SAFE STREETS FOR ALL
RPA-13&18

MAPA Safety Targets and SS4A Planning Updates

STAG MEETING 3

February 10, 2026

Agenda

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1. Introductions
2. Goals of the Meeting:
    - Countermeasures:
        - Capital Improvements
        - Programs
    - Break-outs for each community:
        - More focused reviews
    - Review Countermeasures
3. Countermeasures Overview
4. Breakout Rooms
5. Next Steps
6. Open Discussion/Questions

Study Process/Approach and Status

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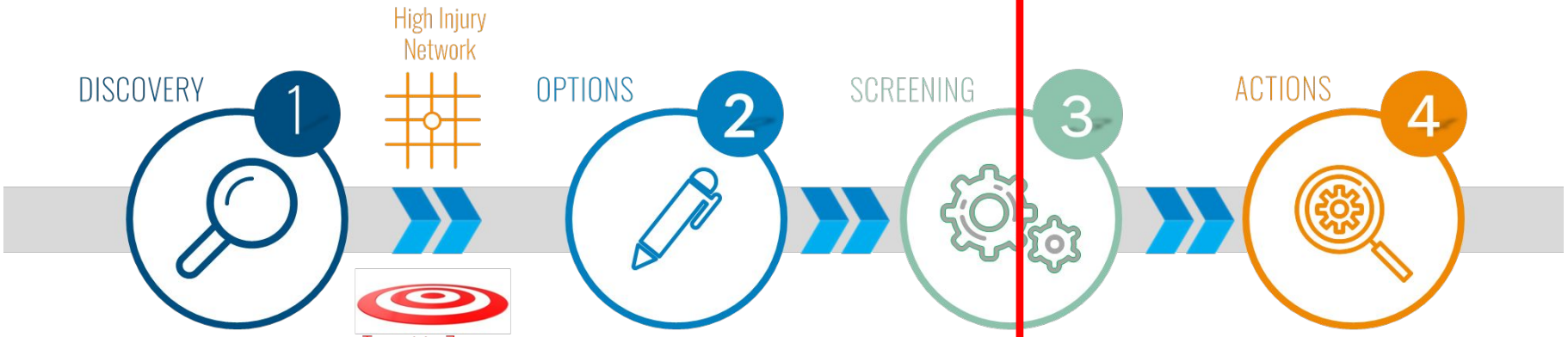

- Crashes:
  - Location
  - Severity
- Contributing Factors
- Local Support/Priorities
- Current Programs/ Activities
- Budget Capacity
- Grant Programs

- Capital Improvements
- Education Programs
- Enforcement

- Effectiveness
- Cost Relative to Budget/Effectiveness
- Adjacent Impacts
- Local Support

- Priority
- Timing
- Project/Program Development
- Outside Actions Required

Current Status

Crash Mitigation Countermeasures

Overview of Countermeasures

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- Created a Toolkit:
  - Ideas
  - Applicable conditions
    - Road design
    - Crashes observed
  - Effectiveness
  - Cost
  - Support for Action Plan goals
- Organized by:
  - Vehicle focused
  - Pedestrian Focused
  - Bicycle Focused
  - Programs and Enforcement

Strategy Toolkit of Countermeasures

#	Strategy	Description	Crash Reduction Factor (CRF)	Estimated Implementation Cost	Mitigating Conditions	Quick Build Capable

Countermeasures

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Strategy Toolkit of Countermeasures

#	Strategy	Description	Crash Reduction Factor (CRF)	Estimated Implementation Cost	Mitigating Conditions	Quick Build Capable
Vehicle Focused Countermeasures						
1	 Appropriate Speed Limits For All Users	Assign speed limit based on the context and activity level in corridor.	30%	$$	Speeding	
2	 Warning Sign with Edge-Mounted LED Lights	LED lights embedded in the sign to outline the sign itself or the words and symbols on the sign	5%	$	Angle Crashes Ped/Bike Broad Side	
3	 Access Management - Close Driveway	Driveway consolidation reduces conflict points along a segment and/or near intersections.	25%	$$-$$$	Sideswipe Head-on Broadside	✓
4	 Access Management - Divided Roadway	Barrier in the roadway separates opposing vehicular traffic and provides control access to/from side streets and driveways; reducing the number of conflict points. reduces conflict points along a segment and/or near intersections.	40%	$$$	Sideswipe Head-on Broadside Pedestrian	✓
5	 Lighting Improvements	Enhanced lighting at intersections increases the visibility of all road users.	20%	$$	Right angle Head-on Broadside Pedestrian	
6	 Remove Sightline Obstructions/ Maintain Vision Triangles	Remove objects that may prevent drivers and pedestrians from having a clear sightline. Red curb (no parking) near intersection, trimming or removing landscaping, or removing or relocating large signs improves sightlines.	30%	$	Right angle Head-on Broadside Pedestrian	
7	 Roundabout	circular intersection in which road traffic is permitted to flow in one direction around a central island. 75% fewer conflict points than conventional intersection.	50%	$$$	Right angle Head-on Broadside Pedestrian	✓
8	 Turn Lanes (Offset, Channelized)	Offsetting left- and right-turn lanes increases visibility and sightlines and is preferable in many situation; particularly at locations with higher speeds or with free-flow or permissive movements.	25%	$$$	Right angle Head-on Broadside Pedestrian	

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Countermeasures

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#	Strategy		Description	Crash Reduction Factor (CRF)	Estimated Implementation Cost	Mitigating Conditions	Quick Build Capable
9		Reflective Traffic Signal Backplate	Retroreflective borders enhance the visibility of traffic signals for aging and color-vision-impaired drivers and may also alert drivers to signalized intersections during periods of power outages when the signals would otherwise be dark .	15%	$	Right angle Rear-end Head-on Broadside Pedestrian	
10		Urbanization (reconstruct rural road with curb and gutter)	Urban section provide more opportunity to incorporate sidewalks and bicycle accommodation.		$$$	Run Off Road Pedestrian	
11		Dynamic Speed Feedback Sign	A speed feedback sign provides a cue for drivers to check their speed and slow down, if necessary.	5%	$	Speeding	✓
12		Lane Conversions (4 to 3-Lane Conversions)	Reallocating roadway space by reducing lanes creates room for bicycle facilities, wider sidewalks, or center turn lanes	30%	$$	Right angle Sideswipe Rear-end Head-on Broadside Pedestrian Bicycle	✓
13		Appropriately Timed Yellow Change Intervals	Appropriately setting yellow times (3 to 6 seconds), significantly enhances intersection safety by reducing red-light running.	10%	$	Right angle Sideswipe Rear-end Broadside Pedestrian Bicycle	
14		No Right Turn on Red	Reduces the potential for conflicts between turning vehicles and pedestrians crossing street.	15%	$	Right angle Pedestrian Bicycle	
15		Flashing Yellow Arrow	Alerts drivers to proceed with caution and decide if there is a sufficient gap in oncoming traffic to safely make a turn.	20%	$	Right angle Broadside	
16		Railroad Crossing - Add Signs and Crossbucks	Provides a clear visual cue prompting drivers to slow down, look both ways, and listen for trains; especially at passive crossings.	25%	$$	Broadside Pedestrian Bicycle	
17		Railroad Crossing - Lights and Sound Signals	Provides both auditory and visual warnings of an approaching train.	75%	$$$	Broadside Pedestrian Bicycle	

