Program Development:
Intersection Safety Improvement Program
&
Vision Zero

July 6, 2021

Collaboration:

Public Works & Public Safety

EL PASO VISION ZERO

Zero Fatalities & Zero Serious Injuries

Program Initiatives

Align with ALL Strategic Plan Goals:

Goal 1. Cultivate an Environment Conducive to Strong, Sustainable Economic Development
Goal 2. Set the Standard for a Safe and Secure City
Goal 3. Promote the Visual Image of El Paso
Goal 4. Enhance El Paso's Quality of Life Through Recreational Cultural and Educational Environments
Goal 5. Promote Transparent and Consistent Communication Amongst All Members of the Community
Goal 6. Set the Standard for Sound Governance and Fiscal Management
Goal 7. Enhance and Sustain El Paso's Infrastructure Network
Goal 8. Nurture and Promote a Healthy, Sustainable Community

Previous Council Action

April 27, 2021

- City Council approved *to direct the City Manager to develop an Intersection Safety Improvement Program and bring back recommendations as part of the FY2022 budget discussions and to develop the framework for an El Paso Vision Zero program that incorporates all current City traffic safety programs and aligns with the Federal and State Vision Zero programs.*

Intersection Safety Improvement Program (ISIP)

Streets and Maintenance

Purpose/Opportunity Statement

Ensure the safety of all road users at intersections in the City of El Paso by analyzing colocations of fatal and serious injury crashes and prioritizing the vulnerable users.

Process

Data Collection

- Plot all crashes and identify fatal, injury, possible injury & non-injury crashes
- Filter out: *Intersection/Intersection Related* (crashes on TxDOT freeways; I-10, US-54, Spurs, etc...)

Data Analysis

- Analyze data based on colocation of crash types (map)
  - In areas of colocation, review *Manner of Collision* (right angle, rear-end, sideswipe), *Contributing Factors, Parties Involved*

Ranking

- Rank intersections based on colocation and crash types
  - intersections with all crash types will rank higher on the list

Improvement Determination

- Use Proven Countermeausures as recommended by FHWA and best practices

Crash Data Collection Example – C.R.A.S.H. Database

***Utilize BEST AVAILABLE data**

- Crash Year
- Case ID
- Crash Date
- Crash Time
- Reported Road
- Reported Intersecting Road
- Crash Latitude
- Crash Longitude
- Intersection Related
- Crash Severity
- Manner of Collision
- Light Condition
- Crash Contributing Factor List
- **Pedestrians**
- **Pedalcyclists**
- Total Crashes

2019 – 20,038 collisions

REPORT DETAILS

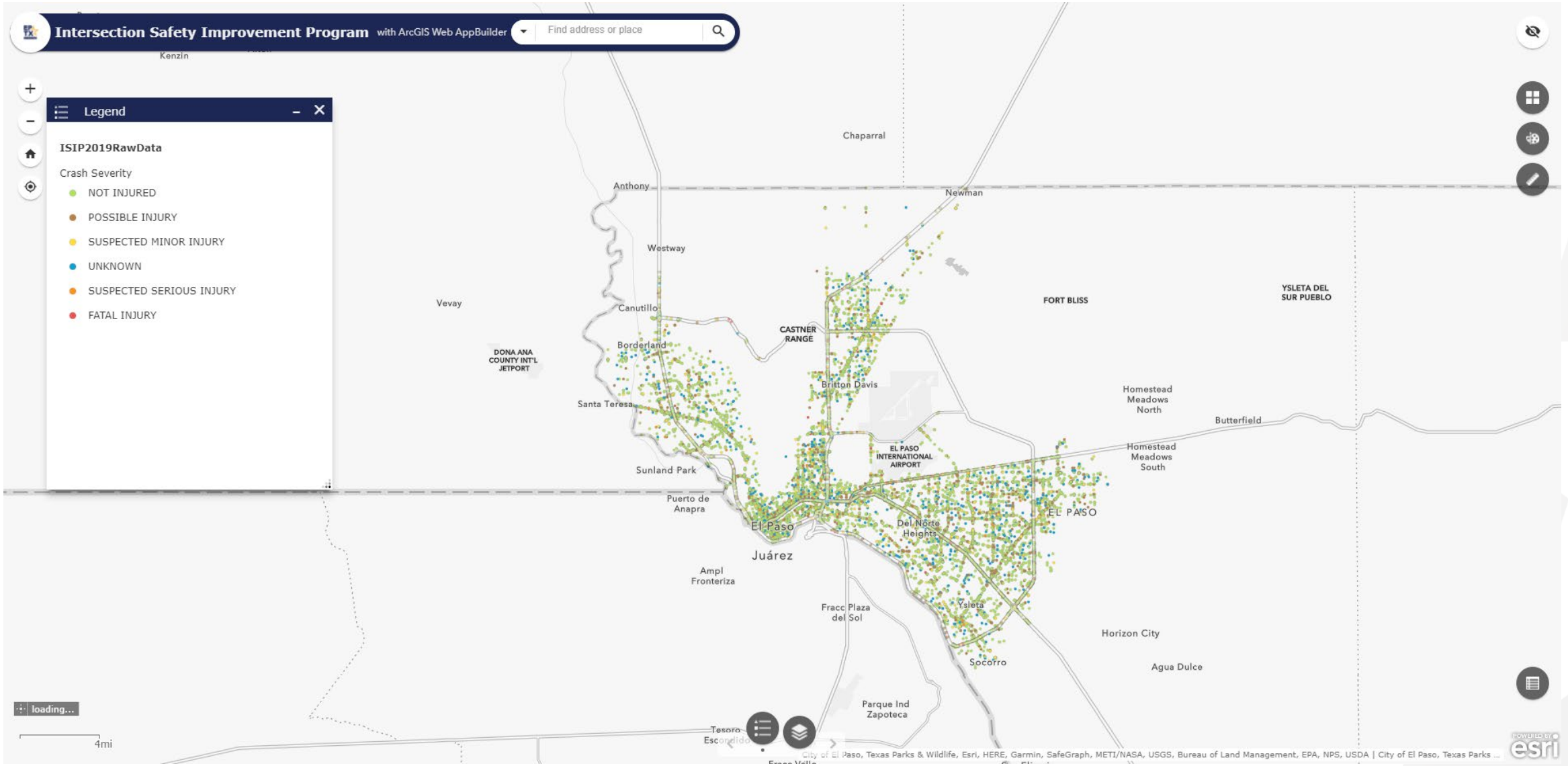
Report Filter:
(City = EL PASO) And ({Crash Year} = 2019)

1 2 3 4 5 of 401 pages

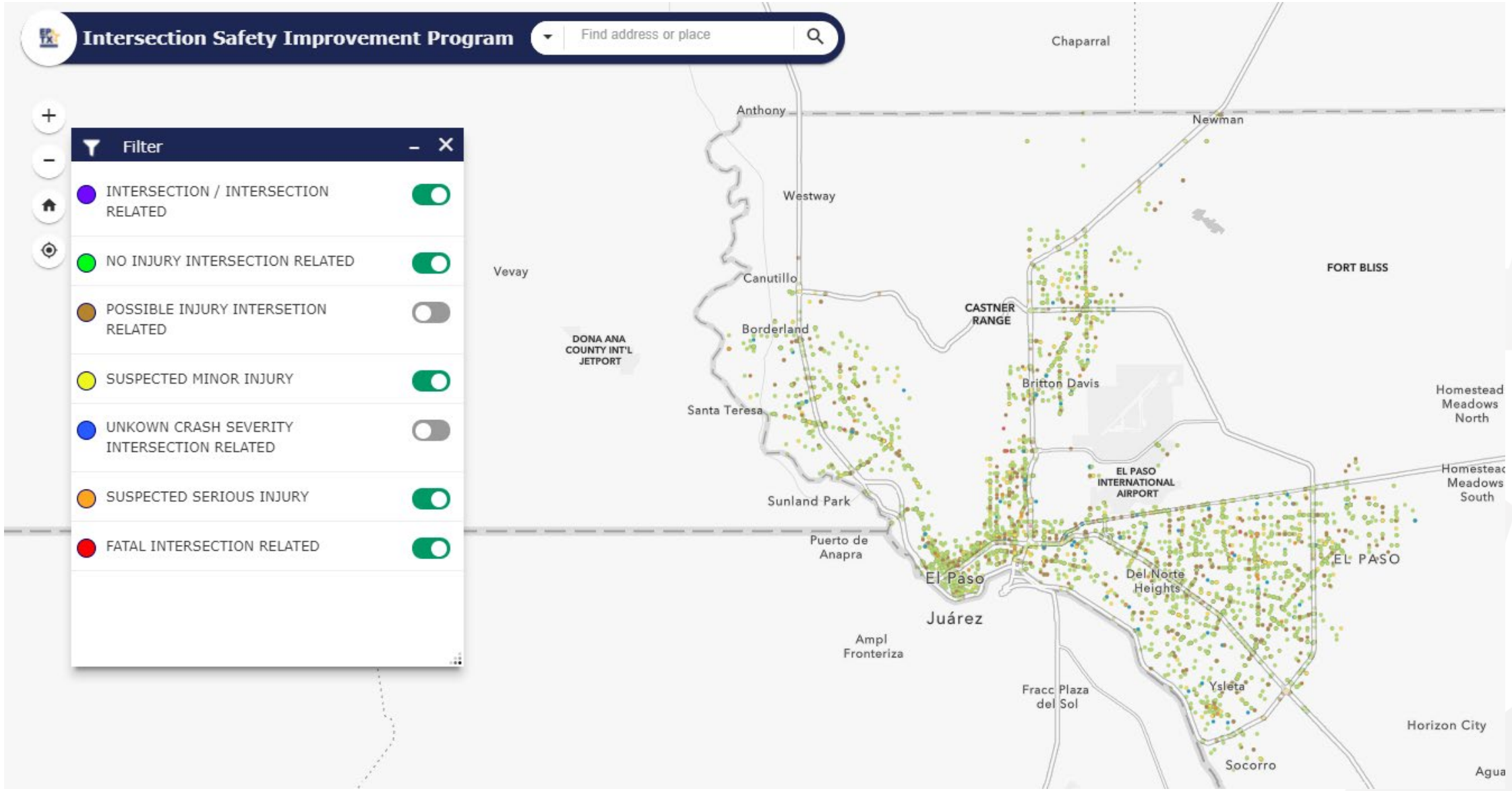
Data rows: 1 - 50 of 20038 | Data columns: 4

