



Local Roadway Safety Plan

Stakeholder Meeting #2

December 6, 2022

10:30 am



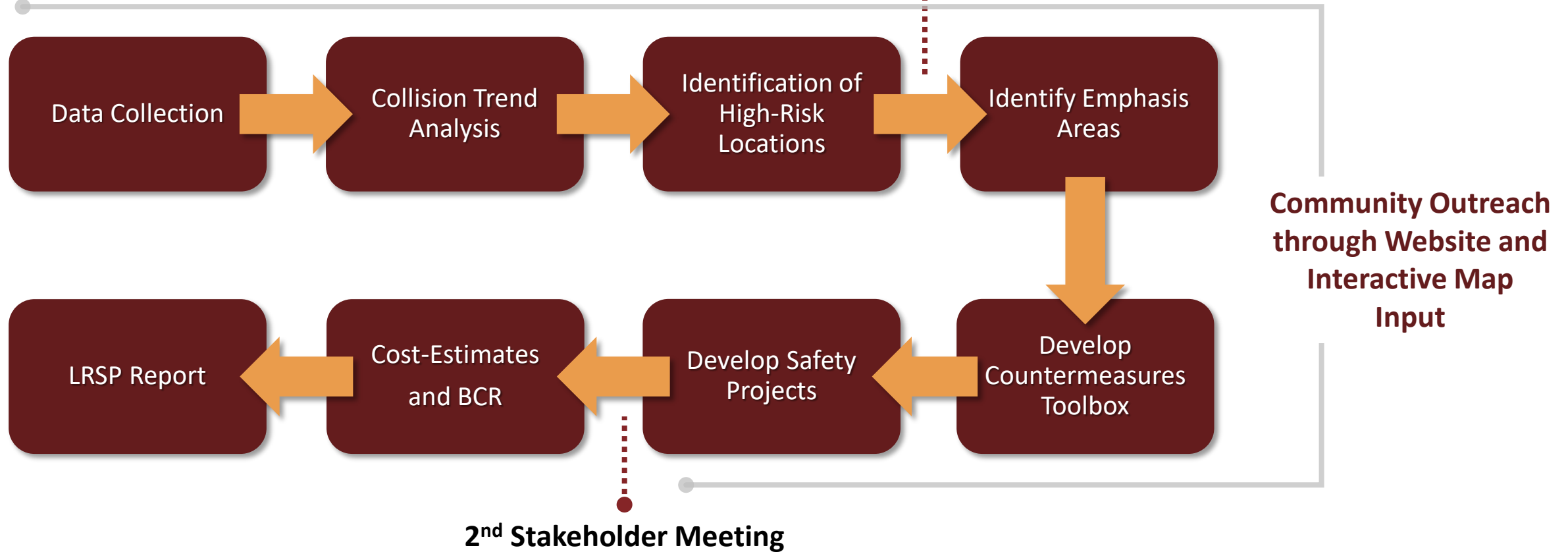
Agenda

- Introductions
- Project Status and Milestones
- Collision Analysis Findings
- Emphasis Areas
- Draft Engineering & Non-Engineering Countermeasures
- Draft Safety Projects
- Implementation/Next Steps



Project Status and Milestones

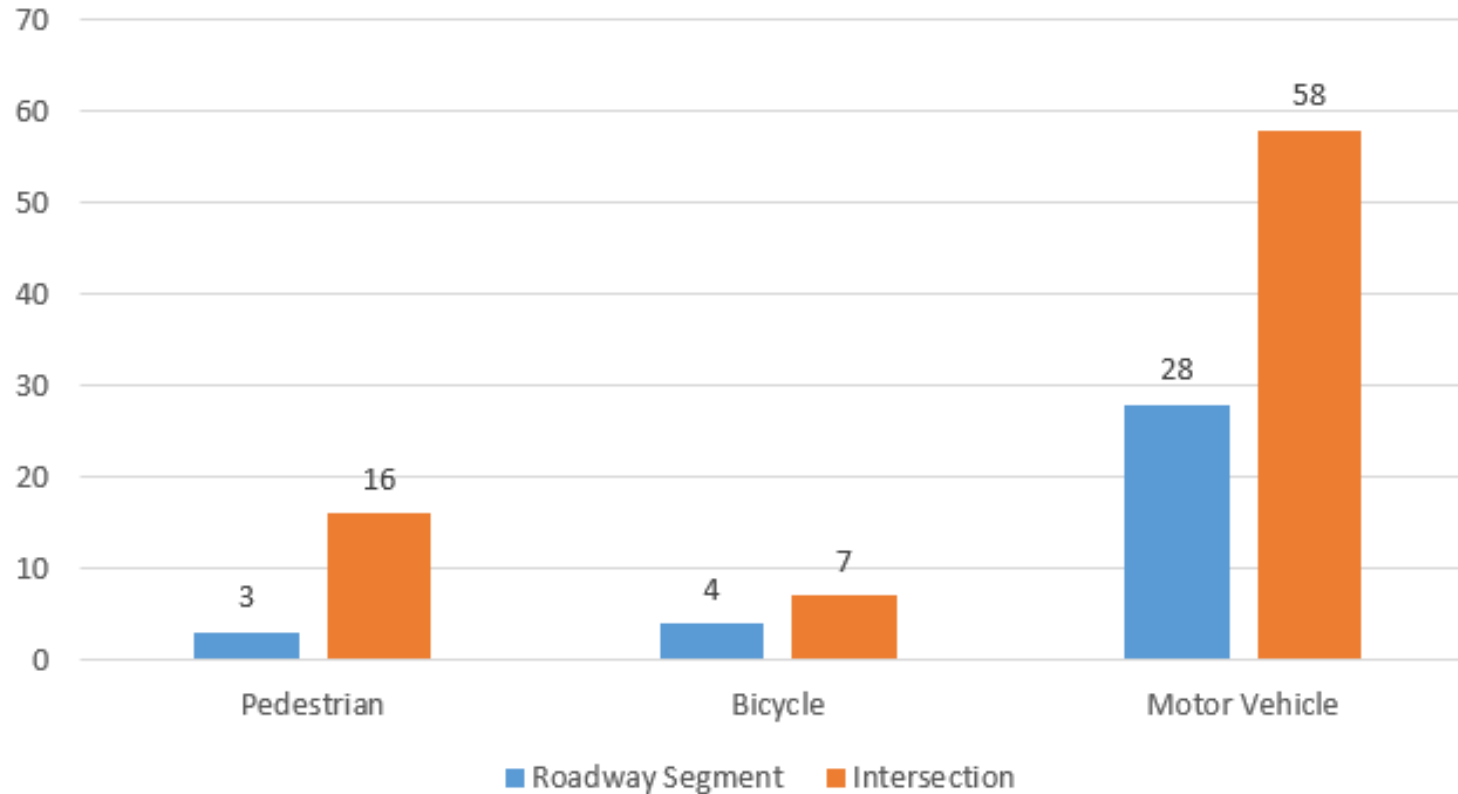
1st Stakeholder Meeting
– September 21, 2022





Introduction

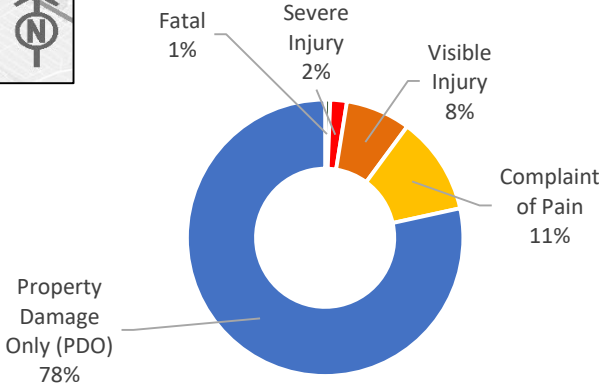
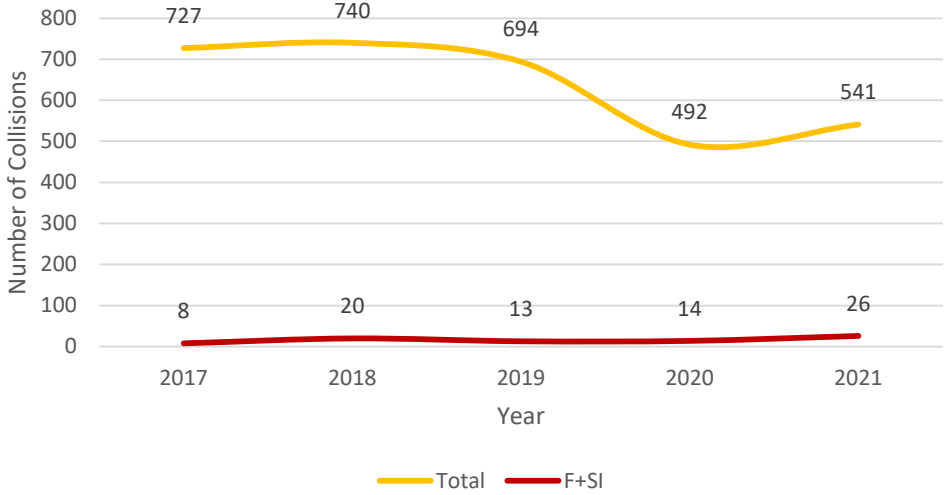
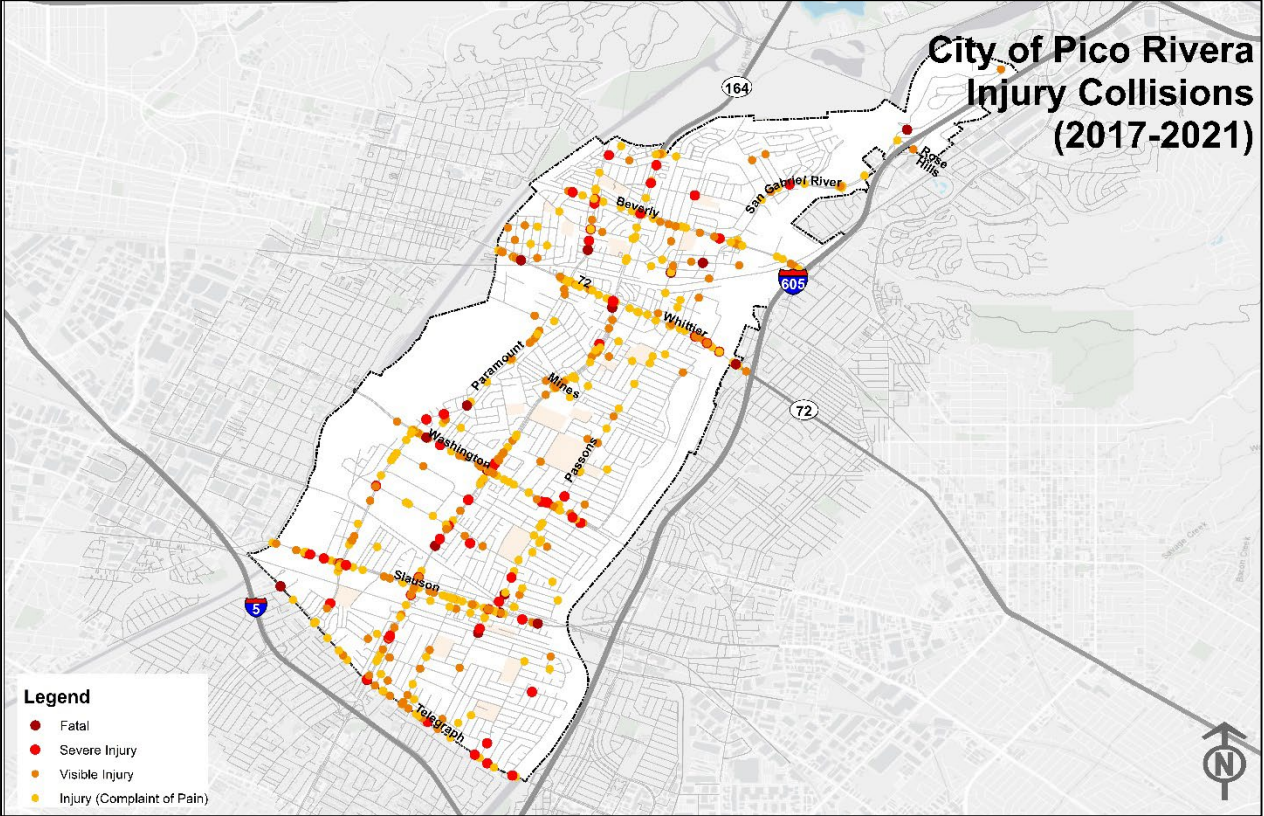
Community Comments Update



