Santa Fe Metropolitan Planning Organization

Transportation in Santa Fe:

What we know

and

How we know it

Crashes

Safety is the MPO's number one priority in every conversation

NMDOT PM 1 (Safety) 2024 Targets

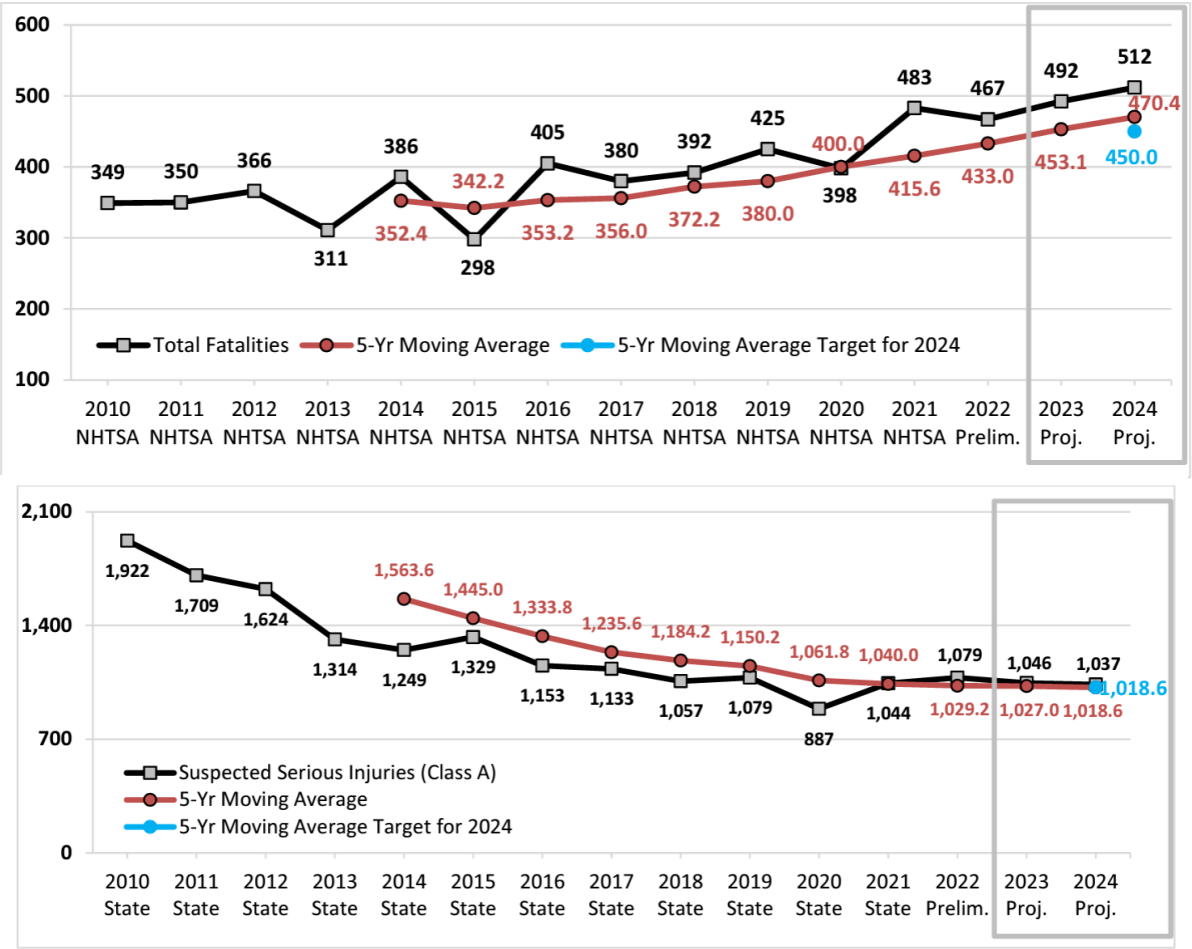


Figure 2 Total Serious Injuries

NMDOT 2024 Target for Serious Injuries: 1,018.6

Santa Fe adopted state "targets" again this year in our performance measurments.

- Trends are Fatalities increasing both in number and rate
  - over-represented by vulnerable users.
- serious injuries are decreasing.
- Increase in vulnerable road-user deaths.

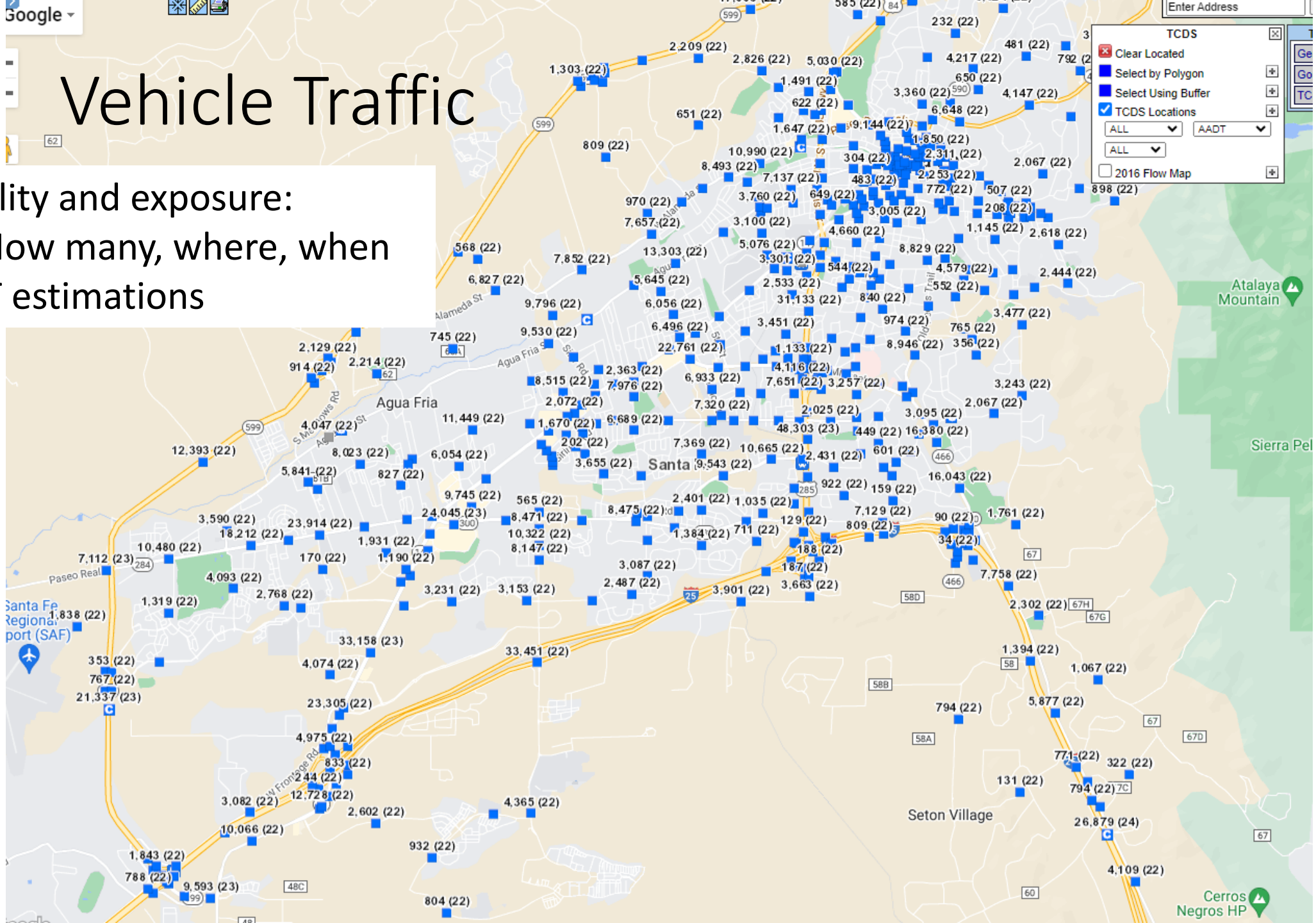
Crashes

- A function of
  - Probability
    - AADT
    - Exposure
  - Human factors:
    - Speed
    - Vehicle type
    - Driver action and attention
  - Infrastructure
    - Design
      - Maintenance

Figure 2. Graphic. Safe System approach (Source: FHWA).

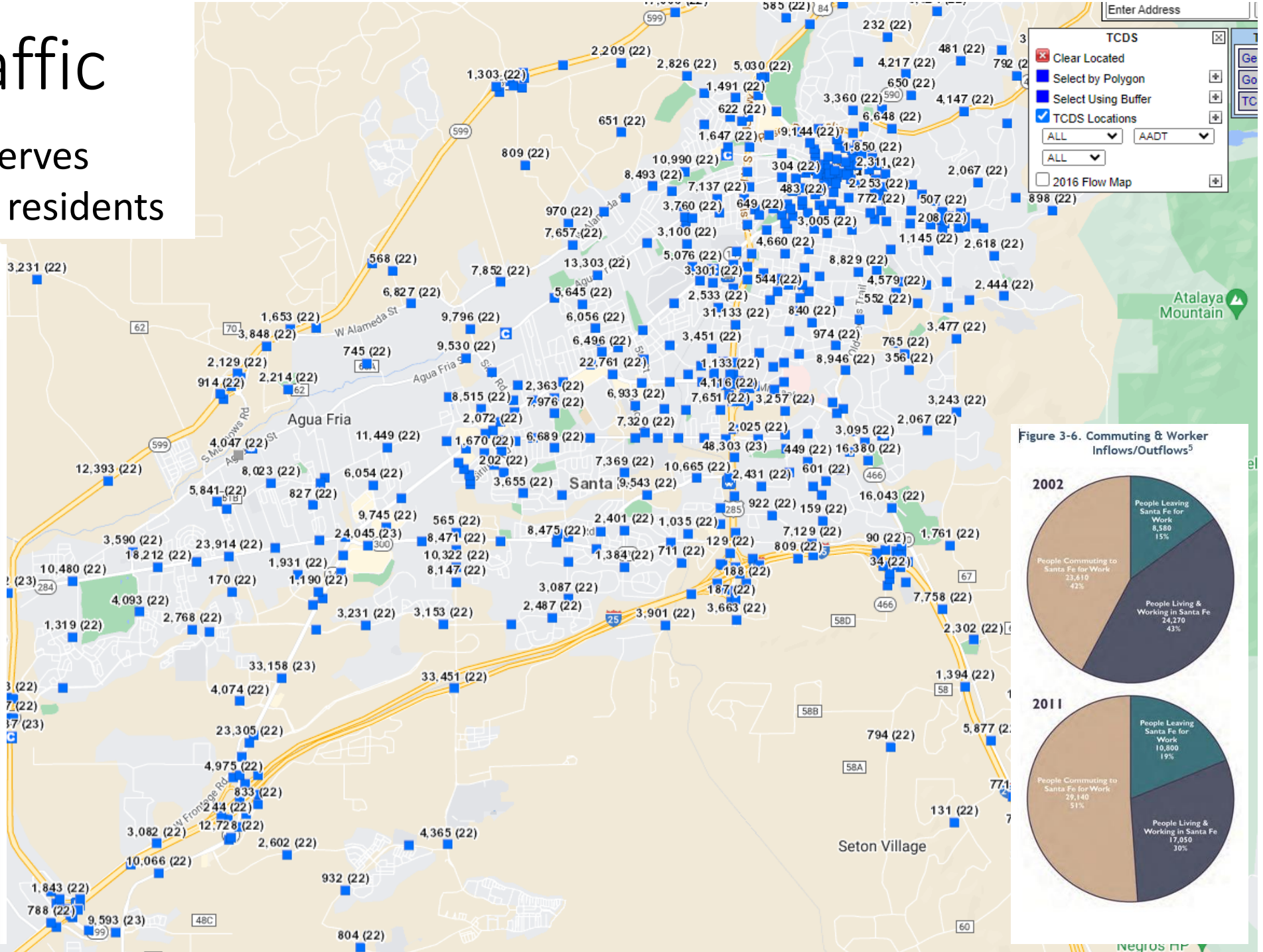
Vehicle Traffic

Probability and exposure:
AADT: How many, where, when
NMDOT estimations



Vehicle Traffic

The system of course serves more than City/county residents



List View | All DIRs | Report Center

Record 1 of 1 Goto Record go

Location ID	22848	MPO ID	
Type	SPOT	HPMS ID	
On NHS	No	On HPMS	
LRS ID	FL4740P	LRS Loc Pt.	0.415985
SF Group	09	Route Type	Two-Way Roadway
AF Group	09	Route	FL4740
GF Group	09	Active	Yes
Class Dist Grp	09	Category	
Seas Clss Grp	Statewide		
WIM Group	FC-NOT-1		
QC Group	Default		
Fnct'l Class	(4) Minor Arterial	Milepost	
Located On	SILER RD		
Loc On Alias	JCT. RUFINA		

More Detail

STATION DATA

Directions: 2-WAY NEG POS

AADT

	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2022	14,675	1,262	9	51	14,260 (97%)	415 (3%)	
	2021	13,001[3]		9	53	12,260 (94%)	741 (6%)	Grown from 2020
	2020	11,179[3]		9	53	10,396 (93%)	783 (7%)	Grown from 2019
	2019	13,567[3]		9	53	12,997 (96%)	570 (4%)	Grown from 2018
	2018	13,621[3]				13,143 (96%)	478 (4%)	Grown from 2017

<< < > >> 1-5 of 13

Travel Demand Model

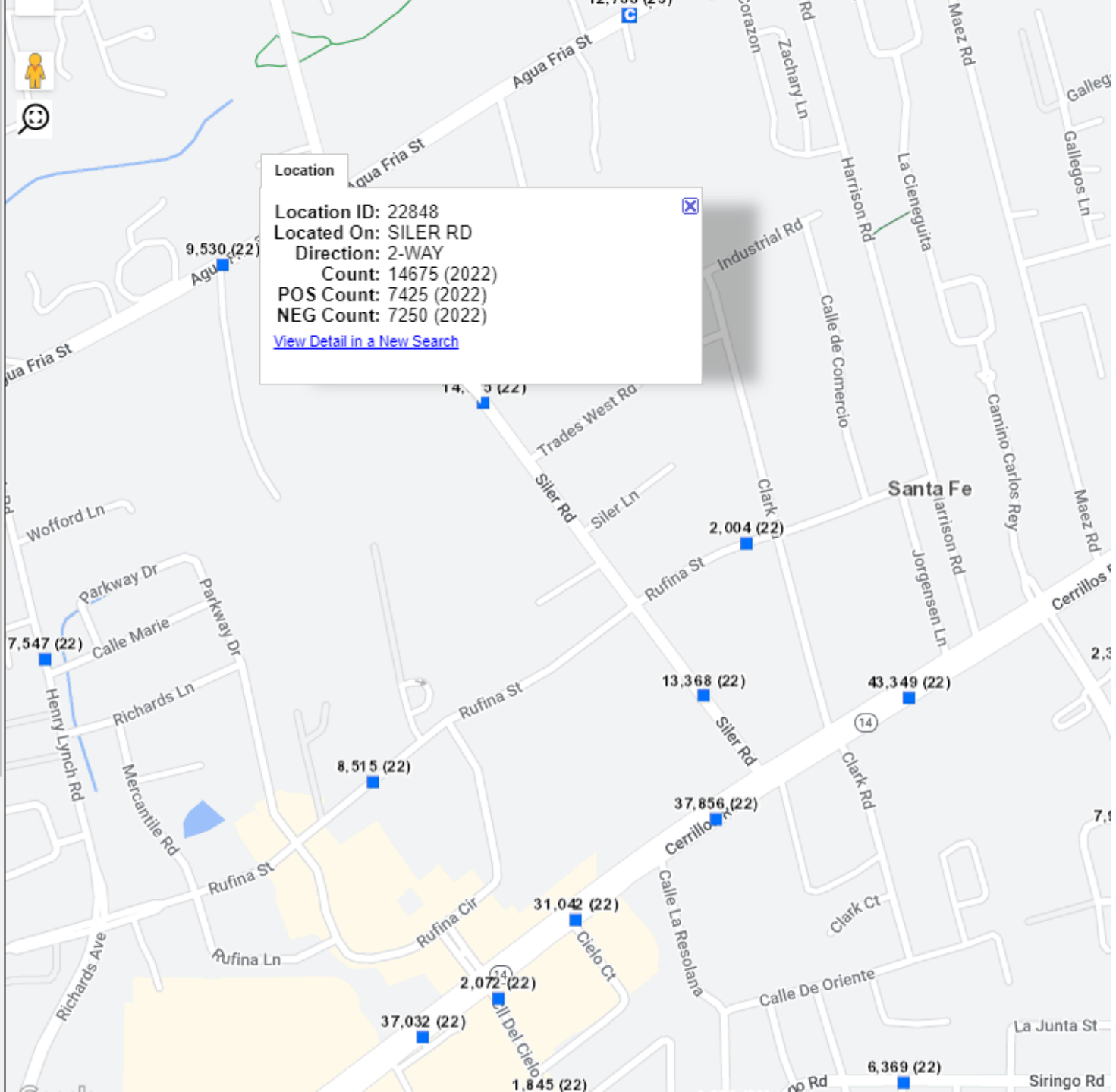
	Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV

VOLUME COUNT

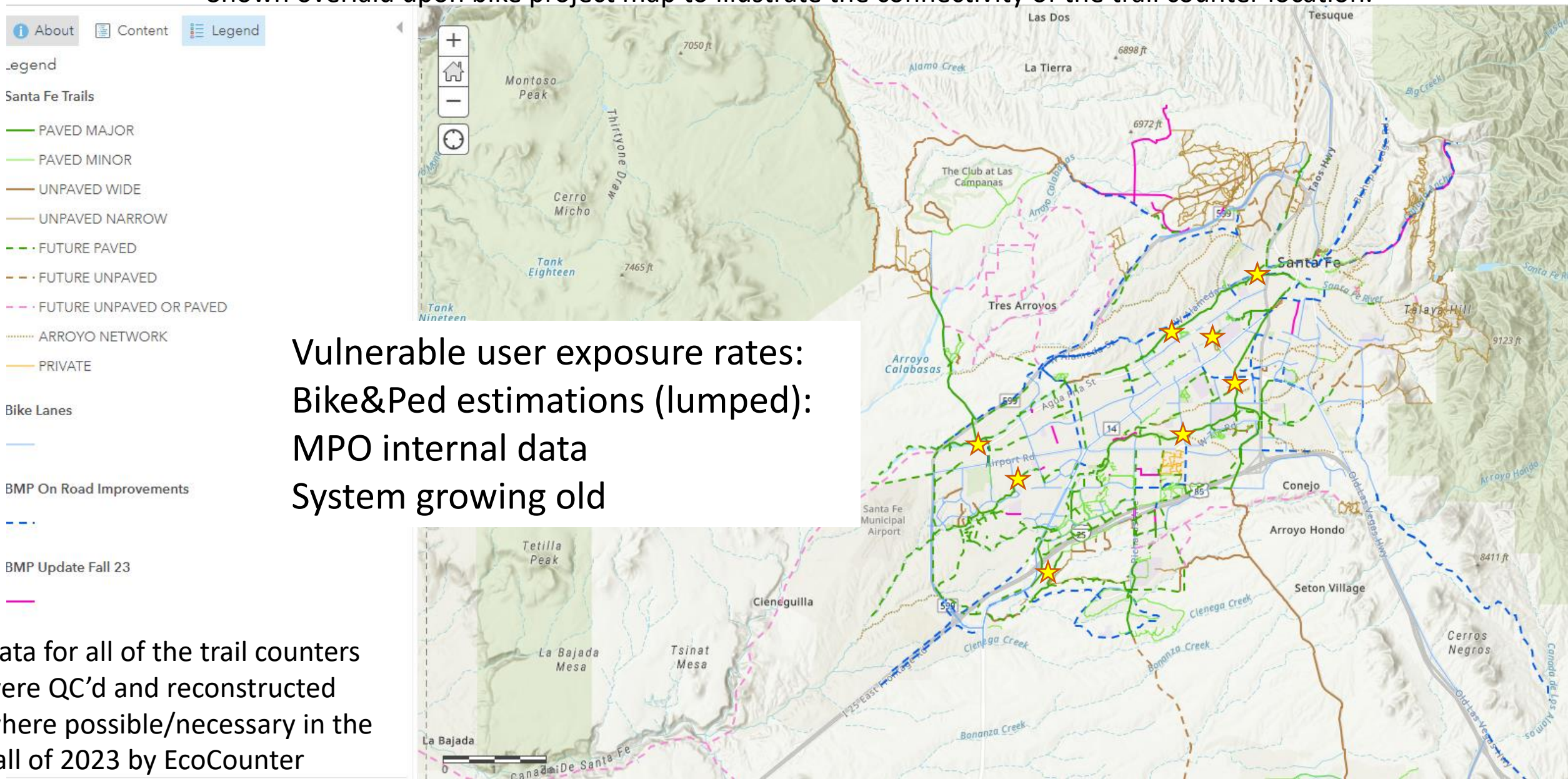
	Date	Int	Total
	Wed 6/8/2022	15	15,152
	Tue 6/7/2022	15	14,860

VOLUME TREND

Year	Annual Growth
2022	13%
2021	16%
2020	-18%
2019	0%

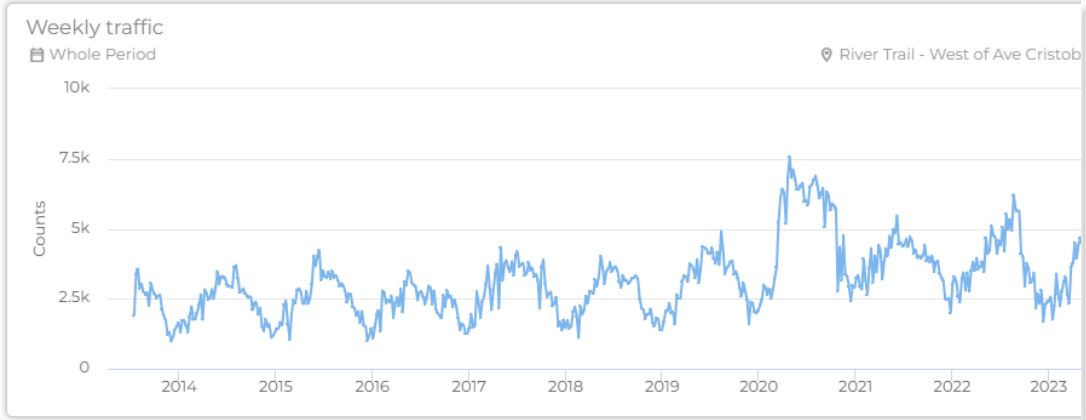


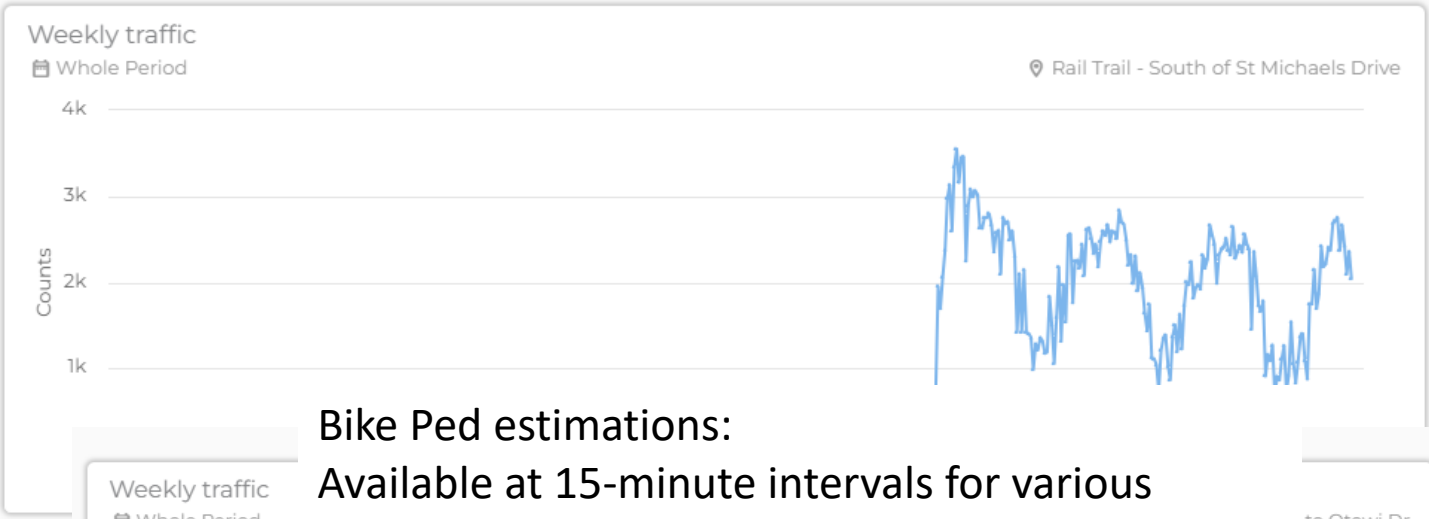
Current Approximate Locations of working Ped/Bike Counters
Shown overlaid upon bike project map to illustrate the connectivity of the trail counter location.



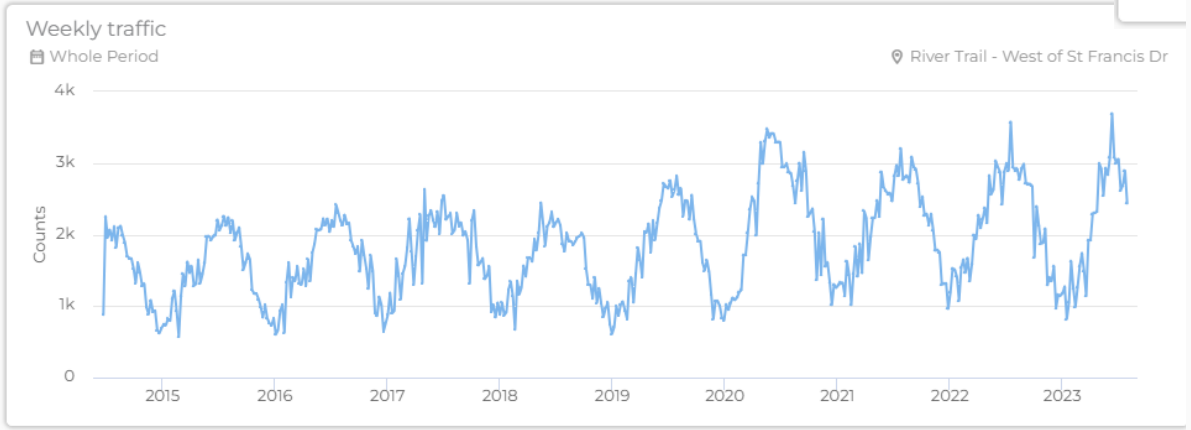
Vulnerable user exposure rates:
Bike&Ped estimations (lumped):
MPO internal data
System growing old

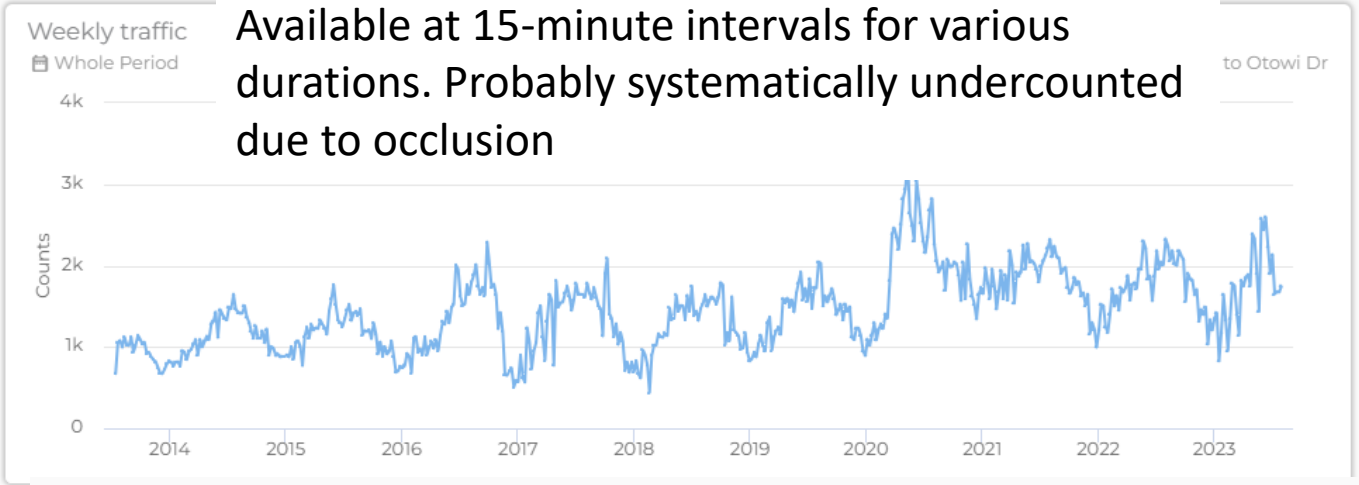
Data for all of the trail counters were QC'd and reconstructed where possible/necessary in the Fall of 2023 by EcoCounter

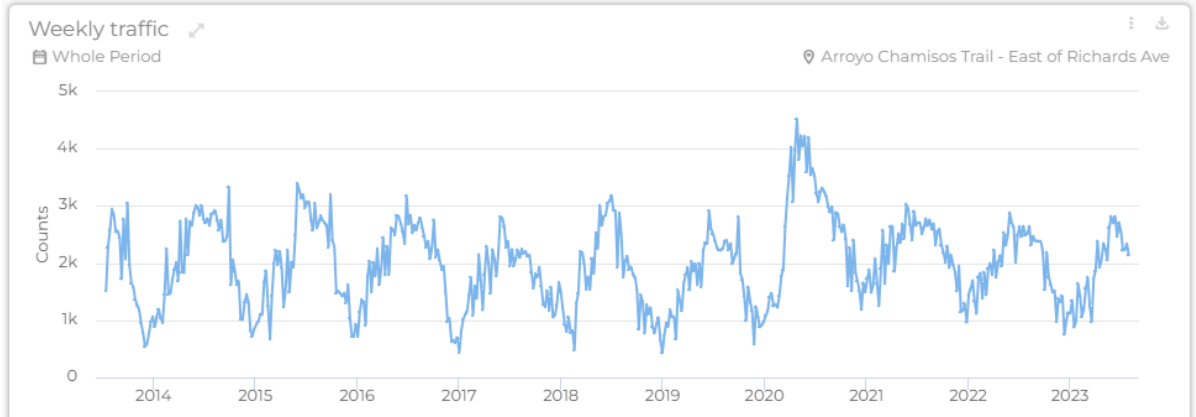




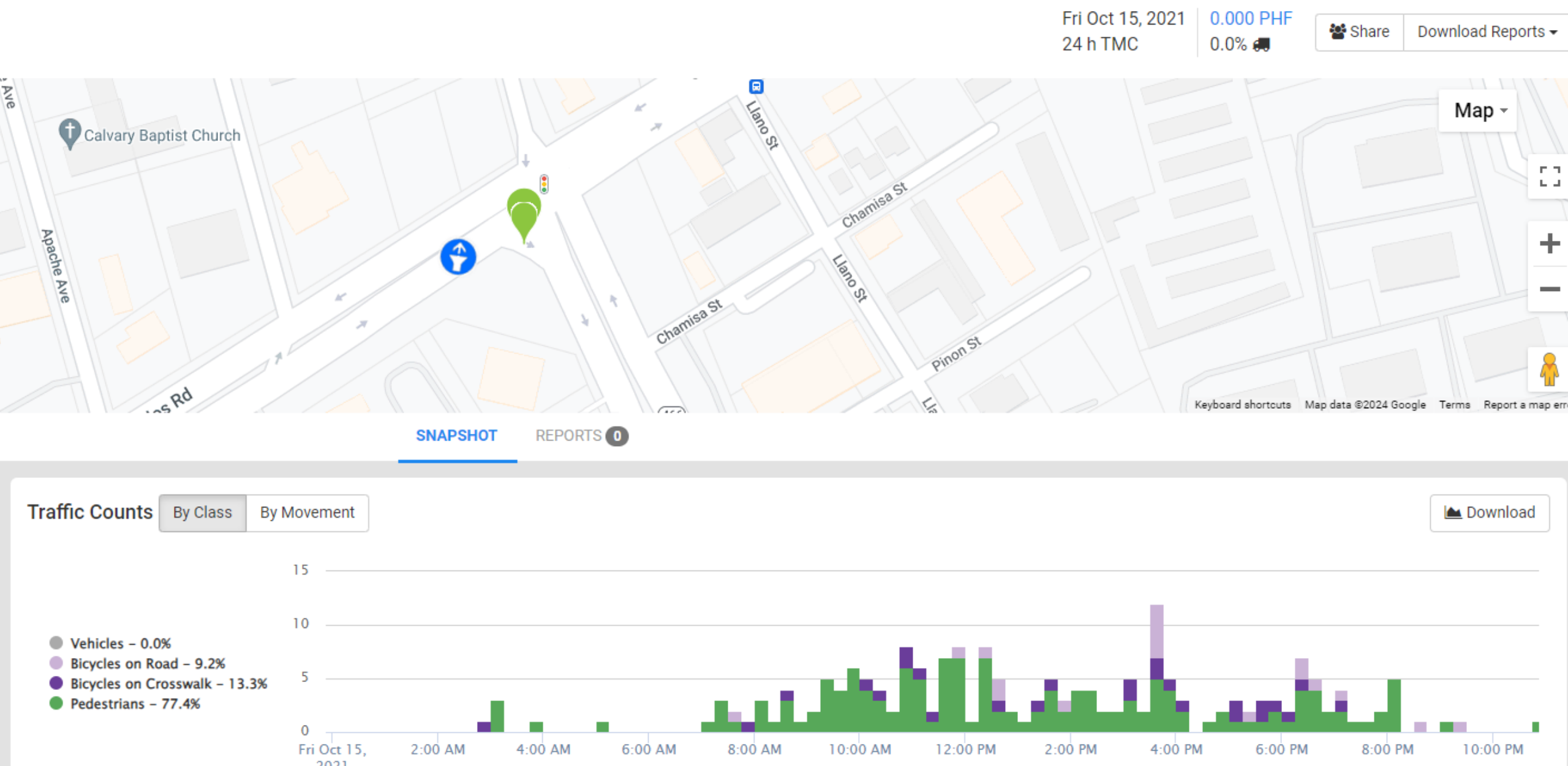
Bike Ped estimations:
Available at 15-minute intervals for various durations. Probably systematically undercounted due to occlusion