Crash Year	Case ID	Crash Date	Crash Time	Reported Road	Reported Intersecting Road	Crash Latitude	Crash Longitude	Intersection Related	Crash Severity	Manner of Collision	Light Condition	Crash Contributing Factor List	Pedestrians	Pedalcyclists	Total Crashes	Image
2019		01/01/2019	12:02 AM	US0054	FM2529	31.94024277	-106.40775299	INTERSECTION	NOT INJURED	ANGLE - BOTH GOING STRAIGHT	DARK, LIGHTED	DISREGARD STOP SIGN OR LIGHT	0	0	1	Image...
2019		01/02/2019	3:35 PM	FM0659	SUN FIRE BLVD	31.76909224	-106.26013233	NON INTERSECTION	NOT INJURED	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DAYLIGHT	FAILED TO CONTROL SPEED	0	0	1	Image...
2019		01/10/2019	7:38 PM	IH0010	NOT REPORTED	31.73543113	-106.32025224	NON INTERSECTION	NOT INJURED	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END	DARK, LIGHTED	FAILED TO CONTROL SPEED	0	0	1	Image...
2019		01/11/2019	6:51 AM	FM0076	N AMERICAS AVE	31.68671189	-106.29844244	NON INTERSECTION	SUSPECTED MINOR INJURY	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DARK, LIGHTED	DRIVER INATTENTION; FAILED TO CONTROL SPEED	0	0	1	Image...
2019		01/11/2019	3:15 PM	E PELICANO DR	TED HOUGHTON DR	31.72833064	-106.27669984	NON INTERSECTION	NOT INJURED	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DAYLIGHT	FAILED TO CONTROL SPEED	0	0	1	Image...
2019		01/13/2019	12:32 AM	N ZARAGOZA RD	MONTWOOD DR	31.75953078	-106.27038199	DRIVEWAY ACCESS	SUSPECTED MINOR INJURY	OPPOSITE DIRECTION - ONE STRAIGHT-ONE STOPPED	DARK, LIGHTED	FAILED TO DRIVE IN SINGLE LANE; HAD BEEN DRINKING	0	0	1	Image...
2019		01/14/2019	10:04 AM	KENWORTHY	KENWORTHY	0	0	NON INTERSECTION	NOT INJURED	ONE MOTOR VEHICLE - BACKING	DAYLIGHT	BACKED WITHOUT SAFETY; DRIVER INATTENTION	0	0	1	Image...
2019		01/16/2019	4:15 PM	IH0010	NOT REPORTED	31.82347788	-106.55776859	NON INTERSECTION	SUSPECTED MINOR INJURY	SAME DIRECTION - BOTH GOING STRAIGHT-SIDESWIPE	DAYLIGHT	CHANGED LANE WHEN UNSAFE	0	0	1	Image...
2019		01/17/2019	1:55 PM	CASA VIEW DR	GEORGE DIETER DR	31.73881864	-106.30233241	NON INTERSECTION	SUSPECTED MINOR INJURY	ONE MOTOR VEHICLE - GOING STRAIGHT	DAYLIGHT	FLEEING OR EVADING POLICE;OTHER (EXPLAIN IN NARRATIVE)	0	0	1	Image...
2019		01/17/2019	7:20 PM	WOLF CREEK DR	BUFF CREEK ST	0	0	NON INTERSECTION	NOT INJURED	ONE MOTOR VEHICLE - BACKING	DARK, NOT LIGHTED	BACKED WITHOUT SAFETY	0	0	1	Image...
2019		01/20/2019	12:30 PM	IH0010	NOT REPORTED	31.88398225	-106.58216596	NON INTERSECTION	NOT INJURED	ONE MOTOR VEHICLE - GOING STRAIGHT	DAYLIGHT	FAILED TO DRIVE IN SINGLE LANE	0	0	1	Image...
2019		01/22/2019	6:40 AM	FM0659	NOT REPORTED	31.77271662	-106.25623851	NON INTERSECTION	POSSIBLE INJURY	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END	DAYLIGHT	FAILED TO CONTROL SPEED; FOLLOWED TOO CLOSELY	0	0	1	Image...
2019		01/22/2019	7:00 PM	SL0375	NOT REPORTED	31.80545685	-106.26824892	NON INTERSECTION	NOT INJURED	ONE MOTOR VEHICLE - GOING STRAIGHT	DARK, LIGHTED	FAULTY EVASIVE ACTION	0	0	1	Image...
2019		01/24/2019	5:54 AM	N NORTH DESERT BLVD	N NORTHERN PASS RD	31.88397483	-106.5760703	NON INTERSECTION	NOT INJURED	ONE MOTOR VEHICLE - GOING STRAIGHT	DARK, LIGHTED	FAILED TO CONTROL SPEED; UNDER INFLUENCE - ALCOHOL	0	0	1	Image...
2019		01/25/2019	8:34 AM	RICH BEEM BLVD	TIERRA FLORES DR	31.80082483	-106.24676038	INTERSECTION	NOT INJURED	ANGLE - BOTH GOING STRAIGHT	DAYLIGHT	DRIVER INATTENTION;FAILED TO YIELD RIGHT OF WAY - OPEN INTERSECTION	0	0	1	Image...
2019		01/26/2019	7:20 AM	US0062	TURF RD	31.80851084	-106.25266478	NON INTERSECTION	NOT INJURED	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DAYLIGHT	FAILED TO CONTROL SPEED	0	0	1	Image...
2019		02/01/2019	2:30 PM	IH0010	NOT REPORTED	31.7571656	-106.35266392	INTERSECTION RELATED	NOT INJURED	SAME DIRECTION - ONE STRAIGHT-ONE RIGHT TURN	DAYLIGHT	FAILED TO CONTROL SPEED; FLEEING OR EVADING POLICE	0	0	1	Image...
2019		02/01/2019	2:32 PM	GILES RD	CAROLINA DR	31.74188485	-106.35401036	INTERSECTION	NOT INJURED	SAME DIRECTION - BOTH GOING STRAIGHT-SIDESWIPE	DAYLIGHT	FLEEING OR EVADING POLICE; OVERTAKE AND PASS INSUFFICIENT CLEARANCE	0	0	1	Image...
2019		02/01/2019	2:35 PM	MYRA ST	HEID AVE	31.74021003	-106.35376915	DRIVEWAY ACCESS	NOT INJURED	ANGLE - ONE STRAIGHT-ONE BACKING	DAYLIGHT	BACKED WITHOUT SAFETY; FLEEING OR EVADING POLICE	0	0	1	Image...
2019		02/04/2019	8:50 AM	US0085	SS1966	31.75848109	-106.50205113	NON INTERSECTION	NOT INJURED	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END	DAYLIGHT	DRIVER INATTENTION; FAILED TO CONTROL SPEED	0	0	1	Image...
2019		02/08/2019	12:19 PM	JOE BATTLE BLVD	MONTWOOD DR	31.76078046	-106.26776917	INTERSECTION	POSSIBLE INJURY	SAME DIRECTION - ONE STRAIGHT-ONE LEFT TURN	DAYLIGHT	TURNED IMPROPERLY - WRONG LANE	0	0	1	Image...
2019		02/19/2019	6:09 AM	SL0375	FM0659	31.76098192	-106.26777143	NON INTERSECTION	NOT INJURED	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DARK, NOT LIGHTED	FAILED TO CONTROL SPEED	0	0	1	Image...
2019		02/20/2019	7:15 AM	SUN FIRE RD	ZARAGOSA RD	31.76816463	-106.26031065	NON INTERSECTION	NOT INJURED	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END	DAYLIGHT	FOLLOWED TOO CLOSELY	0	0	1	Image...
2019		02/26/2019	10:05 AM	GEORGE DIETER DR	PELLICANO DR	31.74461895	-106.30182333	NON INTERSECTION	SUSPECTED MINOR INJURY	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END	DAYLIGHT	DISTRACTION IN VEHICLE; FAILED TO CONTROL SPEED	0	0	1	Image...

