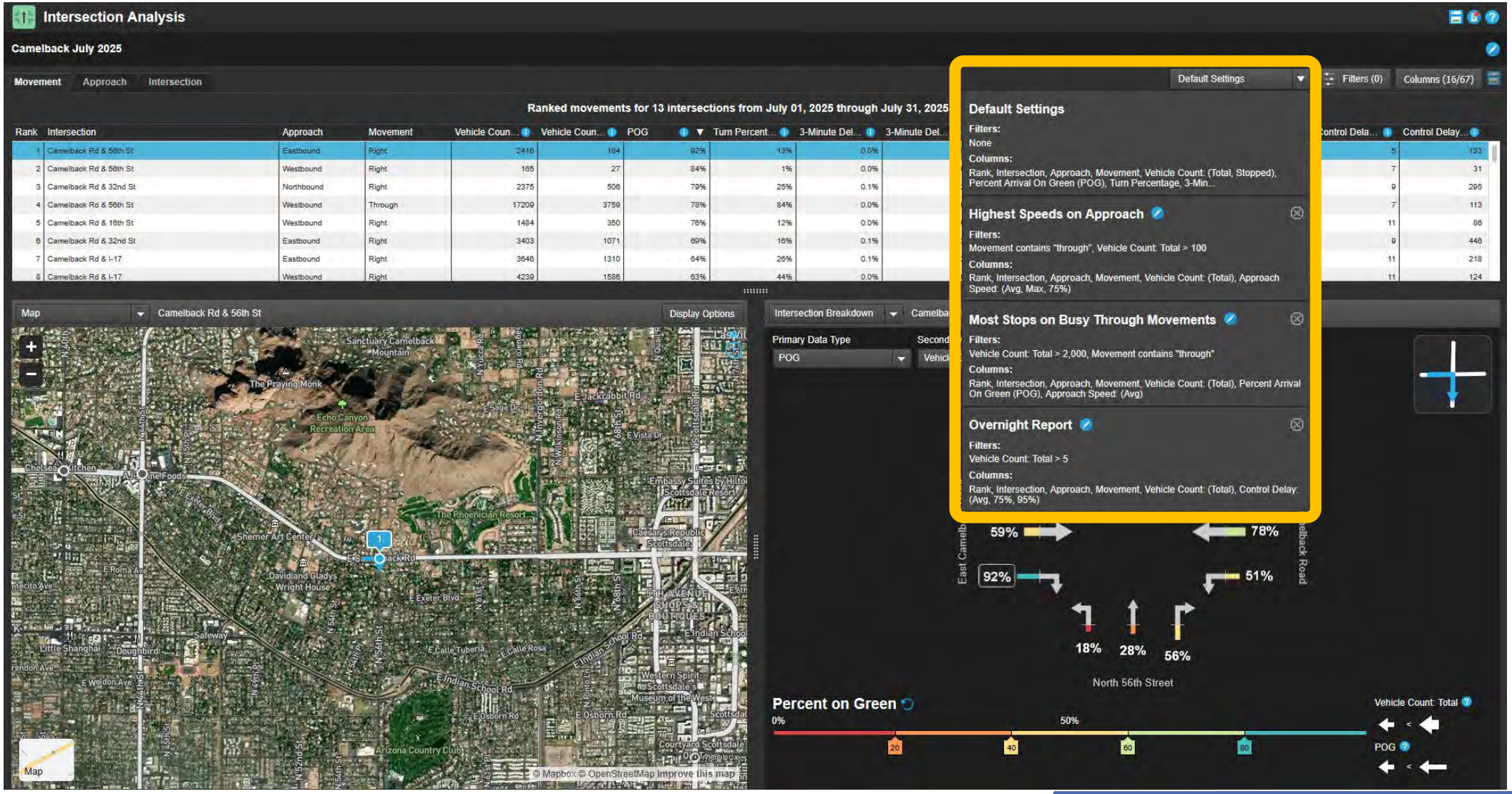
Step 2: Choose columns



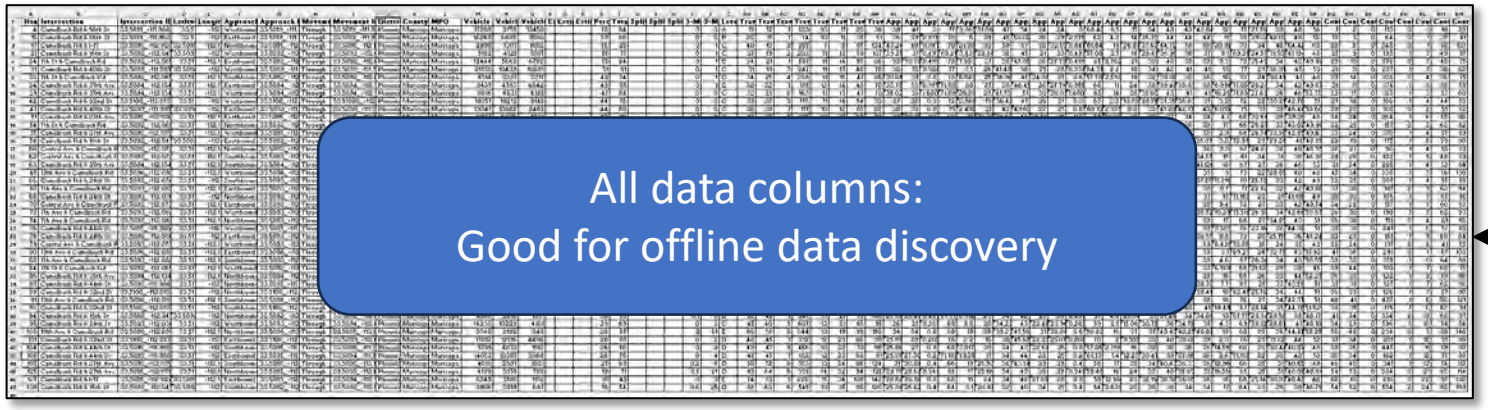
Step 3: Save preset



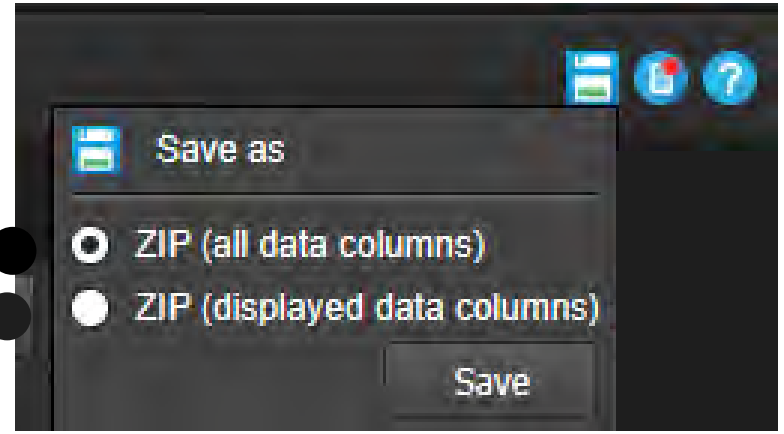
Intersection Analysis: Custom Presets



Intersection Analysis: Exporting Data



All data columns:
Good for offline data discovery



Saves only columns in on-screen table (including active preset)