- **116 responses** (as of 11/21/22)

- Website was promoted on City website, social media and monthly e-news letter
- Speeding and pedestrian safety were the most commented concerns

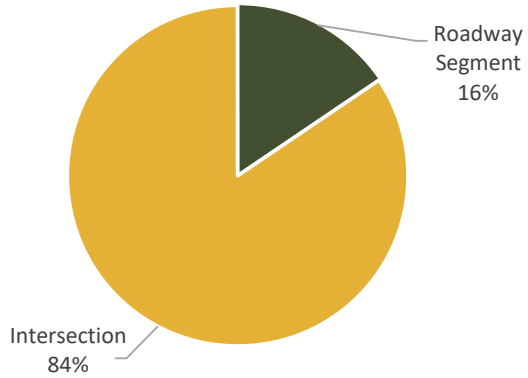
Collision Analysis Findings



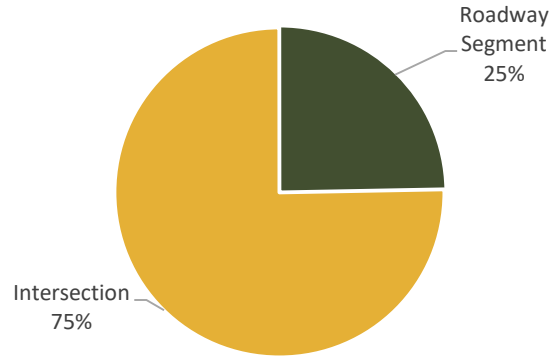
- 3,194 collisions between 2017-2021
- 2,505 property damage only (PDO collisions)
- 81 fatal and severe injury (F+SI/KSI collisions)

Collision Analysis Findings

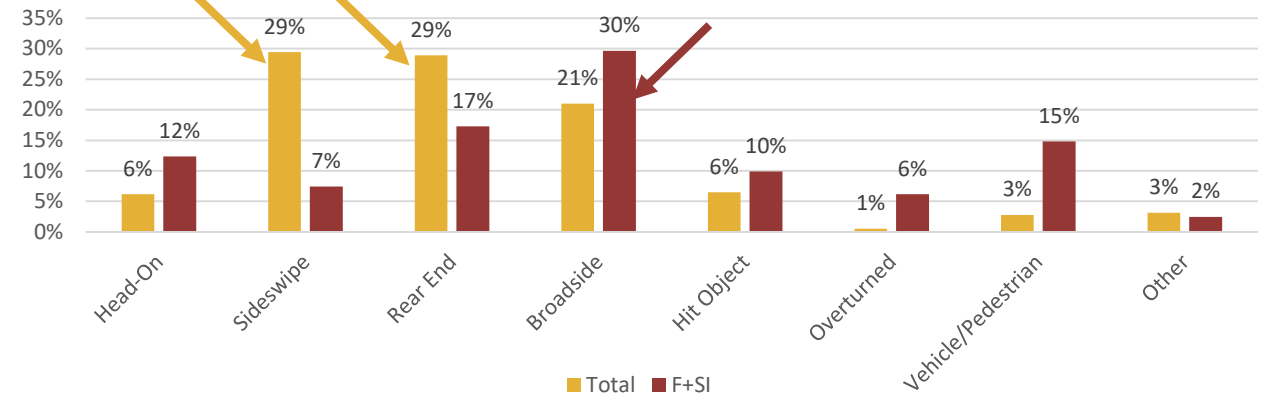
All Collisions



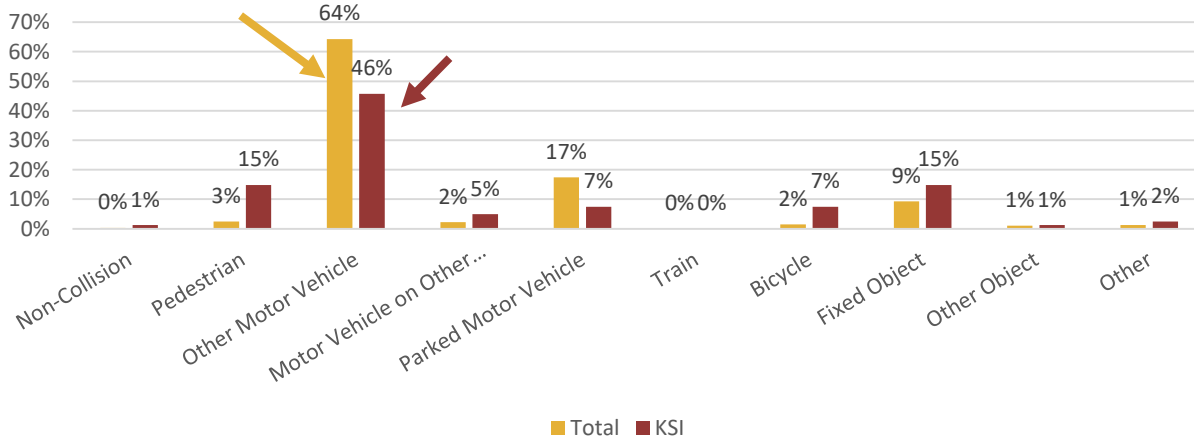
F+SI/KSI Collisions



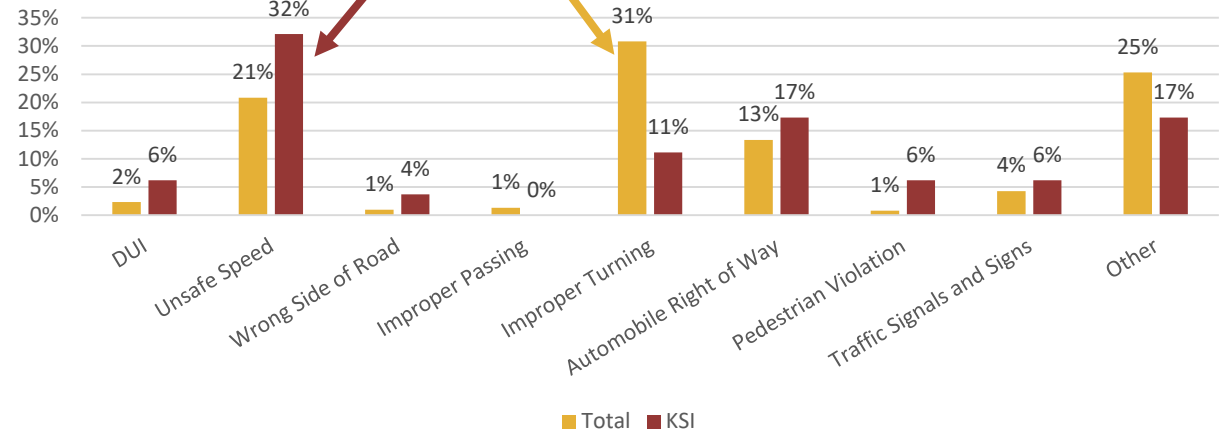
Collision Type



Collisions by Motor Vehicle Involved With



Primary Violation Categories



Equivalent Property Damage Only (EPDO) Score

Collision Severity	EPDO Score
Fatal and Severe Injury Combined	165
Visible Injury	11
Complaint of Pain	6
Property Damage Only (PDO)	1