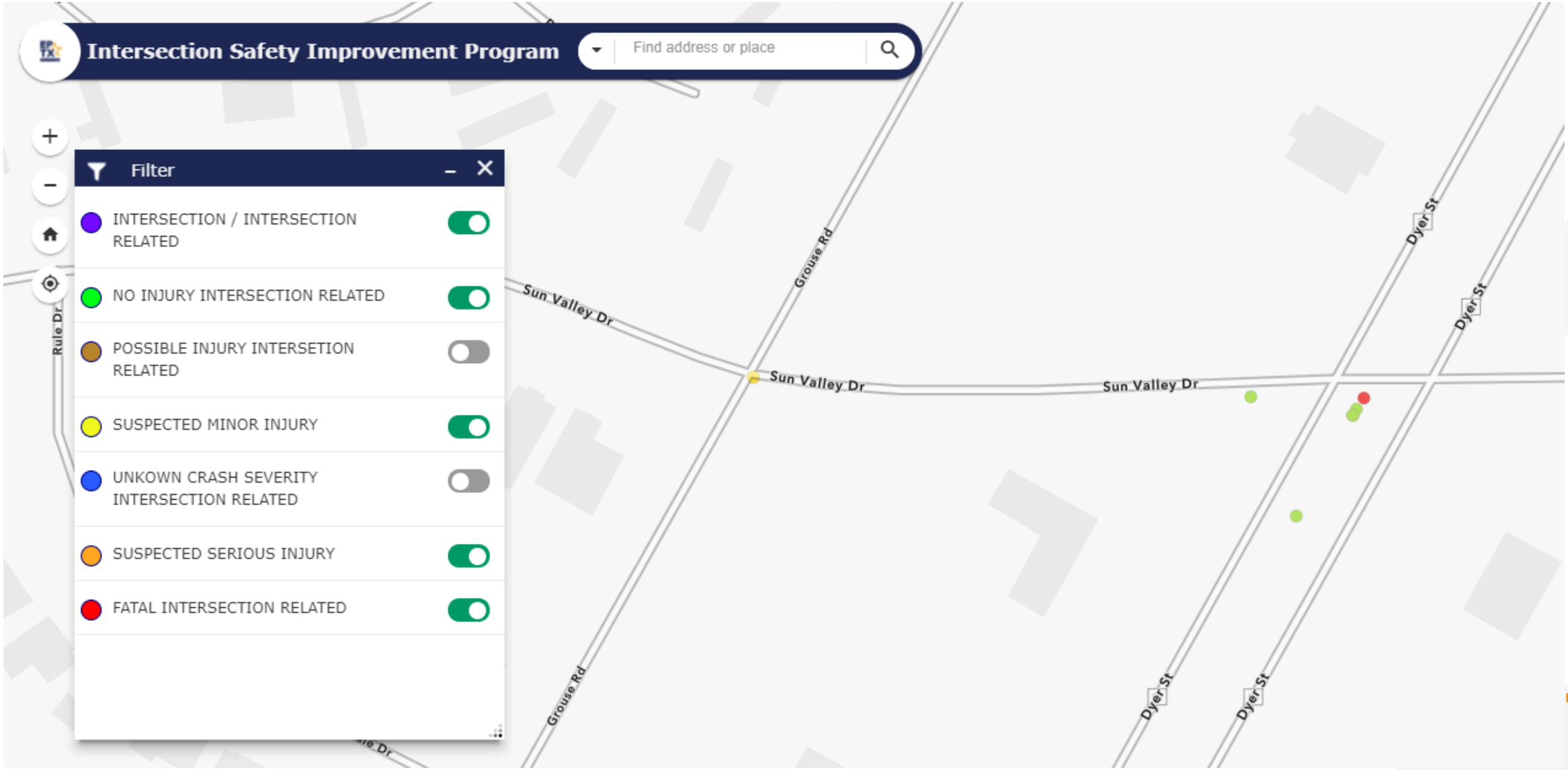
Crash Data Collection - Map



Data Analysis



Data Analysis – Intersection Zoom In



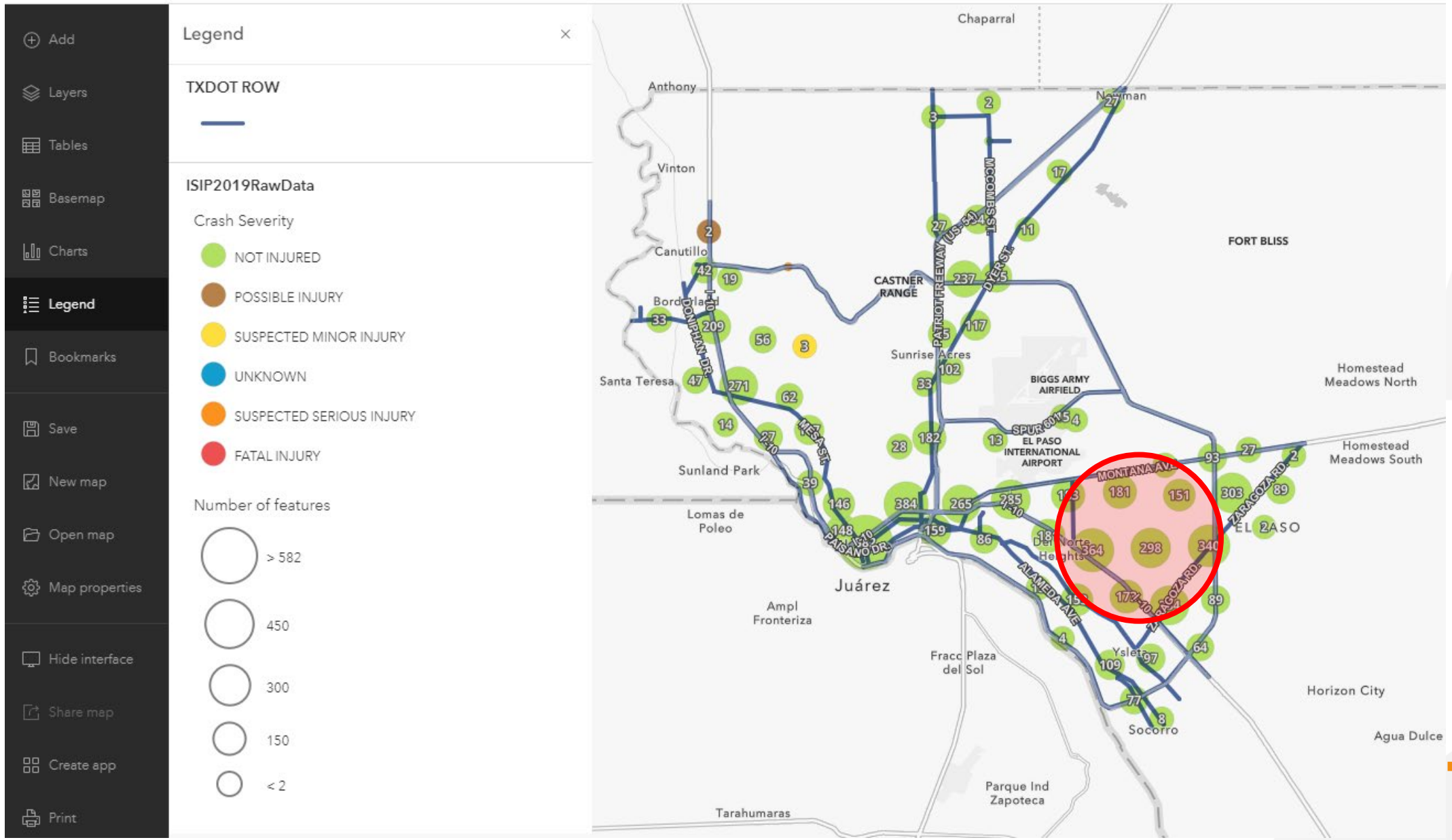
Data Analysis – Cluster Map (Overview)

Map results will tell us – where to further investigate

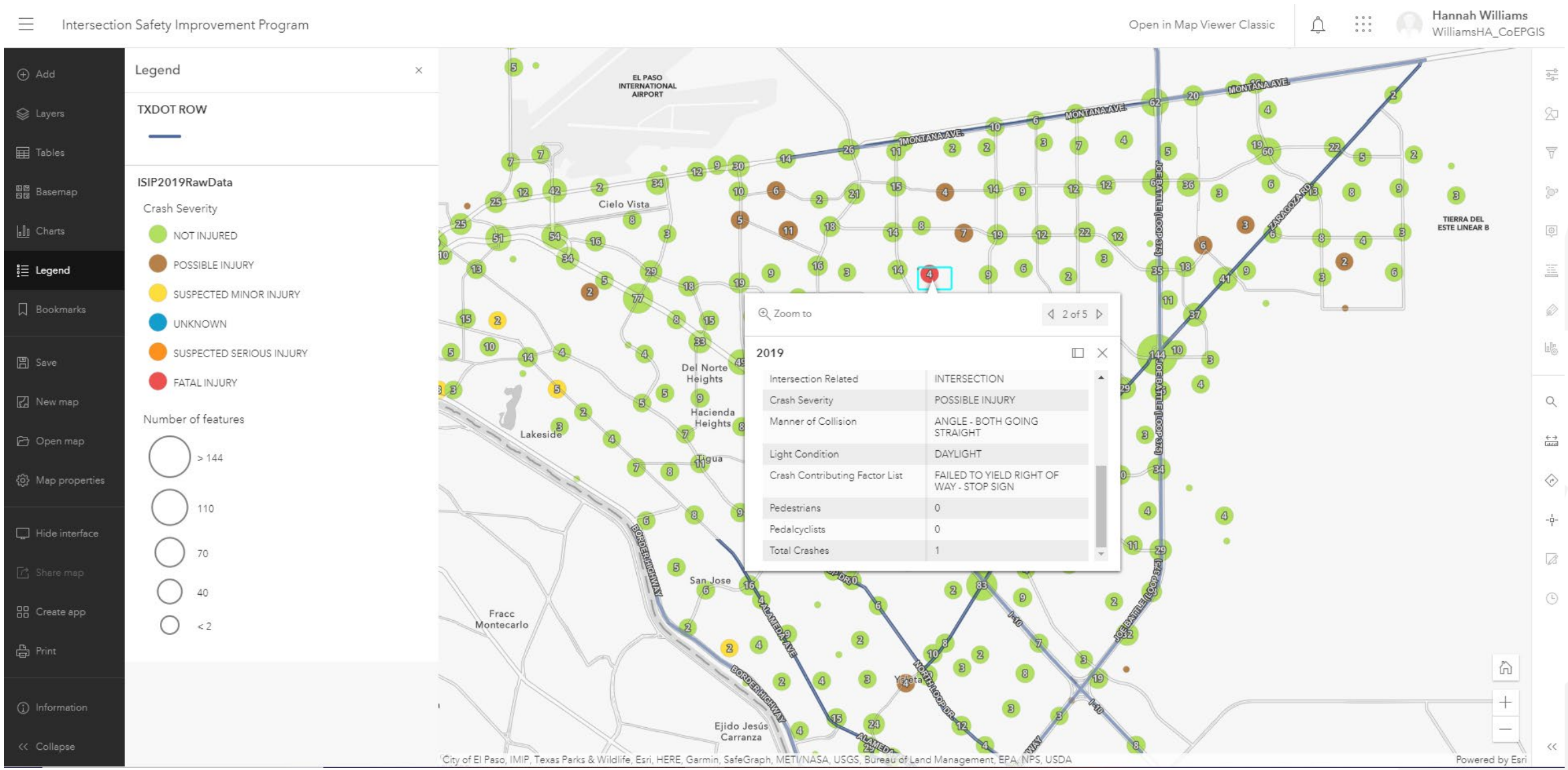
- Colocation: Locations of concentrated crash types

Data Analysis – Cluster Map (Overview)

Intersection Safety Improvement Program



Data Analysis – Cluster Map (Zoomed In)



Data Analysis *continued…*

- Data Dive: Investigate…
  - Manner of Collision *(right angle, left/right turn, sideswipe, rear-end, etc.…)*
  - Parties involved *(pedestrian, cyclist, motorcycle, motor vehicle*
  - Contributing Factors *(Speeding, DWI, Distracted Driving, Damaged/Missing Signage, etc.…)*

NOTE: using this current method, additional tweaking to the existing database will need to be conducted

Partner with –

- UTEP Civil Engineering students on data analysis
- TxDOT on solutions for state & local road intersections

Improvement Determination

FHWA PROVEN SAFETY COUNTERMEASURES

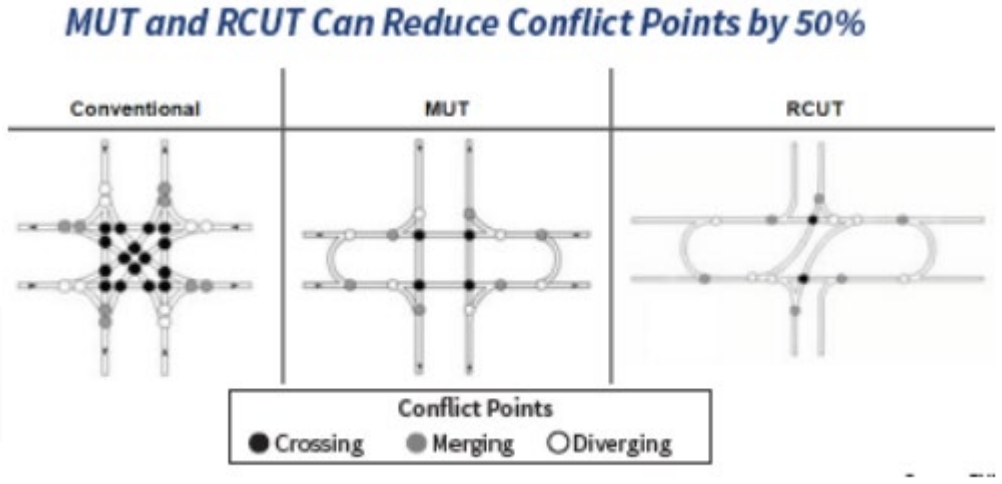
In 2008, FHWA began promoting certain infrastructure-oriented safety treatments and strategies, chosen based on proven effectiveness and benefits, to encourage widespread implementation by State, tribal, and local transportation agencies to reduce serious injuries and fatalities on American highways. This became known as the Proven Safety Countermeasures initiative. The list was updated in 2012 and again in 2017.

This list of Proven Safety Countermeasures has now reached a total of 20 treatments and strategies that practitioners can implement to successfully address roadway departure, intersection, and pedestrian and bicycle crashes. Among the 20 Proven Safety Countermeasures are several crosscutting strategies that address multiple safety focus areas.

Improvement Determination

FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

Reduced Left-Turn Conflict Intersections



Source: FHWA

Geometric designs that alter how left-turn movements occur in order to simplify decisions and minimize the potential for related crashes.

- ***Restricted crossing U-turn (RCUT) – 54% ↓ in injury and fatal crashes***
- ***Median U-turn (MUT) – 30% ↓ in intersection-related injury and fatal crashes***

Montana & Mattox (TxDOT Project, Operational Improvements)

Improvement Determination

FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

Access management refers to the design, application, and control of entry and exit points along a roadway.

- ***25-31% ↓ in injury and fatal crashes along urban/suburban arterials*** (*Source: Highway Safety Manual)*

Lee Trevino Median Enhancements_Trawood to Montwood (2020 HSIP Project Awarded Funding, $247,786 construction, 10% City share, for letting of FY 2022)

Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*


Example of countermeasures on the through approach.

Source: South Carolina DOT

Loma Franklin (NB) and Loma De Paz

This systemic approach to intersection safety involves deploying a group of multiple low-cost countermeasures, such as enhanced signing and pavement markings, at a large number of stop-controlled intersections within a jurisdiction. ***It is designed to increase driver awareness and recognition of the intersections and potential conflicts***.

- On the Through Approach
- On the Stop Approach

Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections

- **10% ↓ in injury and fatal crashes**
- **15% ↓ in nighttime crashes**

(Source: Source: T. Le et al, "Safety Effects of Low-Cost Systemic Safety Improvements at Signalized and Stop-Controlled Intersections," 96th Annual Meeting of the Transportation Research Board, Paper Number 17-05379, January 2017.)

