SMART CITIES DATA PLATFORMS STATUS REPORT

City of San Jose – Smart Cities and Services Improvements Committee – June 02, 2022

Presented by:

Vince Pereira, Information Technology Manager, Department of Transportation

Jesse Mintz-Roth, Vision Zero Program Manager, Department of Transportation

Accept the status report on Smart Data Platforms, related to a City Roadmap item for Vision Zero, which includes insights for transportation planning and addressing crashes and fatalities.

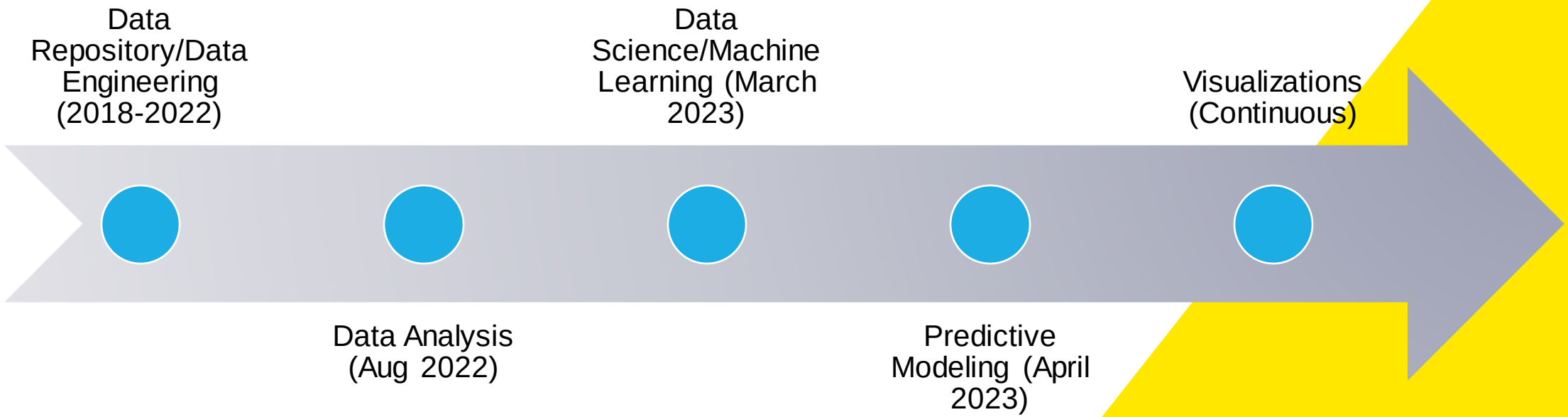
DOT Smart Data Platform Initiatives

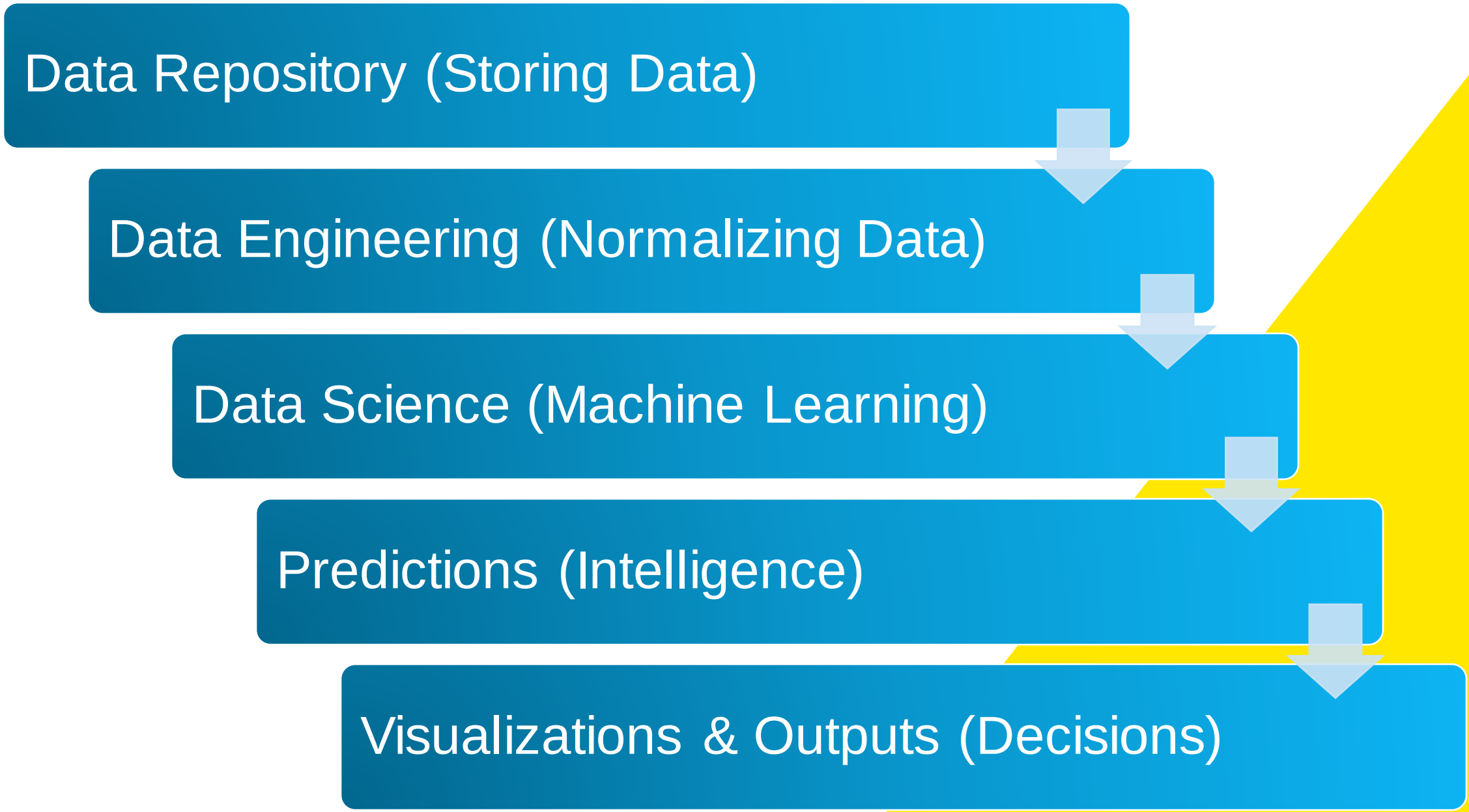
June 2022

Current Status

- DOT internal data analytics **automated processes**
- **Secure pipelines** to migrate data to the UrbanLogiq's Data Repository
- UrbanLogiq's **core functional layers** completed
- Planning Department Phase 1 – **Key Performance Indicators**
- Vision Zero Phase 1 - **"Use-Cases"** and Outputs