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18	 Railroad Crossing - Automated Gates	Enhances safety, efficiency, and reliability by physically preventing vehicles and pedestrians from entering the tracks when a train is present	85%	$$$	Broadside Pedestrian Bicycle	
19	 Clear Zone Maintenance/Enhancements	Unobstructed, traversable roadside area that allows a driver to stop safely or regain control. Clear zone width is informed by roadway context, desired vehicle speeds, and agency design standards.	40%	$$	Run Off Road	
Pedestrian Focused Countermeasures						
20	 Add Pedestrian Crossing Signals	Signals provide designated, safe times for pedestrians to cross, reducing the risk of collisions.	35%	$$	Pedestrian	
21	Add Pedestrian Head to Signals		25%	$$	Pedestrian	
22	 Sidewalks/Multi-use Path	Adding sidewalks/multi-use paths provides a separated and continuous facility for people to walk/bike along the roadway.	25%	$$$	Pedestrian Bicycle	
23	 Curb Extensions/Bump Outs	Widens the sidewalk for a short distance to enhance the pedestrian crossing. Reduces the crossing distance and allows pedestrians and drivers to see each other better.	30%	$$	Pedestrian Bicycle	✓
24	 Grade Separated Pedestrian Underpass/Overpass	Physically separating foot traffic from motor vehicles, railways, and natural barriers. Must of properly located to ensure use.	15%	$$$	Pedestrian Bicycle	
25	 Signalized Mid-Block Crossing	Providing a formal, signalized mid-block option consolidates pedestrian crossings to a predictable location, reducing dangerous "jaywalking" and the risk of unexpected crossings for drivers.	55%	$$	Pedestrian Bicycle	
26	 Reduce Lane Width	Lane narrowing shrinks roadway width while keeping lane count, slowing traffic, shortening pedestrian crossings, and adding bike/pedestrian areas.	25%	$$$	Pedestrian Rear-end	✓
27	 Overhead Pedestrian Warning Sign at Mid-Block Crossing	Increases driver awareness and visibility of the crosswalk and any pedestrians within it. Particularly effective in complex environments where standard signs might be missed.	55%	$$	Pedestrian Rear-end	
28	 Pedestal-Mounted Flashing Signal Beacons	Pedestrian-activated flashing light with additional signage to alert motorists of a pedestrian crossing. An RRFB increases the visibility of marked crosswalks and provides motorists a cue to slow down and yield to pedestrians.	45%	$	Pedestrian Rear-end	

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#	Strategy	Description	Crash Reduction Factor (CRF)	Estimated Implementation Cost	Mitigating Conditions	Quick Build Capable
29	 Pedestrian Barriers to Prevent Mid-Block Crossing	Fence or vegetative median barriers improve safety by preventing unsafe, random street crossings and guiding pedestrians to designated crosswalks.	15%	$$	Pedestrian Rear-end	✓
30	 Enhanced Signing and High Visibility Crosswalk Markings	A high-visibility crosswalk has a striped pattern with ladder markings made of high-visibility material, such as thermoplastic tape, instead of paint. improves the visibility of marked crosswalks and provides motorists a cue to slow down and yield to pedestrians.	30%	$	Pedestrian	
31	 Leading Pedestrian Intervals	A leading signal interval (3-7 seconds) gives pedestrians the opportunity to enter an intersection before vehicles are given a green indication. Most effective at intersections with a high volume of turning.	15%	$	Pedestrian	
32	 Pedestrian Countdown Timers (visual and audible)	Displays "countdown" of seconds remaining on the pedestrian signal.	25%	$	Pedestrian	
33	 Raised Crosswalk	Crosswalk that is typically elevated 3-6 inches above the road or at sidewalk level.	30%	$	Pedestrian	✓
34	 Median and Pedestrian Refuge Island	Raised barrier in the center of the roadway restricting certain turning movements and providing a place for pedestrians to wait if they are unable to finish crossing the intersection.	55%	$	Pedestrian Rear-end	✓
35	 Rectangular Rapid Flashing Beacon	Pedestrian-activated flashing light and signage to alert motorists of a pedestrian crossing. RRFB increases the visibility of marked crosswalks and provides motorists a cue to slow down and yield to pedestrians.	45%	$	Pedestrian Rear-end	
36	 Parking Restriction on Crosswalk Approach	Restricting vehicle parking within 25-30 feet of intersection can improve sight lines.	30%	$	Pedestrian Angle	
Bicycle Focused Countermeasures						
37	 Buffered Bike Lane	Standard bike lanes paired with a designated horizontal buffer space, separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.	55%	$$$	Bicycle	✓

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#	Strategy	Description	Crash Reduction Factor (CRF)	Estimated Implementation Cost	Mitigating Conditions	Quick Build Capable
38	 Separate Multi-use Trail	Off-street facilities that provide exclusive use for nonmotorized travel, including bicyclists and pedestrians.	25%	$$	Bicycle Pedestrian	
39	 Bike Box	Painted area between the crosswalk and vehicle stop bar at a signalized intersection where bicyclists can wait during a red signal phase; placing bicyclists in a location where they are more visible to motorists.	35%	$	Bicycle	✓
Programmatic Concepts						
40	 Education Program	Material on topics such as distracted driving, safe intersection crossing, bicycle safety distributed in various formats.		$		
41	 Media Safety Training	Themed material distributed through TV, radio and digital means can widely share safety information.		$$		
42	 School Focused Programs	Campaigns targeting school aged children focus on walking/biking safety, bus safety, and in-vehicle safety.		$$		
43	 Actively Advance Pedestrian and Bicycle Safety Projects	Prioritization of pedestrian and bicycling projects, which are generally lower cost, is required to create benefits of planning efforts.		$		
Enforcement Concepts						
44	 Short-Term, High-Visibility Seat Belt Law Enforcement	Saturation patrols deter drunk driving by increasing the perceived risk of arrest in high-risk areas. These programs should be regular and highly publicized.		$$		
45	Short-Term, High-Visibility Child Passenger Safety Law Enforcement			$$		
46	High-Visibility Enforcement (Speed/Cell Phone Use)			$$		
47	 Speed Safety Camera Enforcement	The presence of cameras encourages drivers to comply with speed limits, not just at the camera location but, in the case of average speed cameras, over a stretch of road.		$$		

NOTES:

Cost Range

Low ($) - Less than $60,000 Moderate ($$) - $60,000 to $200,000 High ($$$) - Greater than $200,000