Countermeasures installed on both approaches

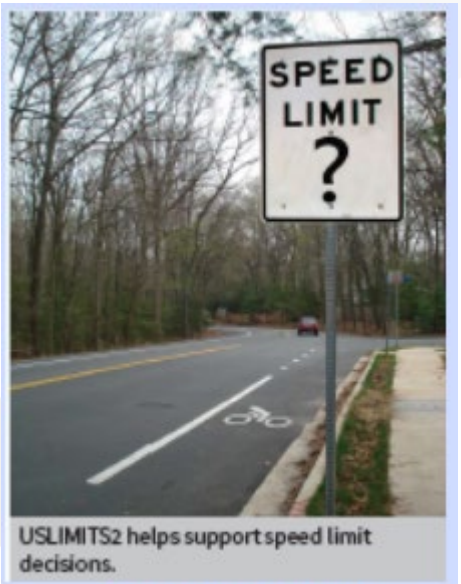
Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

Leading Pedestrian Intervals

A leading pedestrian interval (LPI) **gives pedestrians the opportunity to enter an intersection 3-7 seconds before vehicles are given a green indication.** LPIs provide the following benefits:

- Increased visibility of crossing pedestrians.
- Reduced conflicts between pedestrians and vehicles.
- Increased likelihood of motorists yielding to pedestrians.
- Enhanced safety for pedestrians who may be slower to start into the intersection.
- ***13% ↓ in pedestrian-vehicle crashes at intersections***

- ***Paisano & Mesa***
- ***Airport & Sioux/Cherbourg***
- ***Alameda & Old County***



USLIMITS2 helps support speed limit decisions.

Source: Richard Retting

USLIMITS2[1] is a free, web-based tool designed to help practitioners assess and establish safe, reasonable, and consistent speed limits for specific segments of roadway. It is applicable to all types of facilities. **USLIMITS2 helps practitioners assess and establish safe, reasonable, and consistent speed limits.**

USLIMITS2

"USLIMITS2 acts as an external, impartial, second set of eyes."
—Georgia DOT Traffic Engineer

Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

Medians and Pedestrian Crossing Islands in Urban and Suburban Areas

A ***median*** is the area between opposing lanes of traffic, excluding turn lanes. Medians in urban and suburban areas can be defined by pavement markings, raised medians, or islands to separate motorized and non-motorized road users.

- ***Raised Median: 46% ↓ in pedestrian crashes***
  (*Source: Desktop Reference for Crash Reduction Factors, FHWA-SA-08-011, September 2008, Table 11)*

Example of a road with a median and pedestrian crossing islands.

Source: City of Charlotte, North Carolina

Median and pedestrian crossing islands near a roundabout.

Source: www.pedbikeimages.org / Dan Burden

A ***pedestrian crossing island*** (or refuge area) is a raised island, located between opposing traffic lanes at intersection or midblock locations, which **separate crossing pedestrians from motor vehicles.** Consider medians or pedestrian crossing islands in curbed sections of urban and suburban multi-lane roadways, particularly in areas with a significant mix of pedestrian and vehicle traffic and intermediate or high travel speeds.

- ***Pedestrian Crossing Island: 56% ↓ in pedestrian crashes***
  (*Source: Desktop Reference for Crash Reduction Factors, FHWA-SA-08-011, September 2008, Table 11)*

Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

Schuster & Hawthorne, Schuster & Prospect, Alameda & Dorbandt

Medians, Pedestrian Crossings and Pedestrian Hybrid Beacons – TxDOT Project, Locations on Mesa and Dyer

The pedestrian hybrid beacon (PHB) is a traffic control device **designed to help pedestrians safely cross busy or higher-speed roadways at midblock crossings and uncontrolled intersections.** As a safety strategy to address this pedestrian crash risk, the PHB is an intermediate option between a flashing beacon and a full pedestrian signal because it assigns right of way and provides positive stop control.

- ***55% ↓ in pedestrian crashes***
- ***29% ↓ in total crashes***
- ***15% ↓ in serious injury and fatal crashes***

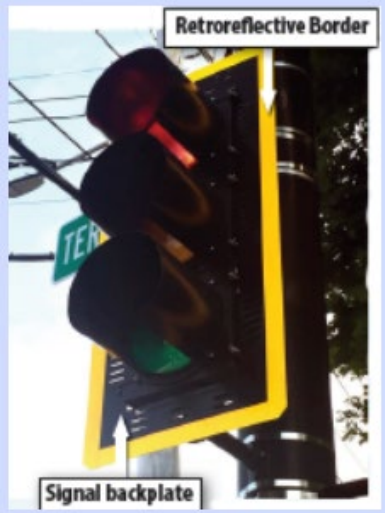
(Source: Zegeer, C., R. Srinivasan, B. Lan, D. Carter, S. Smith, C. Sundstrom, N.J. Thirsk, J. Zegeer, C. Lyon, E. Ferguson, and R. Van Houten. (2017). NCHRP Report 841: Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments. Transportation Research Board, Washington, D.C.)

Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

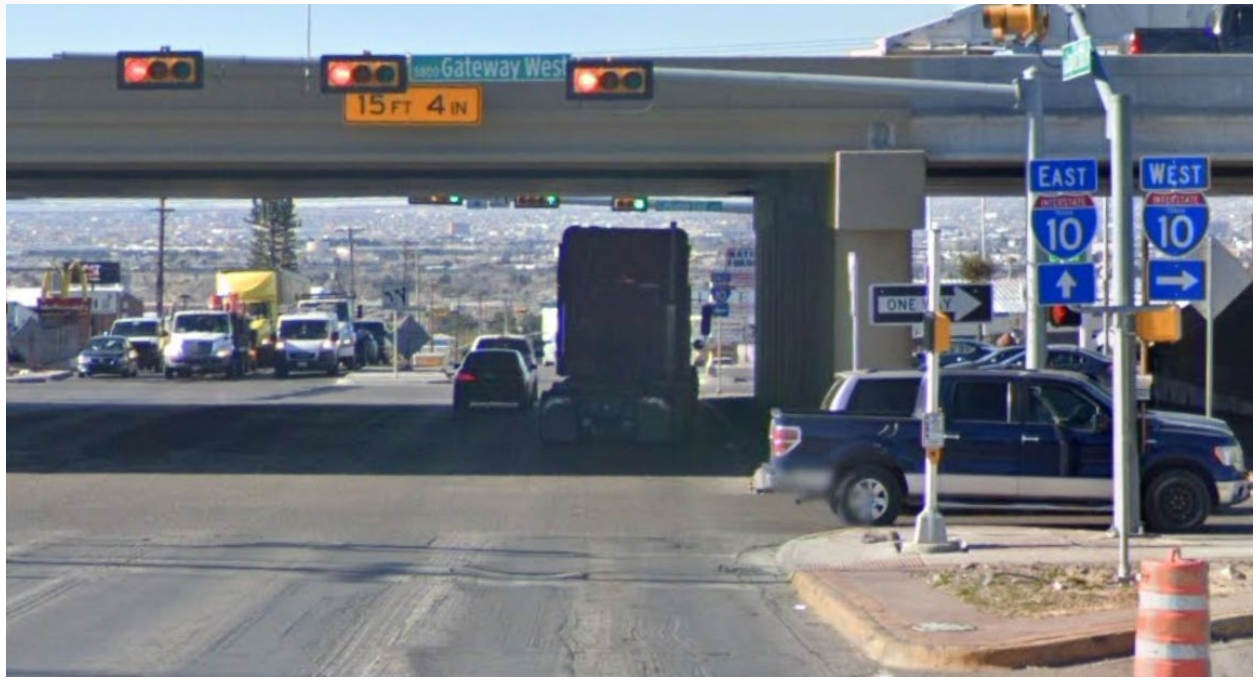
Backplates with Retroreflective Borders

Backplates added to a traffic signal indication improve the visibility of the illuminated face of the signal by introducing a controlled-contrast background. Signal heads that have backplates equipped with retroreflective borders are **more visible and conspicuous in both daytime and nighttime conditions.**

- ***15% ↓ in total crashes*** (Source: CMF Clearinghouse, CMF ID 1410)



Source: FHWA



- ***Hawkins & GWEW***
- ***Paisano & Trowbridge***

(Backplates, no reflective borders)

Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

Roundabouts provide substantial safety and operational benefits compared to other intersection types, most notably a reduction in severe crashes. Roundabouts are an effective option for **managing speed and transitioning traffic from high-speed to low-speed environments**.

- ***Two-Way Stop-Controlled Intersection to a Roundabout: 82% ↓ in severe crashes***
- ***Signalized Intersection to a Roundabout: 78% ↓ in severe crashes***

(*Source: Highway Safety Manual)*

Rich Beem and Edgemere (NB Approach)

- ***Rich Beem and Edgemere***
- ***RC Poe and Edgemere***
- ***Country Club and Upper Valley***

Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

Road Diets
(Roadway Reconfiguration)

A Road Diet typically involves converting an existing four-lane undivided roadway to a three-lane roadway consisting of two through lanes and a center two-way left-turn lane (TWLTL).

Recommend corridors for funding (MPO/HSIP)

Before and after photos of a Road Diet project.

Source: City of Orlando, Florida

Benefits of Road Diet installations may include:

- **↓ of rear-end and left-turn crashes** due to the dedicated left-turn lane.
- **↓ right-angle crashes** as side street motorists cross three versus four travel lanes.
- **Fewer lanes for pedestrians to cross**.
- **Opportunity to install pedestrian refuge islands, bicycle lanes, on-street parking, or transit stops.**
- **Traffic calming and more consistent speeds**.
- **A more community-focused, "Complete Streets" environment that better accommodates the needs of all road users**

4-Lane → 3-Lane Road Diet Conversions: 19-47% ↓ in total crashes

(Source: *Evaluation of Lane Reduction "Road Diet" Measures on Crashes*, FHWA-HRT-10-053)

Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

At a signalized intersection, **the yellow change interval is the length of time that the yellow signal indication is displayed following a green signal indication**. The yellow signal confirms to motorists that the green has ended and that a red will soon follow. Since red-light running is a leading cause of severe crashes at signalized intersections, it is imperative that the yellow change interval be appropriately timed.

- ***36-50% ↓ in red light running***
- ***8-14% ↓ in total crashes***
- ***12% ↓ in injury crashes***

(Source: NCHRP Report 731, *Guidelines for Timing Yellow and All-Red Intervals at Signalized Intersections*)


Properly-timed yellow change intervals can reduce red-light running and improve overall intersection safety.

Source: FHWA

All signalized intersections within the City limits

Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

Walkways

A walkway is any type of defined space or pathway for use by a person traveling by foot or using a wheelchair. **These may be pedestrian walkways, shared use paths, sidewalks, or roadway shoulders.**

- ***Sidewalks:* 65-89% ↓ *in crashes involving pedestrians walking along roadways***
- ***Paved Shoulders:* 70% ↓ *in crashes involving pedestrians walking along roadways***

(Source: *Desktop Reference for Crash Reduction Factors*, FHWA-SA-08-011, Table 11)

Example of a sidewalk in a residential area.

Source: pedbikeimages.org / Burden

Paved shoulder used as a walkway.

Source: pedbikeimages.org / Burden

Multi-disciplinary team performs field review during an RSA.

Source: FHWA

Road Safety Audits are unique and performed by a multidisciplinary team independent of the project. RSAs **consider all road users, account for human factors and road user capabilities, are documented in a formal report**, and require a formal response from the road owner.

- ***10-60% ↓ in total crashes***

  (Source: *Road Safety Audits: An Evaluation of RSA Programs and Projects*, FHWA-SA-12-037; and *FHWA Road Safety Audit Guidelines*, FHWA-SA-06-06)

Road Safety Audits

Roseway and Pendale; Complete Streets Policy

Improvement Determination
FHWA PROVEN SAFETY COUNTERMEASURES *continued…*

Left and Right
Turn Lanes at Two-Way
Stop-Controlled Intersections

Auxiliary turn lanes—either for left turns or right turns—**provide physical separation between turning traffic that is slowing or stopped and adjacent through traffic at approaches to intersections**. Turn lanes can be designed to provide for deceleration prior to a turn, as well as for storage of vehicles that are stopped and waiting for the opportunity to complete a turn.