Data Platform Timeline



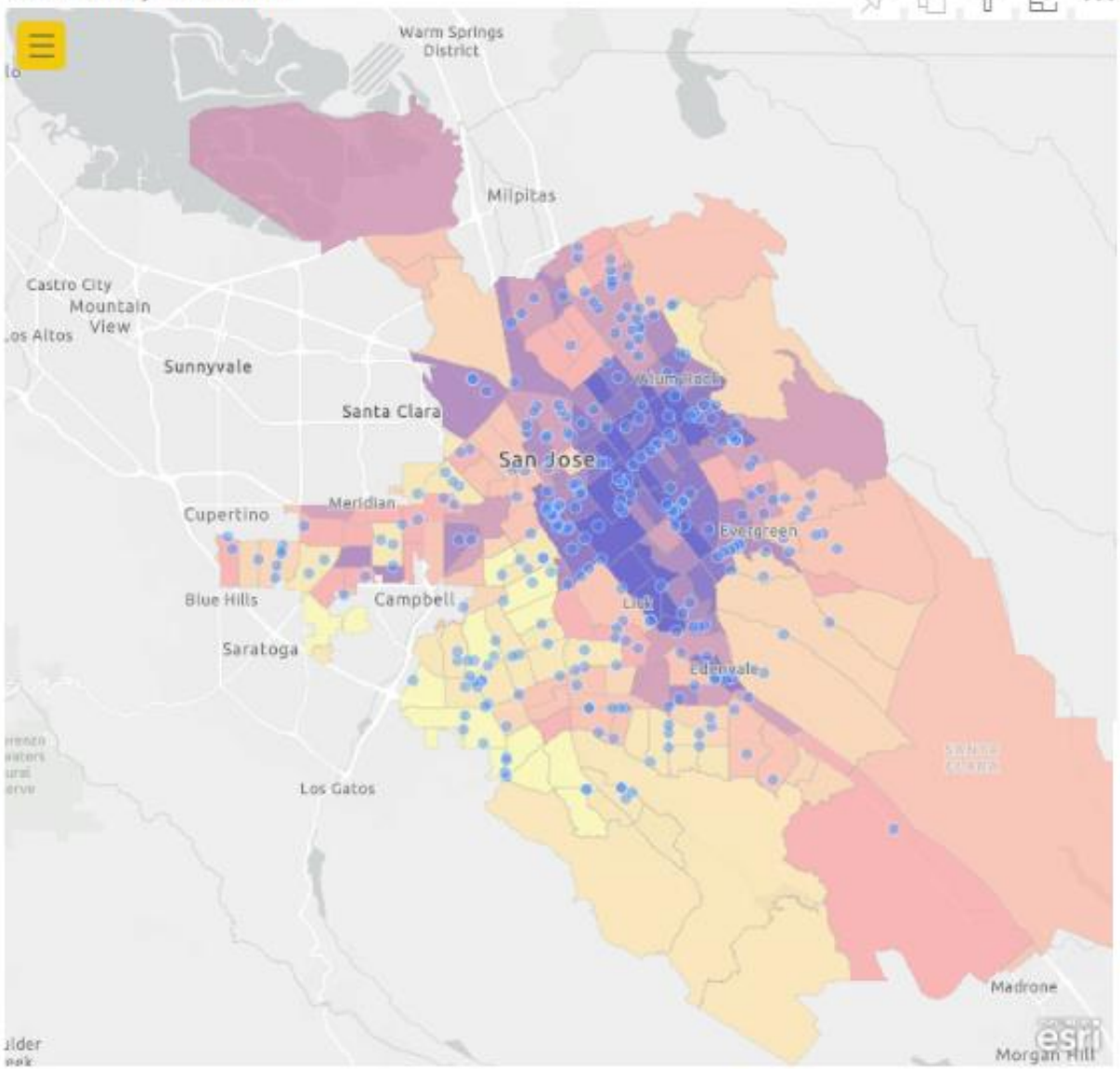

Data Repository (Storing Data)
Data Engineering (Normalizing Data)
Data Science (Machine Learning)
Predictions (Intelligence)
Visualizations & Outputs (Decisions)

Pages

- All
- Traffic Safety
- Local Projects
- Signals
- Options
- Rail

File | Export | Share | Get insights | Subscribe | ...

Traffic Safety/Vision Zero



EquityS	Projects	AllocatedBudget
10	31	$1,643,310
9	43	$469,500
8	39	$784,451
7	44	$365,000
6	17	$360,000
5	31	$200,000
4	18	$170,000
3	43	$2,097,000
2	19	$45,000
Total	**285**	**$6,134,261**