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Seven Community Crashes

All Seven Communities

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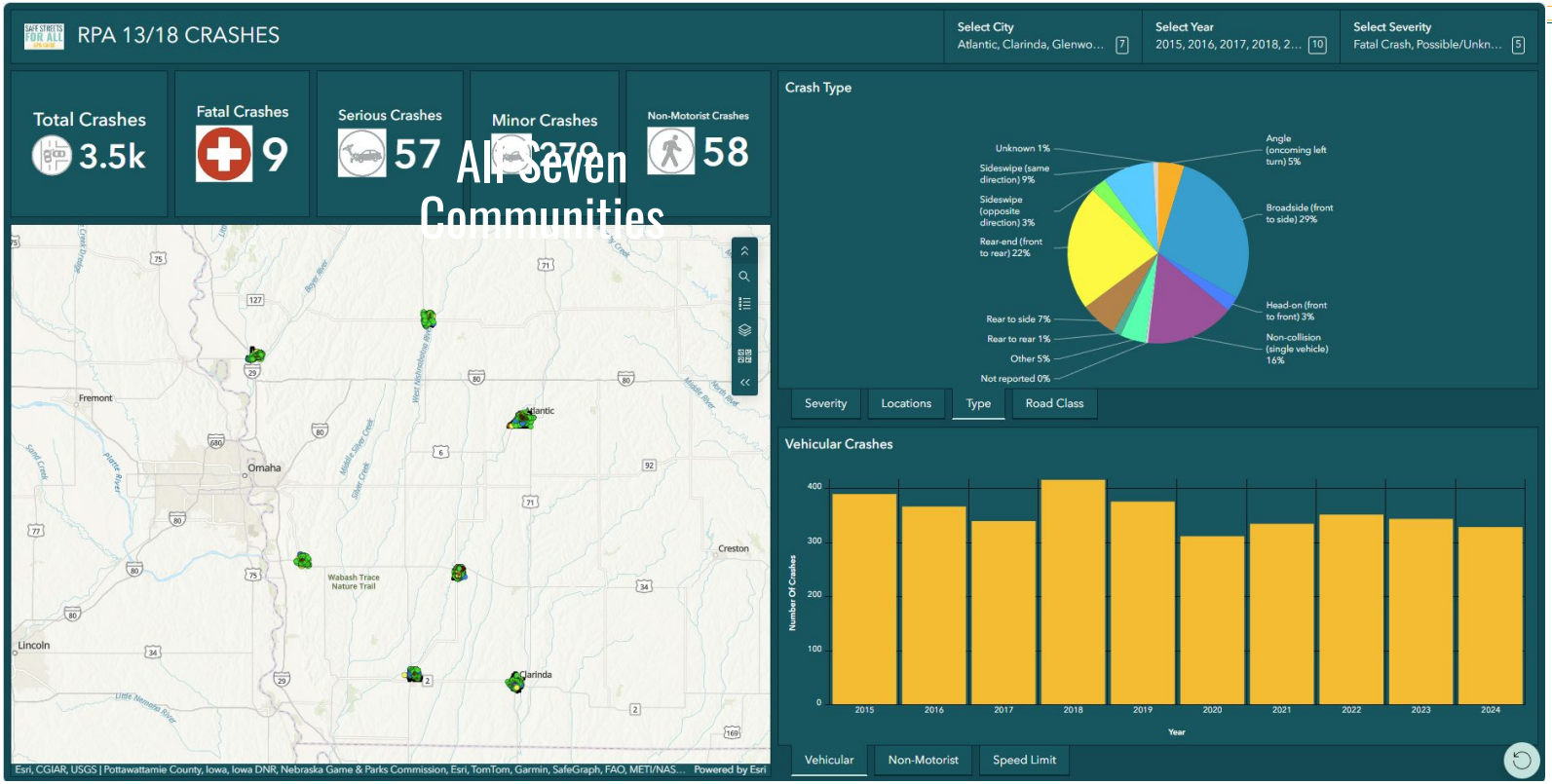

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All Seven Communities

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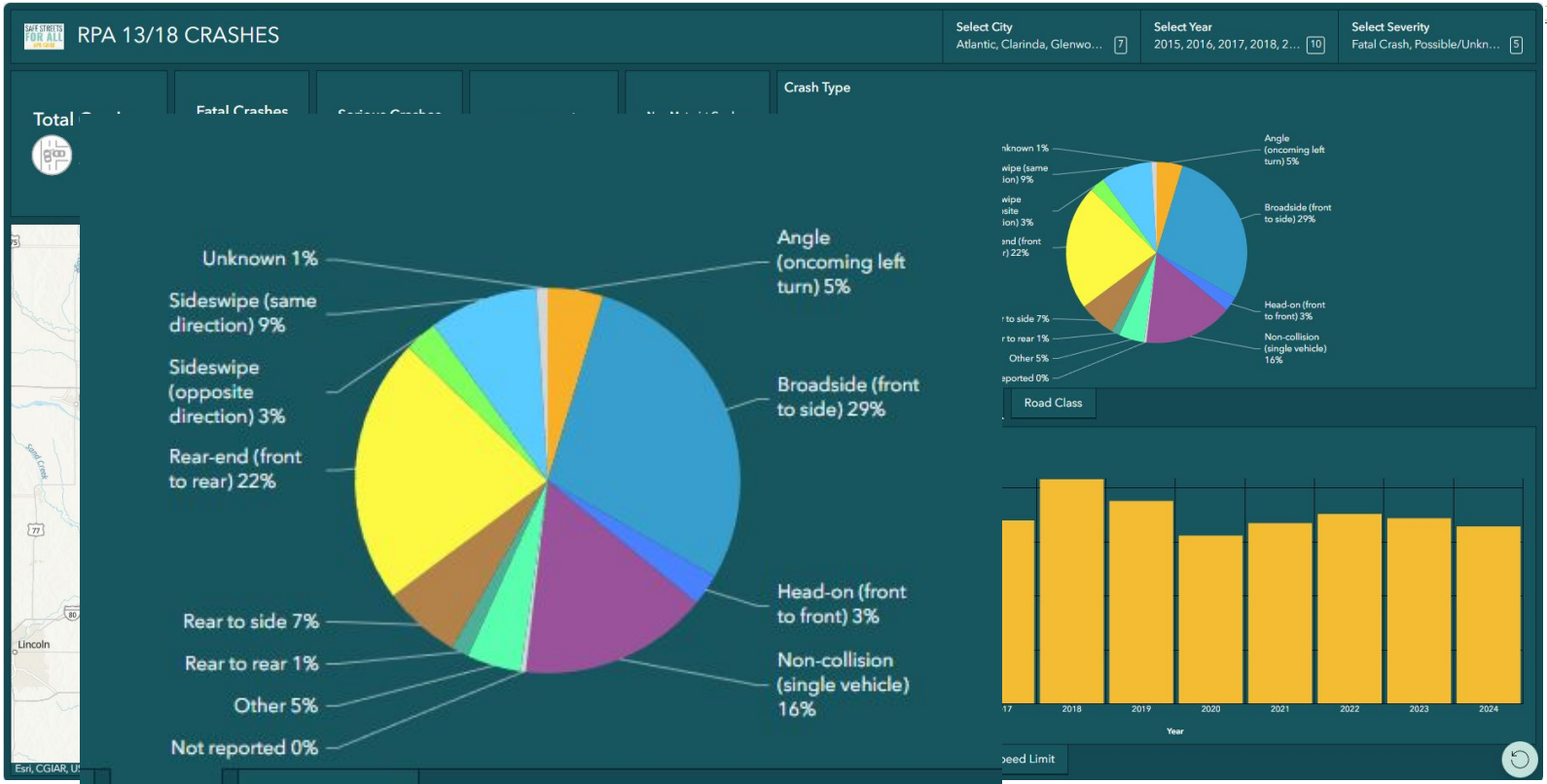