	A	B	C	D	E	F	G
1	Rank	Intersection	Approach	Movement	Vehicle Count: Total	Percent Arrival On Green (POG)	Approach Speed: Avg
2	4	Camelback Rd & 56th St	Westbound	Through	17209	78.157	38.300
3	15	Camelback Rd & 56th St	Eastbound	Through	16268	58.889	35.590
4	17	Camelback Rd & I-17	Northbound	Through	2990	56.288	43.242
5	21	Camelback Rd & 16th St	Westbound	Through	9182	55.075	29.213
6	24	7th St & Camelback Rd	Eastbound	Through	12444	54.5	32.250
7	31	Camelback Rd & 40th St	Westbound	Through	21130	50.596	32.640
8	33	7th St & Camelback Rd	Southbound	Through	6514	49.386	30.015
9	34	Camelback Rd & 35th Ave	Eastbound	Through	9435	49.2	32.800
10	39						35.030
11							26.970
12							30.040
13							29.170
14							31.120
15							31.660
16							28.090
17							27.670
18							28.998
19	6						34.267
20	65	19th Ave & Camelback Rd	Westbound	Through	11386	37.362	27.437
21	66	Camelback Rd & 24th St	Southbound	Through	4222	36.689	28.297
22	67	7th Ave & Camelback Rd	Eastbound	Through	9828	36.6	25.140
23	68	Camelback Rd & 24th St	Northbound	Through	4408	36.366	26.989
24	70	Central Ave & Camelback Rd	Eastbound	Through	10876	36.089	31.085

Displayed data columns:
Good for regular reports

Ranked movements for 13 intersections from July 01, 2025 through July 31, 2025

Rank	Intersection	Approach	Movement	Vehicl...	POG	Approa...
4	Camelback Rd & 56th St	Westbound	Through	17209	78%	38
15	Camelback Rd & 56th St	Eastbound	Through	16268	59%	36
17	Camelback Rd & I-17	Northbound	Through	2990	56%	43
21	Camelback Rd & 16th St	Westbound	Through	9182	55%	29