Status	# of Projects
Complete	166
Active/Planned	119
Total	**285**

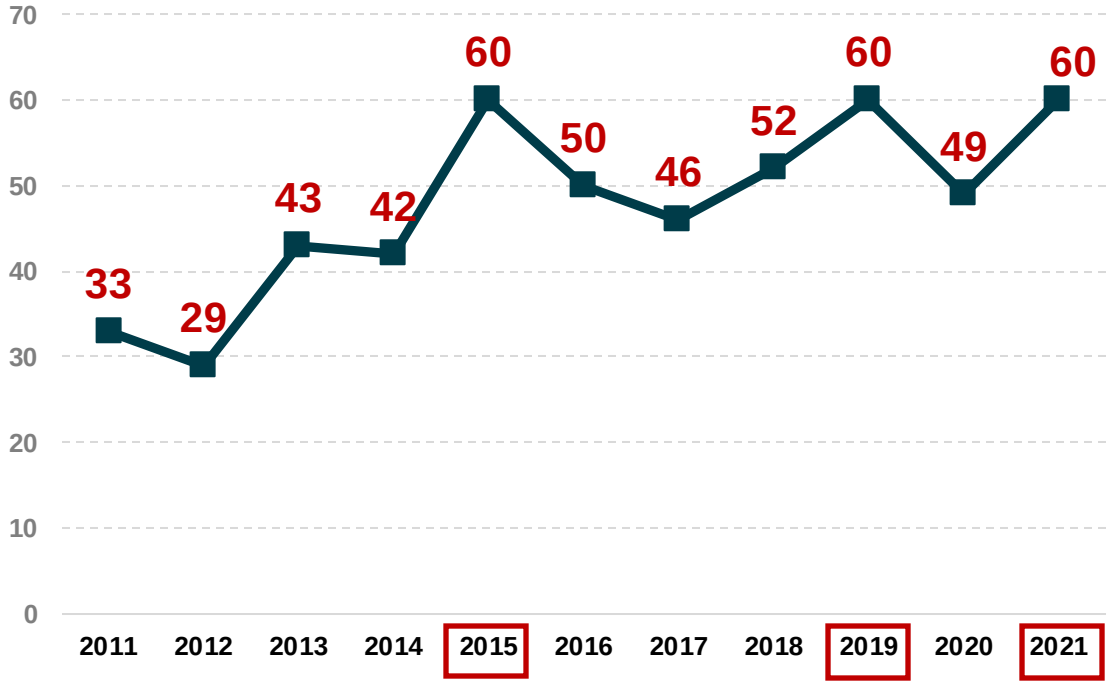
Project Name
19th St Buffered Bike Lane Enhancement - 19th / Julian
19th St Buffered Bike Lane Enhancement - 19th / St James
ACR 2018 - Winchester and Moorpark Truncated Domes
Al Fresco Parklet - 13th/Vestal
ALAMEDA and MCKENDRIE ST
Allenwood Dr Cat Tracking

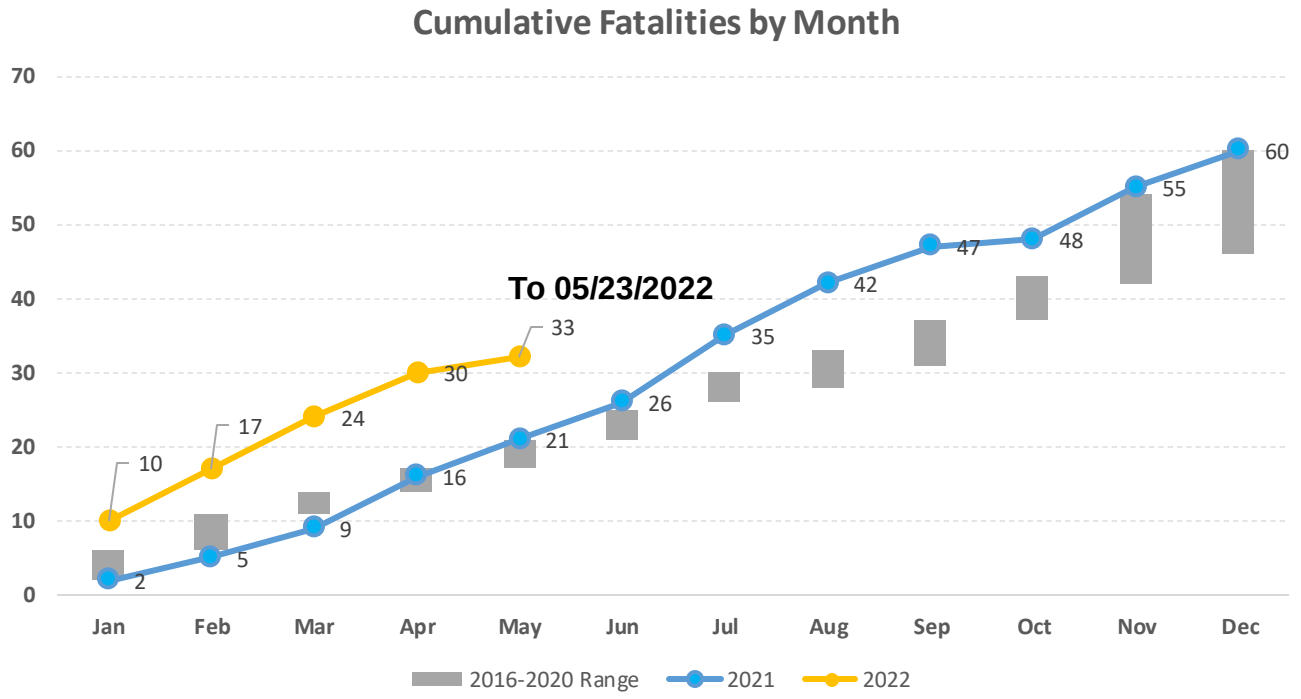
Safety Improvement
Bulb Outs (Detached)
Centerline
Chokers
Closure (Full)
Closure (Partial)
Delineators
Diverters
Edgeline
Flashing Beacons
Hardened Centerline
High-visibility Crosswalk
Leading Pedestrian Interval
Median
Painted Islands
Radar Speed Display Signs
Raised Island Markers