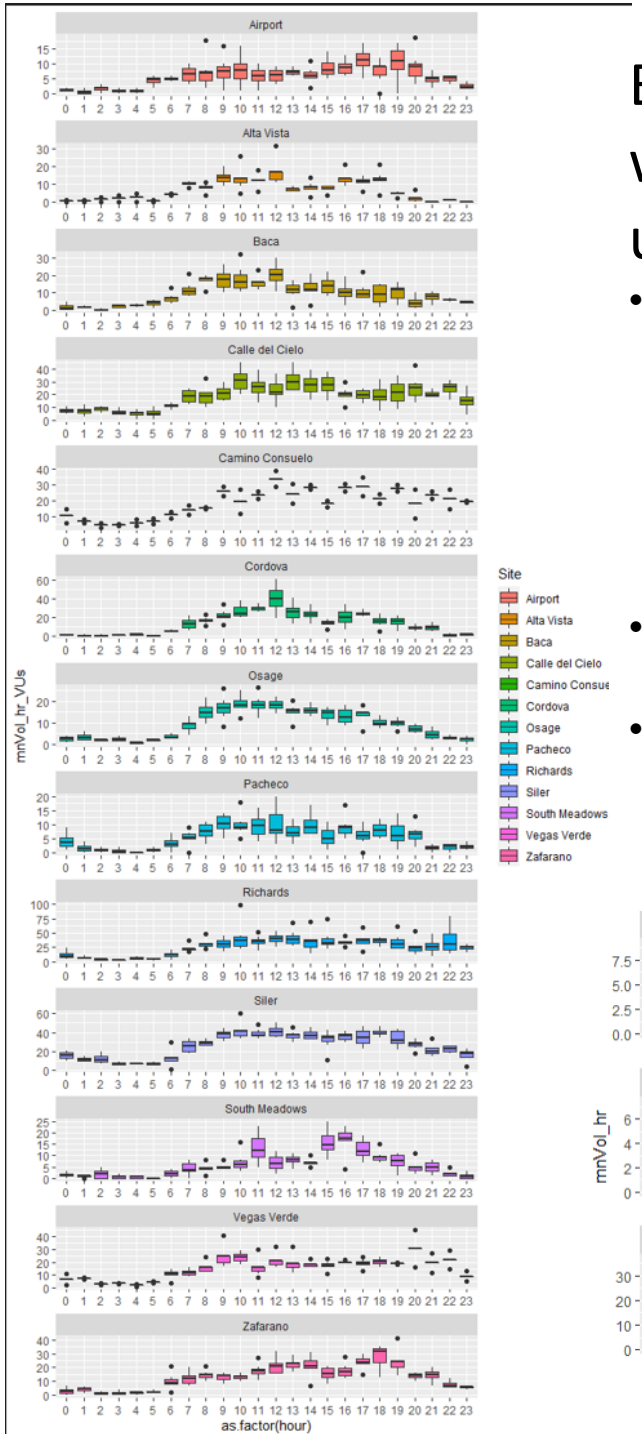






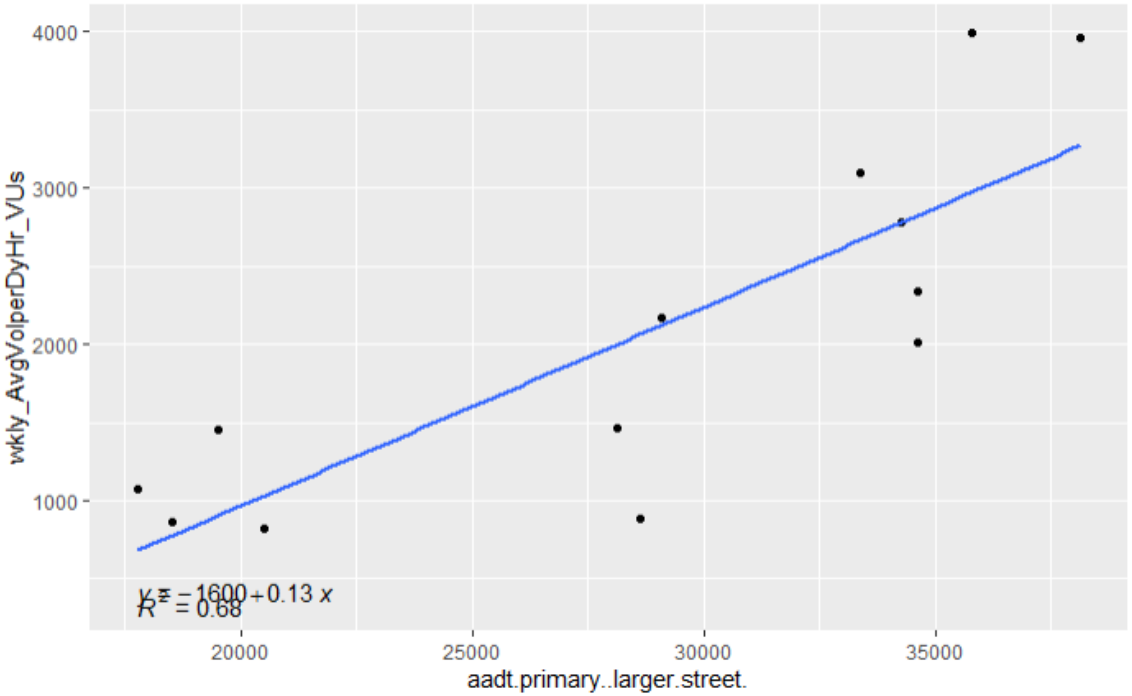
Spot data: MPO owns two cameras
-count analysis is extra and costs are dependent on type of count and duration.

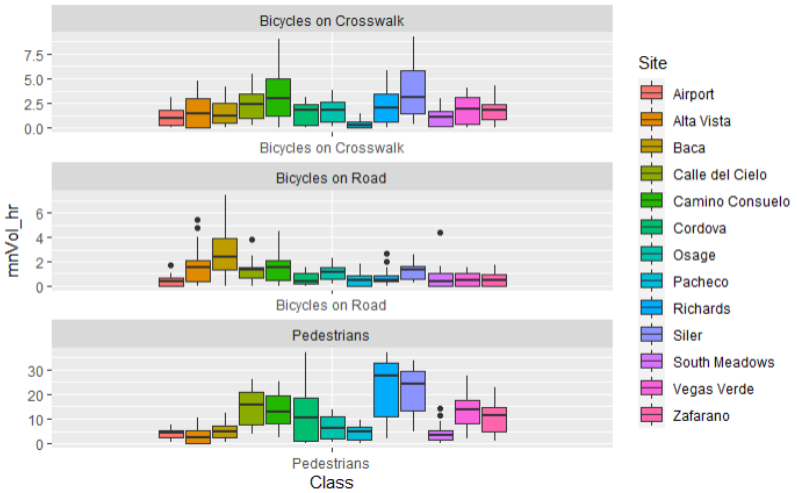


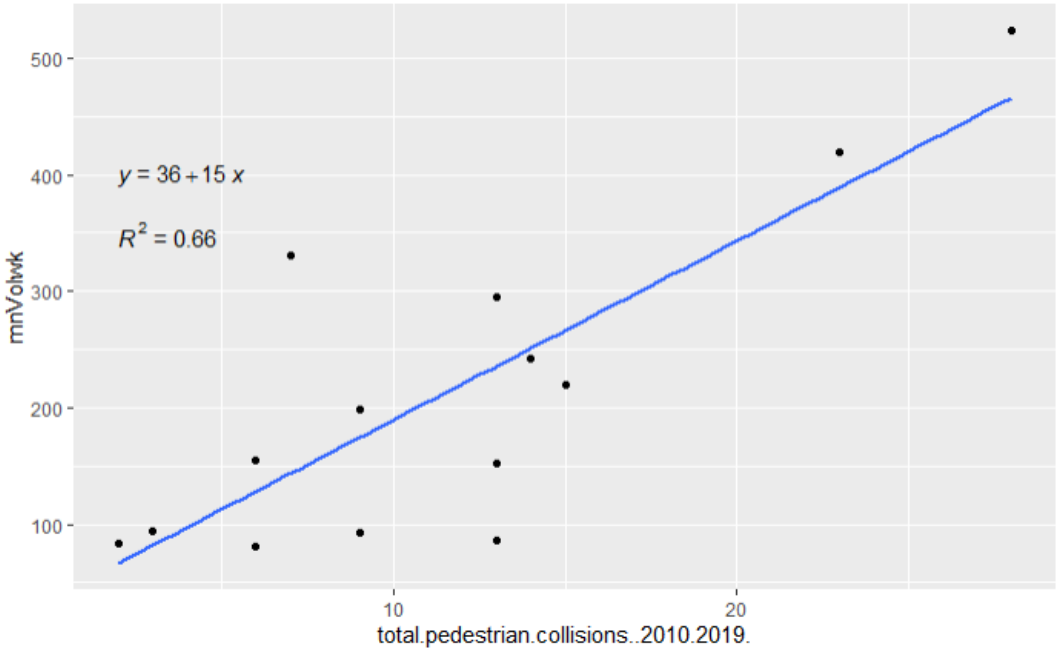


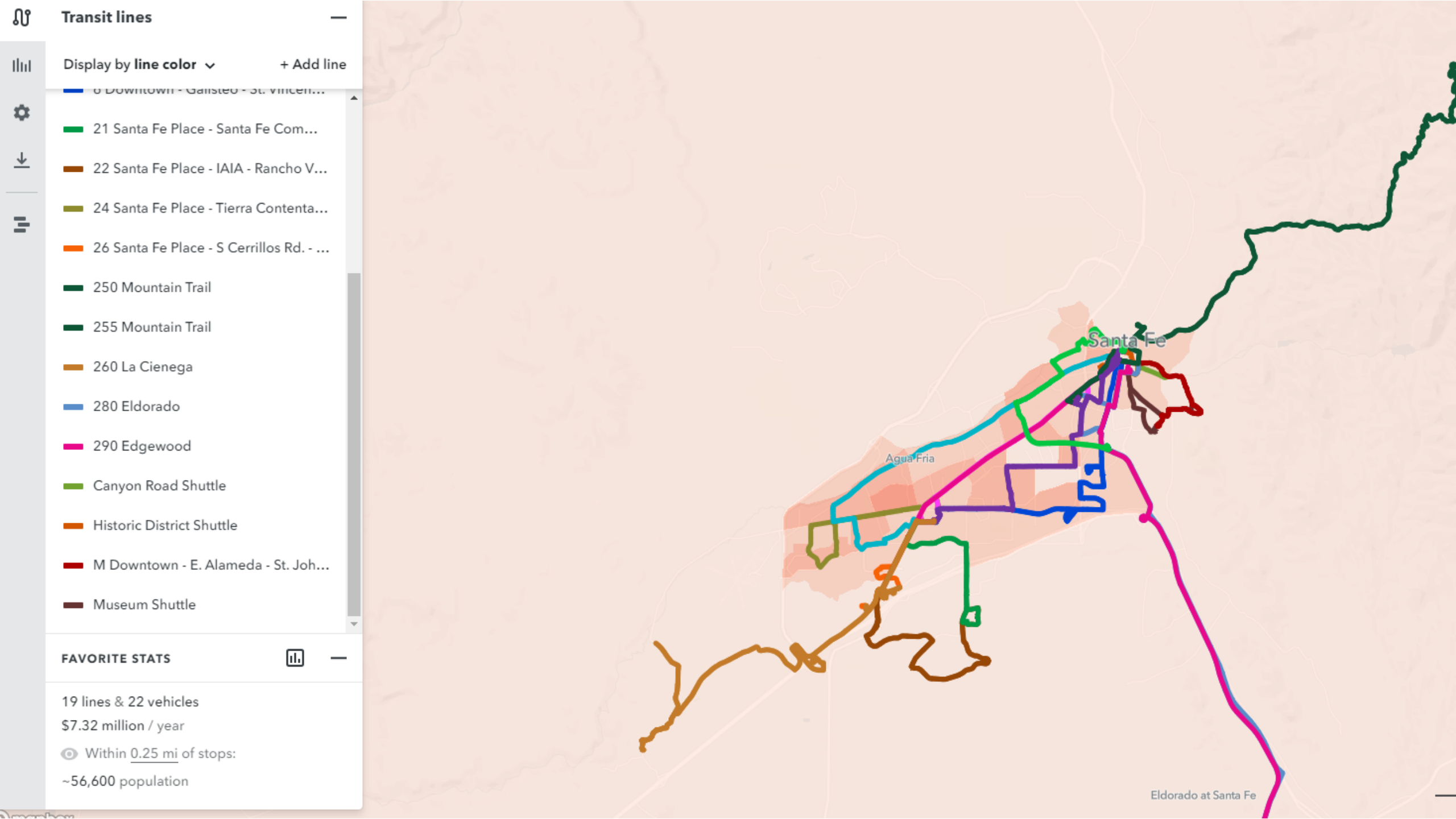
Because of similar cameras, we know that vulnerable user's

- mirror vehicle use in timing and location along Cerrillos.
  - Does not seem to be related to zoning or a number of other factors such as absolute distance to pedestrian generators such as schools and grocery stores
- Pedestrian/bike incidents follow pedestrian exposure
- Bicyclist use the sidewalk as much OR more while traveling on Cerrillos

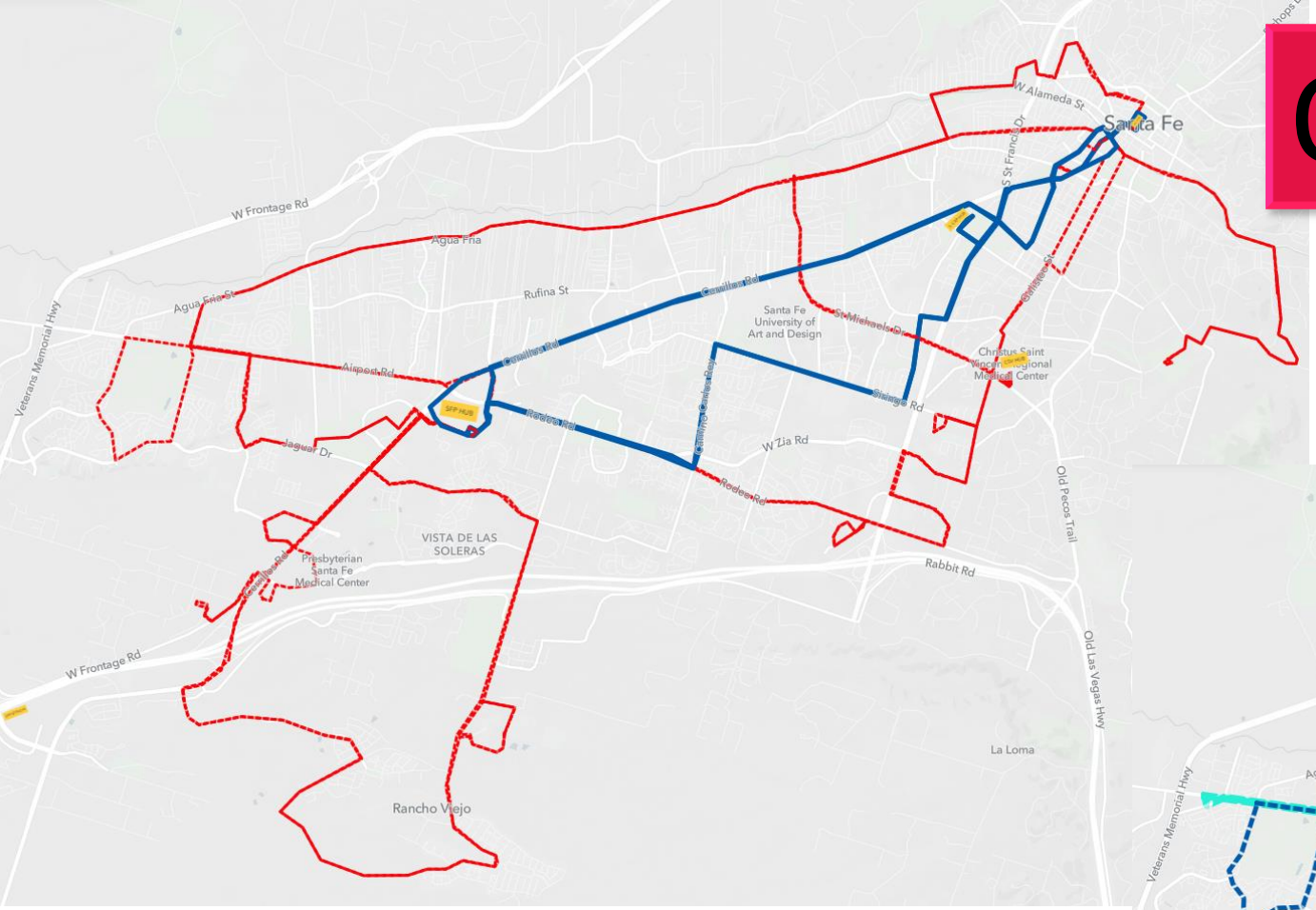




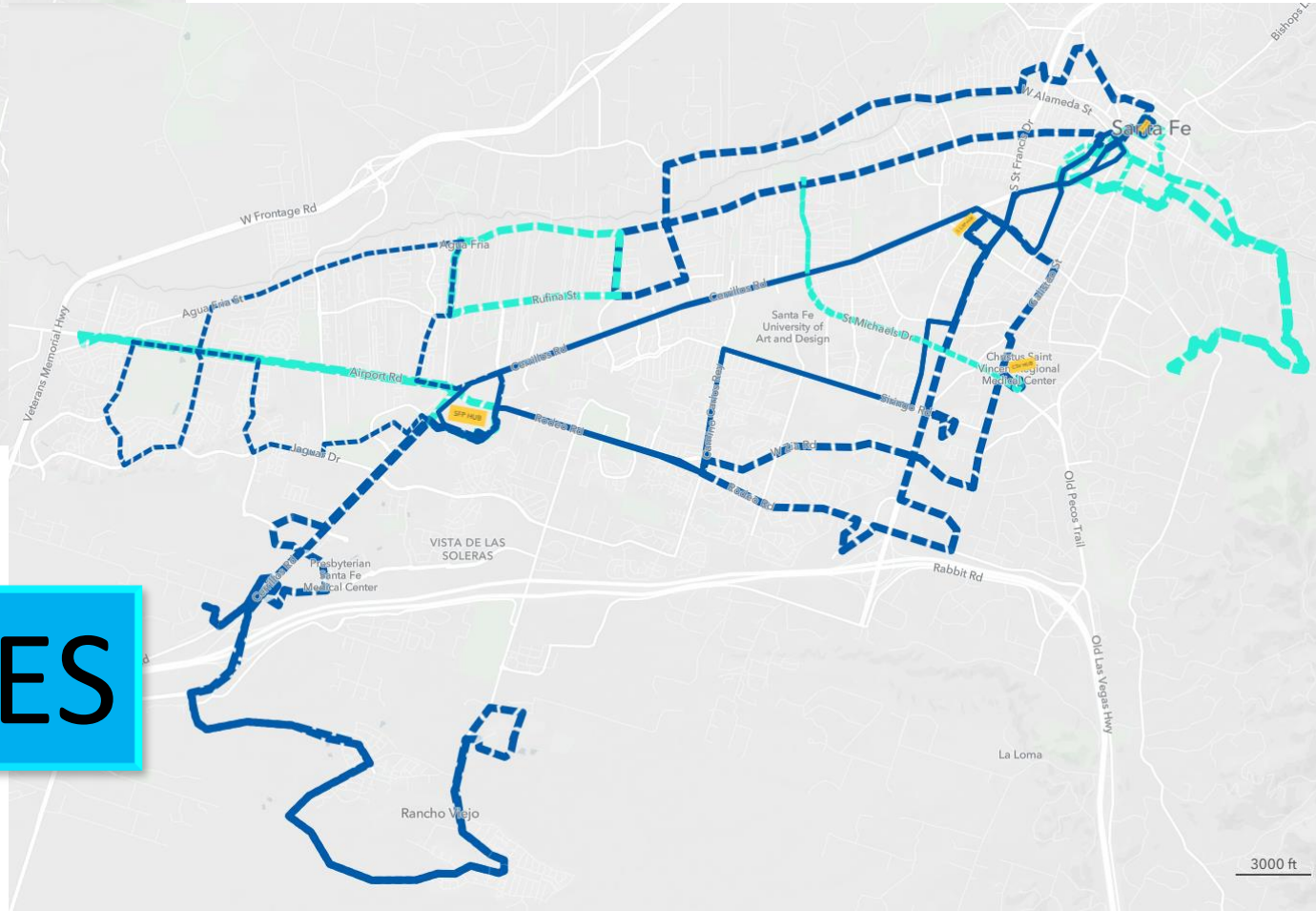



Transit lines
Display by line color
+ Add line
21 Santa Fe Place - Santa Fe Com...
22 Santa Fe Place - IAIA - Rancho V...
24 Santa Fe Place - Tierra Contenta...
26 Santa Fe Place - S Cerrillos Rd. - ...
250 Mountain Trail
255 Mountain Trail
260 La Cienega
280 Eldorado
290 Edgewood
Canyon Road Shuttle
Historic District Shuttle
M Downtown - E. Alameda - St. Joh...
Museum Shuttle
FAVORITE STATS
19 lines & 22 vehicles
$7.32 million / year
Within 0.25 mi of stops:
~56,600 population
Santa Fe
Agua Fria
Eldorado at Santa Fe