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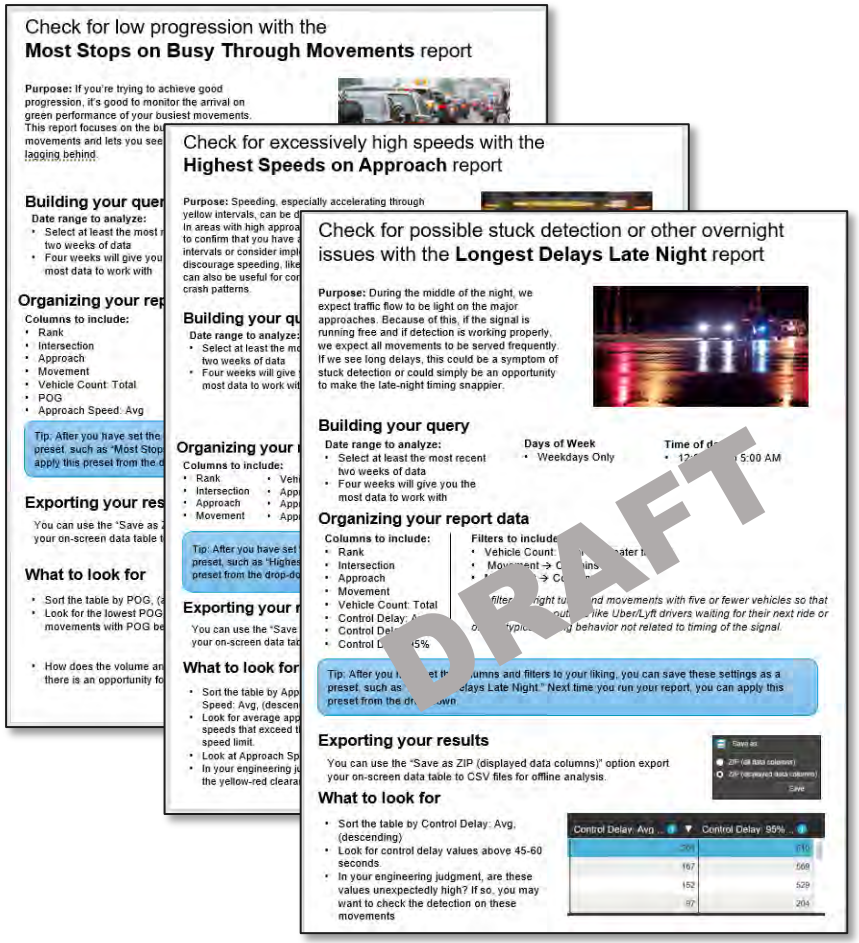
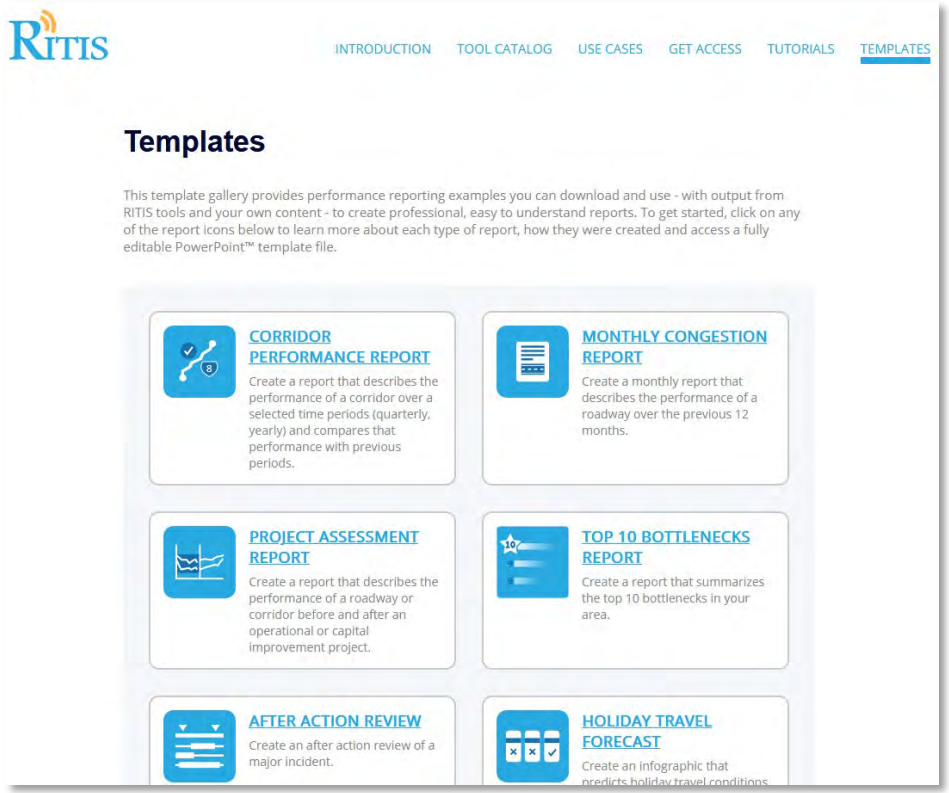
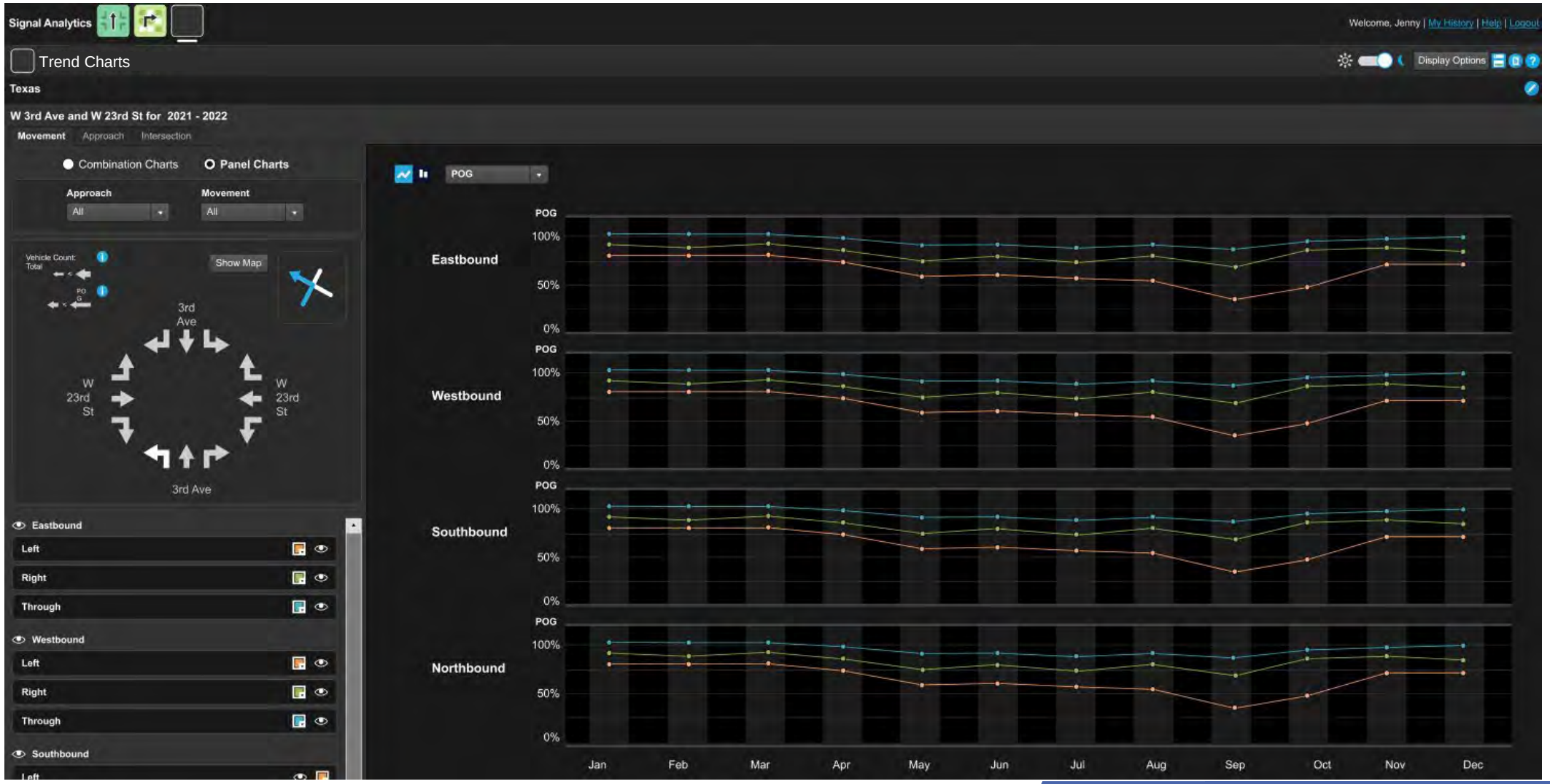
Signals Templates: under development





On the way: Performance Charts

On the way: Trend Charts



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Questions?

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September 4, 2025

RITIS | PROBE DATA ANALYTICS SUITE

User Feedback Session, Q/A & Wrap Up

Michael Pack
Director
UMD CATT Lab

Jesse Buerk
Associate Director, Office of Capital Programs
DVRPC
RITIS User Group Co-chair

We want to hear from you!

- All features and functionality are driven by state/MPO users.
- You are welcome to join any of our User Groups / Working Groups / Listening Sessions to brainstorm/define these new features and functionality.
- You can also type your comments to us today either in the Q&A box or with an email to support@ritis.org

Agency Input – Polling and Open Discussion

Please type your answer under the question in the pop-up box.

Poll –

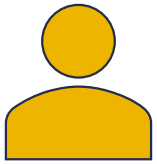
1. Is there any topic you would like to see added to a future User Group meeting?

2. Please provide detailed feedback on new features/capabilities you would like to see built out in the future.

Wrap Up

Jesse Buerk
Associate Director, Office of Capital Programs
DVRPC
RITIS User Group Co-chair

Questions?



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