Vision Zero Data Initiatives

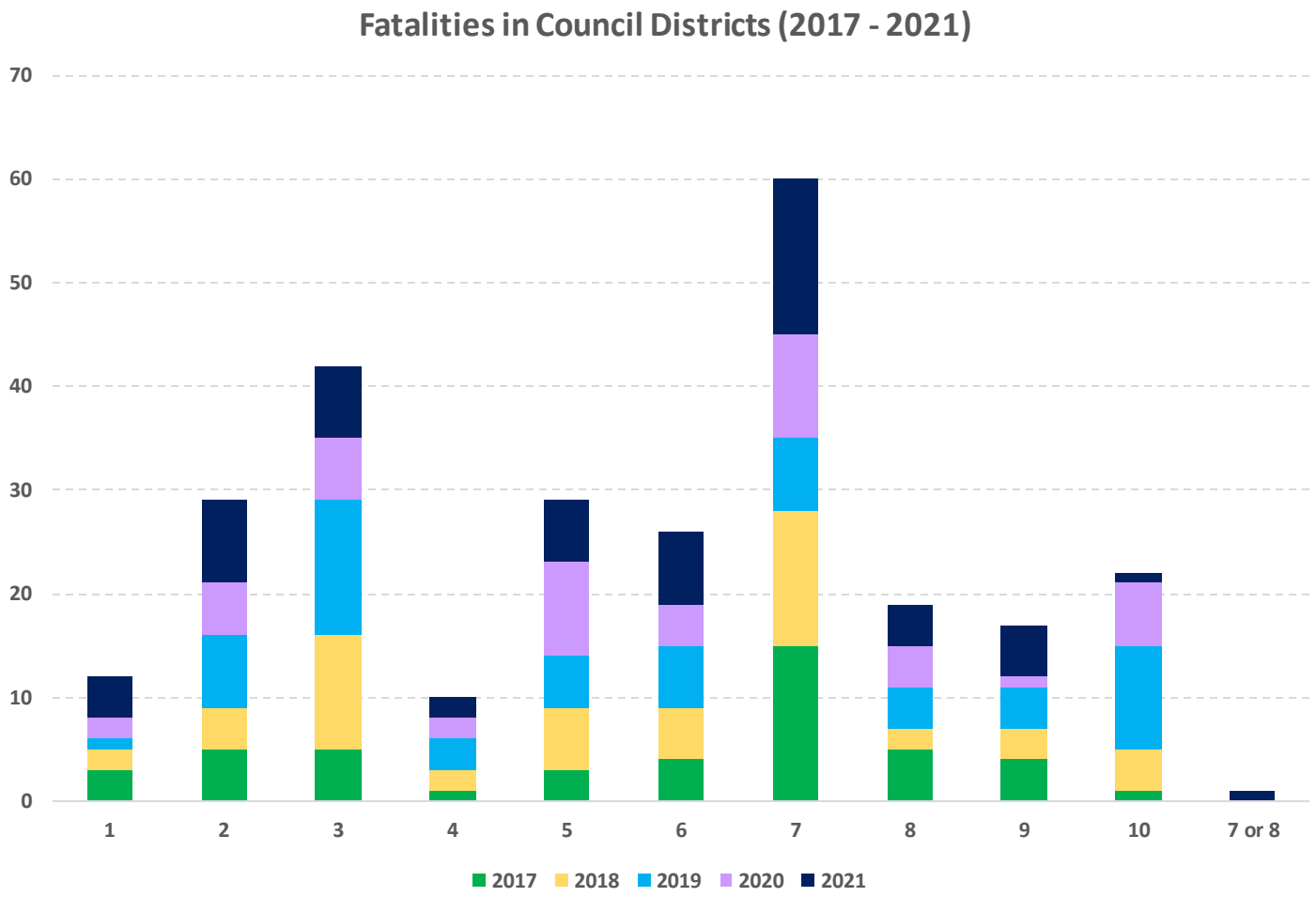
June 2022

San José Traffic Fatalities



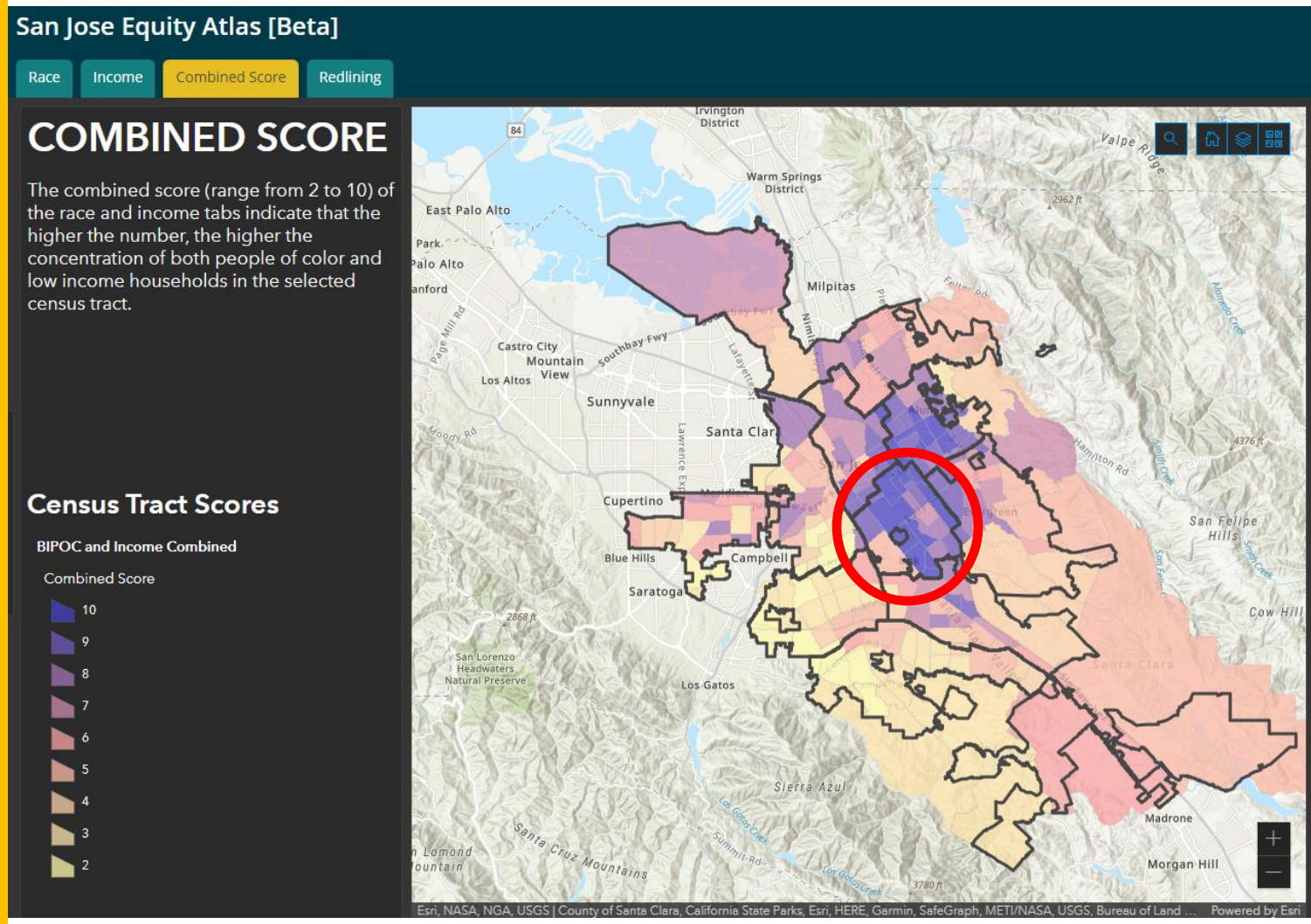


Traffic Fatalities by Council District



* Due to lack of exact Area of Impact (AOI), unable to determine on which district the crashed occurred.