ORIGINAL ROUTES

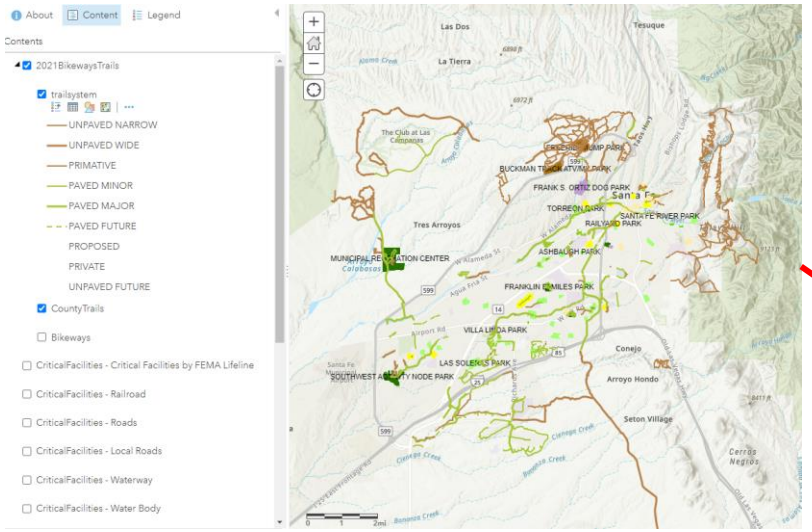


REDEFINED ROUTES

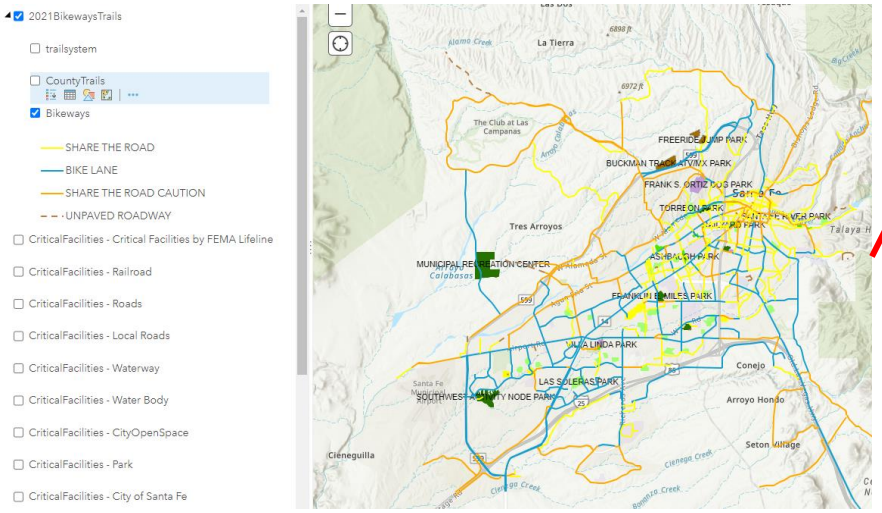


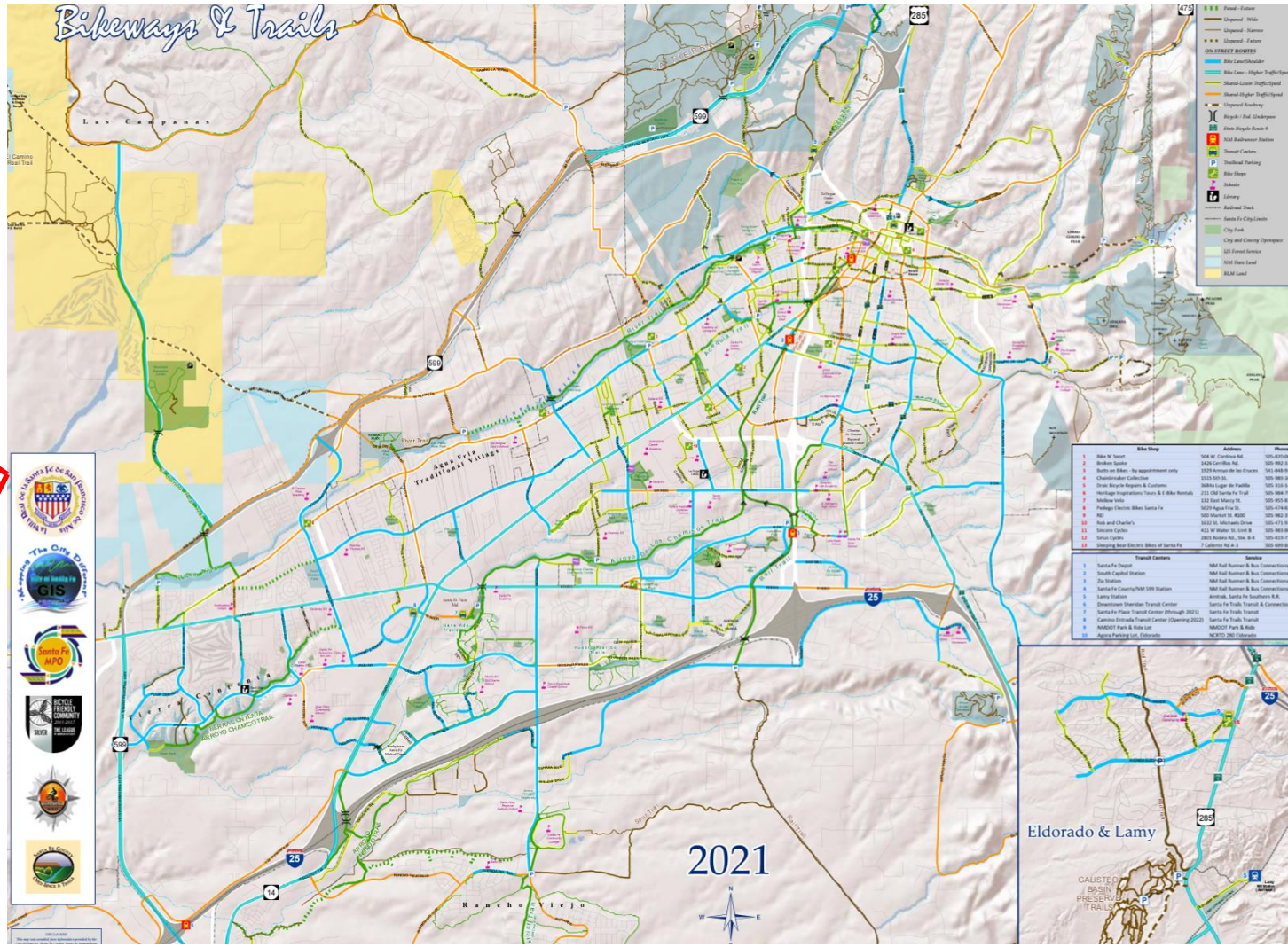
CITY OF SANTA FE
Land of Enchantment, Land of Opportunity

Off-road Ped/Bike Routes

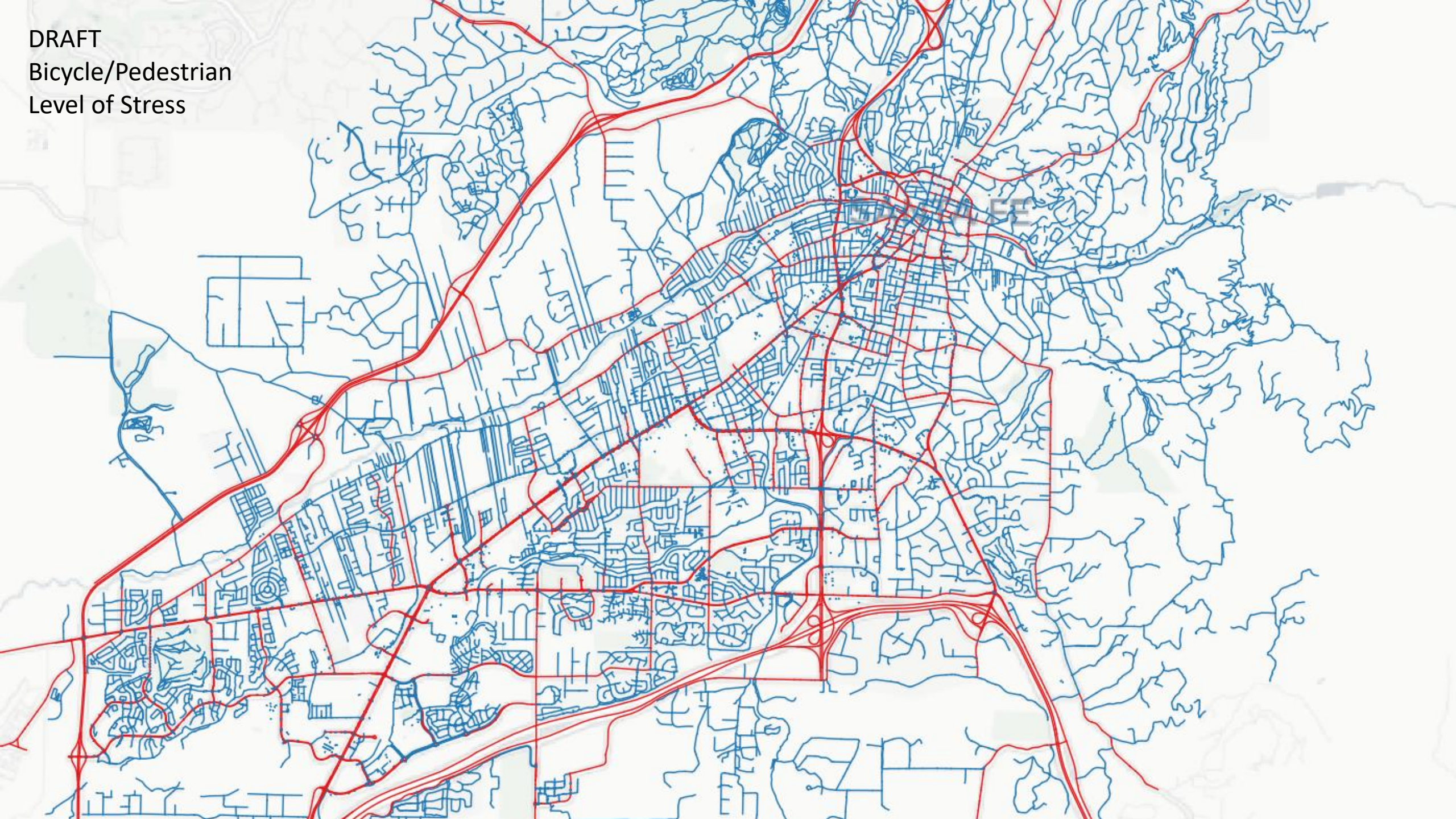


On road Ped/Bike Routes

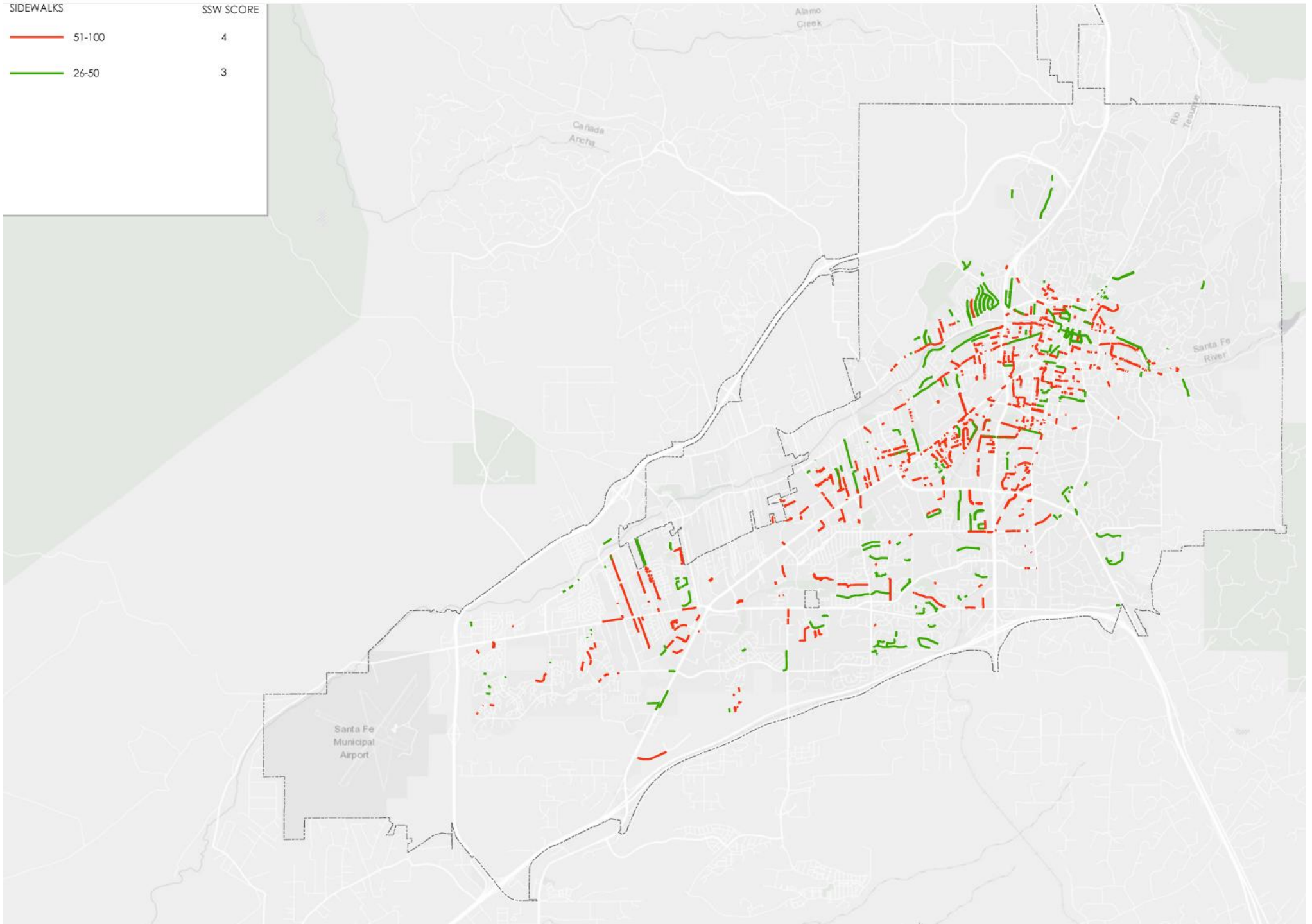




DRAFT
Bicycle/Pedestrian
Level of Stress



- Inventory of assets and road characteristics
- 2016 work shows the number of streets without sidewalk data



Search point of interest
85th Percentile Speed (M-F)
Below
Normal
Above
Speed Data:
Urban SDK
Santa Fe Readiness Center AASF
Santa Fe Regional Airport
mapbox