EPDO Score =

(165 x # of Fatal Collisions) +

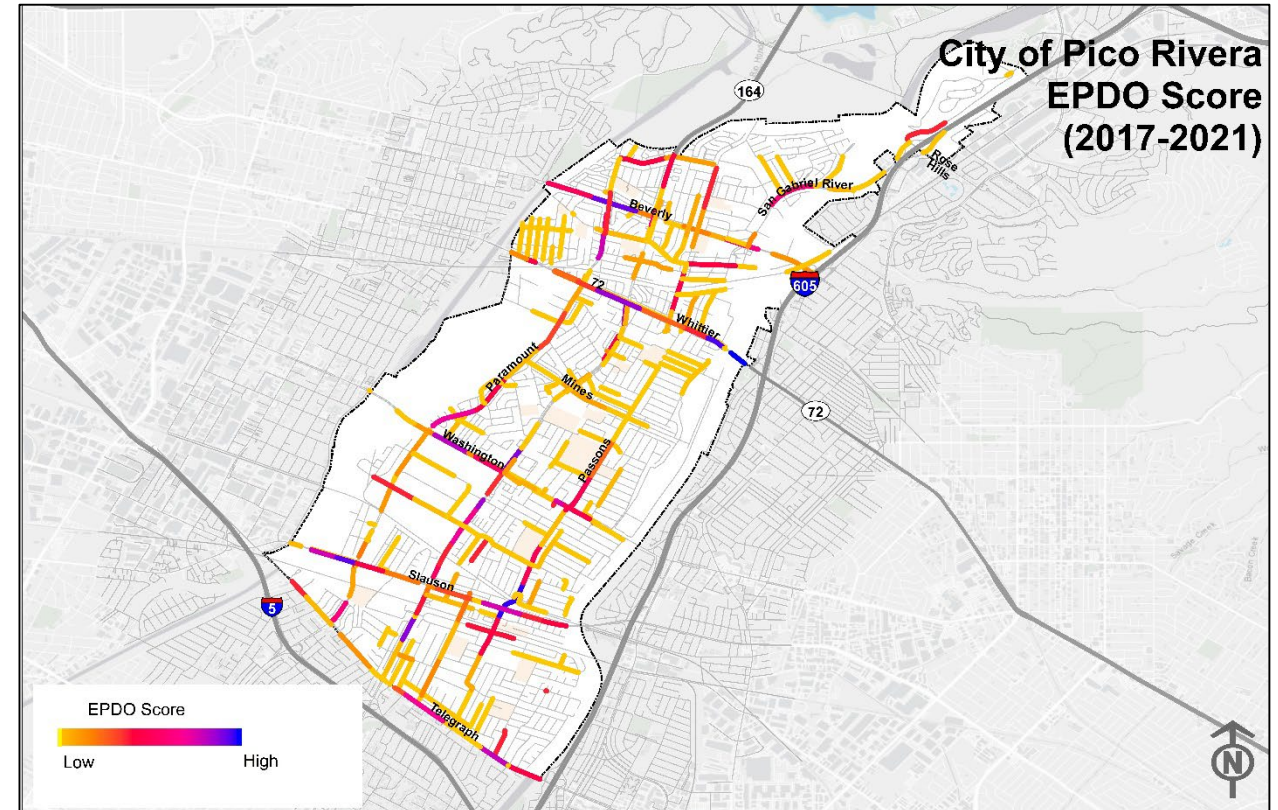
(165 x # of Severe Injury Collisions) +

(11 x # of Other Visible Injury Collisions) +

(6 x # of Complaint of Pain Collisions) +

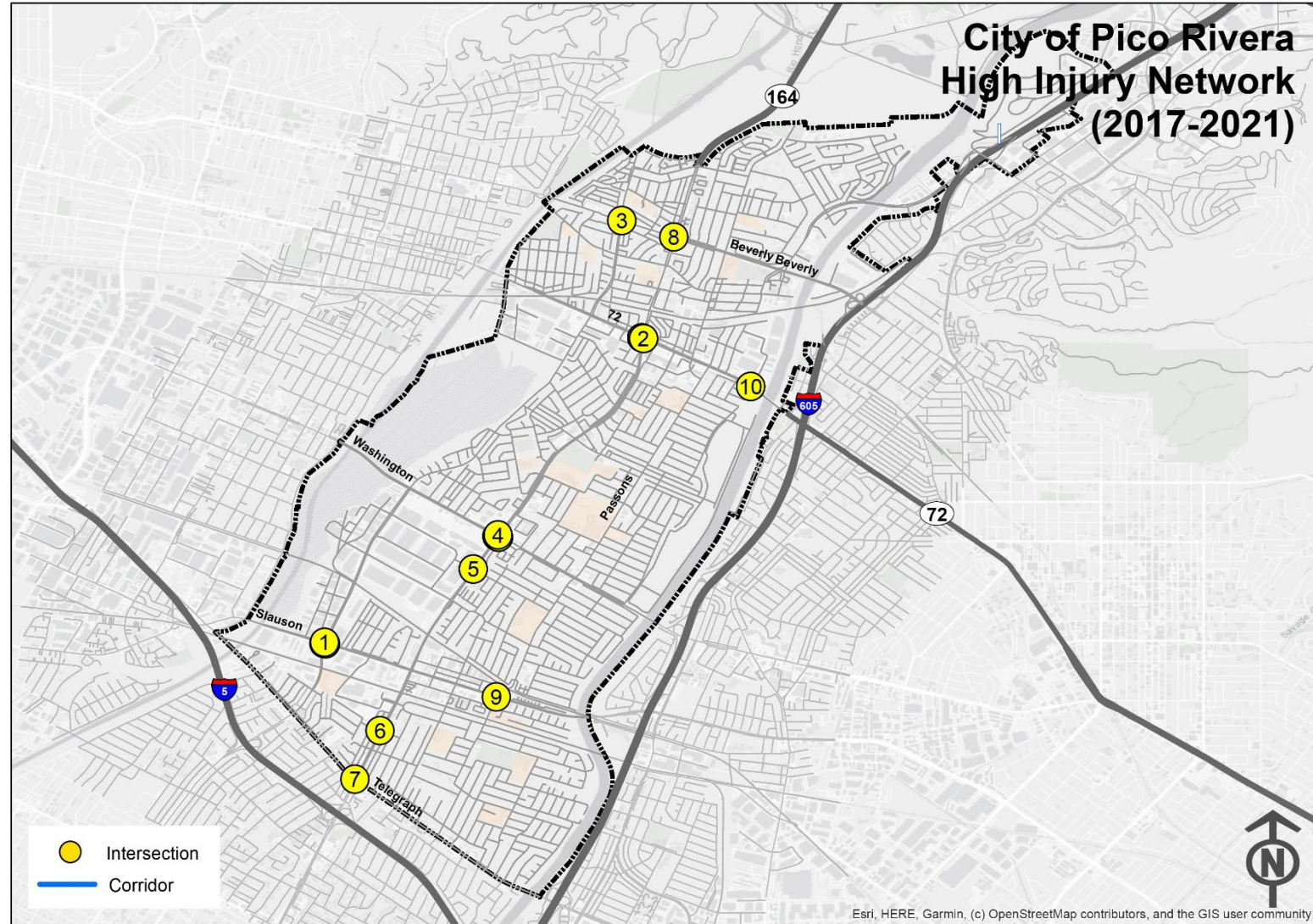
(1 x # of PDO Collisions)

(Source: Local Roadway Safety Manual 2020, Caltrans)



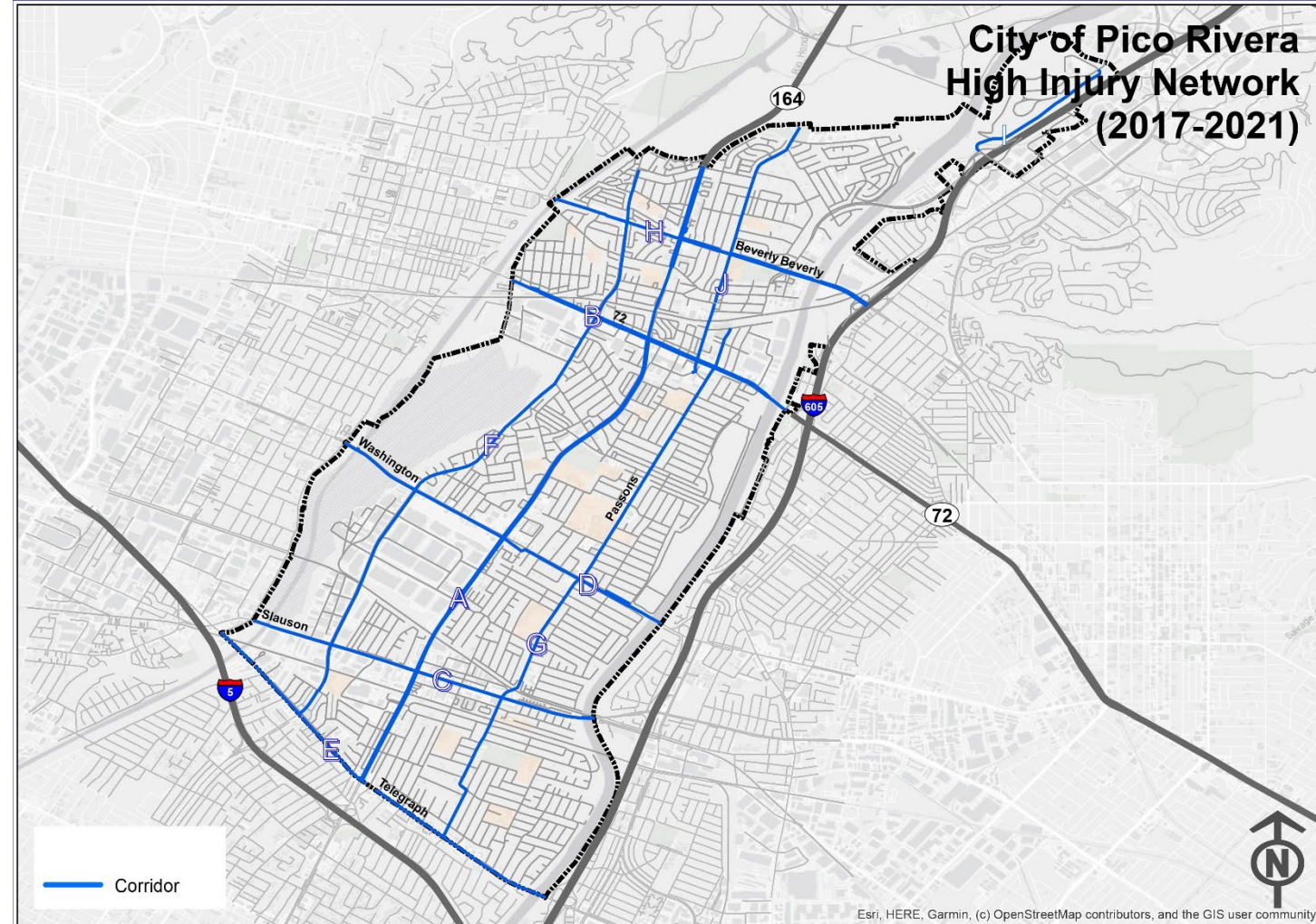
High-Injury Intersections

ID	Intersection	Total Injury Collisions	Severity Weight
1	Slauson Ave and Paramount Blvd	14	581
2	Rosemead Blvd and Whittier Blvd	8	535
3	Beverly Blvd and Paramount Blvd	14	530
4	Rosemead Blvd and Washington Blvd	10	422
5	Rosemead Blvd and Danbridge St	7	365
6	Rosemead Blvd and Maxine St	5	358
7	Rosemead Blvd and Telegraph Rd	4	342
8	Beverly Blvd and Rosemead Blvd	9	248
9	Slauson Ave and Passons Blvd	10	244
10	Gregg Rd and Whittier Blvd	8	227



High-Injury Corridors

ID	Corridor	Total Injury Collisions	Length (miles)	Severity Weight
A	Rosemead Blvd: From/To City Limits	90	4.4	2,777
B	Whittier Blvd/ SR 72: From/To City Limits	63	1.6	1,452
C	Slauson Ave: From/To City Limits	55	1.8	1,379
D	Washington Blvd: From/To City Limits	38	2.0	1,237
E	Telegraph Rd: From/To City Limits	29	2.5	850
F	Paramount Blvd: Gallatin Rd to Telegraph Road	24	4.0	820
G	Passons Blvd: Stephens St to City Limit	26	3.6	648
H	Beverly Blvd: From/To City Limits	32	1.8	560
I	Rooks Rd: Sports Arena Dr to San Gabriel River Pkwy	7	0.9	519
J	Durfee Ave: Kruse Road to Jackson St	8	1.6	205



Top Emphasis Areas

- Improve Intersection Safety
- Address Rear-end Collisions
- Address Broadside Collisions
- Reduce Unsafe Speed Violations
- Address Nighttime Collisions
- Reduce Improper Turning Violations

Objective:			
Reduce the number of KSI collisions at intersections.			
	Strategy	Performance Measure	Agencies/Organizations
Education	Conduct public information and education campaign for intersection safety laws regarding traffic signals, stop signs, and turning left or right.	Number of education campaigns or residents reached.	City/LA County Sheriff Department
Enforcement	Targeted enforcement at high-injury intersections to monitor right-of-way violations, speed limit laws and other violations that occur at intersections.	Decrease in number of citations and/or warnings issued over time due to increased driver compliance.	LA County Sheriff Department
Engineering	<ul style="list-style-type: none"> • S02, Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number • S03, Improve signal timing • S09, Install raised pavement markers • S16/NS04/NS05, Convert intersection to roundabout • NS06, Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs • NS07, Upgrade intersection pavement markings • NS08, Install Flashing Beacons at Stop-Controlled Intersections • NS09, Install flashing beacons as advance warning (Non-Signalized Intersection) (NS.I.) • NS10, Install transverse rumble strips on approaches • NS11, Improve sight distance to intersection (Clear Sight Triangles) • NS13, Install splitter-islands on the minor road approaches • NS14, Install raised median on approaches • NS19PB, Install raised medians (refuge islands) • Automated Red-light Enforcement 	Number of intersections improved.	City
EMS	S05, Install emergency vehicle pre-emption systems Improve resource of deployment for emergency responses to collision sites. Ensure emergency routes are clear and well defined	EMS vehicle response time.	City/LA County LA County Fire Department & EMS Response Teams

Draft Countermeasure Toolbox – Signalized Intersections

HSIP Code	Countermeasure
S02	Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number
S03	Improve signal timing (coordination, phases, red, yellow, or operation)
S05	Install emergency vehicle pre-emption systems
S09	Install raised pavement markers and striping (Through Intersection)
S11	Improve pavement friction (High Friction Surface Treatments)
S12	Install raised median on approaches (S.I.)
S13PB	Install pedestrian median fencing on approaches
S20PB	Install advance stop bar before crosswalk (Bicycle Box)
S21PB	Modify signal phasing to implement a Leading Pedestrian Interval (LPI)

Signalized Intersection Improvements



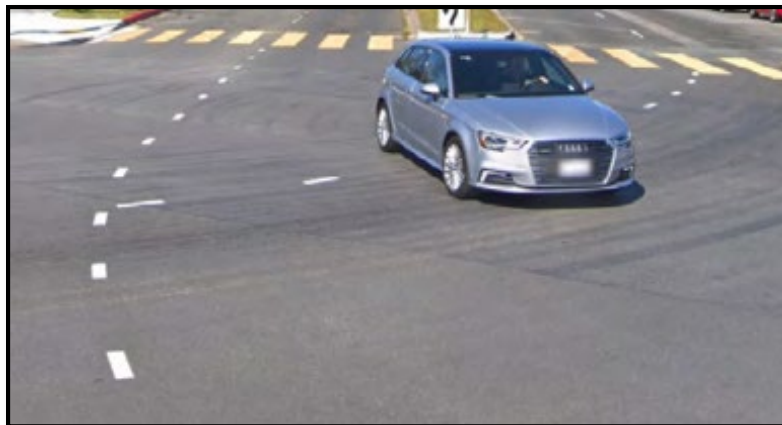
*S02- Improve Signal Hardware
(lenses, back-plates with
retroreflective borders,
mounting, size, and number)*