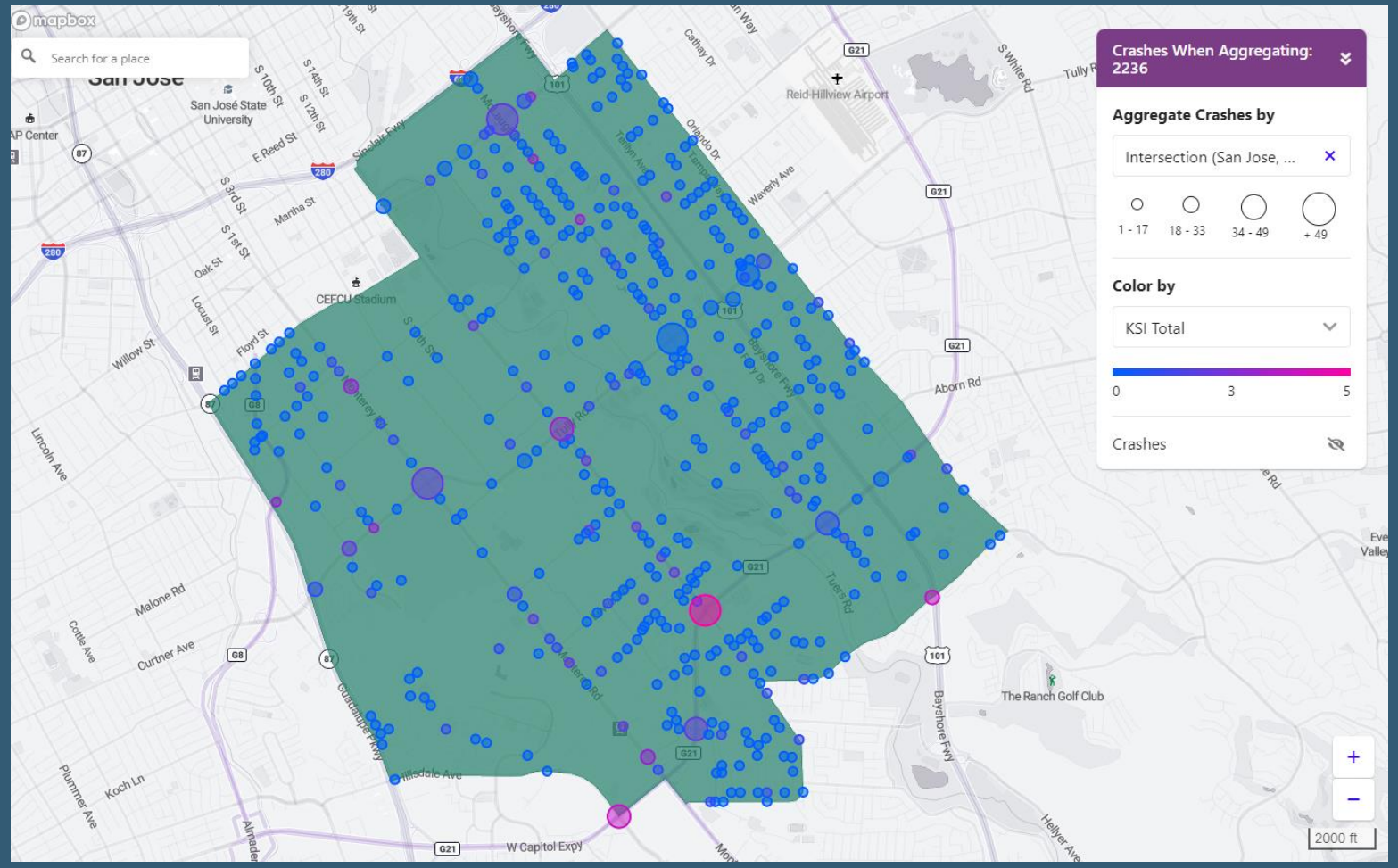
Council District: San José Equity Atlas



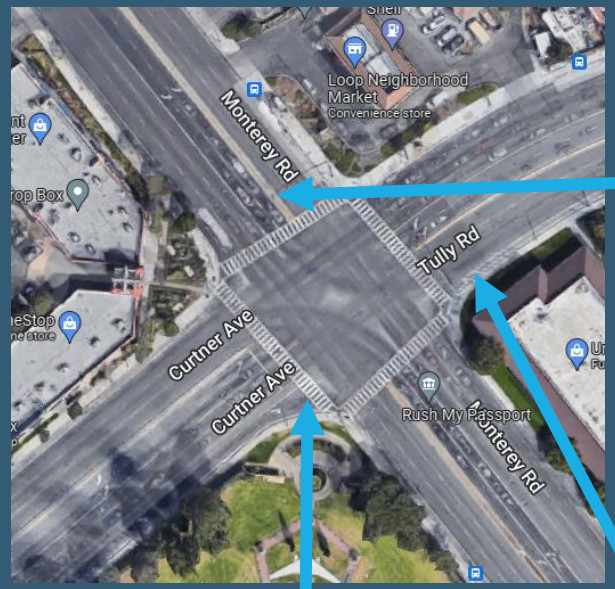
UrbanLogiq Map: Project Prioritization in District 7