Speed Data:
Available monthly starting in June 2022

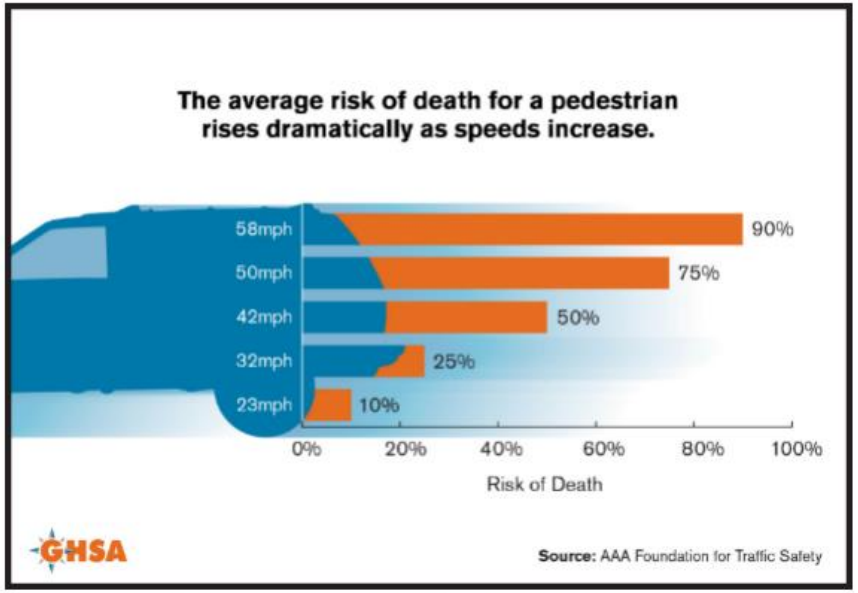
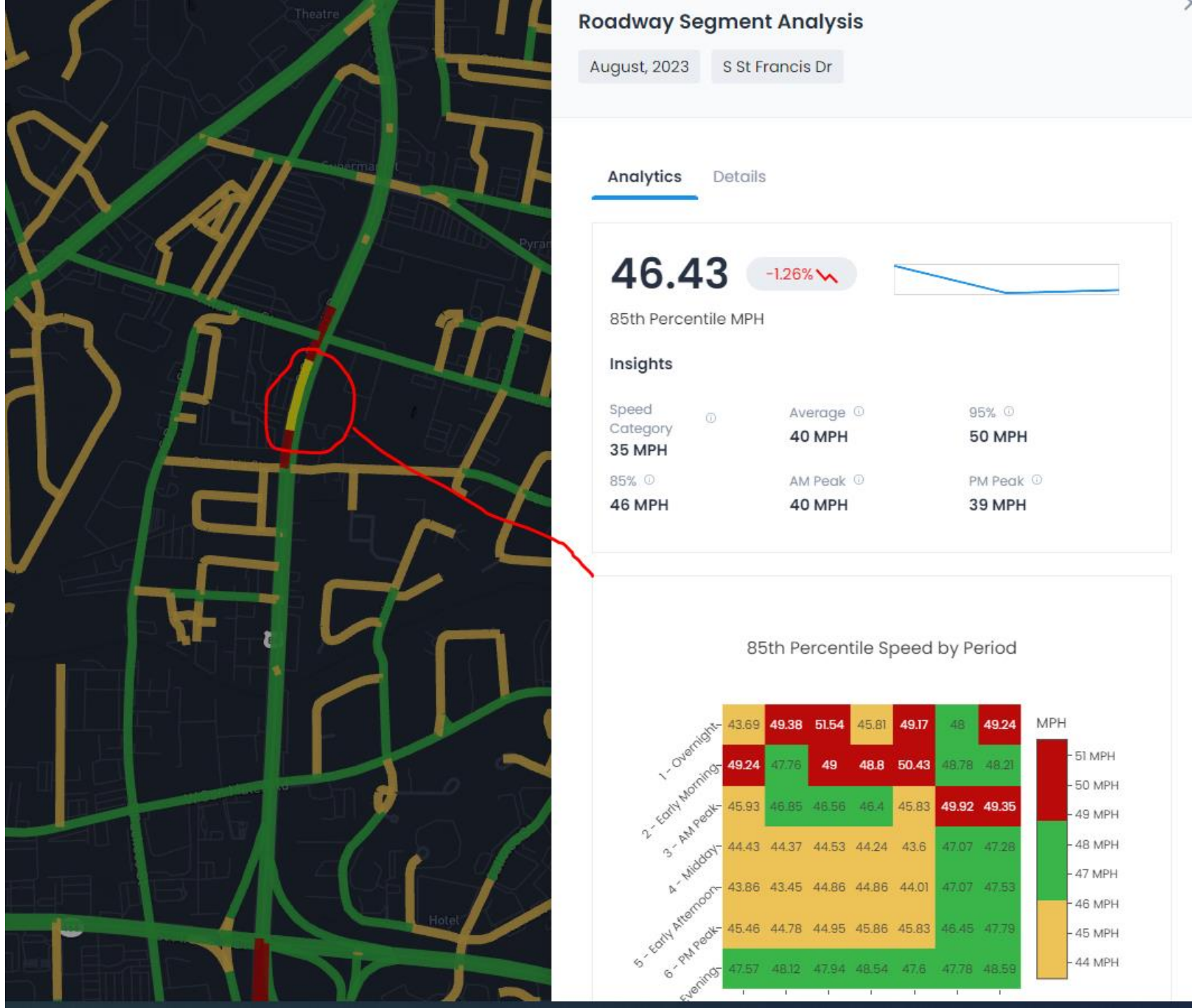


Figure 3. Graphic. Relationship between pedestrian crash risk and speed (Source: GHSA and AAA).

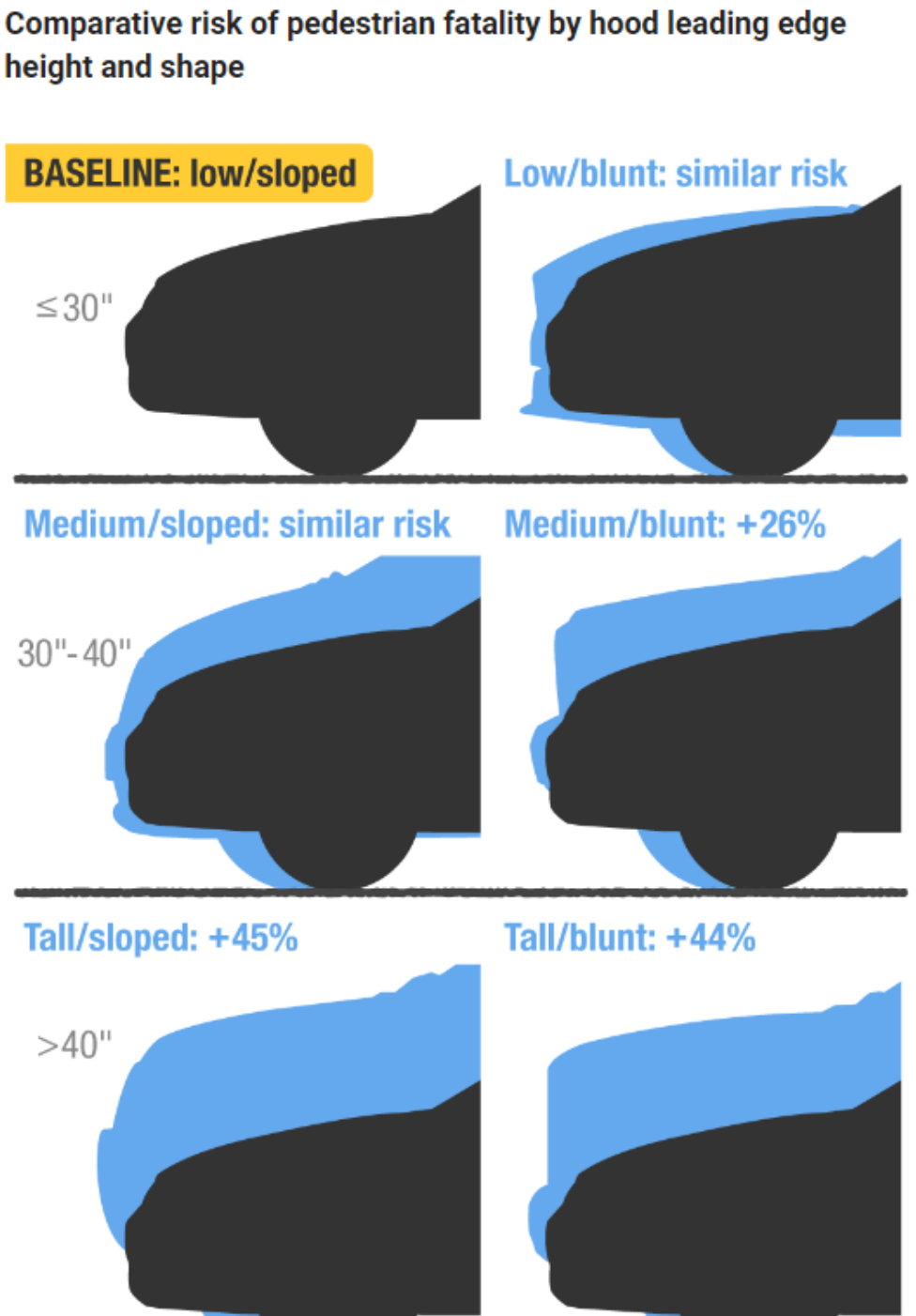


- Vehicle Type:

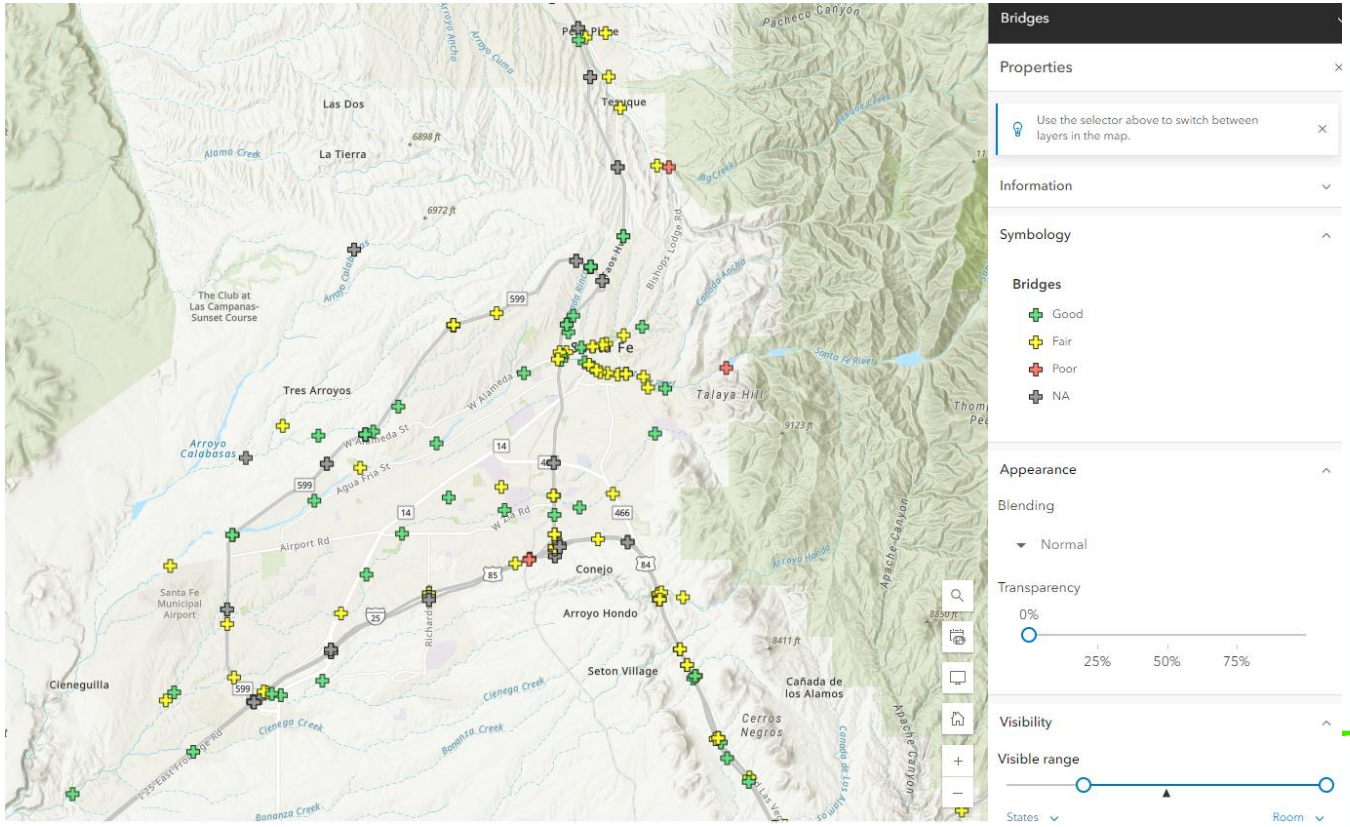
“Whatever their nose shape, pickups, SUVs and vans with a hood height greater than 40 inches are about 45 percent more likely to cause fatalities in **pedestrian** crashes than cars and other vehicles with a hood height of 30 inches or less and a sloping profile, an IIHS study of nearly 18,000 pedestrian crashes found. However, among vehicles with hood heights between 30 and 40 inches, a blunt, or more vertical, front end increases the risk to pedestrians.”

- **Insurance Institute for Highway Safety (IIHS)**

https://www.iihs.org/news/detail/vehicles-with-higher-more-vertical-front-ends-pose-greater-risk-to-pedestrians



Bridge and Pavement Condition



https://www.arcgis.com/home/item.html?id=111e5c2bc2854a8f977b0747b25b1db5

NMDOT 2018-2023 pavement data

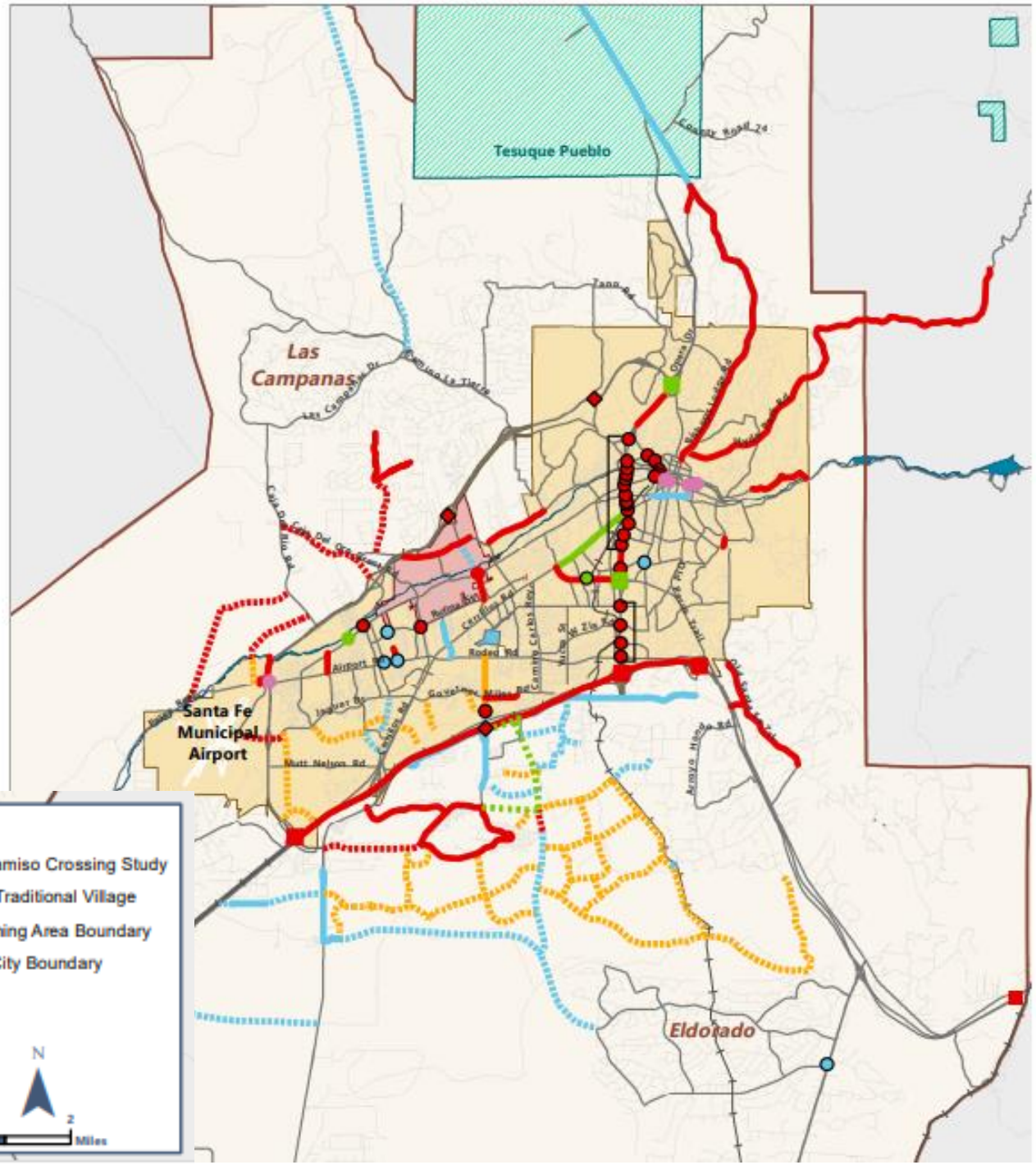
What is our future?