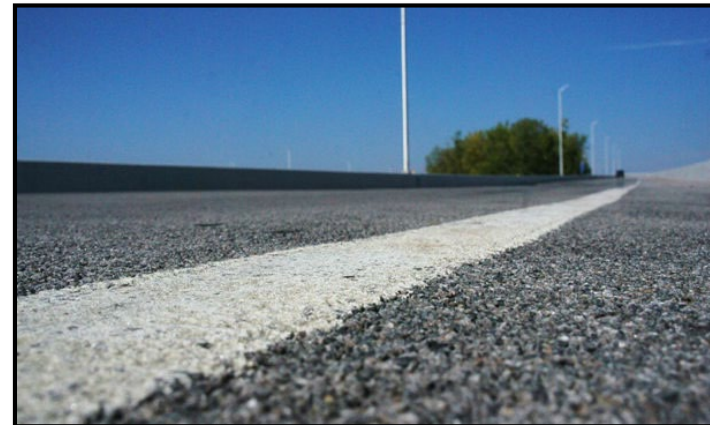
*S03- Improve Signal Timings
(coordination, phases, red, yellow, or
operation)*



S05- Install emergency vehicle pre-emption systems



*S09- Install raised pavement markings and striping
(Through Intersection)*



S11- Improve pavement friction

Signalized Intersection Improvements



S12- Install raised median on approaches



S13- Install pedestrian median fencing on approaches



S20PB- Advance Stop Bar (Bicycle Box)



S21PB- Modify signal phasing to implement a Leading Pedestrian Interval (*LPI*)

Draft Countermeasure Toolbox – Unsignalized Intersections

HSIP Code	Countermeasure
NS03	Install Signals (If Warranted)
NS22PB	Install Rectangular Rapid Flashing Beacon (RRFB)
NS23PB	Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))

Un-signalized Intersection Improvements



NS03- Install Signal (Including Hybrid Beacon, If Warranted)



NS22PB- Install Rectangular Rapid Flashing Beacon (RRFB)

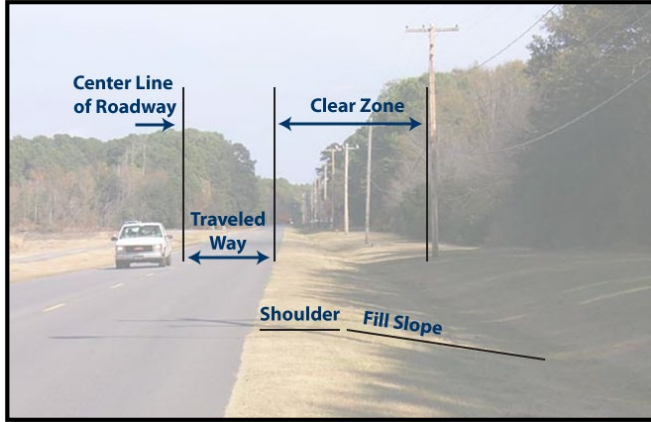


NS06- Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs

Draft Countermeasure Toolbox – Roadway Segments

HSIP Code	Countermeasure
R02	Remove or relocate fixed objects outside of Clear Recovery Zone
R21	Improve pavement friction (High Friction Surface Treatments)
R22	Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)
R26	Install dynamic/variable speed warning signs
R27	Install delineators, reflectors and/or object markers

Roadway Segment Improvements



R02- Remove or relocate fixed objects outside of Clear Recovery Zone



R21- Improve pavement friction (High Friction Surface Treatments)



R22 - Install/Upgrade signs with new fluorescent sheeting (*regulatory or warning*)



R26- Install dynamic/variable speed warning signs



R27- Install delineators, reflectors, and/or object markers

Safety Projects

Project 1: Safety at Signalized Intersections

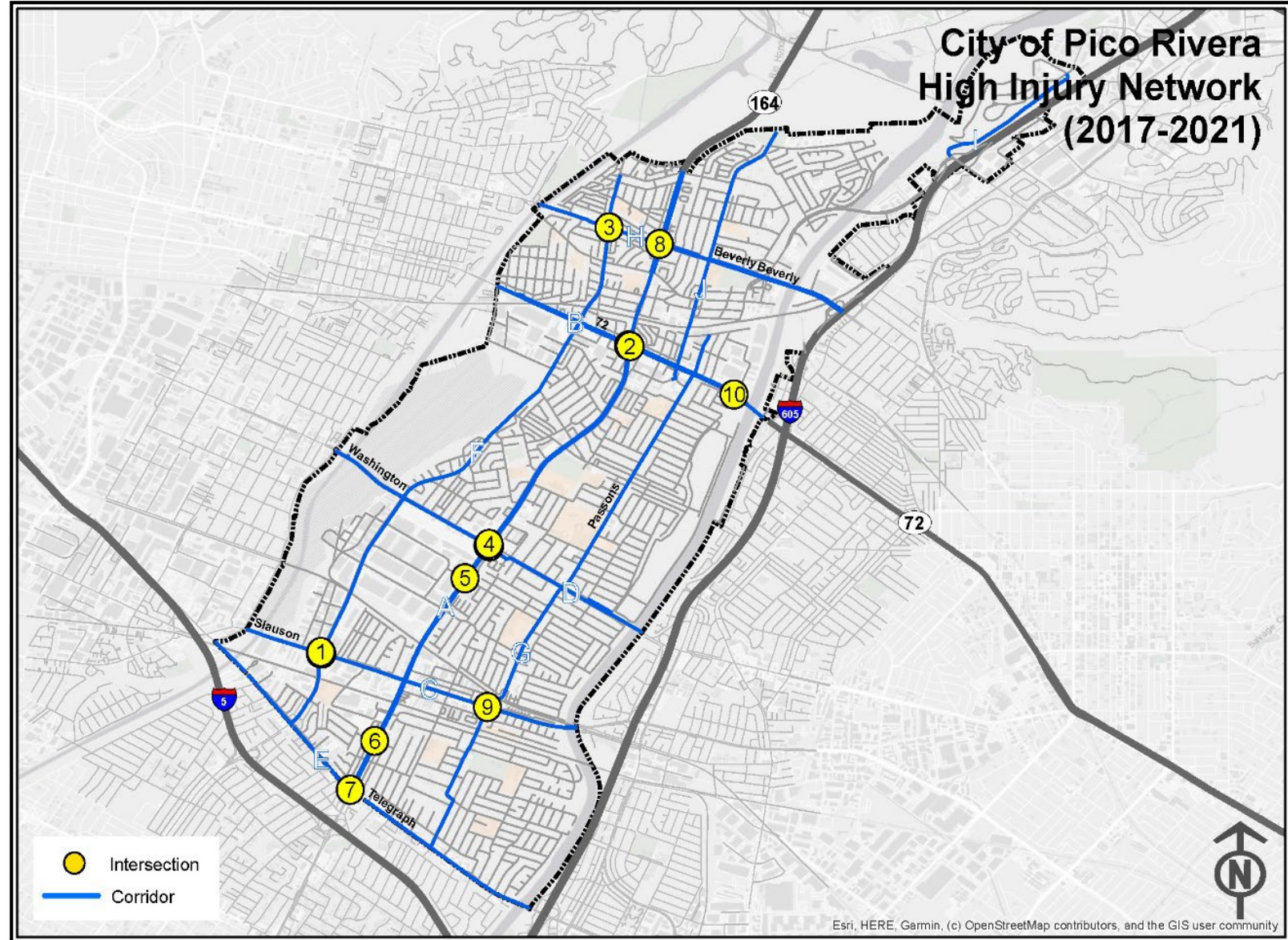
Project 2: Safety at Signalized Intersections

Project 3: Citywide Signal Timing:

HSIP Project: Citywide Signal Upgrade

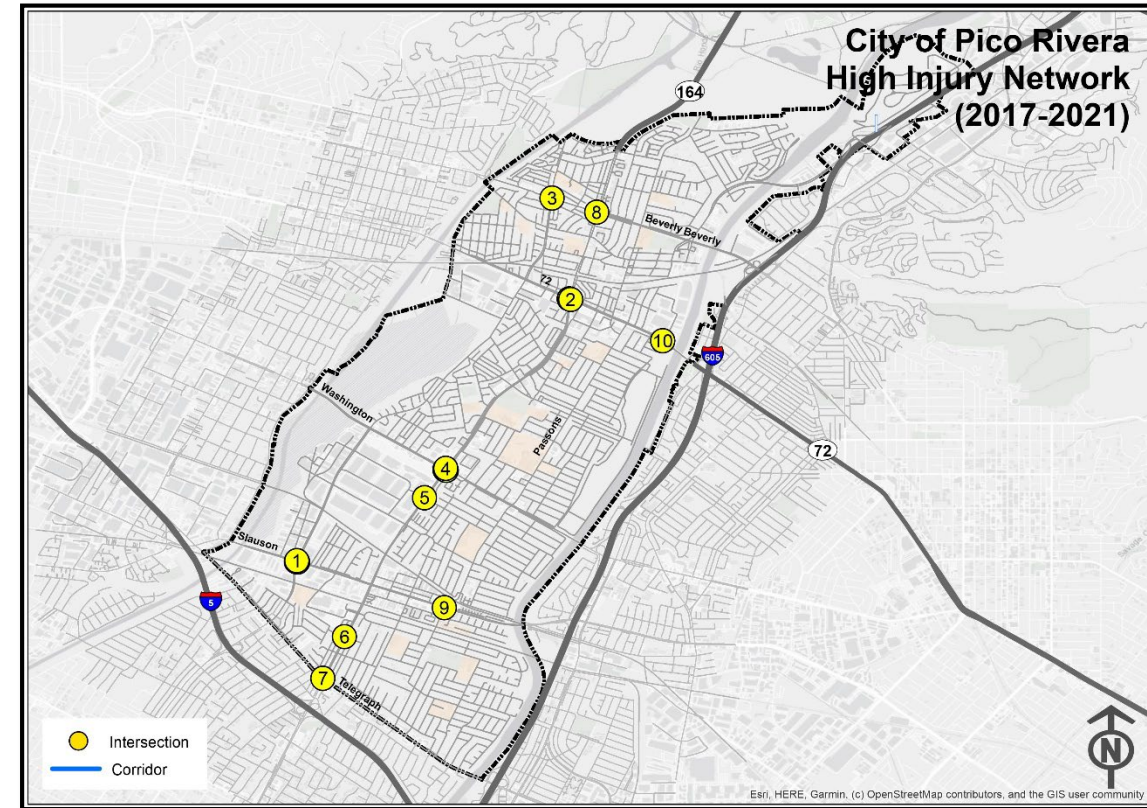
Project 5: Safety on Roadway Segments

HSIP Project: Citywide Sign Upgrade



Project 1: Safety at Signalized Intersections

#	Location	CM 1	CM 2	CM3	CM4	CM5
1	Slauson Ave and Paramount Blvd	S03	S09	S11		S13PB
2	Rosemead Blvd and Whittier Blvd	S03	S09	S11		
3	Beverly Blvd and Paramount Blvd	S03	S09	S11		
4	Rosemead Blvd and Washington Blvd	S03	S09	S11	S12	S13PB
7	Rosemead Blvd and Telegraph Rd	S03	S09	S11	S12	
8	Beverly Blvd and Rosemead Blvd	S03		S11		S13PB
9	Slauson Ave and Passons Blvd	S03	S09		S12	
10	Gregg Rd and Whittier Blvd	S03	S09		S12	S13PB



S03 – Improve signal timing (coordination, phases, red, yellow, or operation)

S09 – Install raised pavement markers and striping

S11 – Improve pavement friction (High Friction Surface Treatments)

S12 – Install raised median on approaches (S.I.)