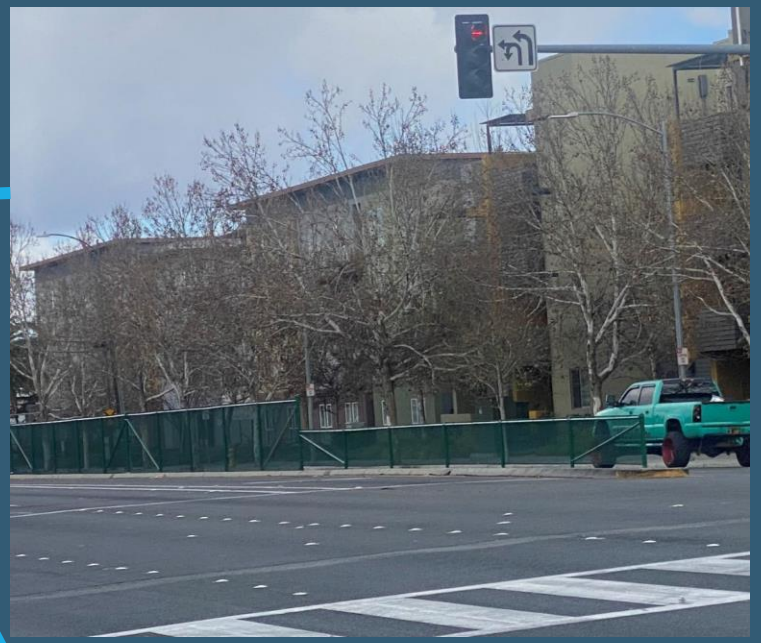
UrbanLogiq search:

- Crashes 2016-2020
- District: 7
- Crashes aggregated by: intersection
- Color by: Count of Killed or Severely Injured (KSI)

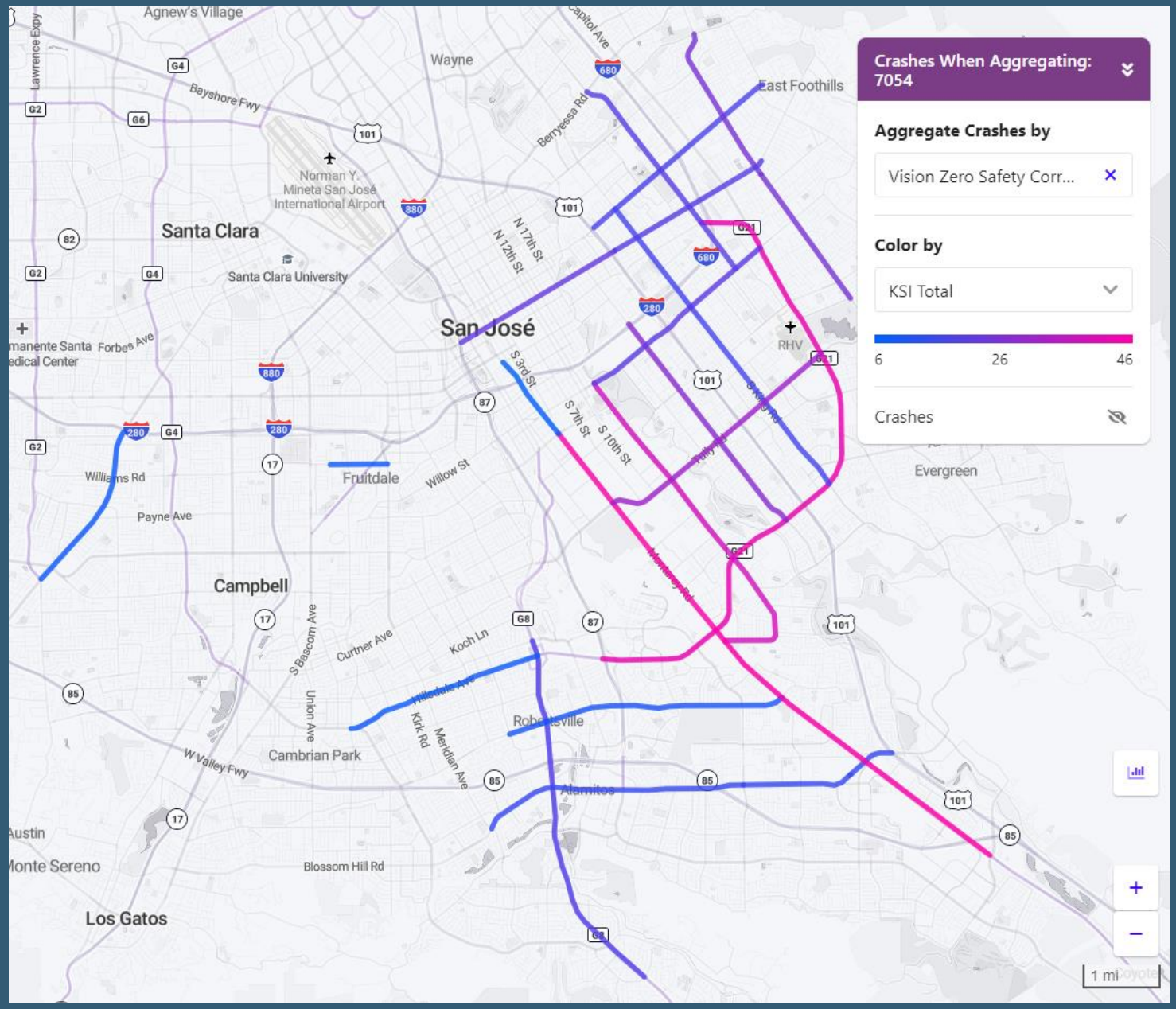


Example Project: Quick Build Monterey at Curtner/Tully (2022) (D7)





UrbanLogiq: Map of Priority Safety Corridors with Count of People Killed or Severely Injured (KSI) in Traffic



UrbanLogiq: List of Priority Safety Corridors with Count of People Killed or Severely Injured (KSI) in Traffic

KSI Count by Safety Corridor (Top 10)