- ***Left-Turn Lanes: 28%-48% ↓ in total crashes***
- ***Right-Turn Lanes: 14-26% ↓ in total crashes***

(*Source: Highway Safety Manual)*

Example of left-turn lanes.

Source: FHWA

Intersection Safety Improvement Program Purpose/Opportunity Statement

Ensure the safety of all road users at intersections in the City of El Paso by analyzing colocations of fatal and serious injury crashes and prioritizing the vulnerable users.

EL PASO VISION ZERO

Zero Fatalities & Zero Serious Injuries

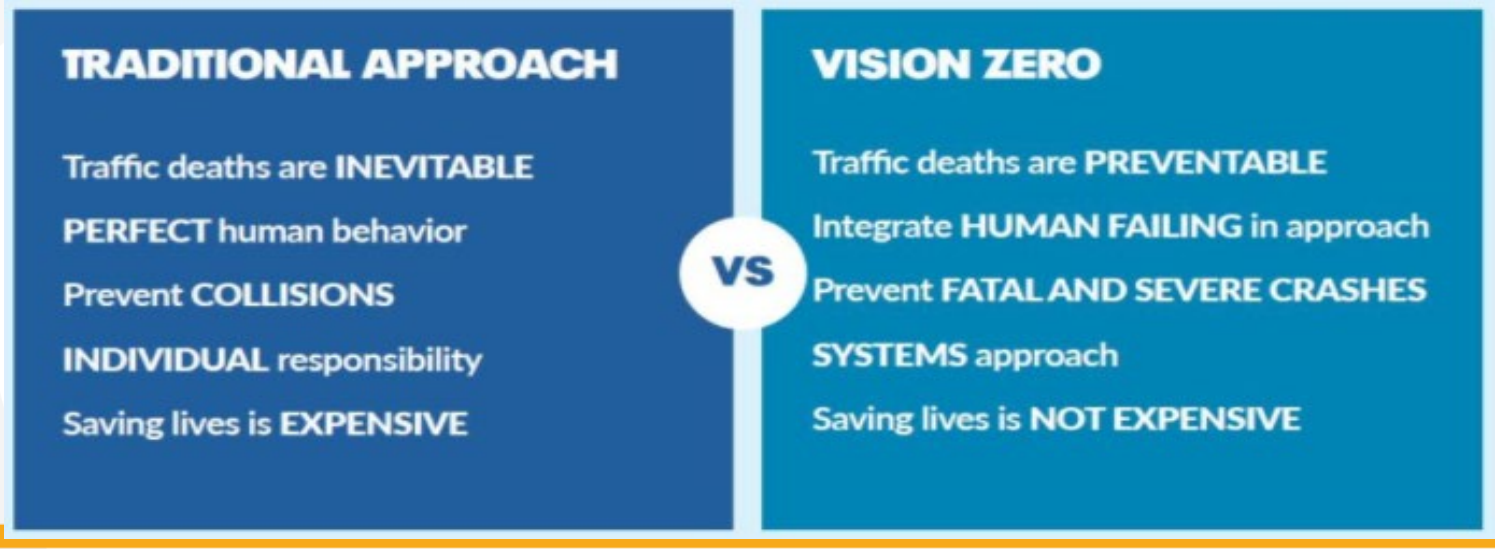
Public Works (CID, SaM)

Public Safety (EPPD, SaM)

What is Vision Zero?

Vision Zero is

- a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all.
- a fundamental shift in philosophy and approach to traffic safety.
- acknowledging that business as usual is not enough and that systemic changes are needed in our traffic safety work to make meaningful progress
- prioritizing the preservation and quality of human life



Source: Vision Zero Network

What Makes a Vision Zero Community?

Meet the following minimum criteria:

- A clear goal of eliminating traffic fatalities and severe injuries has been set
- The City Council and Mayor officially commit to Vision Zero
- A Vision Zero plan or strategy is in place, or the City (City Council approval) has committed to doing so in a clear time frame
- Key departments (including transportation, public health and elected officials' offices) are leading

Vision Zero Recognition:

https://visionzeronetwork.org/wp-content/uploads/2018/05/Form_Consideration-for-Recognition-as-Vision-Zero-Community.pdf

Source: Vision Zero Network

Partners

- **Core Team:** Public Works, Public Health, Public Safety
- **Technical Advisory Committee & Vision Zero Commitment:**

  - Mayor
  - City Council
  - El Paso Fire Department
  - El Paso Police Department
  - Planning and Inspections
  - Capital Improvement Department
  - Parks & Rec
  - Hospitals
  - School Districts
  - Border Patrol
  - City Attorney's Office
  - Neighborhood Associations
  - Economic Development
  - MPO
  - Transportation Agencies
  - Local Advocacy & Neighborhood Organizations
  - International Bridges
  - City-led Committees and Boards
  - GIS
  - Public Outreach

Vision Zero: Foundational Elements

Vision Zero Action Plan: Foundational Elements

1. Build a Robust Data Framework (before Action Plan is created)
   - Answers questions like…

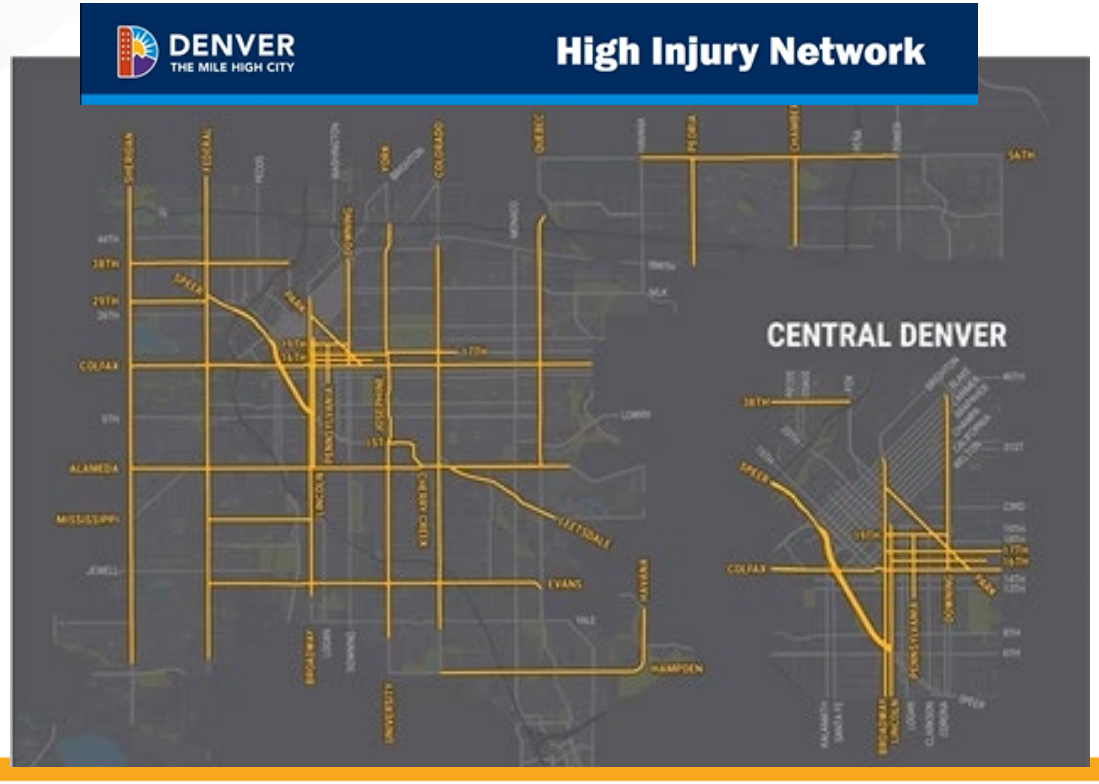
VISION ZERO EL PASO
Zero Fatalities & Zero Serious Injuries

Vision Zero Action Plan: Foundational Elements
continued…

1. Build a Robust Data Framework (before Action Plan is created) *continued…*

Analysis of Vision Zero data should lead to the development of a ***High Injury Network that geographically identifies locations where investments in safety are most urgent****, which in turn will* ***drive your implementation strategy***

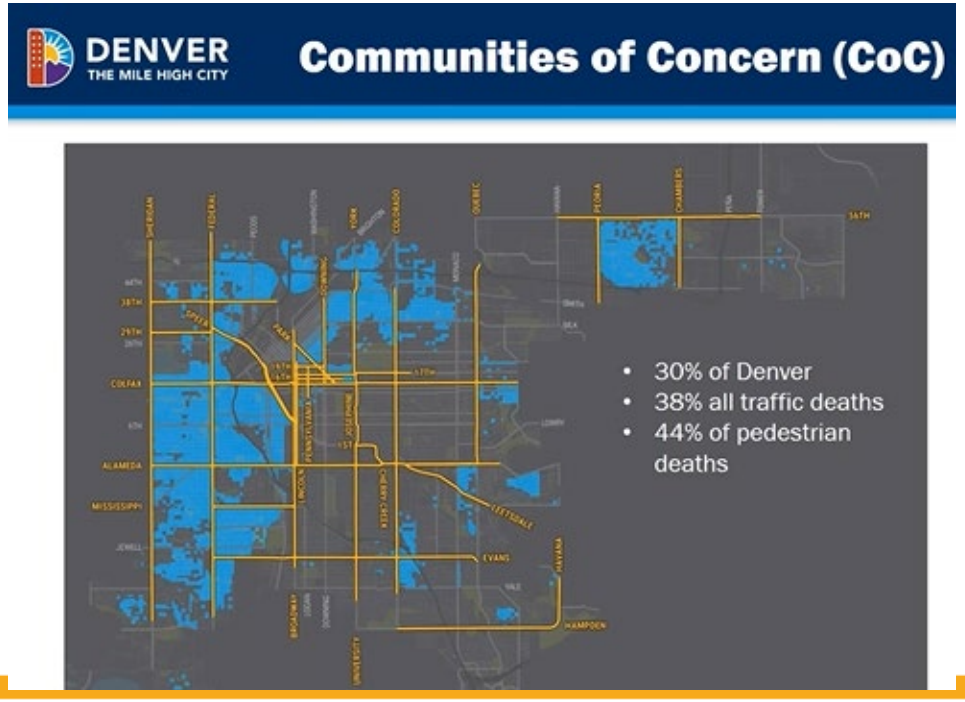
- 123 miles
- Around 5% of Denver's street network
- ~ 50% of fatalities



Source: City of Denver

Vision Zero Action Plan: Foundational Elements
continued...

2. Set Measurable Goals with a Clear Timeline for Implementation
   - Baseline: Identify "**reach zero year**"
     - **Example Goal:** Zero traffic-related deaths and serious injury crashes by 2050, and cut the number of fatalities in half by 2035 (aligns with TxDOT's Road to Zero Campaign)
     - What AND where are the community concerns?
       ~ use feedback to inform project goals and outcomes



What is the focus area?