S13PB - Install pedestrian median fencing on approaches

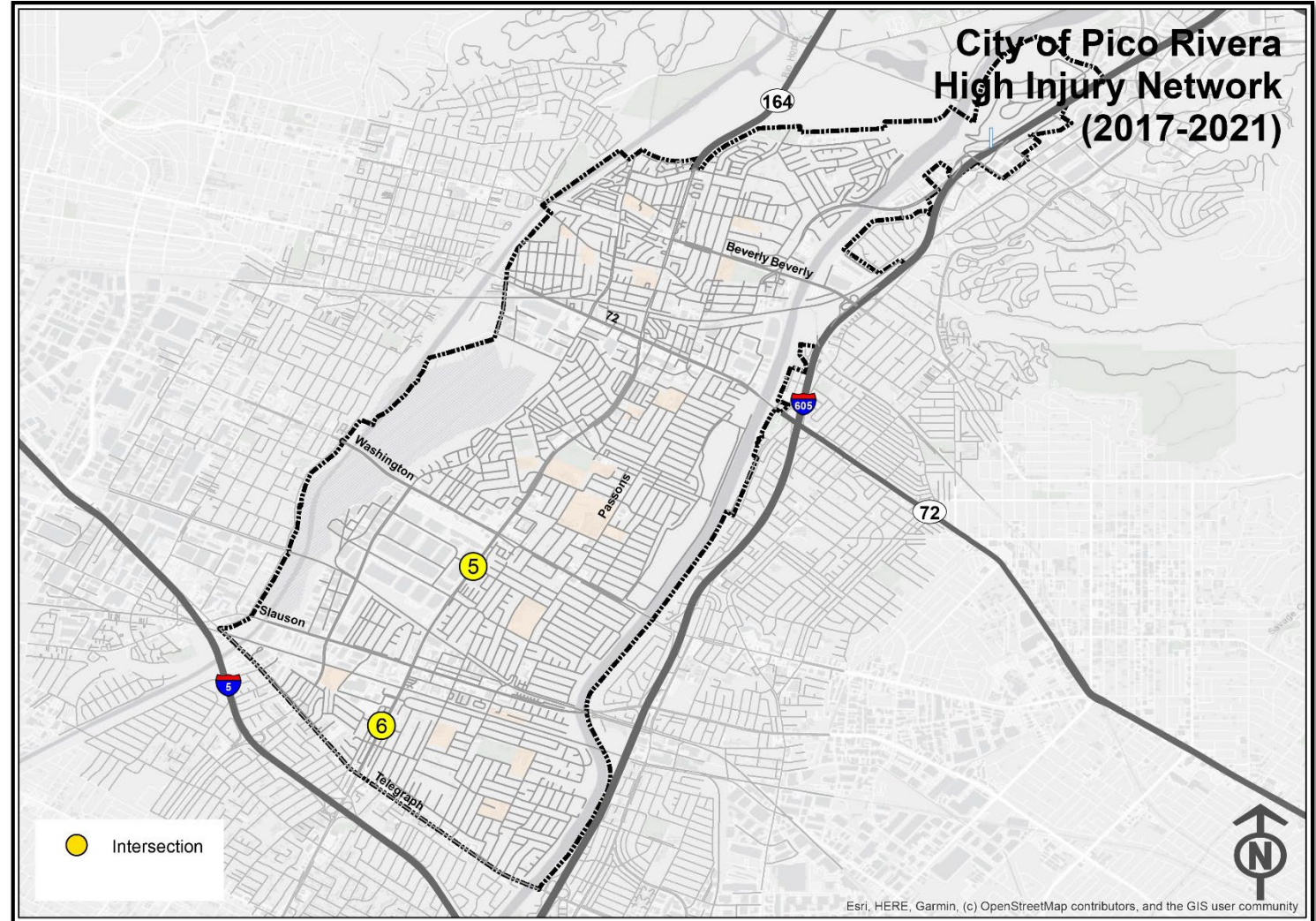
Project 2: Safety at Unsignalized Intersections

#	Location	CM 1	CM 2	CM3
5	Rosemead Blvd and Danbridge St	NS03	NS22PB	NS23PB
6	Rosemead Blvd and Maxine St	NS03		

NS03 – Install Signals

NS22PB – Install Rectangular Rapid Flashing Beacon (RRFB)

NS23PB – Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))

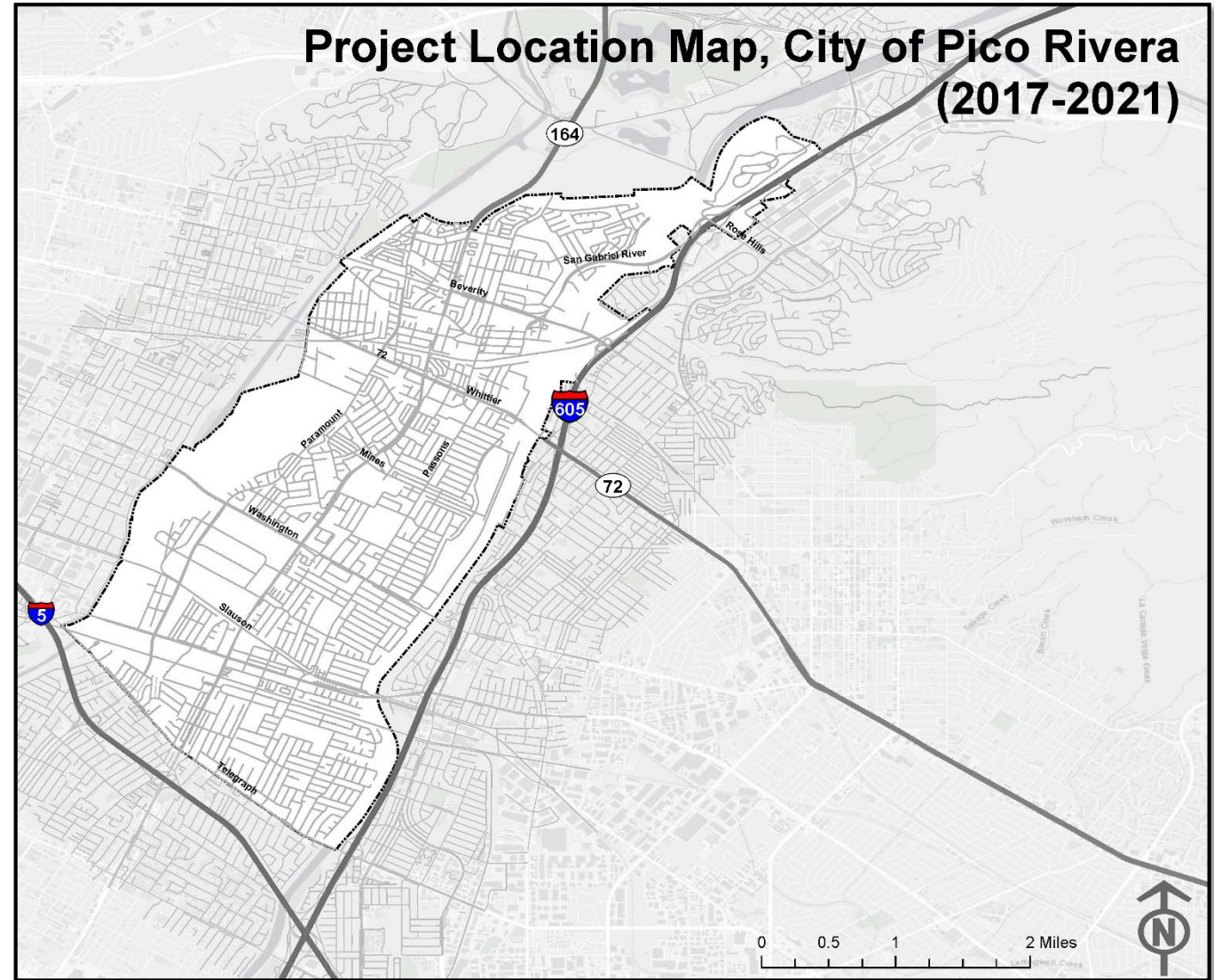


Project 3: Citywide Signal Timing

#	Location	CM 1	CM 2	CM3
1	Citywide Signalized Intersections – 47 Intersections	S03	S05	

S03 – Improve signal timing (coordination, phases, red, yellow, or operation) (Improve Clearance Time)

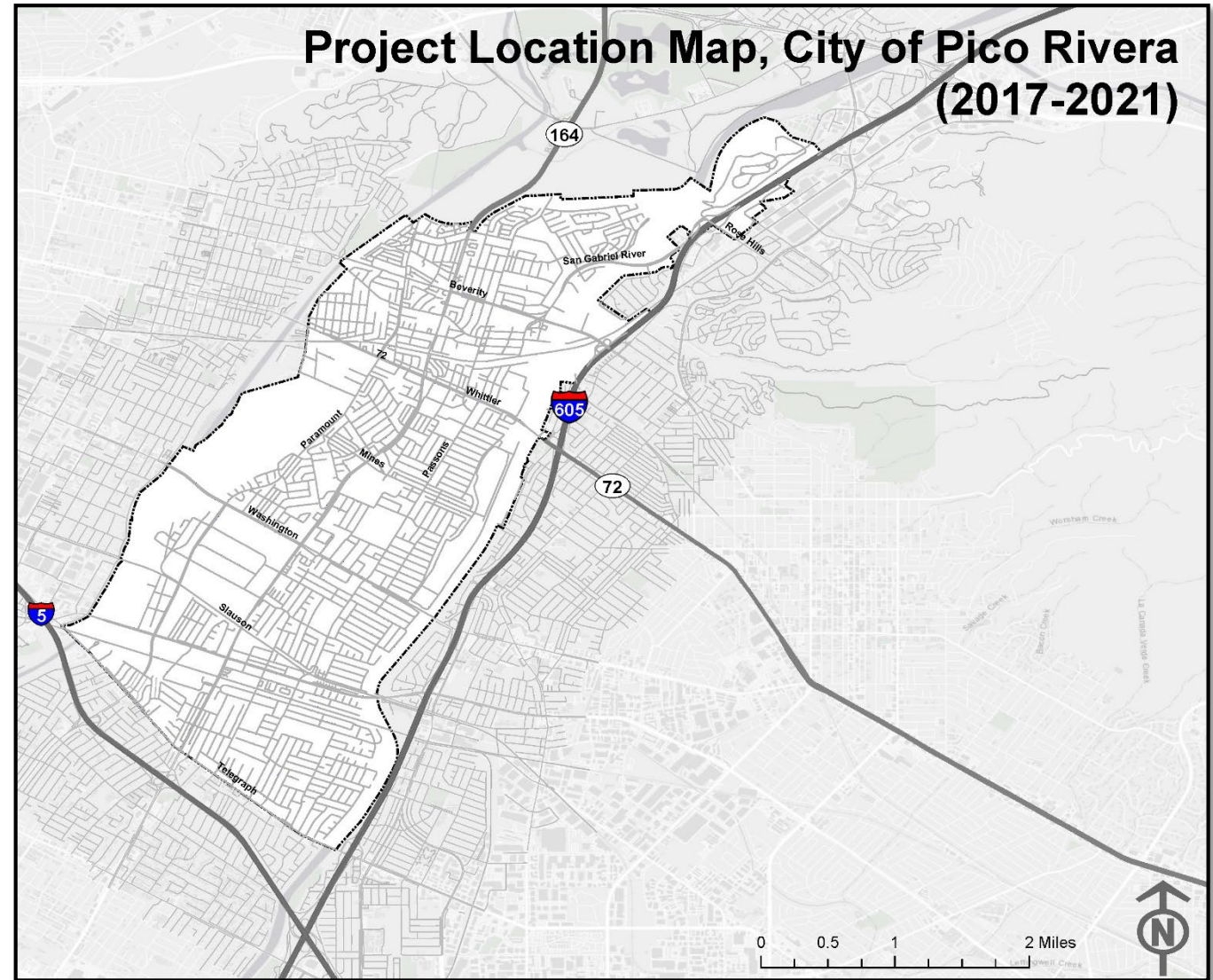
S05 – Install emergency vehicle pre-emption systems