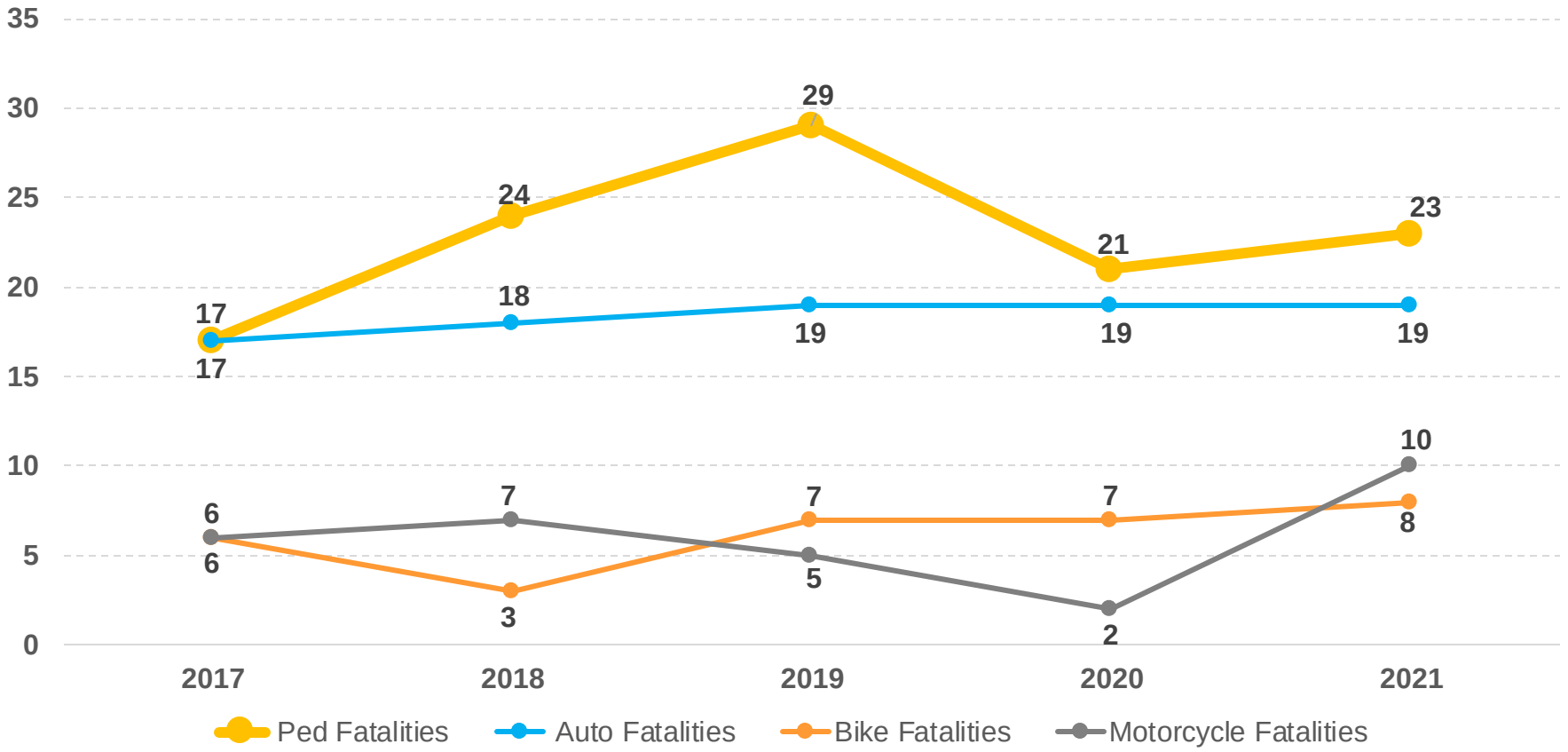
Monterey Road between Alma Ave and Bernal Road	46
Capitol Expressway between Route 680 and Route 87	44
Senter Road between Story Road and Monterey Road	40
Tully Road between Monterey Road and Capitol Expwy	32
McLaughlin Ave between I-680 and Capitol Expwy	28
White Road between Penitencia Creek Road and Cunningham Ave	25
Santa Clara St between Rte 101 and Hwy 87	22

2021 insights: Where are people getting injured while walking in darkness?

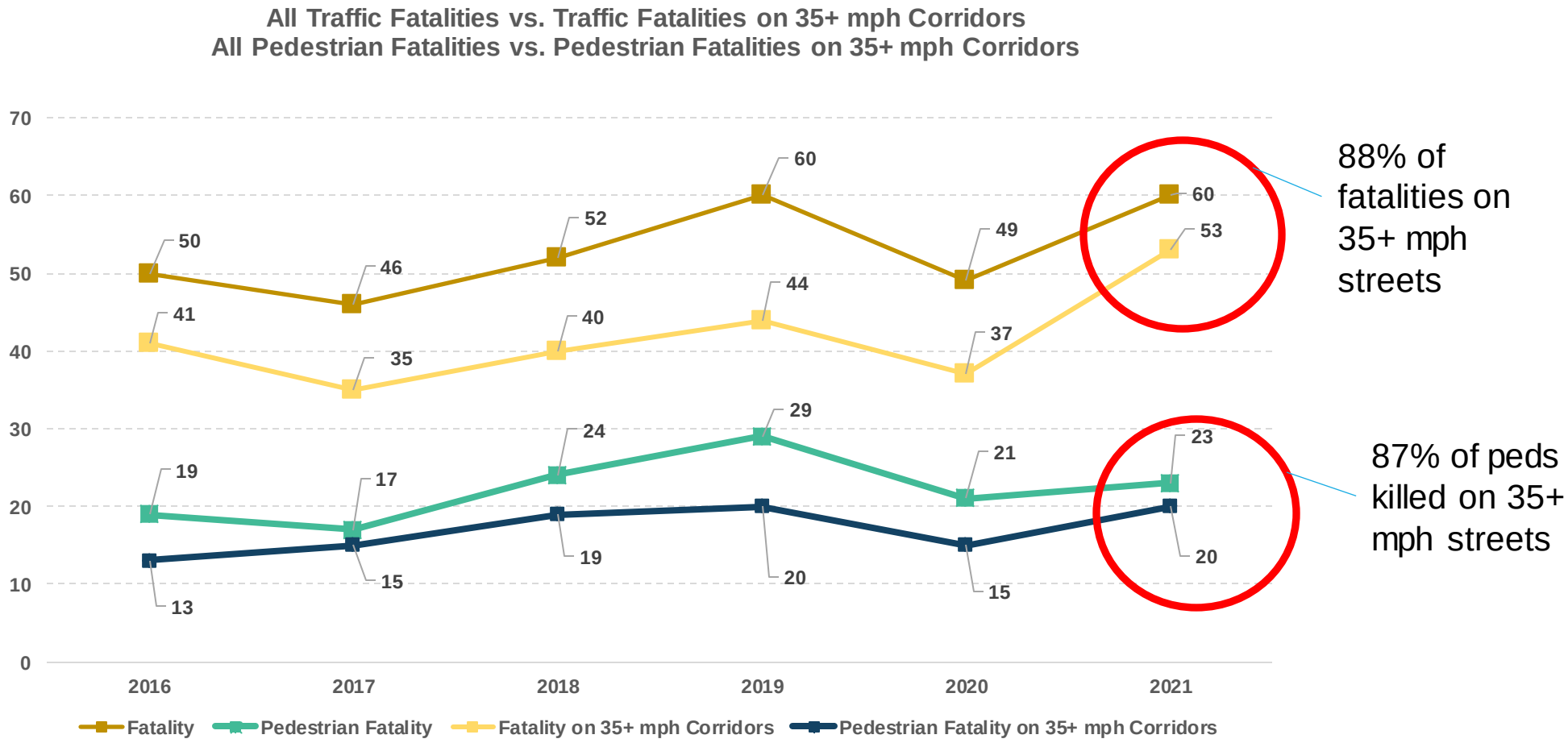
2021: 60 Traffic Fatalities (58 crashes) in San José