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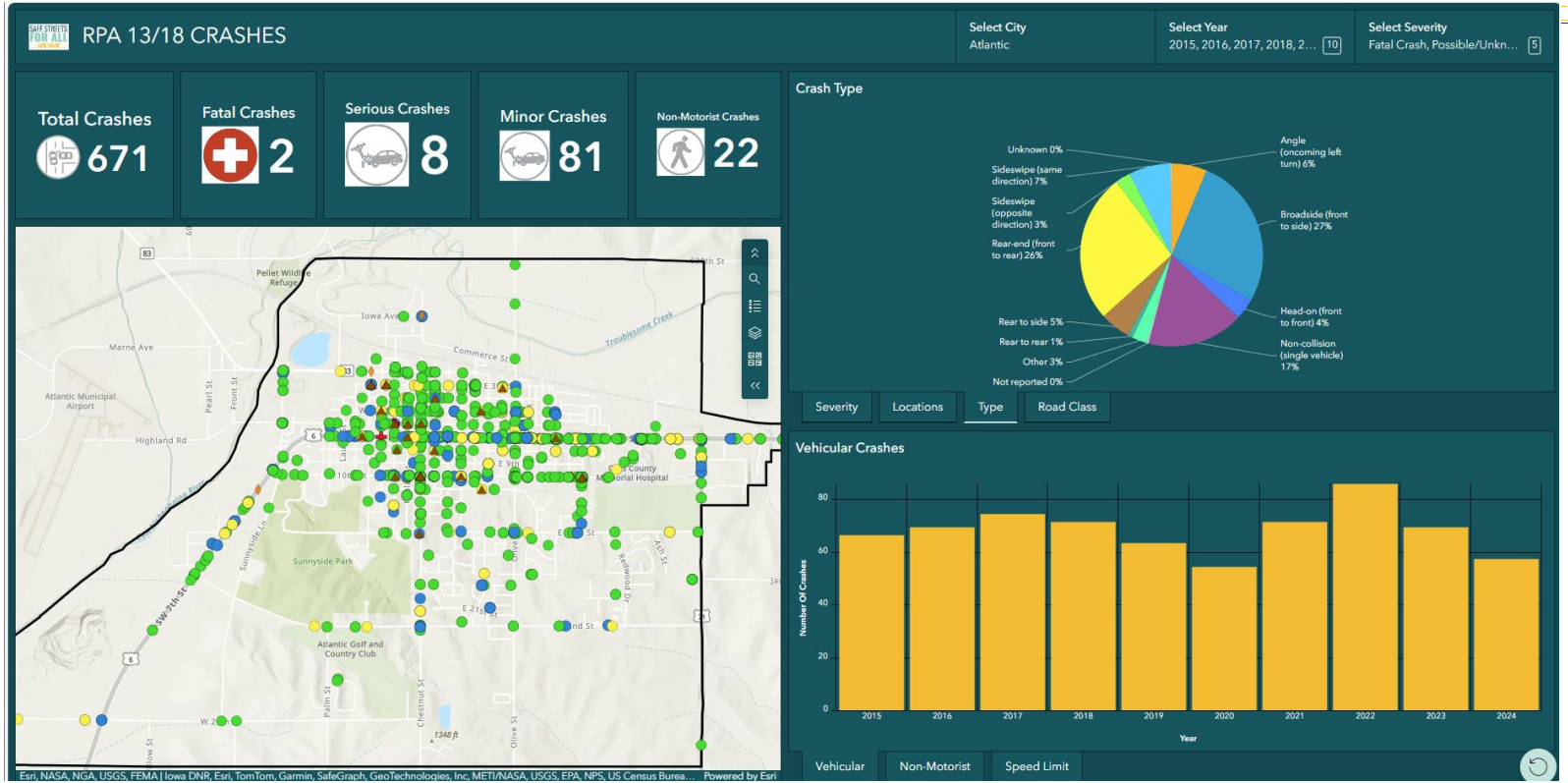
Crash/Safety Countermeasures

Atlantic – Crash Summary



Atlantic – Crash Summary

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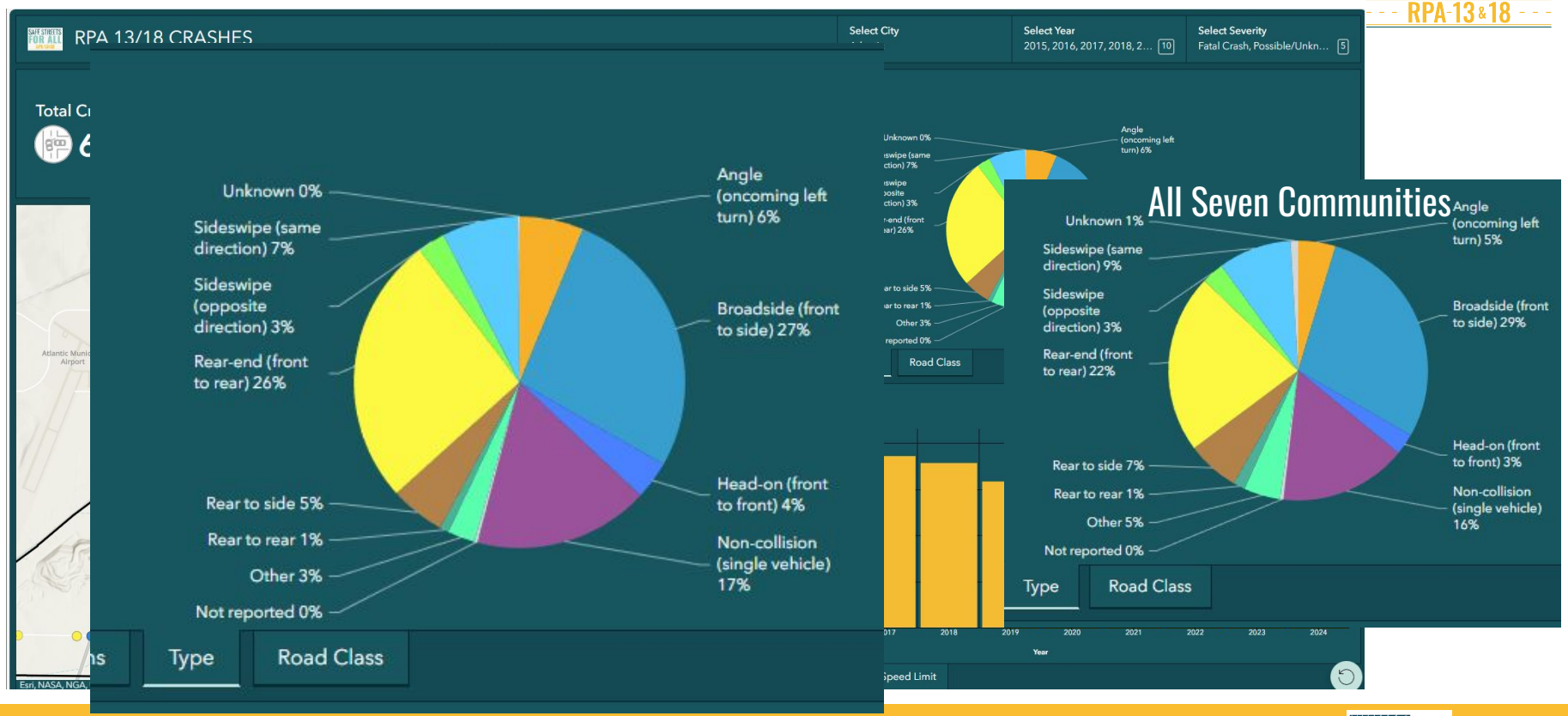

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HPN and Priorities - Atlantic

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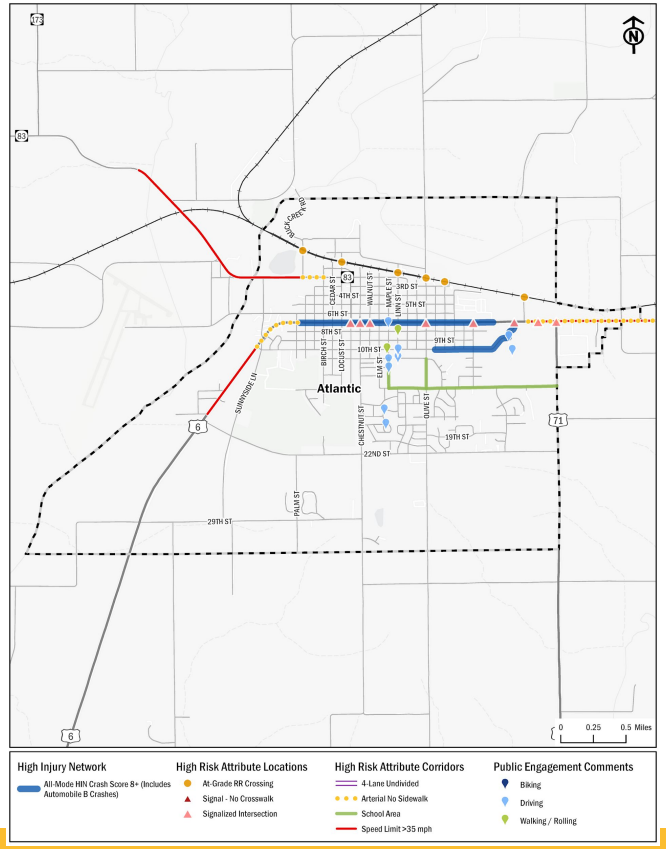