- *Fatal and serious injury crashes*
- *Equity: Communities of Concern*
  - *Community Outreach*

Source: City of Denver

Vision Zero Action Plan: Foundational Elements
continued…

3. Be Accountable
   - Shared Responsibility Among Agencies
   - Questions to answer for each strategy…

Key Influencers

Seasonality

Vision Zero: Foundational Elements *continued…*

4. Ensure Transparency
   - Provide opportunities for course-corrections when needed
     - **Action Plan is a Living Document**
   - At a minimum, prioritize the following to promote transparency:
     - Maintain public website to share crash data and progress on Action Plan strategies, and solicit feedback on safety concerns, projects, and strategies;
     - Routine meetings with Vision Zero Task Force to solicit input, review data, and provide ongoing feedback on progress and challenges;
     - Meet with and solicit input from residents about projects, priorities and safety concerns;
     - Seek 3rd party assessment of progress, and report regularly (annually at a minimum) to key stakeholders, decision making bodies, and the public

Vision Zero: Actionable Strategies

EL PASO VISION ZERO

Zero Fatalities & Zero Serious Injuries

Vision Zero: Actionable Strategies

Engineering • Education • Equity/Enforcement • Evaluation

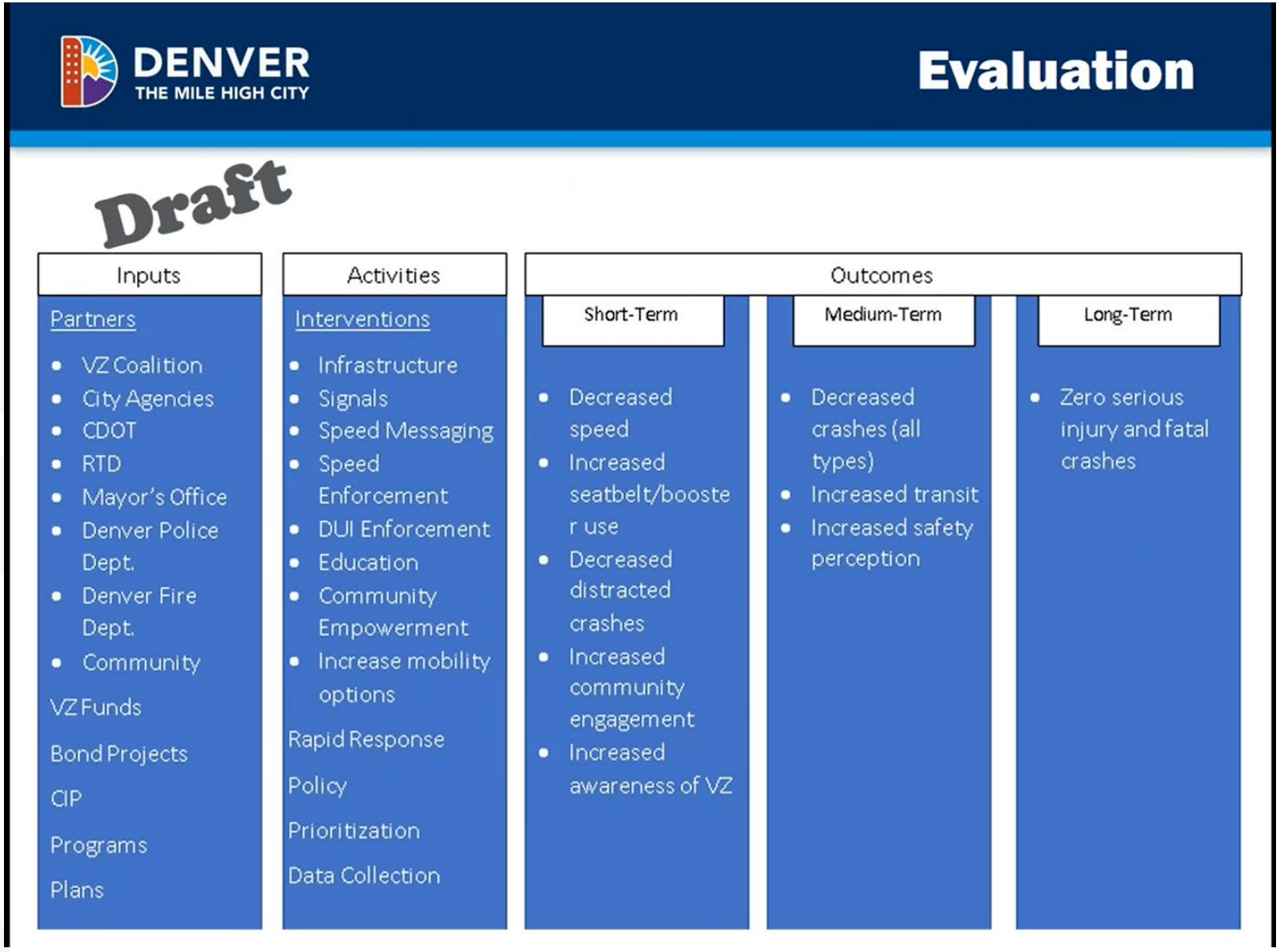
- Prioritize Roadway Design
  - Plan transportation systems that make slower, safe speeds the norm to protect the most vulnerable road users, especially in areas with historic patterns of fatalities and serious injuries
- Focus on Speed Management
  - Use proven countermeasures to reduce speed for the sake of safety
- Utilize Impactful Education Strategies
  - Educate community on safe road behaviors
  - Educate policy makers, decision makers, and other influencers about the importance of Vision Zero and the strategies that are proven to be most effective in order to make real change
  - Marketing Plan to communicate and educate the traveling public on the City's bold statement of being a Vision Zero City
- Ensure Enforcement is Equitable
  - Enforcement has a role to play in traffic safety efforts and should be approached thoughtfully in order to improve enforcement + community relations

Vision Zero: Actionable Strategies

Engineering • Education • Equity/Enforcement • **Evaluation**

- Ensure your Action Plan is a living document that includes how updates will be developed and when progress updates will be provided to policymakers, other agencies and the public
  - Highlight and celebrate accomplishments, but be real about challenges
  - Revisit the Foundational Elements every time you modify a goal or strategy
  - Utilize the Community Engagement & Equity Strategies