- 29 (48%) - on Priority Safety Corridors
- 7 (12%) - on Monterey Road
- 18 (30%) - Unhoused
- 42 (70%) - in darkness
- 10 (17%) - motorcycle
- 23 (38%) - people walking
  - → 18 (78%) in darkness
- 44 (73%) - male driver
- 18 (30%) - with speeding as a factor

People killed while walking are the largest fatality group by road user type: 114 of 267 (2017-2021)



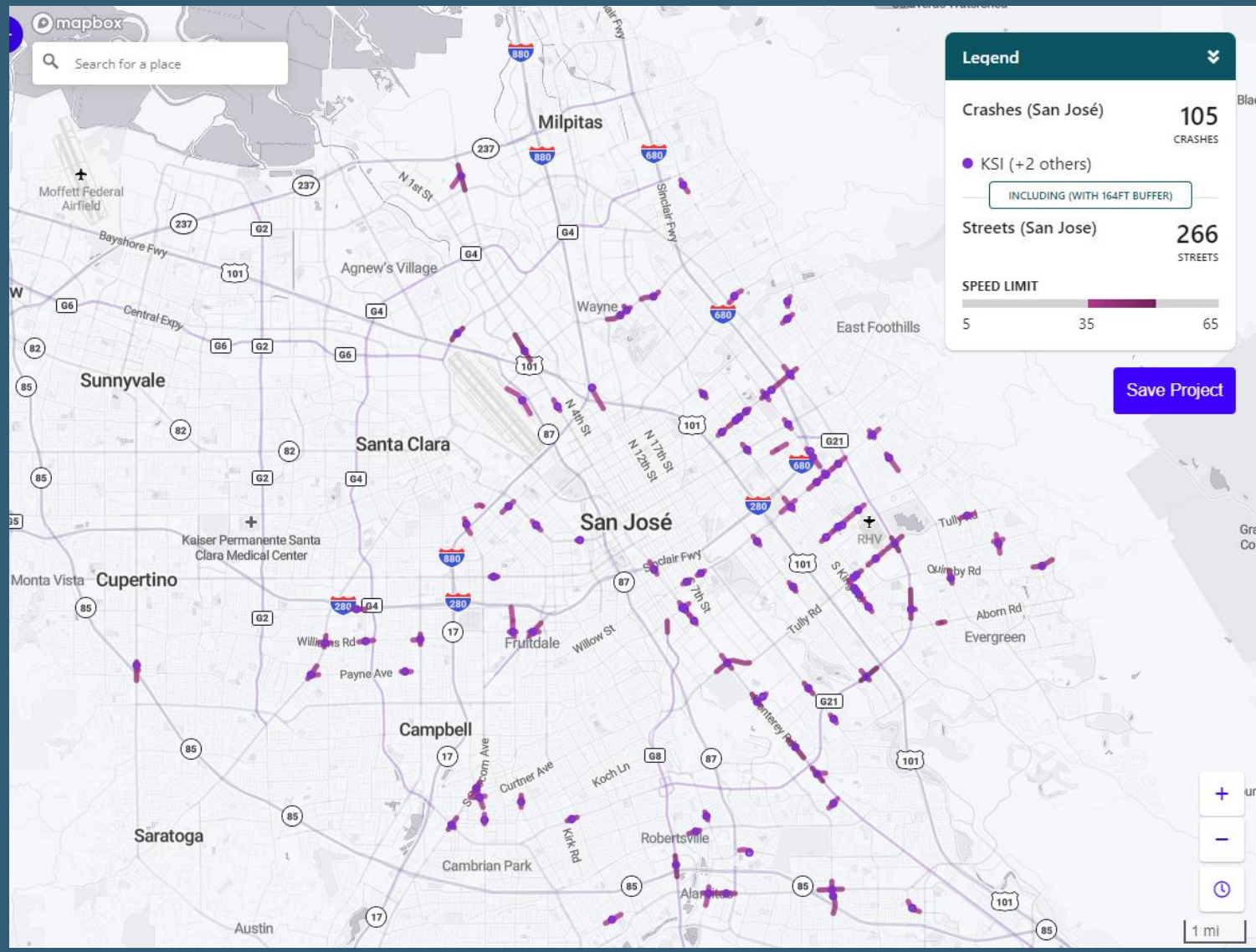
Up to 88% of annual Traffic Fatalities occur on roads with posted 35 to 50 mph speed limits



88% of fatalities on 35+ mph streets

87% of peds killed on 35+ mph streets

UrbanLoqiq: Map of fatal and severe injuries involving people walking on roads with posted speed limits of 35-50 mph



Team Slide

Here's what we look like and what we do

Vince Pereira
Manager
DOT IT

Jesse Mintz-Roth
Manager
Vision Zero

Thao Nguyen
Data Manager
Vision Zero

William Harmon
GIS Analyst
DOT IT

Herman Chandi
Co-Founder,
Urban Logiq

Questions and Feedback!