- Speed reduction – IA 6:
  - 22nd Street to 10 Street
- School area projects:
  - 10th Street/Linn Street
  - 10th Street/Olive Street
  - 14th Street Olive Street
  - 14th Street Plum Street
- More detail – Washington Elementary School area project
- US 6/IA 83/7th Street:
  - Rearends – Review signal timing/phasing/yellow interval
  - Broadsides – Added intersection control/reduce speeds on mainline
  - Speeds (West end) – Speed indication signs/Reduce speed closer to 22nd Street

- Sidewalks
- Intersection Control (stop signs)
- Crossing guards

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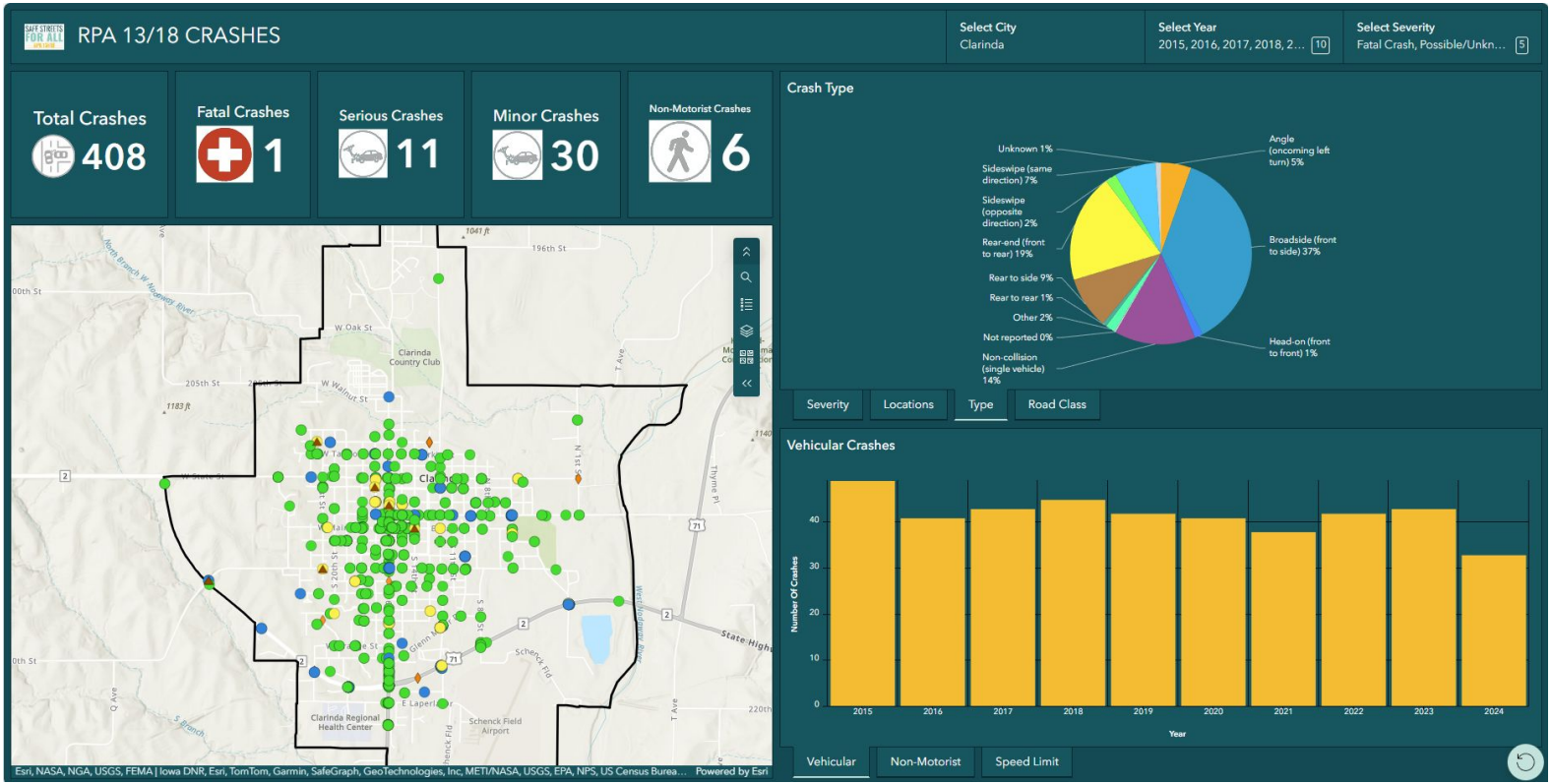
Clarinda – Crash Summary



Clarinda – Crash Summary

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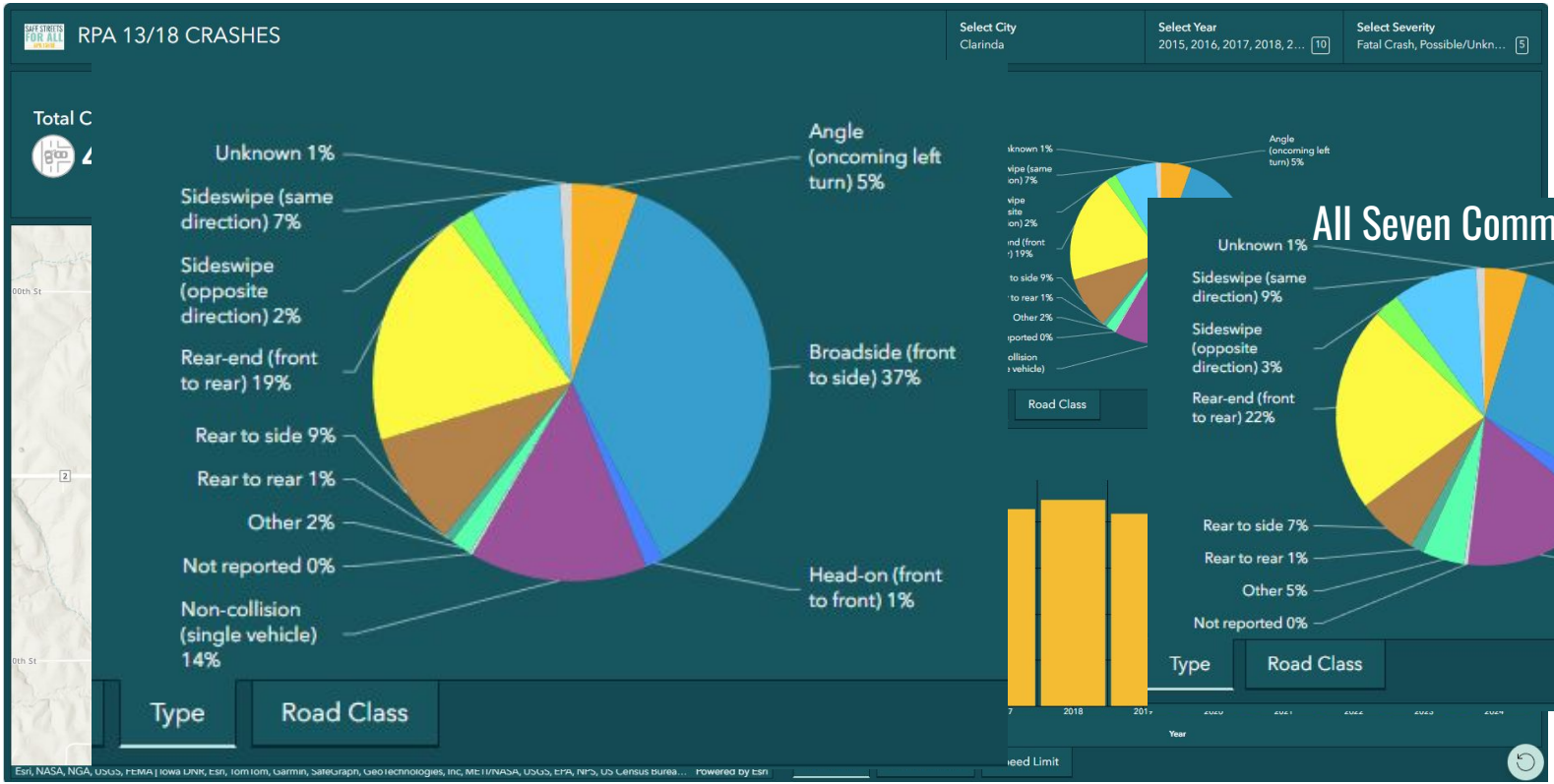