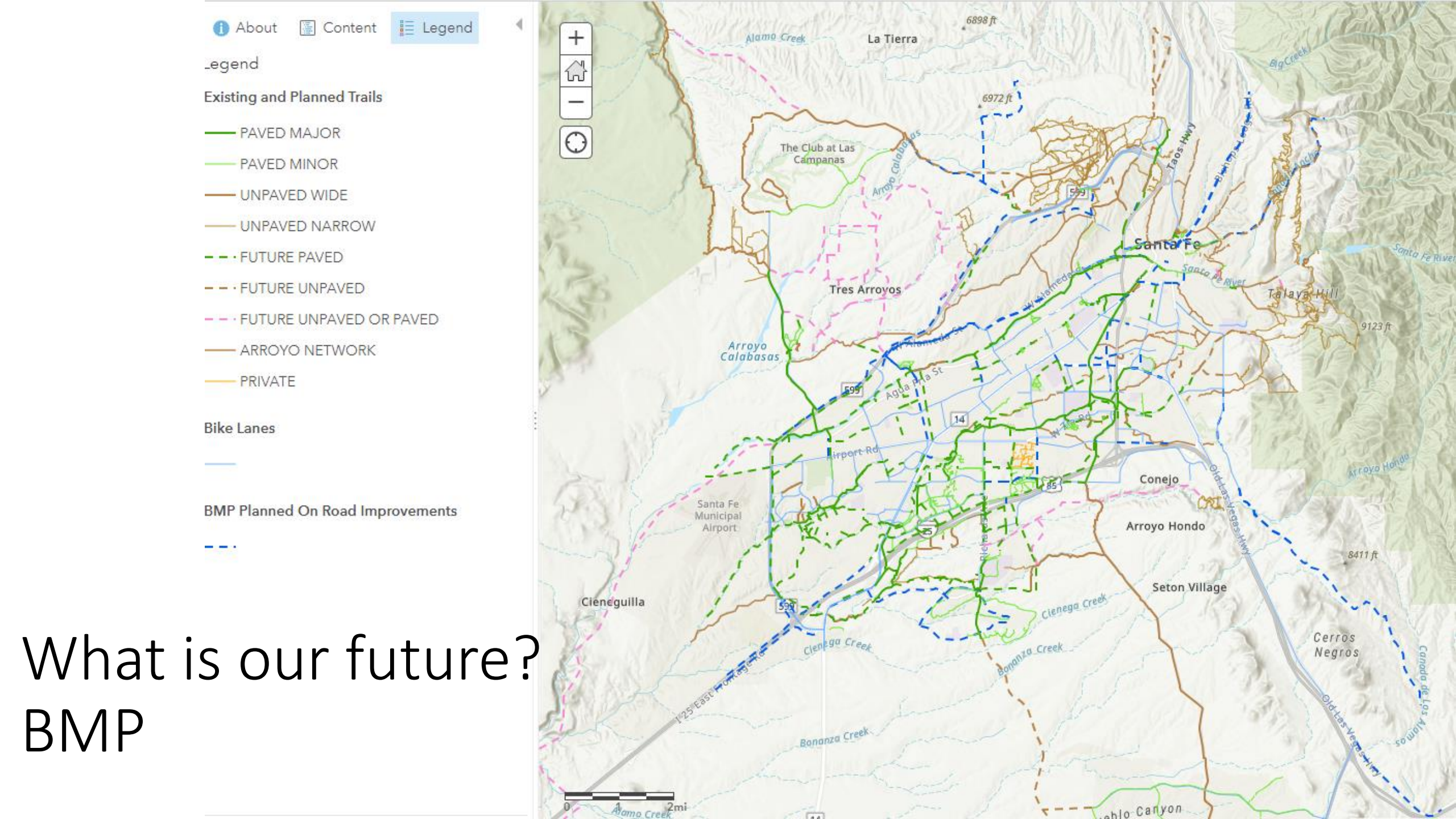
The Travel Demand Model:
showing the number of peak trips in 2050 that take ~ 5 minutes or less

Understanding the assumptions of a model like this are key to its intelligent use.

What is our future?

Future Road Map in the
MTP



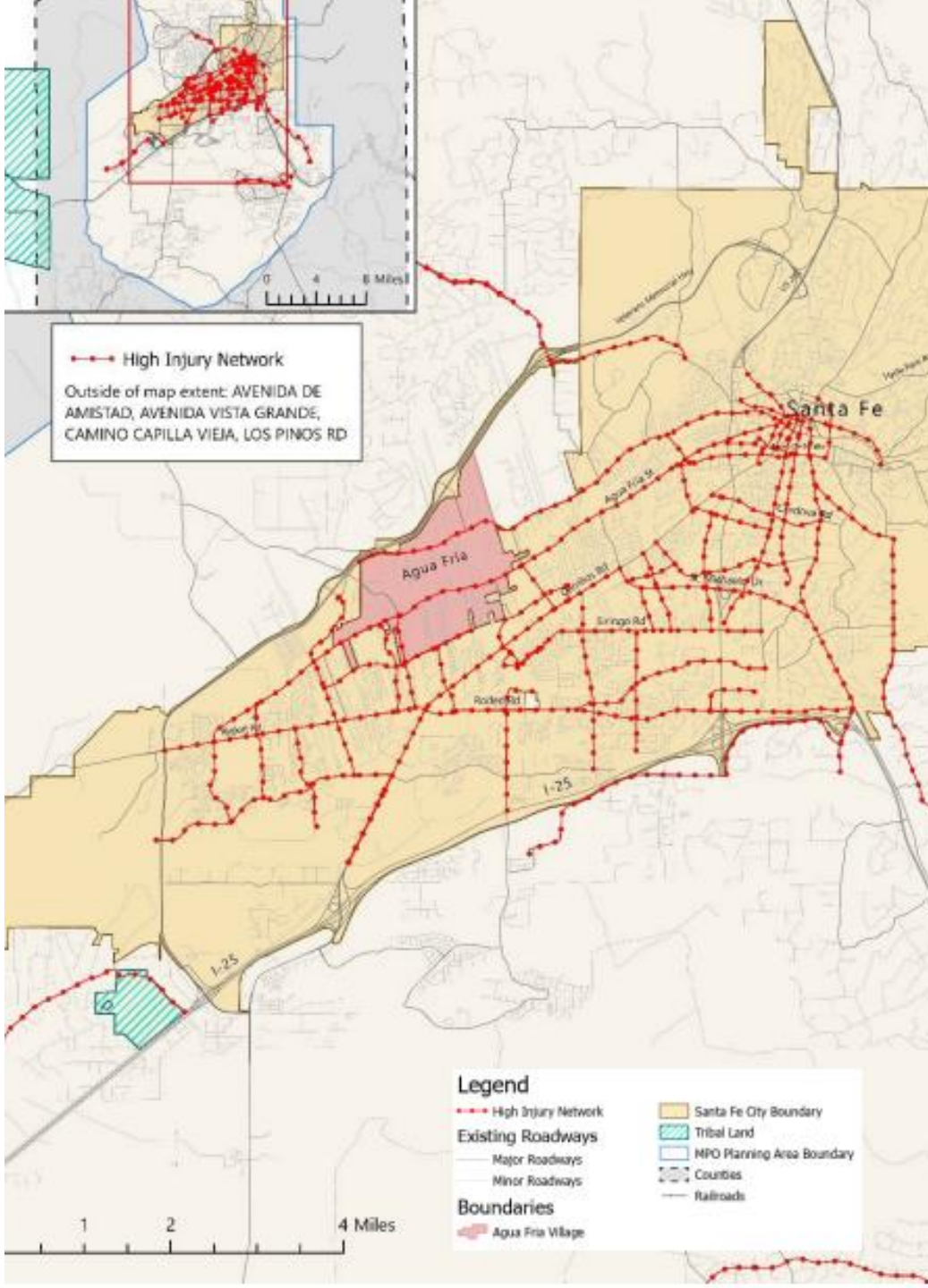


What is our future? BMP

LOCAL ROAD SAFETY PLAN

This document is poised to become a guiding plan for your future roadway network.

Santa Fe's High Injury Network HIN



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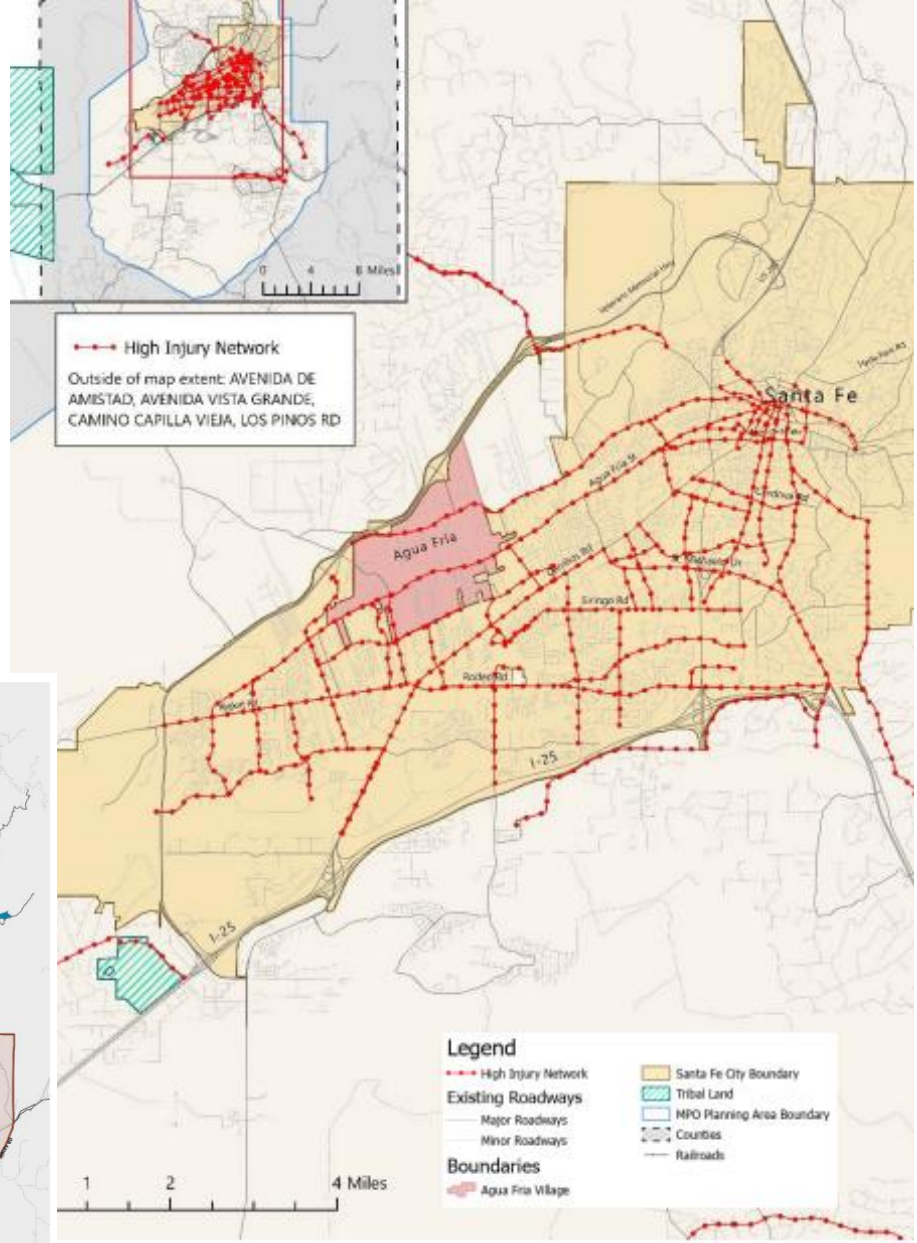
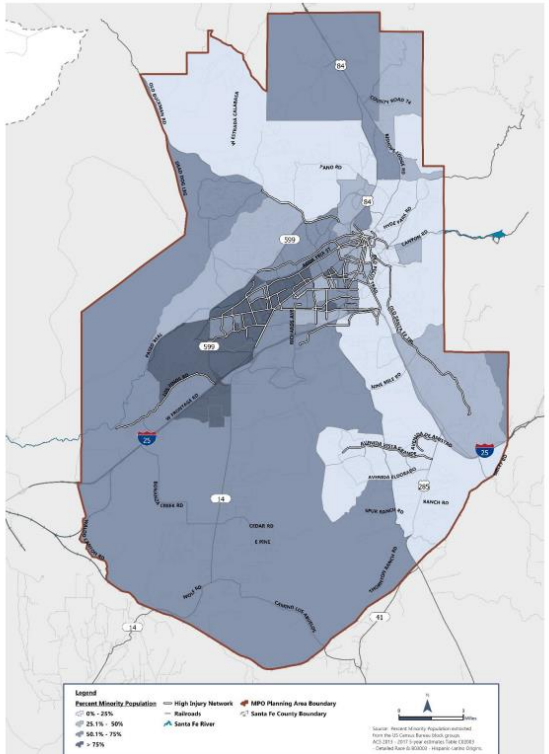
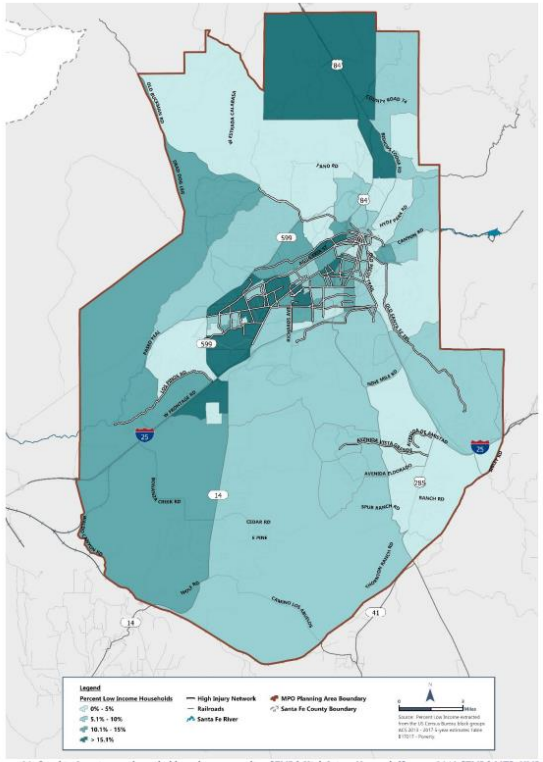


Equity Factors

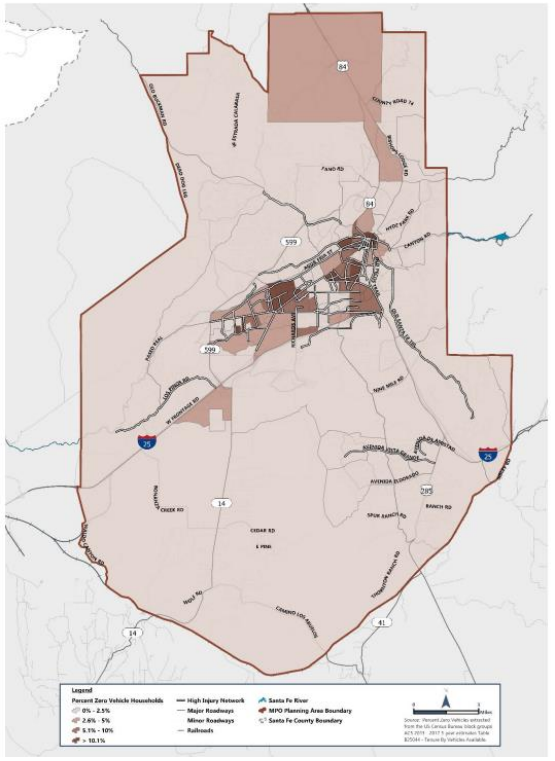
% Minority



% Low Income



% 0 Vehicle



- Roadway Departure
- Distracted Driving
- Impaired Driving
- Speeding
- Intersections
- Older Drivers
- Younger Drivers
- Pedestrians
- Bicyclists

Figure 23. Graphic. Santa Fe Metropolitan Region LRSP emphasis areas (Source: FHWA, 2022).

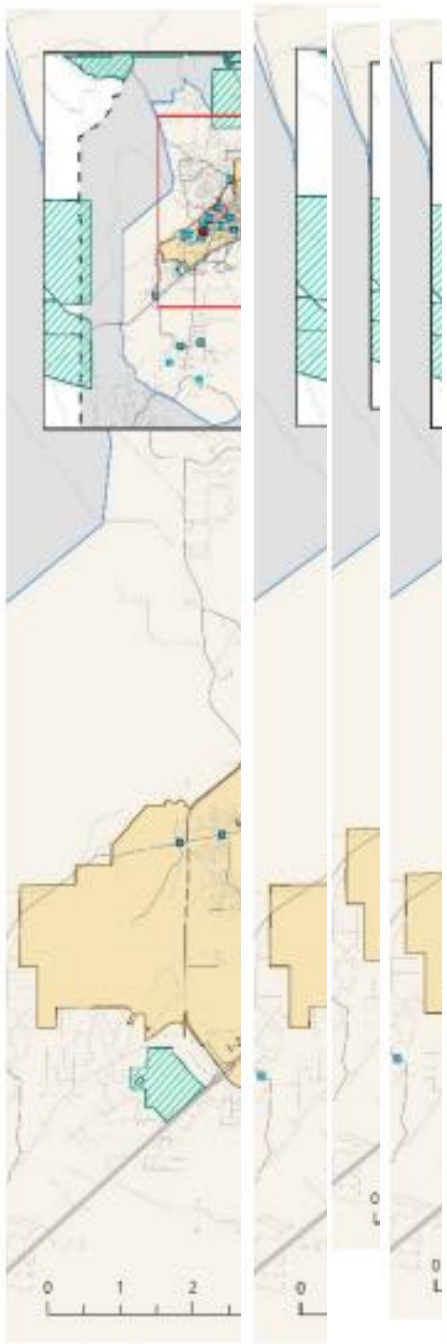
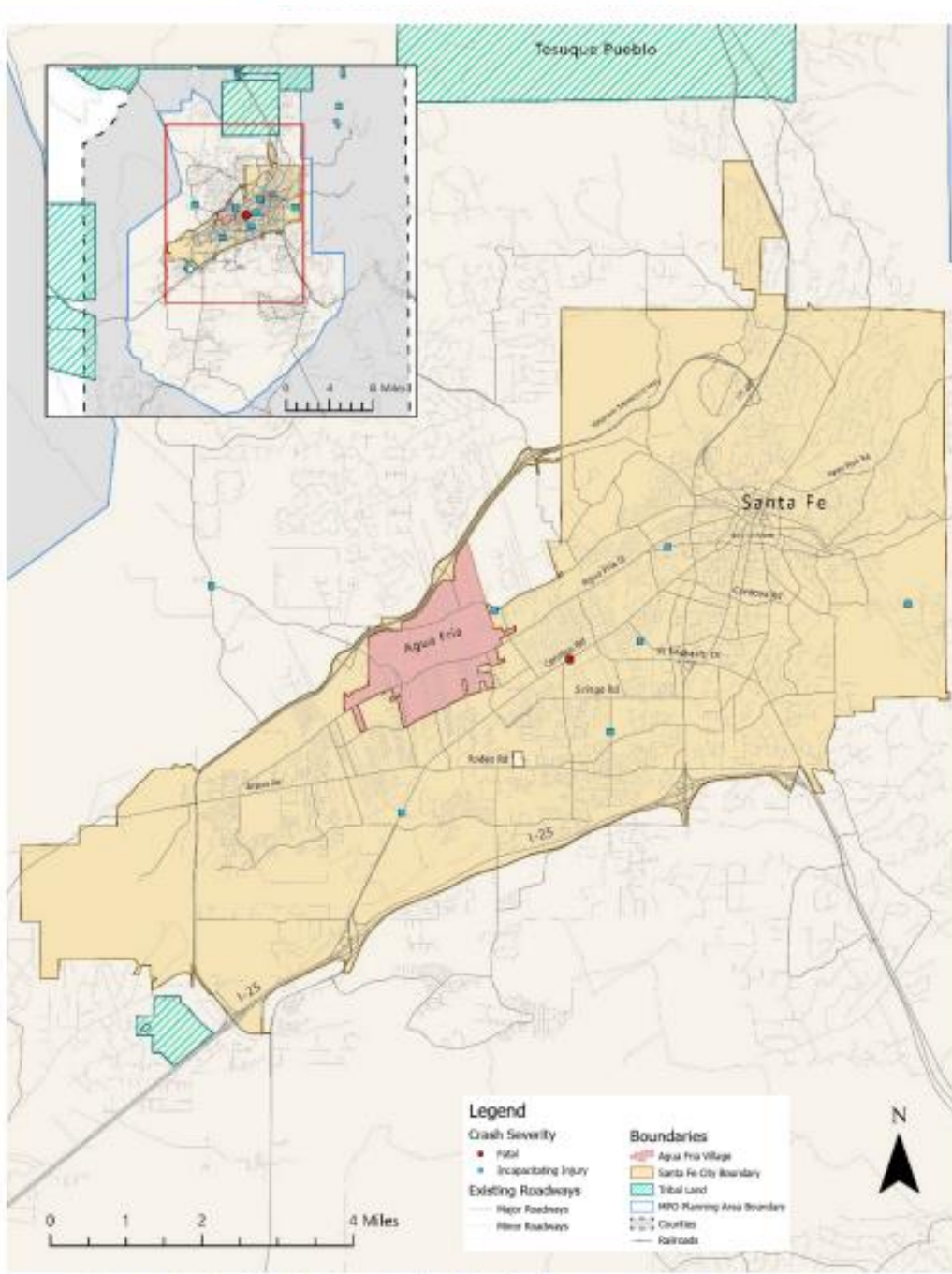