Vision Zero: Evaluation



Source: City of Denver

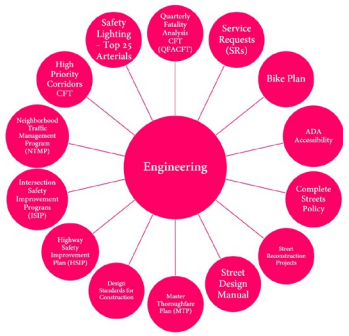
EP TX
CITY OF EL PASO

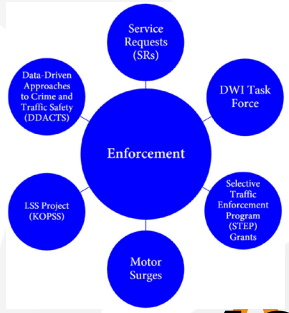
EL PASO VISION ZERO

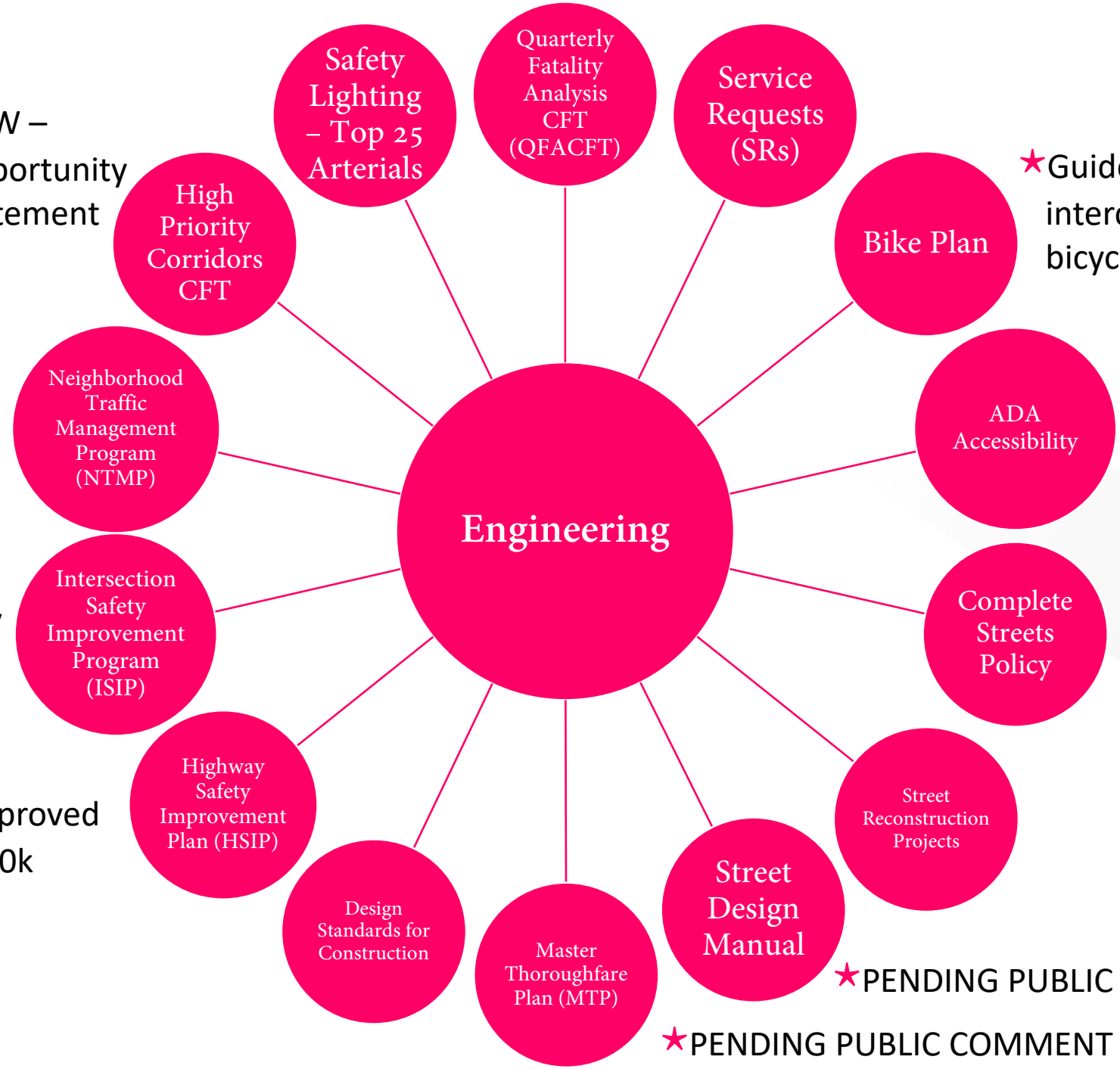
Zero Fatalities & Zero Serious Injuries

4 Es

- Engineering
- Education
- Evaluation Check
- Enforcement







★NEW – Opportunity Statement

★NEW – Opportunity Statement

★2020 HSIP Approved Projects - $800k

★Guide to create an interconnected network of bicycle lanes

★PENDING ADOPTION

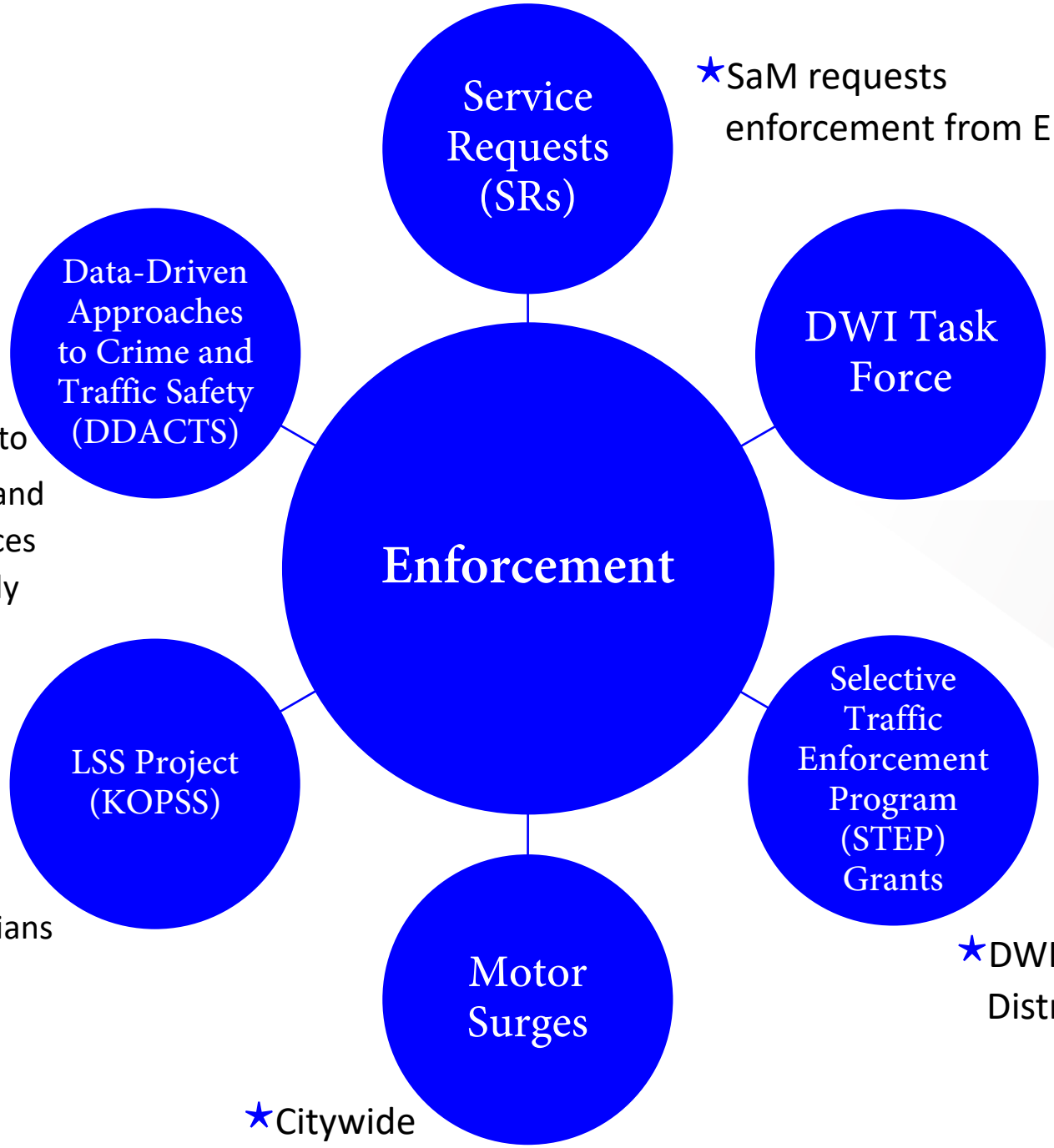
★PENDING PUBLIC COMMENT

★PENDING PUBLIC COMMENT

Education

- Service Requests (SRs)
  - ★Citizens alert City staff to safety concerns on any one of the +6k streets in El Paso
- Safety Town
  - ★Training event for toddlers at Bassett Center
- Presentations to Public
  - ★Schools, citizen groups, rec centers, colleges, military, etc.
- Auto Safety Grant
  - ★EPPD received funding for educational equipment
- Complete Streets
  - ★PENDING ADOPTION
- Media Announcements
  - ★Continued DWI enforcement
- Safety Flyers
  - ★English/ Spanish distributed at businesses, community fairs, and civic centers


Service Requests (SRs)
★Citizens alert City staff to safety concerns on any one of the +6k streets in El Paso
Intersection Safety Improvement Program (ISIP)
★Opportunity Statement
Presentations to Council
★Bi-Annual/Annual Updates
Evaluation Check
Quarterly Fatality Analysis CFT (QFACFT)
★Collaborative group that recommends solutions based on data collection
High Priority Corridors CFT
★Opportunity Statement
Complete Streets Policy
★PENDING ADOPTION



★SaM requests enforcement from EPPD

★Mapping allows staff to pinpoint "hot spots" and trends so that resources can be more efficiently allocated

★Continued DWI enforcement throughout the City on a nightly basis.

★<u>Traffic Safety Plan:</u>
Keeping our Pedestrians and Streets Safe

★DWI, Speeding, Distracted Driving, etc…

★Citywide

Existing Data Efforts

EL PASO VISION ZERO

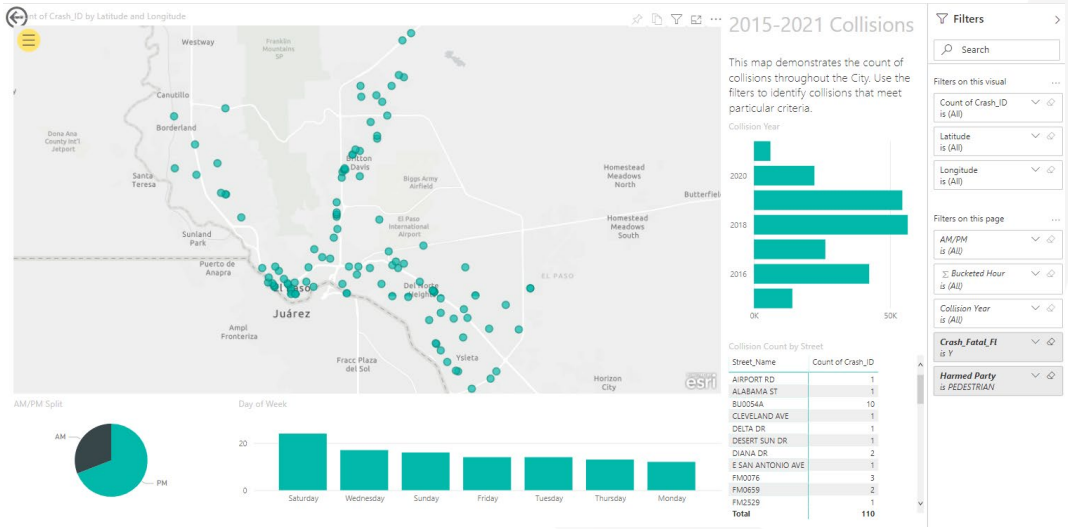
Zero Fatalities & Zero Serious Injuries

Existing Data Efforts (2015 – 2021)