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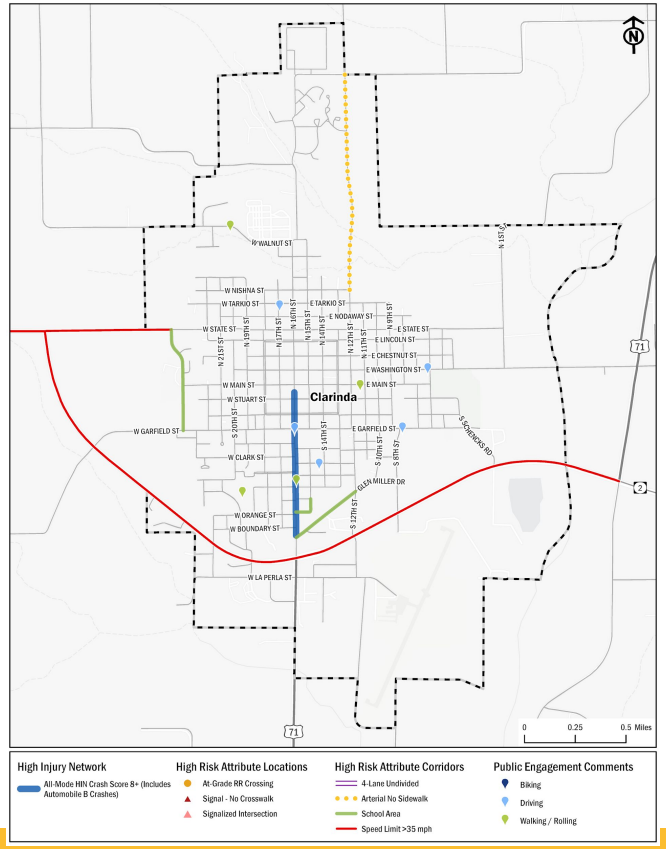

- School Areas:
  - Add sidewalks
- 16th Steet South of Downtown:
  - Restripe as 3-Lane
  - Bike lanes

Glenwood – Crash Summary

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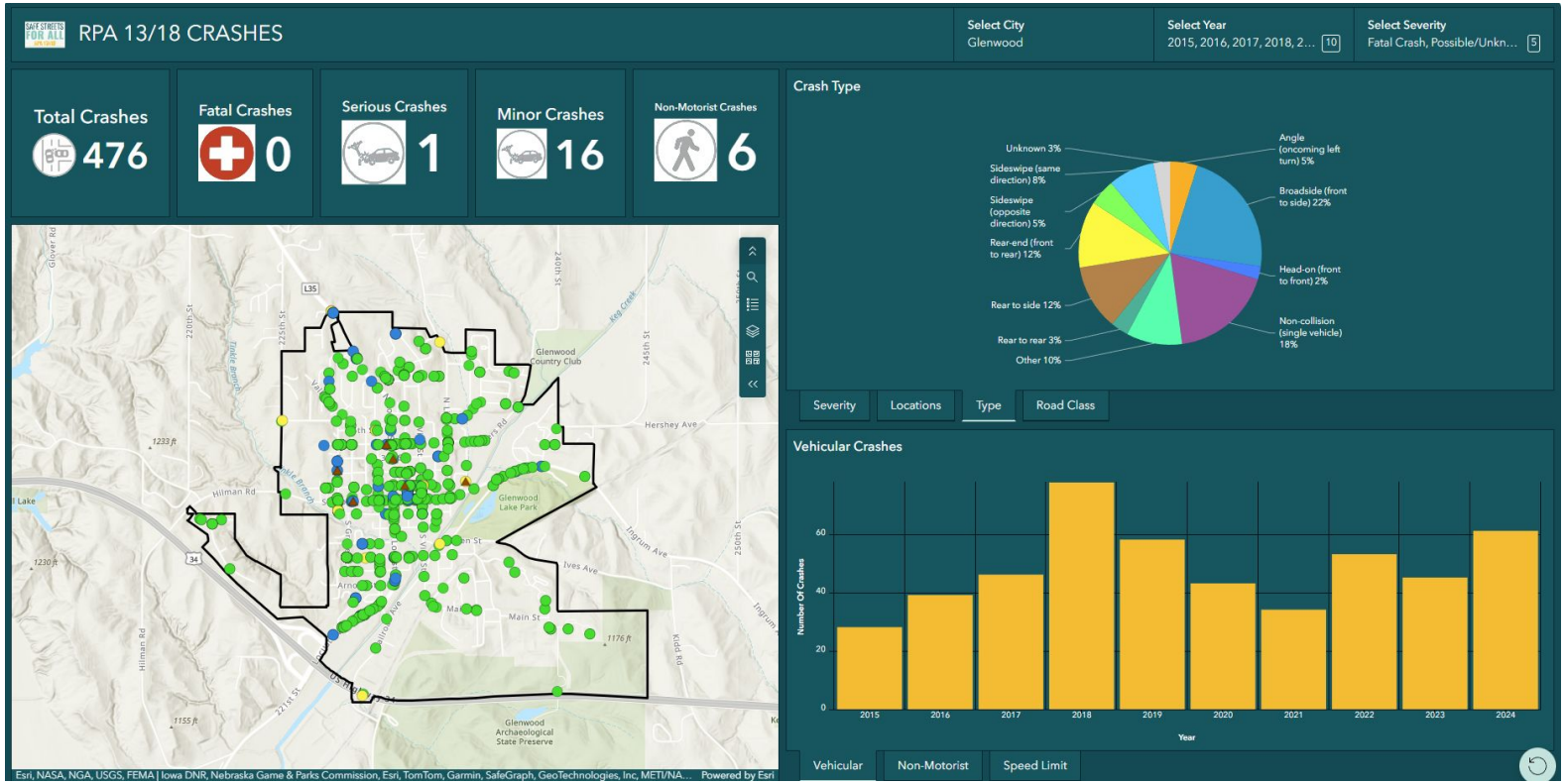

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Glenwood – Crash Summary

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HPN and Priorities - Glenwood