Figure 24. Graphi Figuregure 2019 (Source:



Figur

Figure 32. Graphic. Bicyclist-involved fatal and serious injury crashes, 2015-2019 (Source: NMDOT, 2022).

“Okay, You Know How To Fix a Deadly Stroad. Now Do It 1,000 Times.”

The “1,000 times” problem may actually be the primary reason why we can expect local governments to be resistant to adopting an approach like the Crash Analysis Studio as policy. If you truly acknowledge that a deadly crash is not a fact of life, but an anomaly that shouldn’t have happened, and a condition that should be corrected, then you suddenly have a to-do list a thousand miles long.

Okay, You Know How To Fix a Deadly Stroad. Now Do It 1,000 Times. (strongtowns.org)

- There is a lot going on with data, but what is the direction in order to address socio-economic problems.

Table 4. Priority High Injury Network (HIN) corridors (Source: NMDOT, 2022).[31]

HIN Corridor	Start	End	Miles	K	A	B	% of Locality KA Crashes	% of Locality KAB Crashes
Agua Fria Rd	Airport Rd	Siler Rd	4.01	0	2	24	2%	4%
Agua Fria St	Siler Rd	Alameda St	3.62	0	2	23	2%	4%
Airport Rd	Veterans Memorial Hwy	Cerrillos Rd	3.06	3	10	62	12%	10%
Camino Carlos Rey	Calle De Oriente Norte	Governor Miles Rd	1.88	2	2	10	4%	2%
Cerrillos Rd*	Beckner Rd	St. Michaels Dr	5.92	10	20	121	28%	21%
Old Pecos Trail (N)	St. Michaels Dr	Old Santa Fe Trail	1.60	0	2	7	2%	1%
Old Pecos Trail (S)	St. Michaels Dr	W Old Agua Fria Rd	1.97	0	3	14	3%	2 %
Paseo De Peralta	S. St. Francis Dr	Washington Ave. -Bishops Lodge Rd	1.92	1	3	14	4%	3%
Richards Ave	Historic Route 66	Rufina St	2.33	1	2	22	3%	4%
Rodeo Rd	Cerrillos Rd	Old Pecos Trail	4.35	1	4	38	5%	6%
Saint Michaels Dr	Cerrillos Rd	Old Pecos Trail	2.34	2	6	48	7%	8%
Siler Rd	Agua Fria St	Cerrillos Rd	0.63	1	3	17	4%	3%
South Meadows Rd	Alameda Frontage Rd	Jaguar Rd	2.41	0	3	12	3%	2%
W Alameda St	Via Abaio	Don Gaspar Ave	5.25	1	6	20	6%	4%
Zafarano Dr	Rufina St	Rodeo Rd	0.79	0	3	18	3%	3%
W. Zia Rd	Rodeo Rd	Botulph Rd	2.38	0	2	13	2%	2%

**Cerrillos Road from St. Michaels Drive to St. Francis Drive is not included as it is NMDOT's jurisdiction.*

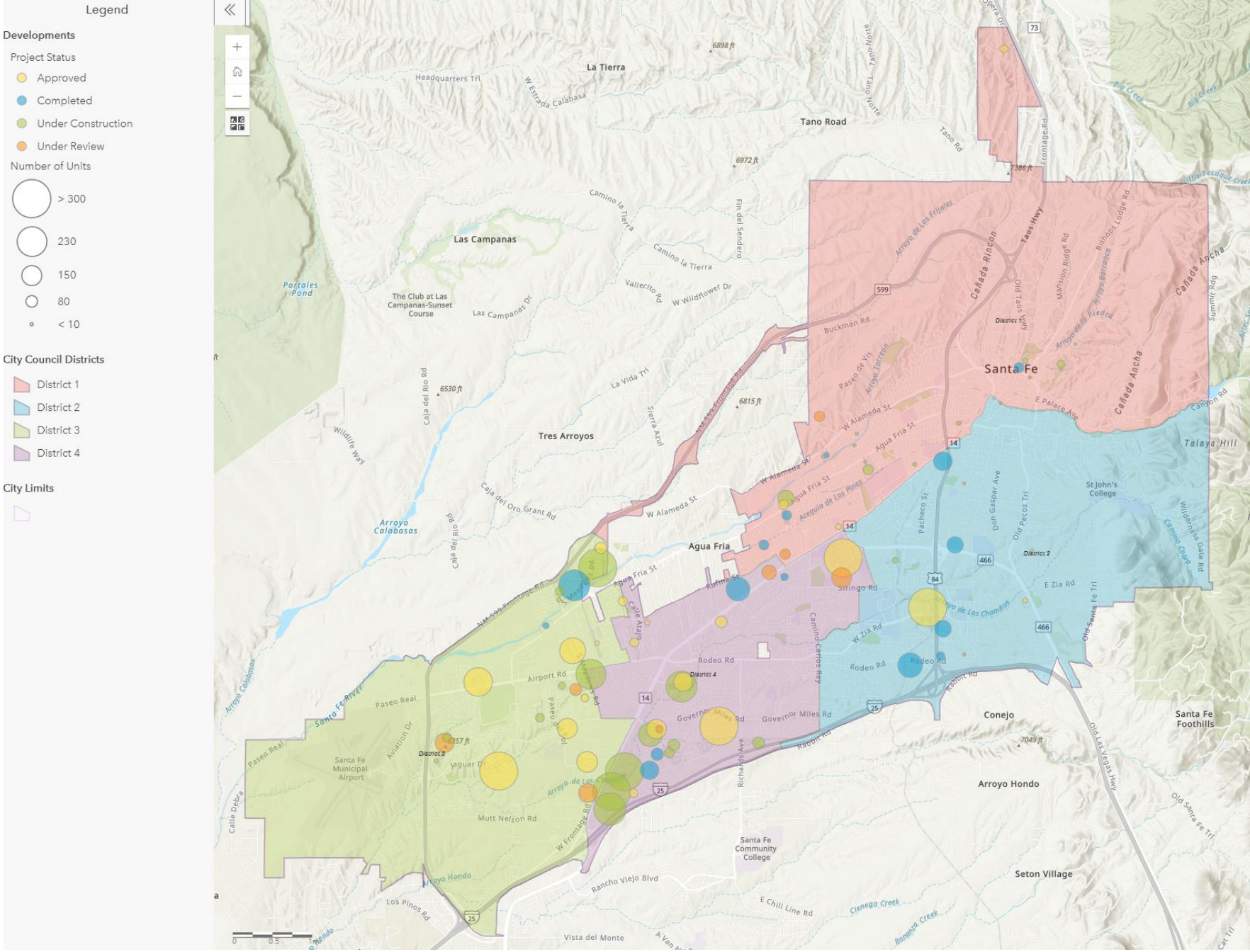
This is the Santa Fe Residential Pipeline map.

It shows the Number of development projects by the status of the work. One can zoom in to see details about each development and its approximated location.

But
What if it also showed: the future transportation improvements expected to take place at each location?

What if the data associated with each TIA was accessible to 3rd Parties or to other developers in the area to understand/assess the compounding impacts in each area?

What if this was overlayed on top of the Future Road Network, The Transportation Master Plan, the Bike Master Plan, CIP, ICIP, TIP, other IPs



You could:

Better budget for infrastructure needs across the city

Identify where the most needs are

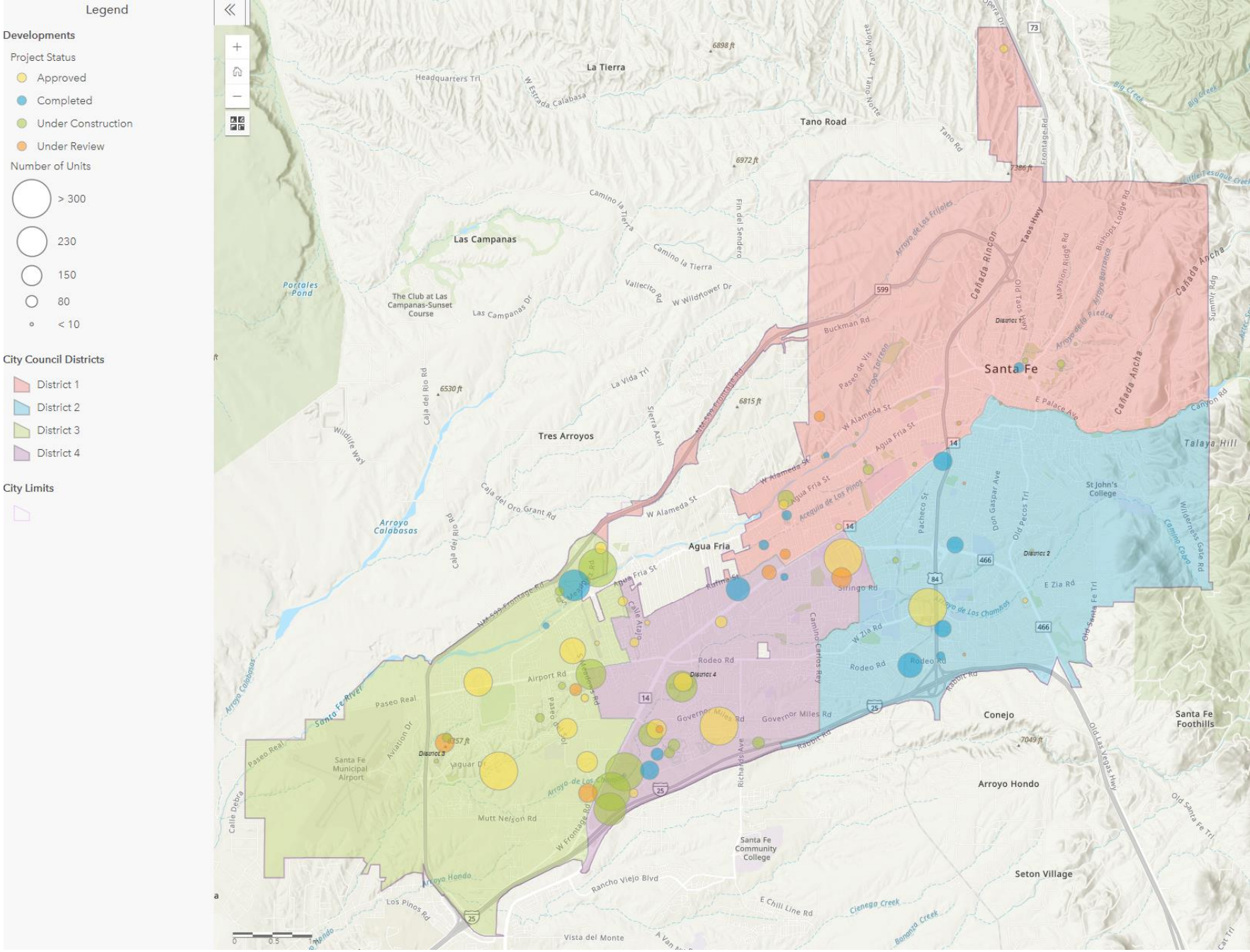
Identify where the most money has been spent

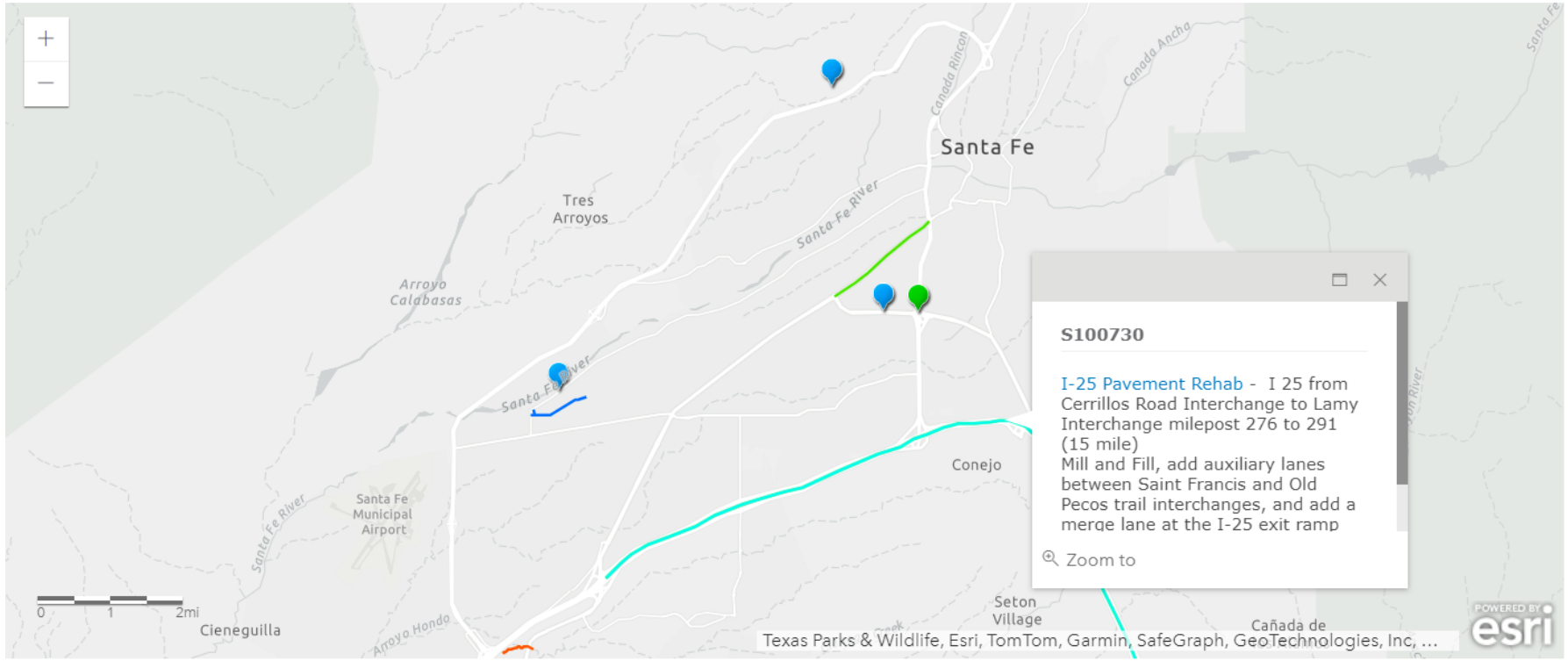
Sum the amount of private investment in an area vs public investment

Identify locations of imminent importance

Have better data to be more responsive to changing needs

Be more transparent.