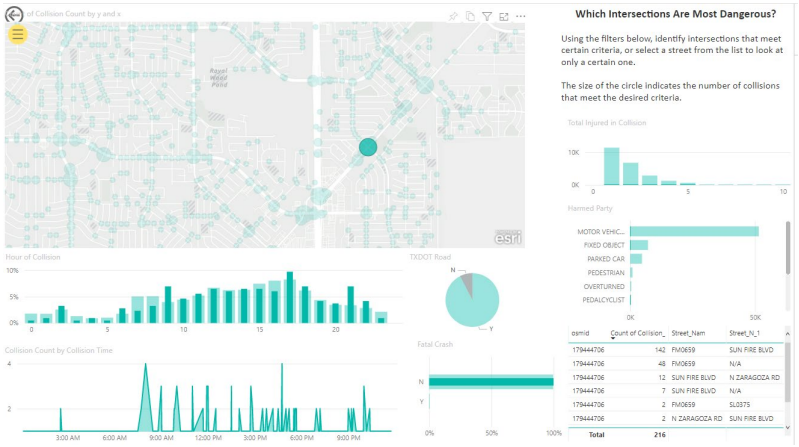
***Utilize BEST AVAILABLE data**

Page 1 – *Vision Zero Stats Homepage*

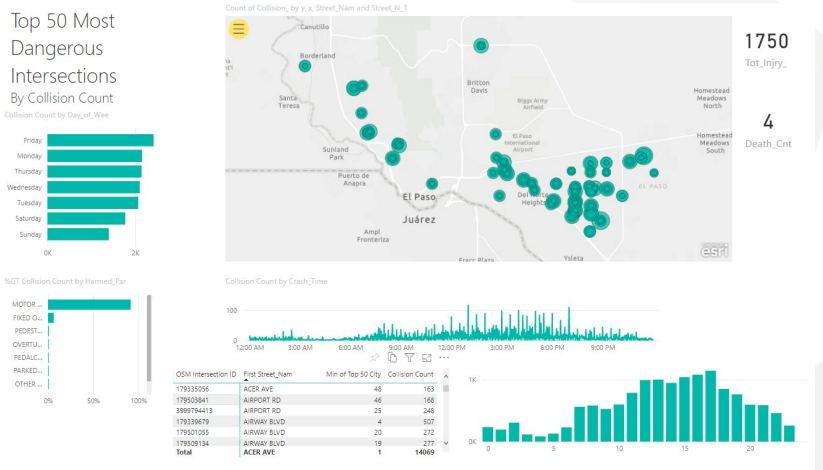
Page 2 – *Crash Filter*



Page 3 – *Intersection Identification*



Page 4 – *List*

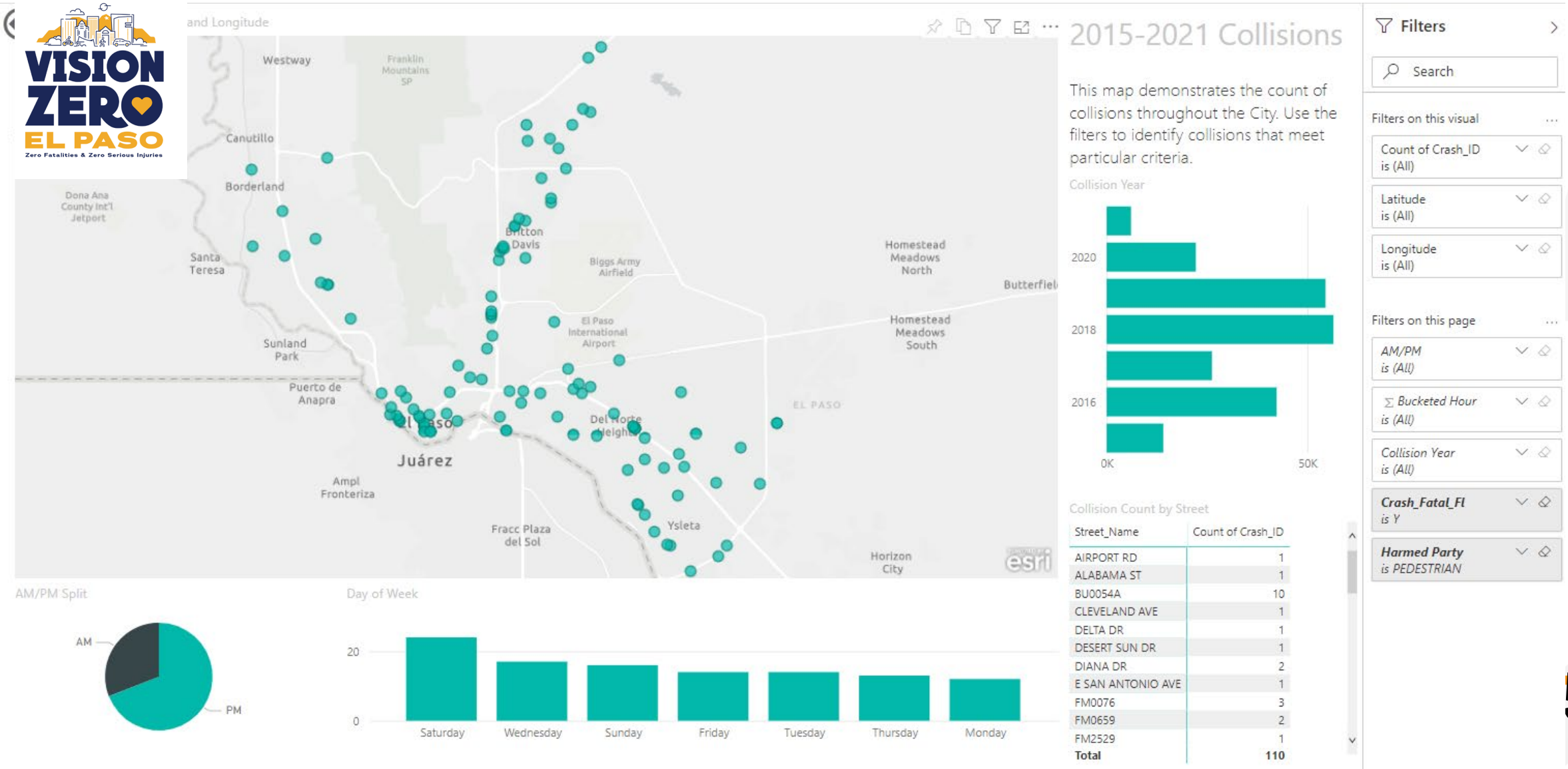


Existing Data Efforts (2015 – 2021) *continued…*

Page 1 – Vision Zero Stats Homepage

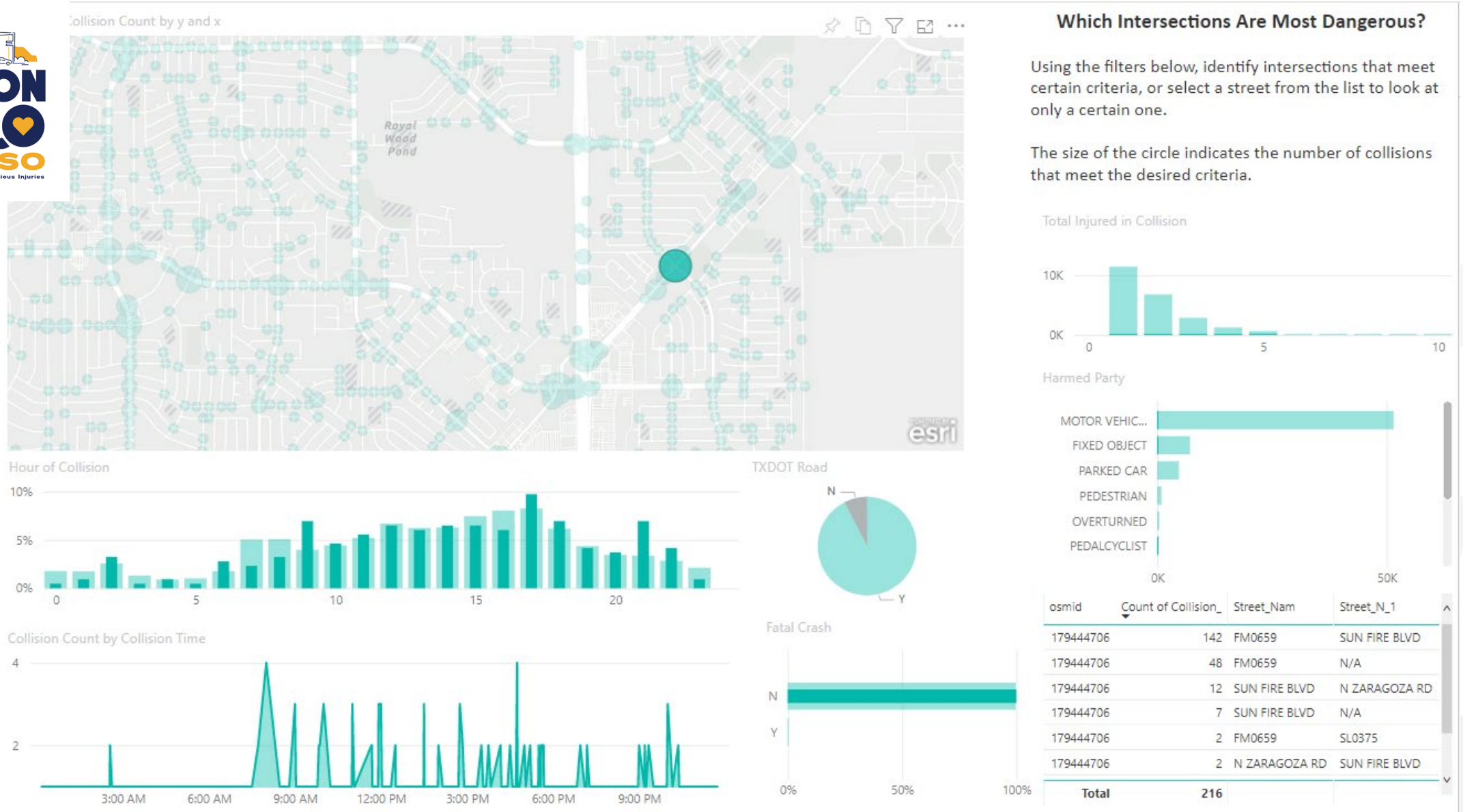
Existing Data Efforts (2015 – 2021) *continued…*

Page 2 – Crash Filter



Existing Data Efforts (2015 – 2021) *continued…*

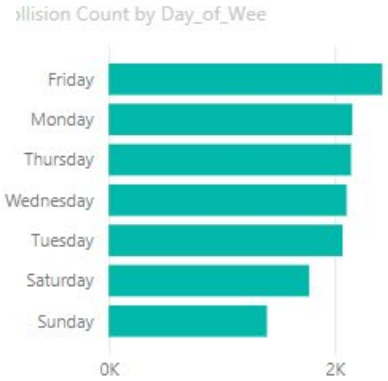
Page 3 – Intersection Identification

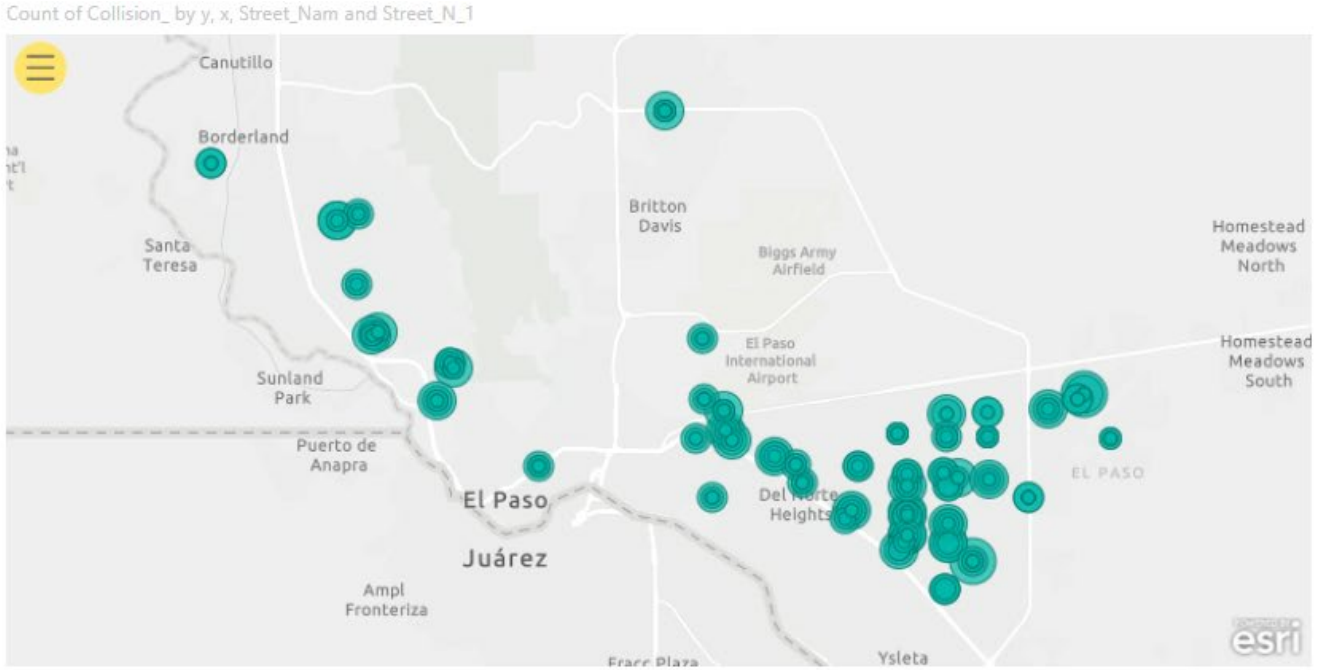


Existing Data Efforts (2015 – 2021) *continued…*

Page 4 – List

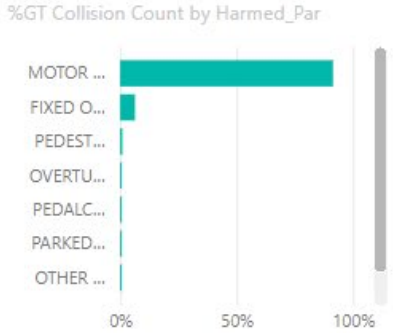
Top 50 Most Dangerous Intersections By Collision Count



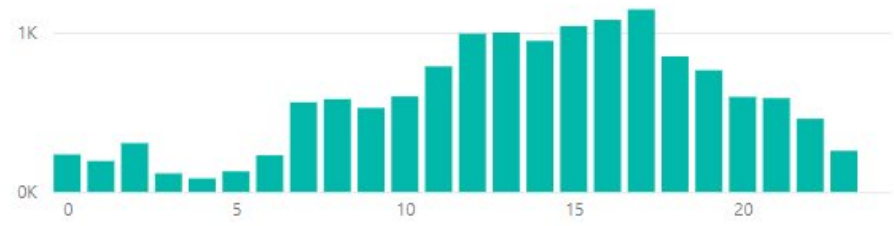


1750
Tot_Injry_

4
Death_Cnt



OSM Intersection ID	First Street_Nam	Min of Top 50 City	Collision Count
179335056	ACER AVE	48	163
179503841	AIRPORT RD	46	168
3999794413	AIRPORT RD	25	248
179339679	AIRWAY BLVD	4	507
179501055	AIRWAY BLVD	20	272
179509134	AIRWAY BLVD	19	277
Total	**ACER AVE**	**1**	**14069**



Existing Data Efforts (2015 – 2021)

What's Missing?

- Equity
  - Socio economic
  - Street infrastructure
- Public Health Info
  - Obesity
  - Diabetes
- Current locations of city and state projects
- High Injury Network (HIN) creation

What's Next?

- Vision Zero
  - Bring consultant on board to develop Vision Zero Program & Action Plan
    - Develop Goals & Strategies
    - Engaging Partners & Stakeholders
    - Organize structure & establish Vision Zero Champions
    - Website
    - PR Campaign
  - Continue to Develop Data (ISIP)
    - High Injury Network
  - FY2022 Budget Allocation of $1.8M
    - Develop Intersection Safety Improvement Program (pilot intersection improvements)
    - Develop Vision Zero Program & Action Plan

Thank You!

Capital Improvement Department

Enrique Avalos
Alex Hoffman
Sam Rodriguez

Streets and Maintenance

William Gabe Aguilar
Alfredo Austin
Richard Bristol
Harold Kutz
Adam McCreary
Joel McKnight
Olivia Montalvo
Sergio Reyes
Andres Rico
Hannah Adele Williams
Jiann-Shing Yang

Strategic Communications Office

Tammy Fonce
Russell Williams

El Paso Police Department

Nicholas Emerick
Commander Steven Lopez
Lt. Steven Schmidt
Lt. Tonya Shields
Dr. Emiliano Villarreal

MISSION

Deliver exceptional services to support a high quality of life and place for our community

VISION

Develop a vibrant regional economy, safe and beautiful neighborhoods and exceptional recreational, cultural and educational opportunities powered by a high performing government

VALUES

Integrity, **R**espect, **E**xcellence, **A**ccountability, **P**eople

MISIÓN

Brindar servicios excepcionales para respaldar una vida y un lugar de alta calidad para nuestra comunidad

VISIÓN

Desarrollar una economía regional vibrante, vecindarios seguros y hermosos y oportunidades recreativas, culturales y educativas excepcionales impulsadas por un gobierno de alto desempeño

VALORES

Integridad, **R**espeto, **E**xcelencia, **R**esponsabilidad, **P**ersonas