HSIP Application Project – Citywide Signal Upgrade

#	Location	CM 1	CM 2	CM3
1	Citywide Signalized Intersections – 47 Intersections	S02	S17PB	S20PB

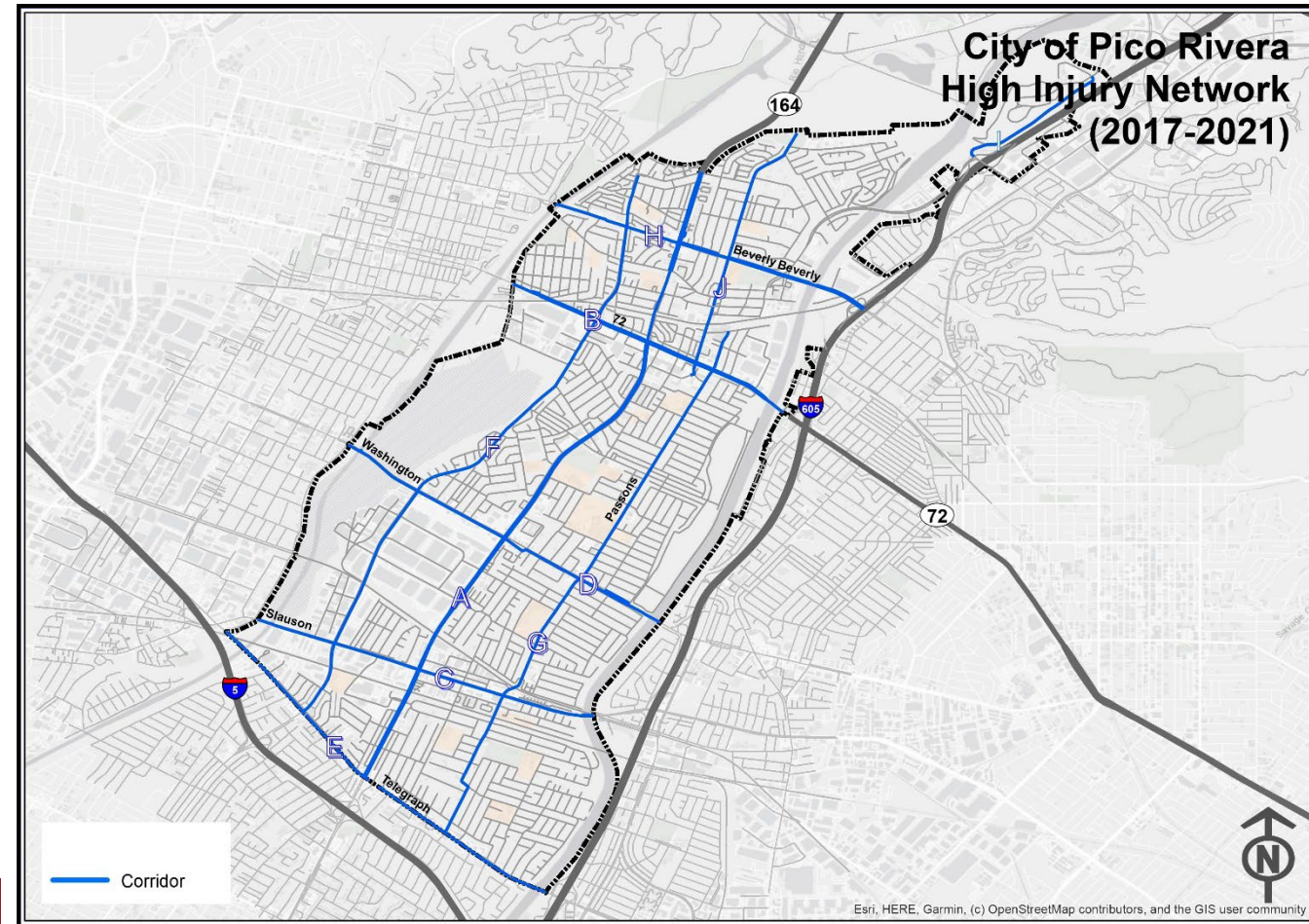
- S02** – Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number
- S17PB** – Install pedestrian countdown signal heads
- S20PB** - Install advance stop bar before crosswalk (Bicycle Box)



Project 4: Safety on Roadway Segments

#	Location	CM1	CM2	CM3	CM4
A	Rosemead Blvd: From/To City Limits	R02	R21	R26	R27
B	Whittier Blvd/ SR 72: From/To City Limits		R21	R26	R27
C	Slauson Ave: From/To City Limits		R21		R27
D	Washington Blvd: From/To City Limits		R21		R27
E	Telegraph Rd: From/To City Limits		R21	R26	R27
F	Paramount Blvd: Gallatin Rd to Telegraph Road		R21	R26	R27
G	Passons Blvd: Stephens St to City Limit		R21		R27
H	Beverly Blvd: From/To City Limits	R02	R21		R27
I	Rooks Rd: Sports Arena Dr to San Gabriel River Pkwy			R26	R27
J	Durfee Ave: Kruse Road to Jackson St				R27

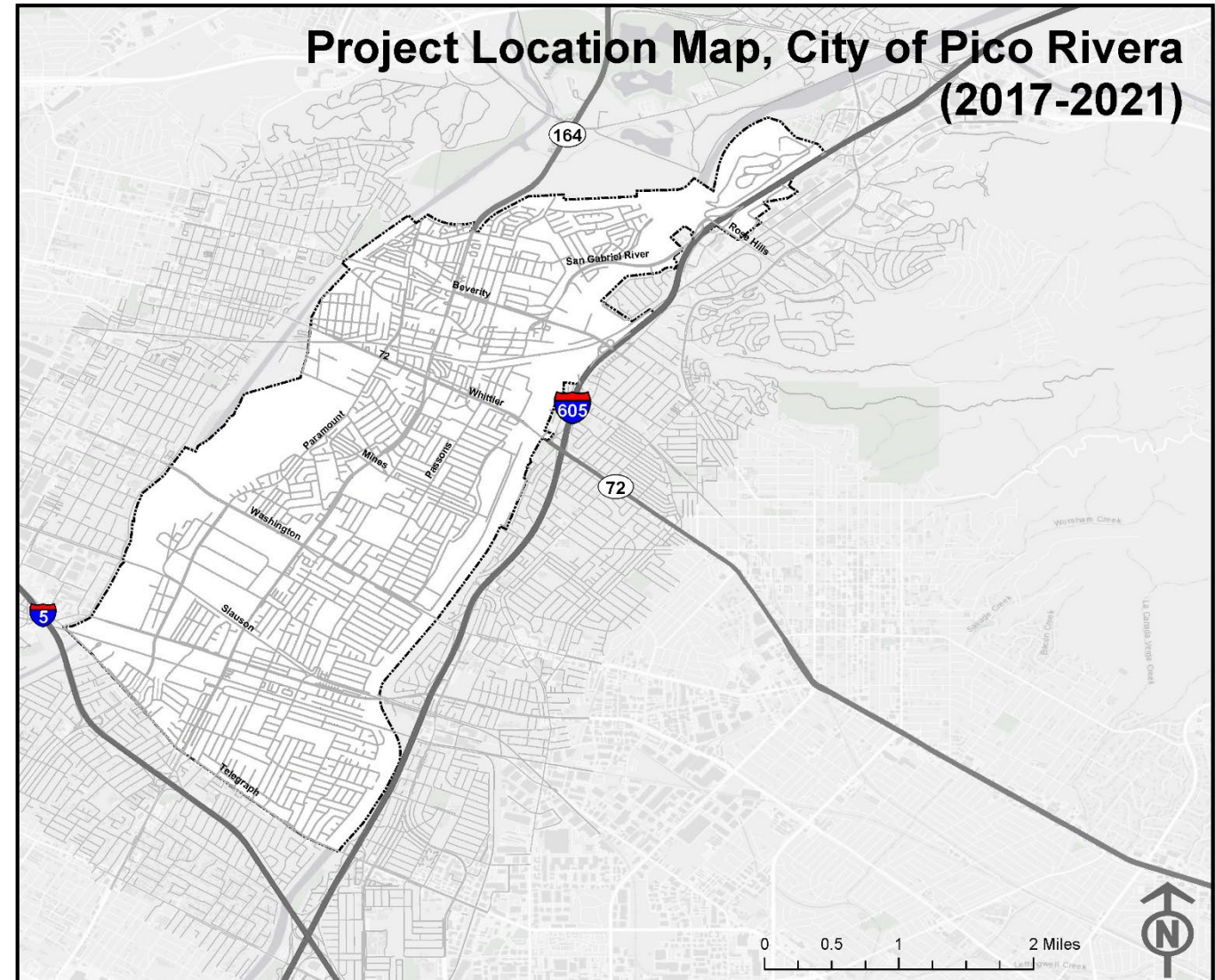
R02 – Remove or relocate fixed objects outside of Clear Recovery Zone
R21 – Improve pavement friction (High Friction Surface Treatments)
R26 – Install dynamic/variable speed warning signs
R27 – Install delineators, reflectors and/or object markers



HSIP Application Project – Citywide Sign Upgrade

#	Location	CM 1	CM 2	CM3
1	Citywide Roadway Traffic Sign Upgrade	R22		

R22 – Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)



Draft Non Engineering Strategies

- Education

- Conduct public information and education campaign for intersection safety laws, unsafe speeds, distracted driving, improper turning and driving under the influence.
- Conduct bicycle and pedestrian safety campaigns and outreach to raise their awareness of bicycle and pedestrian safety needs through media outlets and social platforms in Moraga every 3-5 years

- Enforcement

- Targeted enforcement at high-risk locations.
- Increase the number of personnel who have completed Advanced Roadside impaired Driving Enforcement (ARIDE) training

- EMS

- Install emergency vehicle pre-emption systems
- Increase the number of EMS/fire control personnel taking Traffic Incident Management Training

- Other

- Prepare a Town-wide Traffic Calming Plan

A photograph of a street scene with a 'Dal Rae' sign and palm trees, overlaid with a semi-transparent red banner containing the word 'Discussion'.

Discussion

Next Steps

- Incorporate Feedback
- Cost Estimate and BCR Analysis
- Present to Transportation Subcommittee
- Prepare Draft Local Road Safety Plan
- Present Draft for review
- Present Draft to City Council
- City Council for Adoption



A photograph of a street scene with a 'Dal Rae' sign and palm trees, overlaid with a semi-transparent red banner containing the text 'Thank you!'. The background shows a clear blue sky with scattered white clouds, a tall palm tree on the left, and a street with a white SUV in the foreground. A decorative street lamp is visible on the right side of the road.

Thank you!

What is a Local Roadway Safety Plan (LRSP)?