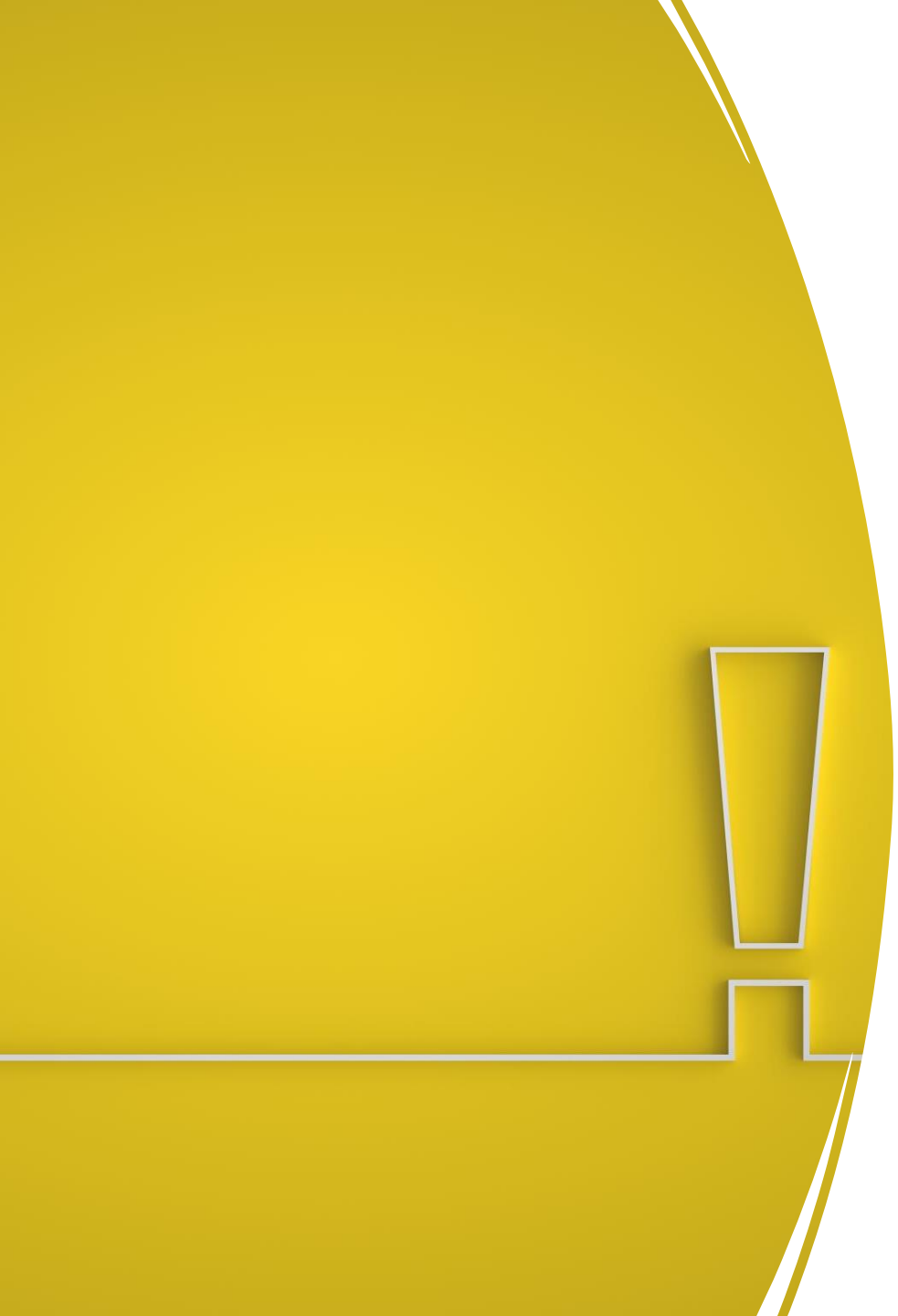
- Click on any balloon or highlighted project in the above map to retrieve the NMDOT link for detailed information by project.
  - Zoom in and out using the + and – icons in the top left of the map

City Projects

County Projects

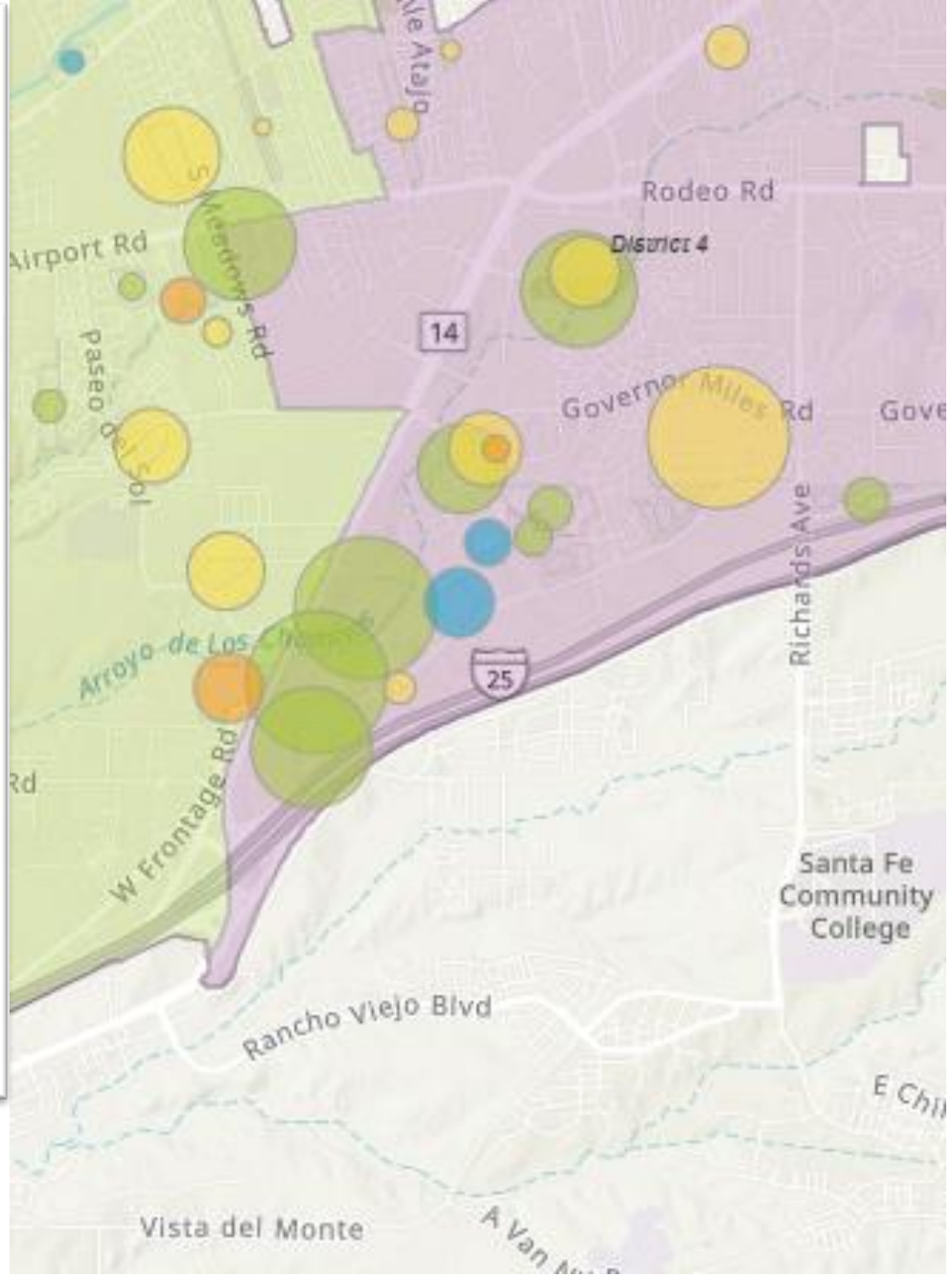
NMDOT Projects

TIP Amendments Awaiting Approval/Draft TIP



Final Thoughts

- The MPO has access to a wide variety of in-depth data. While holes in the datasets exist (missing robust pedestrian/bicyclist counts, missing infrastructure condition data on local roads, missing project expenditure tracking in the past) we have the data and understanding to apply for large grants/
- However, changes to policy are essential to curving trends in crash severity over the long-term.


Rodeo Rd
District 4
Airport Rd
Paseo del Sol
S Meadows Rd
14
Governor Miles Rd
Richards Ave
Arroyo de Los Chamisos
25
W Frontage Rd
Santa Fe Community College
Rancho Viejo Blvd
Vista del Monte
Developments
Project Status
Approved
Completed
Under Construction
Under Review
Number of Units
> 300
230
150
80
< 10
City Council Districts
District 1
District 2
District 3
District 4
City Limits

Public Support

- Through Surveys and outreach
  - The MTP 2015-2040 online survey received nearly 300 responses
  - The MTP 2020-2045 online survey received nearly 670 responses

FIGURE 2-5. SURVEY RESPONSE: TRANSPORTATION BARRIERS

Survey Question: Which of the following barriers influence you the most when considering transportation options?

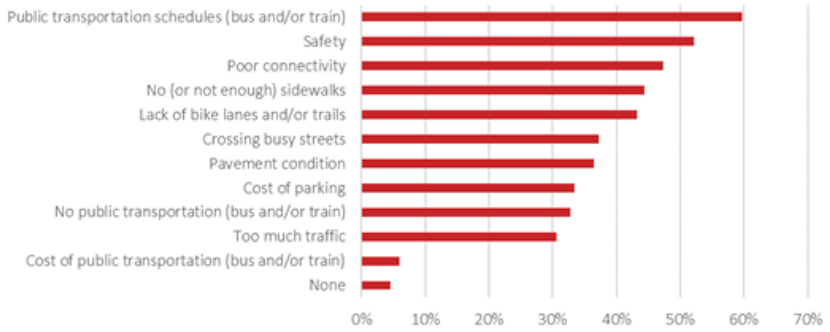


FIGURE 2-3. VENN DIAGRAM OF THE MODES OF TRANSPORTATION SURVEY PARTICIPANTS USE AT LEAST WEEKLY

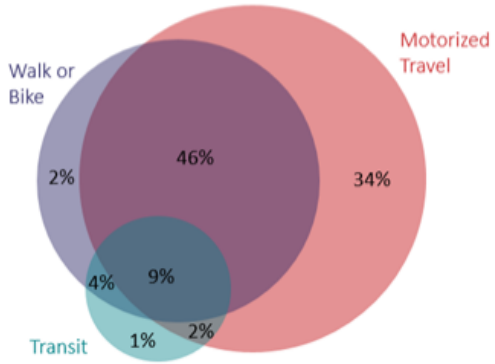
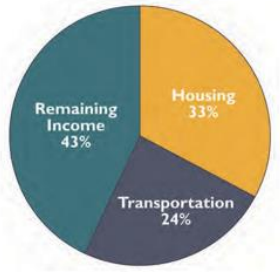


Figure 5-1. Housing and Transportation Costs in Santa Fe[1]



[1] Center for Neighborhood Technology's Housing and Transportation (H+T®) Affordability Index (HTAindex.cnt.org)

Question: The Santa Fe Metropolitan Transportation Plan considers different types of travel; how often do you use the following to get to work, play or shopping?

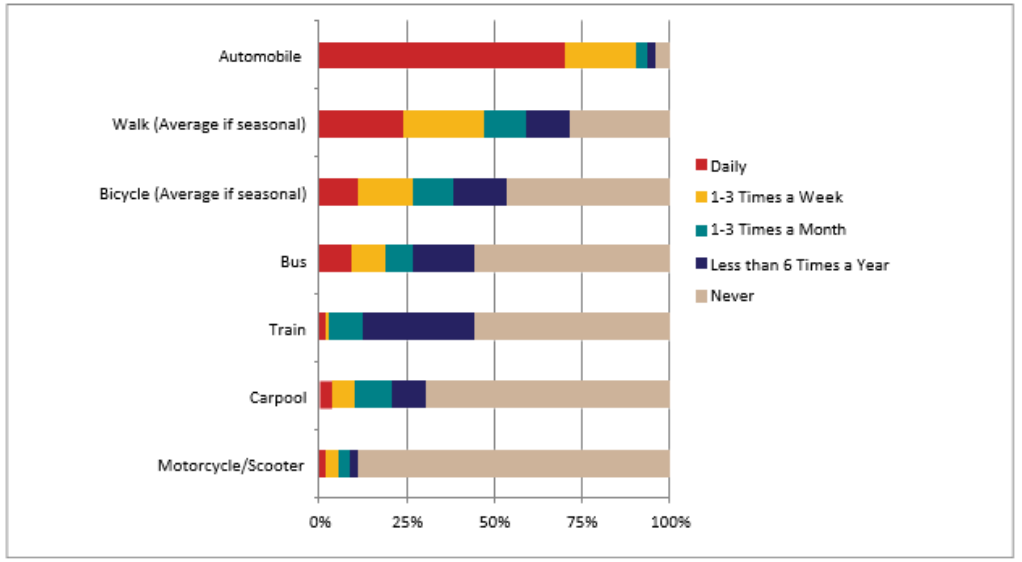
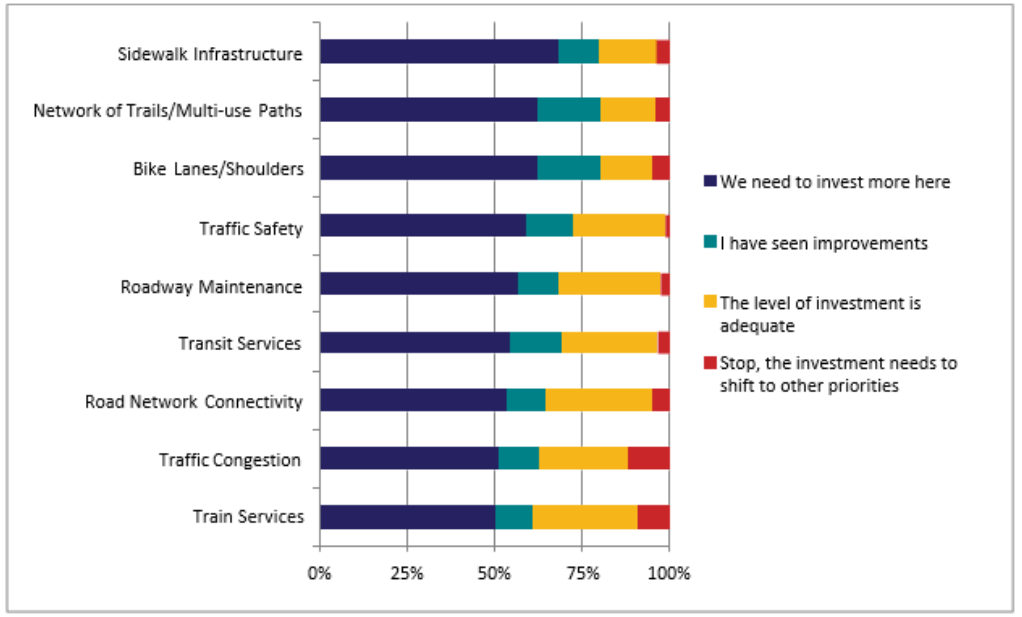


Figure 2-2. Survey Response: Worthwhile Investments

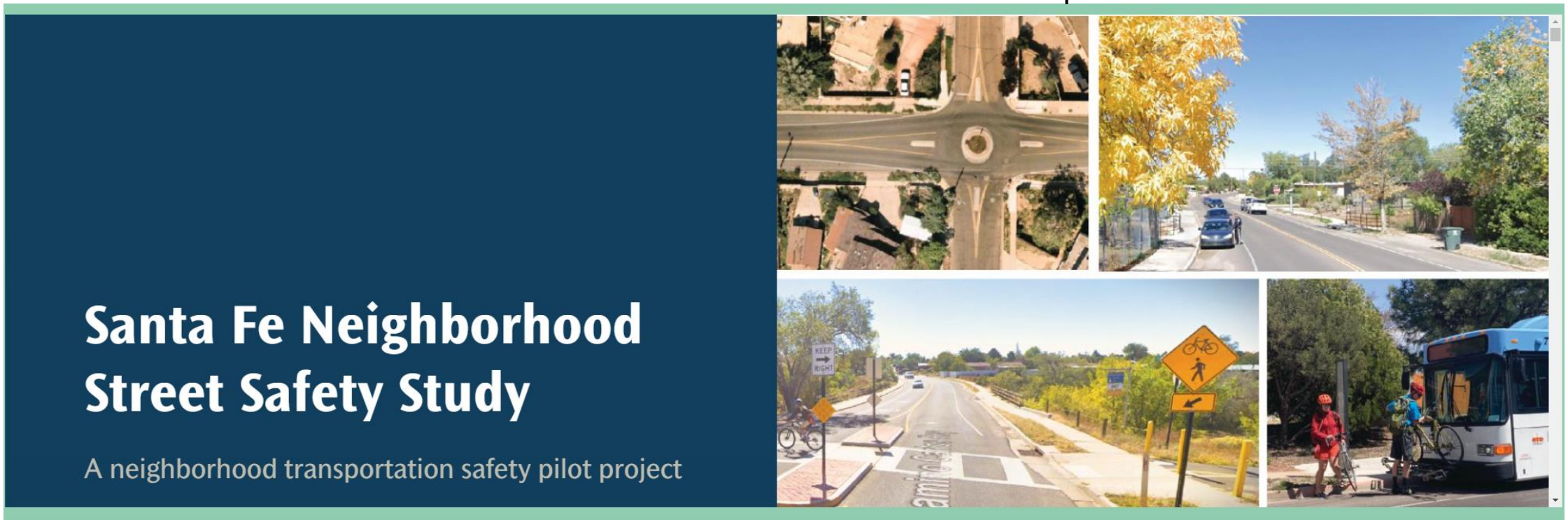
Question: What do you believe are worthwhile investments in our transportation facilities that the MPO should continue to support?



Public Support

https://santafempo.org/special-projects/neighborhoods/

250 responses



Do you avoid any locations because of street safety concerns?

Corridor	Comment
Cerillos Rd	Absolutely. I avoid urban trails at night. I hate walking on St Francis Dr. (sorry, I know that's not part of the survey). I won't bike on Cerrillos or let my child bike on Cerrillos/St. Francis/St. Mike's. Cordova Road is a little nerve-wreaking for biking too.
	Absolutely. I cut through to safer routes on my bike to avoid bodily harm by vehicles. The sheer volume of traffic and bad driving I see regularly is enough to cause pause and seek very complicated routes to my destination. I avoid Cerrillos because it's a highway built through the middle of town. It's completely built for the driving experience with vehicles at the pinnacle of the hierarchy and preference. Walking and cycling should NOT be viewed as afterthou.
	Airport, cerrillos, rodeo, zia, st francis, zaferano... all are the absolute worst. I take extra time just to go through neighborhoods to avoid all main streets as much as possible
	Areas around Cerrillos road from Airport to St. Francis. Rodeo road from Airport to Zafarano.
	avoid Cerrillos as much as I can