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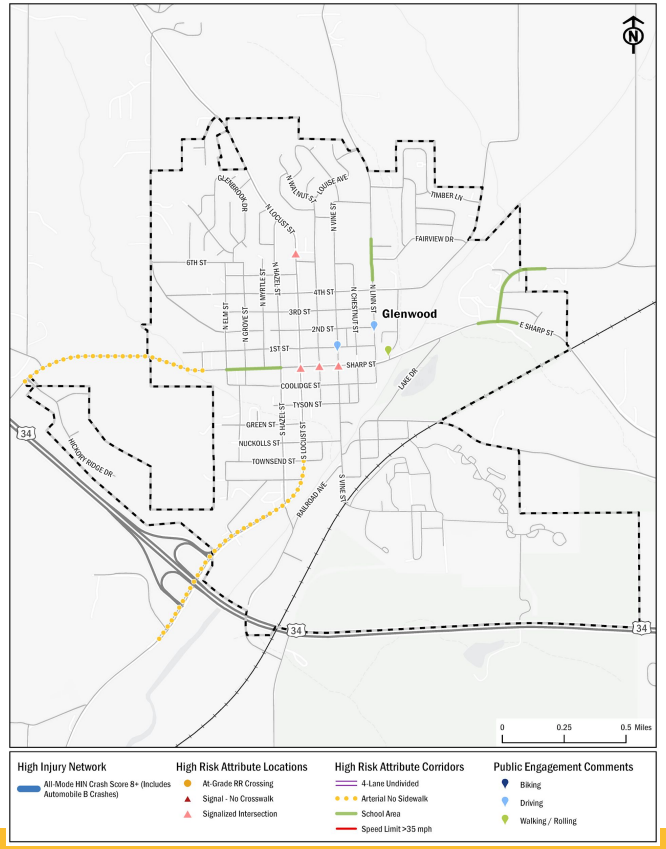

- City Trail Loop
  - North of East Sharp Street
  - South of East Sharp Street
- Mills County Trail Connections:
  - Glenwood to Mineola along Keg Creek
  - Glenwood to Malvern along railroad
  - Glenwood to Malvern along Gaston
- High School – Peak Period Traffic:
  - Congestion: Sivers Road/Sharp Street
  - Mixing of Middle-High School (8:05 AM/8:00 AM start) and (3:25 PM/3:20 PM out)

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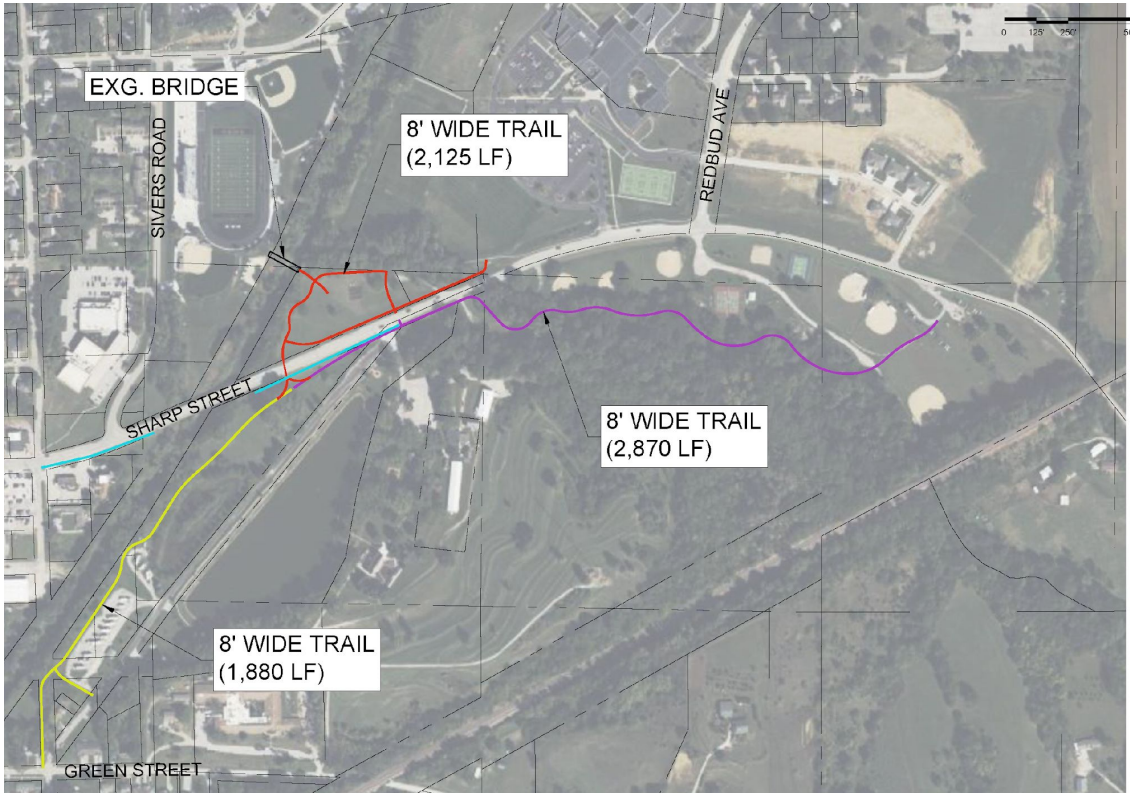

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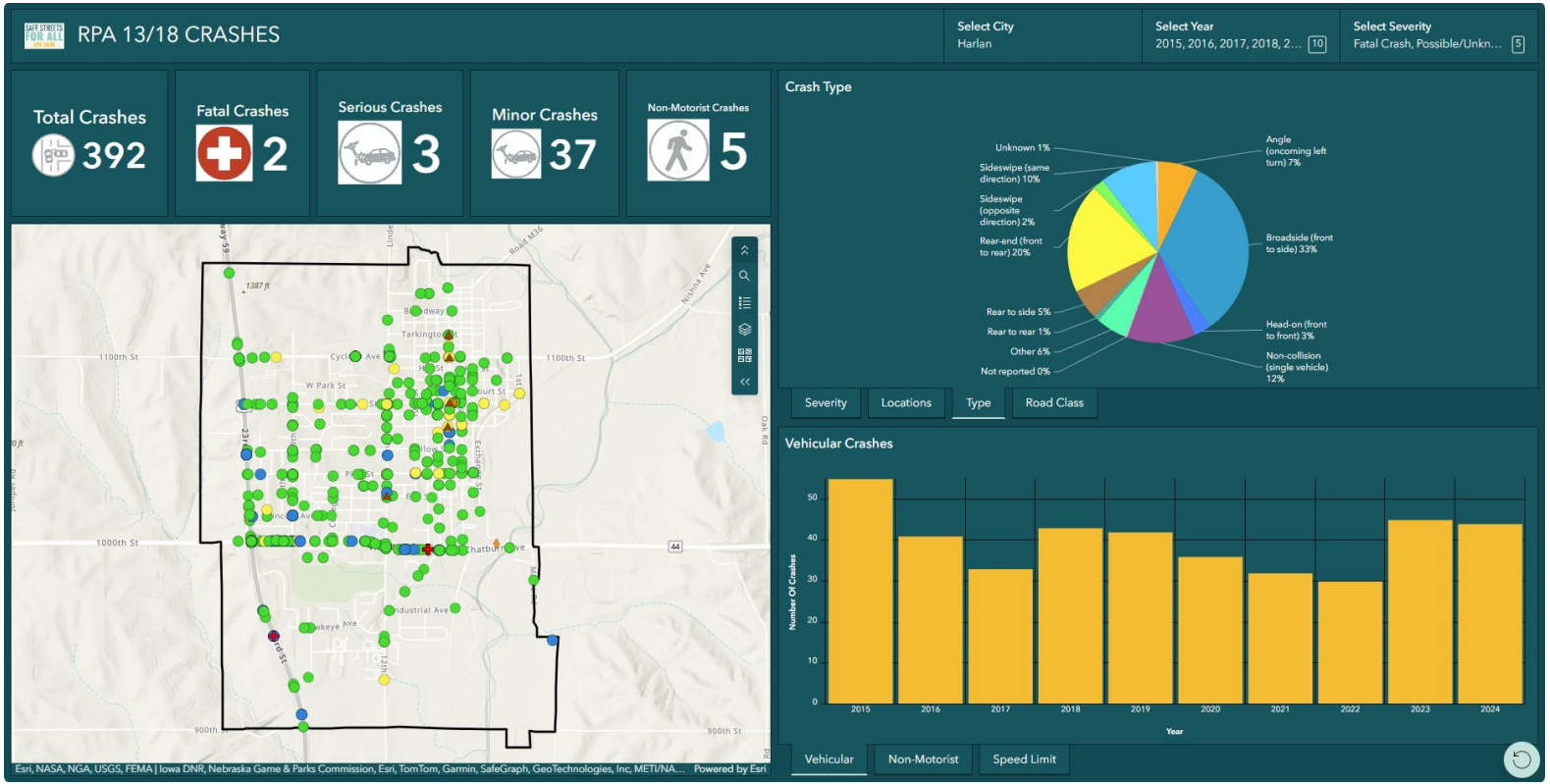
Harlan – Crash Summary