Overarching Goals:

- Systematically identify and analyze active transportation problems and recommend improvements
- Improve the safety of all road users by using proven effective countermeasures
- Coordinate with key Stakeholders to implement roadway safety improvements and response within Pico Rivera
- Continually leverage existing resources to secure additional funding for safety improvements
- Ensure that safety improvements are made in a manner that is fair and equitable for all Pico Rivera residents, especially disenfranchised communities

Considers engineering and non-engineering strategies:

- 4 E's of Traffic Safety: **E**ducation, **E**nforcement, **E**ngineering and **E**mergency Medical Services (EMS)



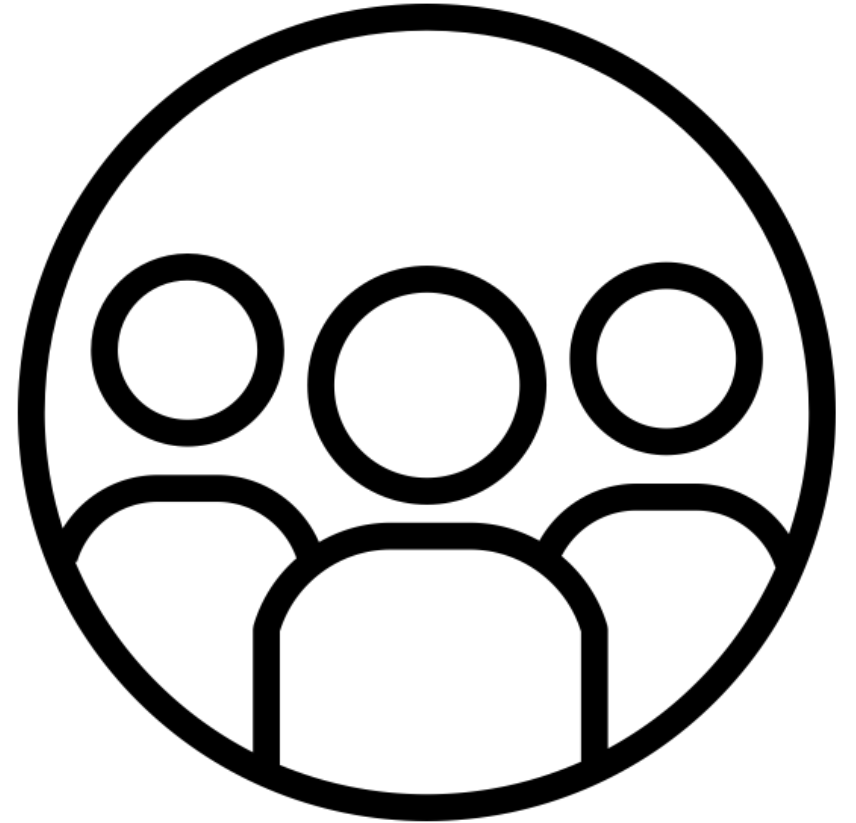
LRSP Process

- Five-years of collision data (2017-2021) on local roadways, including non-freeway state routes (SR 164 non-freeway, SR 72)
- Collision analysis
 - Identification of collision trends: collision types, severity, violation category, lighting conditions, etc.
 - Geographic analysis: spatial identification of top trends
- Identification of high-injury intersections and mid-block (roadway segment) locations
- Identification of emphasis areas
- Identification of viable countermeasures and develop a countermeasure toolbox
- Develop safety projects for high-risk locations



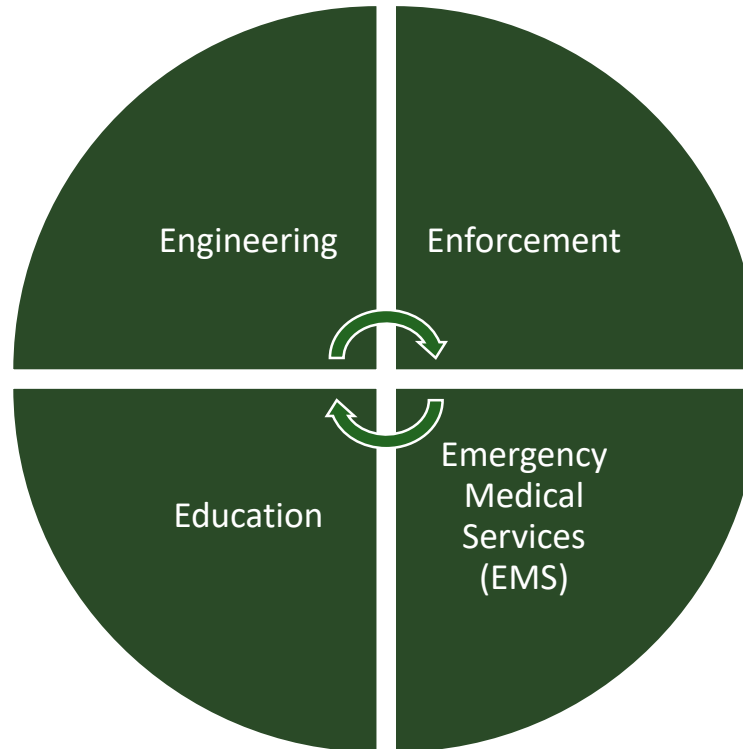
Your Role as a Safety Champion!

- Comments on the presentation
- Tell us about your traffic safety related issues or concerns
- Tell us what you heard from the members of the community
- Help set the goals and objectives of the LRSP
- Share with us any ideas for programs/safety measures under the E categories (Education, Enforcement, Engineering and EMS)
- Report your concerns in a map-based survey at <https://www.pico-rivera.org/index.php/local-roadway-safety-plan/>
- Share the survey with everyone
- Stay informed about the project!



The 4 E's of Traffic Safety

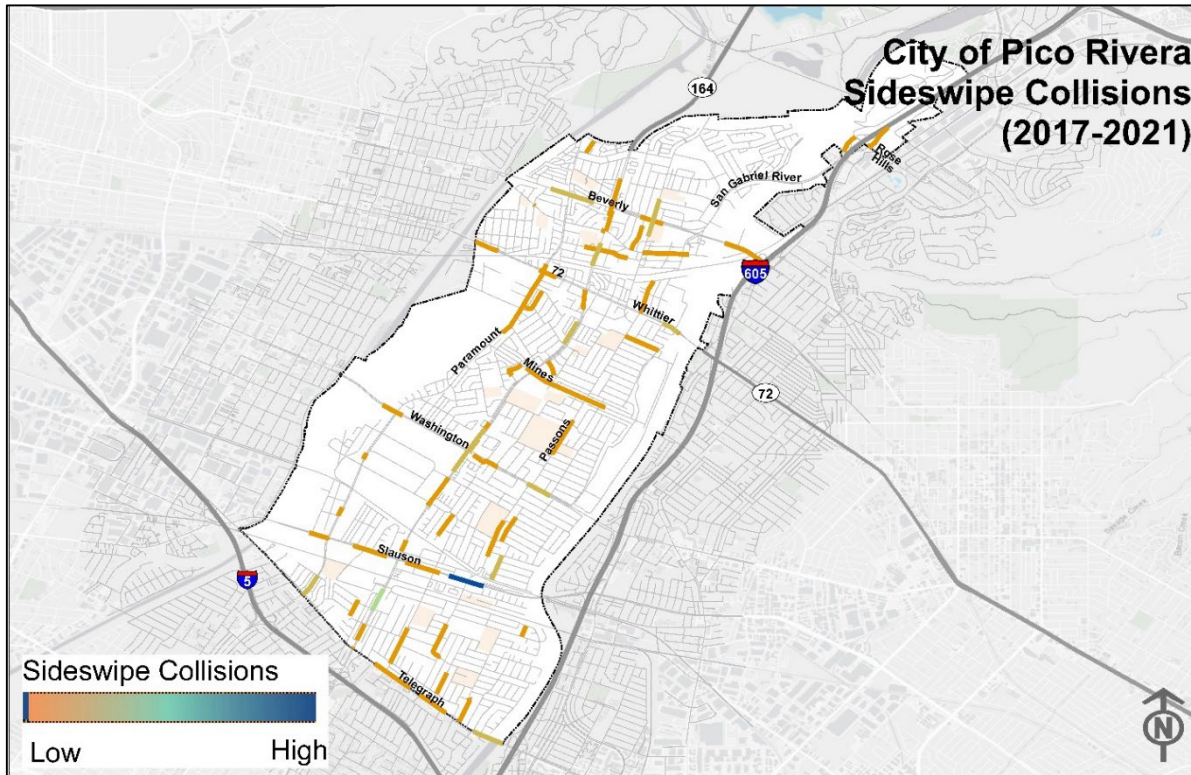
- HSIP eligible countermeasures
- E.g.: Improve intersection lighting, install median refuge island, install bulb outs, improving signs and striping
- Conduct focused public information and education campaigns
- Create pocket guides and informational fliers with pedestrian laws, stop sign violations, etc.
- Safe Routes to School education programs



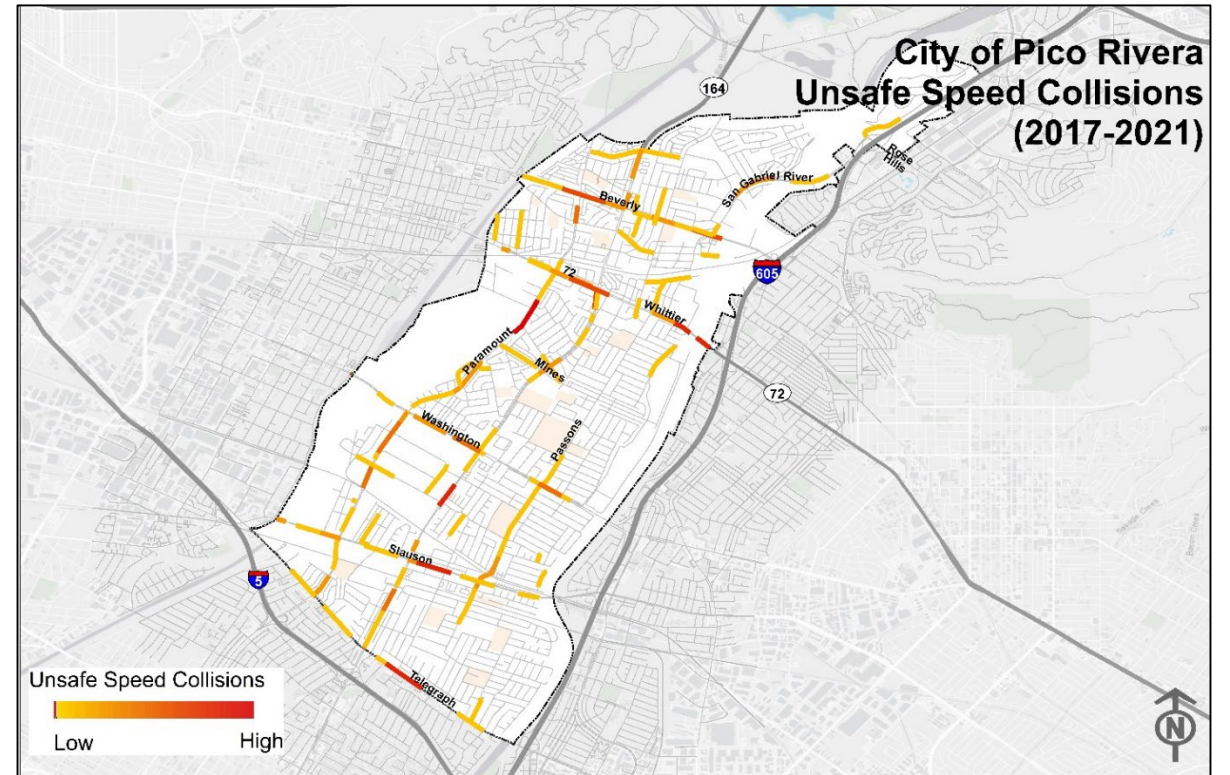
- Targeted enforcement at high risk intersections and priority locations
- Place high priority on enforcement of violation type that contribute to the most fatalities and severe injuries
- Improve deployment to collision sites
- Ensure emergency routes are defined and clear

Geographic Collision Analysis

29% of total collisions were Sideswipe



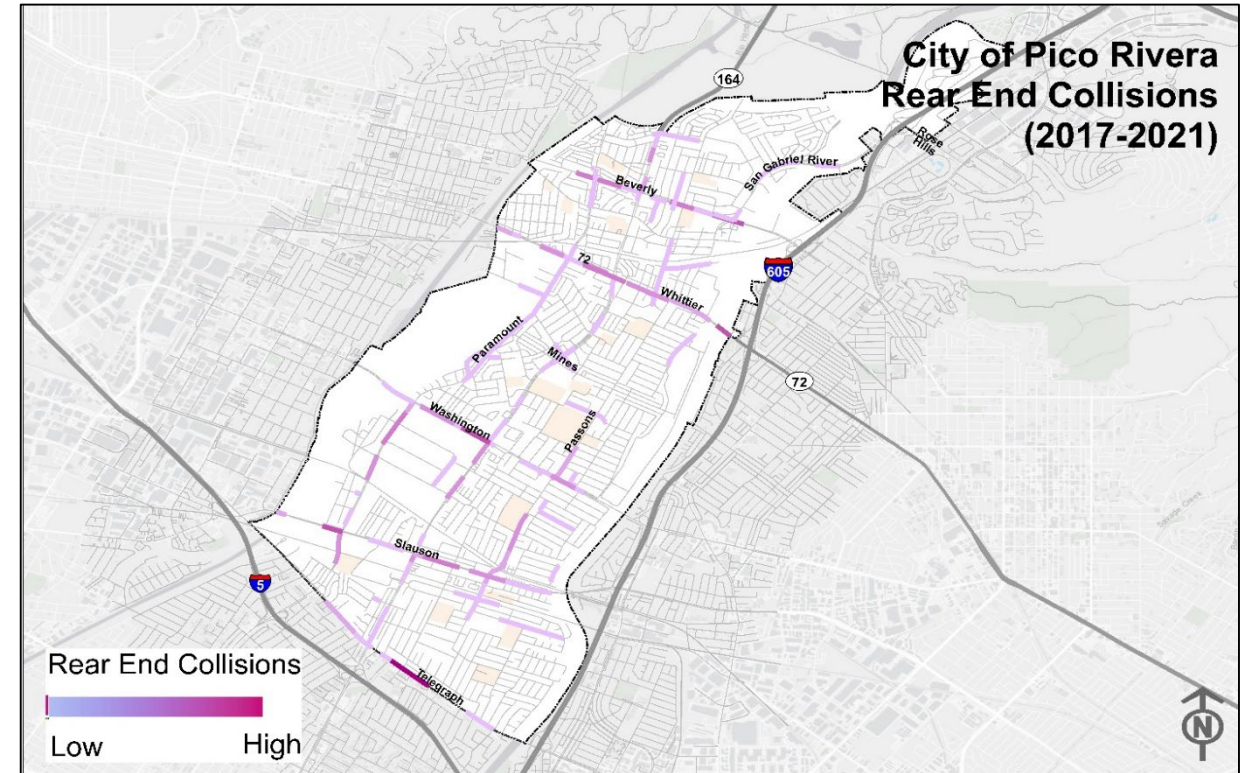
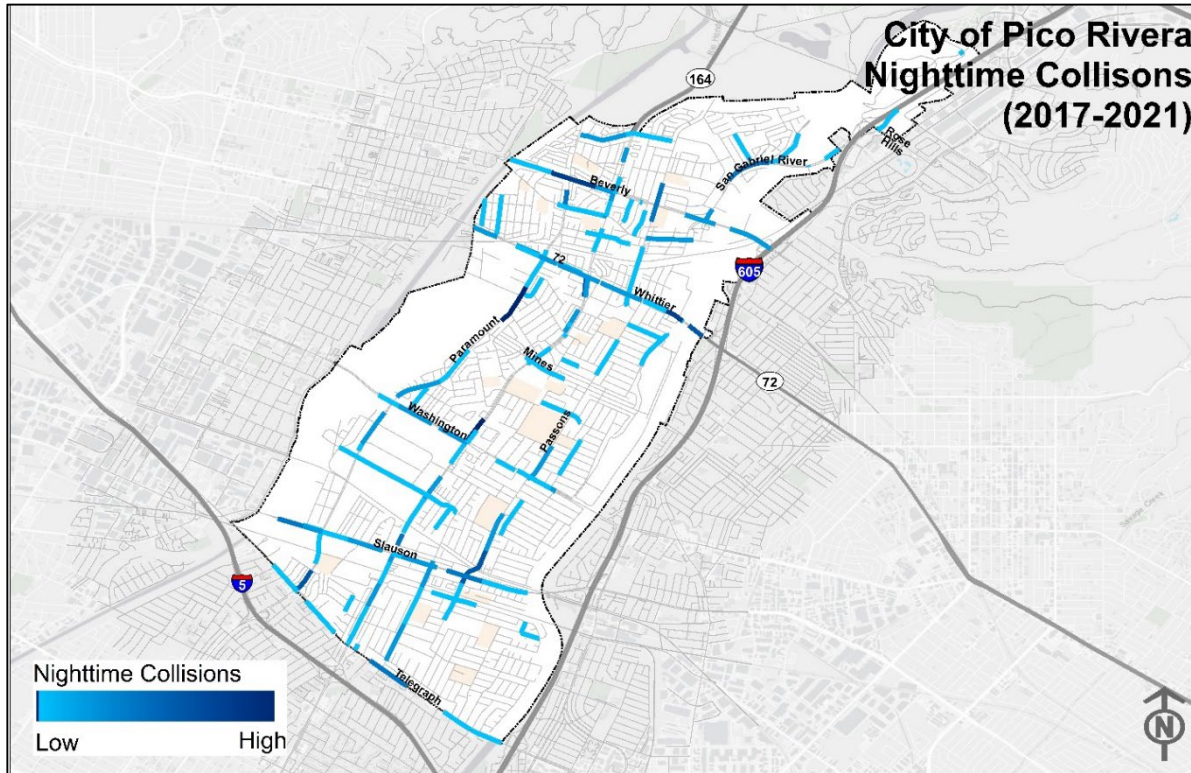
21% of total collisions were caused by Unsafe speed



Geographic Collision Analysis

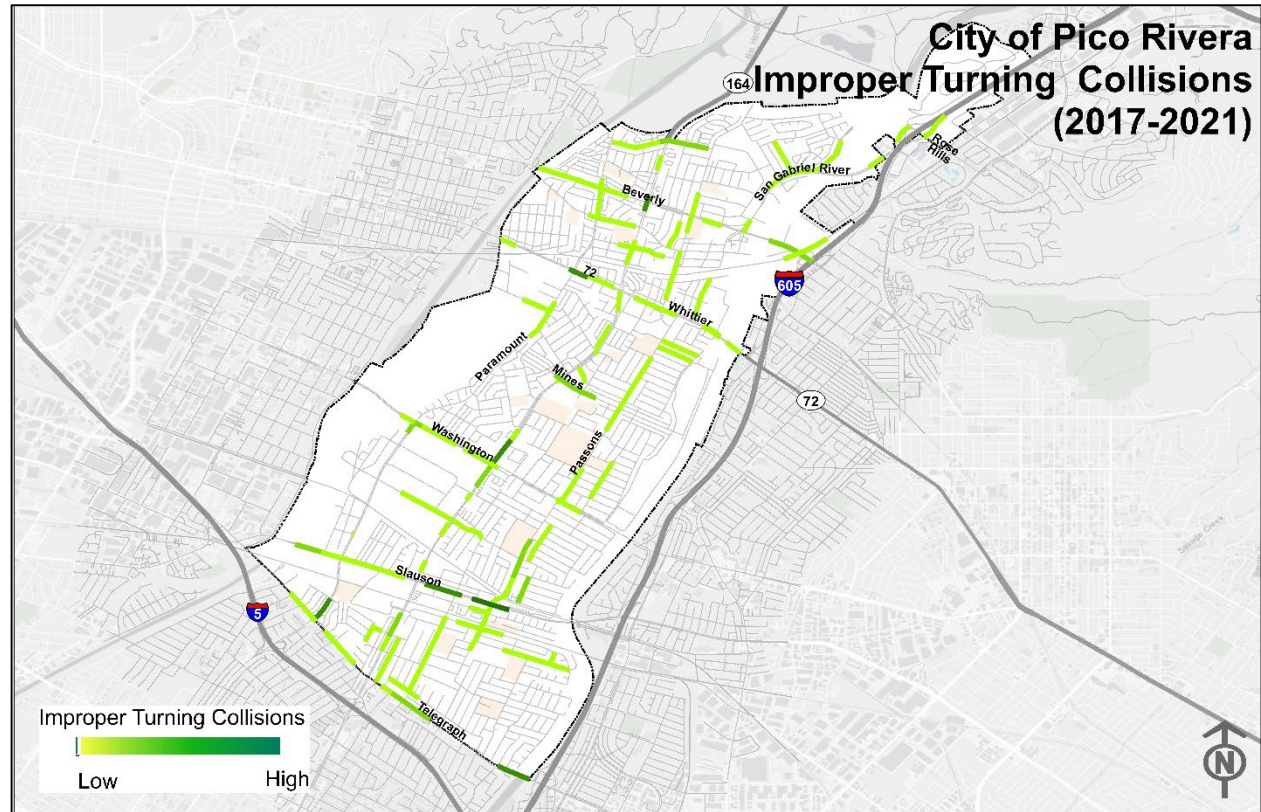
34% of total collisions occurred at Night

29% of total collision were Rear End



Geographic Collision Analysis

31% of total collisions were Improper Turning Violations



Project Website is Live!



Project Overview

The City of Pico Rivera is developing a comprehensive Local Roadway Safety Plan (LRSP). The LRSP would enable the City to enhance roadway safety for all modes of transportation and for all ages and abilities.

The overarching goal is to develop a successful LRSP by utilizing the historic collision database to create a decision-making process that relies on a partnership with stakeholders and public outreach using the five "E's of traffic safety: Engineering, Enforcement, Equity, Education, and Emergency Medical Services.

Scroll down to view the project area and report your roadway safety concerns in the City of Pico Rivera.

Collision History

Explore

[Project Overview](#)

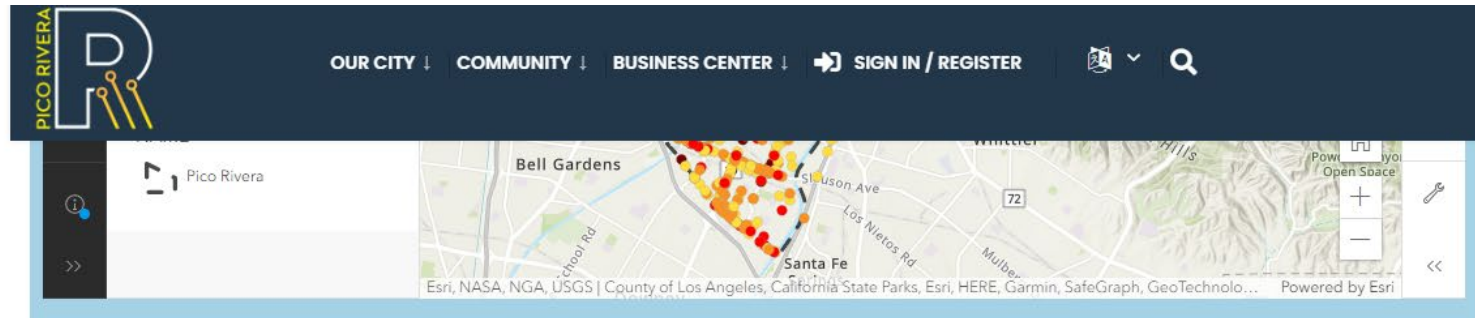
[Project Area](#)

[Collision History](#)

[Project Updates](#)

[Provide Feedback](#)

Provide Feedback



Project Updates

6/30/2022: View the Collision History section for collisions of all severity that occurred in the City of Pico Rivera from 2017 to 2021. We are constantly updating the interactive map as the project moves forward.

3/30/2022: Downloadable materials, plans, and reports will be uploaded here when they are available.

Provide Feedback

Your input is essential for the success of this Local Roadway Safety Plan. Click the button below to provide feedback with your concerns regarding safety and access for all modes, ages, and abilities.

[Report Your Area of Concern](#)

For further updates, check project updates or subscribe to receive notifications.



Tell us your concerns on the map!