Harlan – Crash Summary

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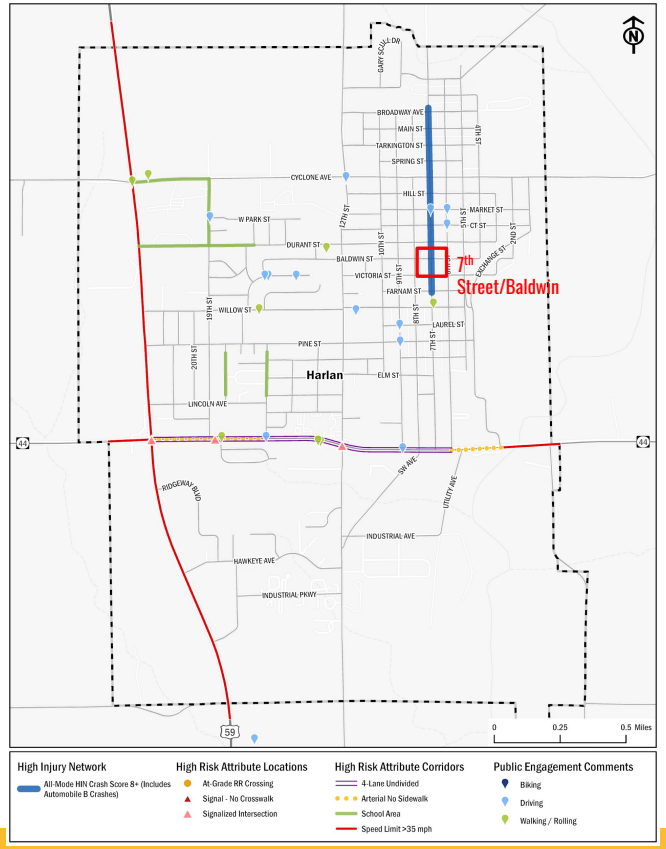
HPN and Priorities - Harlan



- Crosswalk Addition – Highway 44/12th Street:
  - Painted crosswalk
  - ADA curb cuts/tactile pads
  - Pedestrian refuge island
- 7th Street HIN Corridor:
  - Predominant crash type - Broadside
  - Added intersection control:
    - Stop control (two-way or all-way)
    - Mini roundabout
  - Baldwin Street: Trucks – Why are they there? All-way Stop?
- Crosswalk: 12th Street @ Elm Crest (Not functioning)

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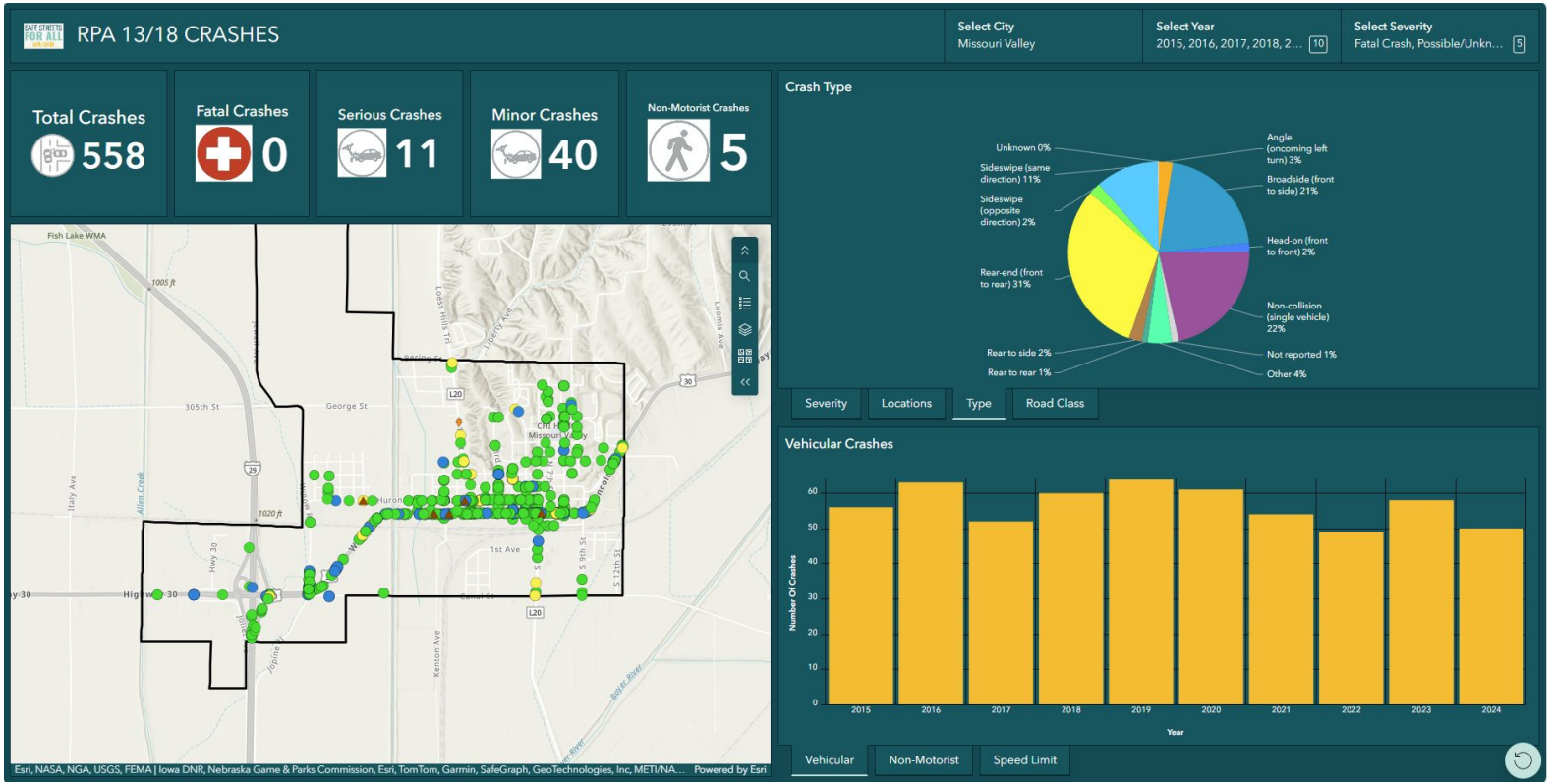
Missouri Valley – Crash Summary



Missouri Valley – Crash Summary

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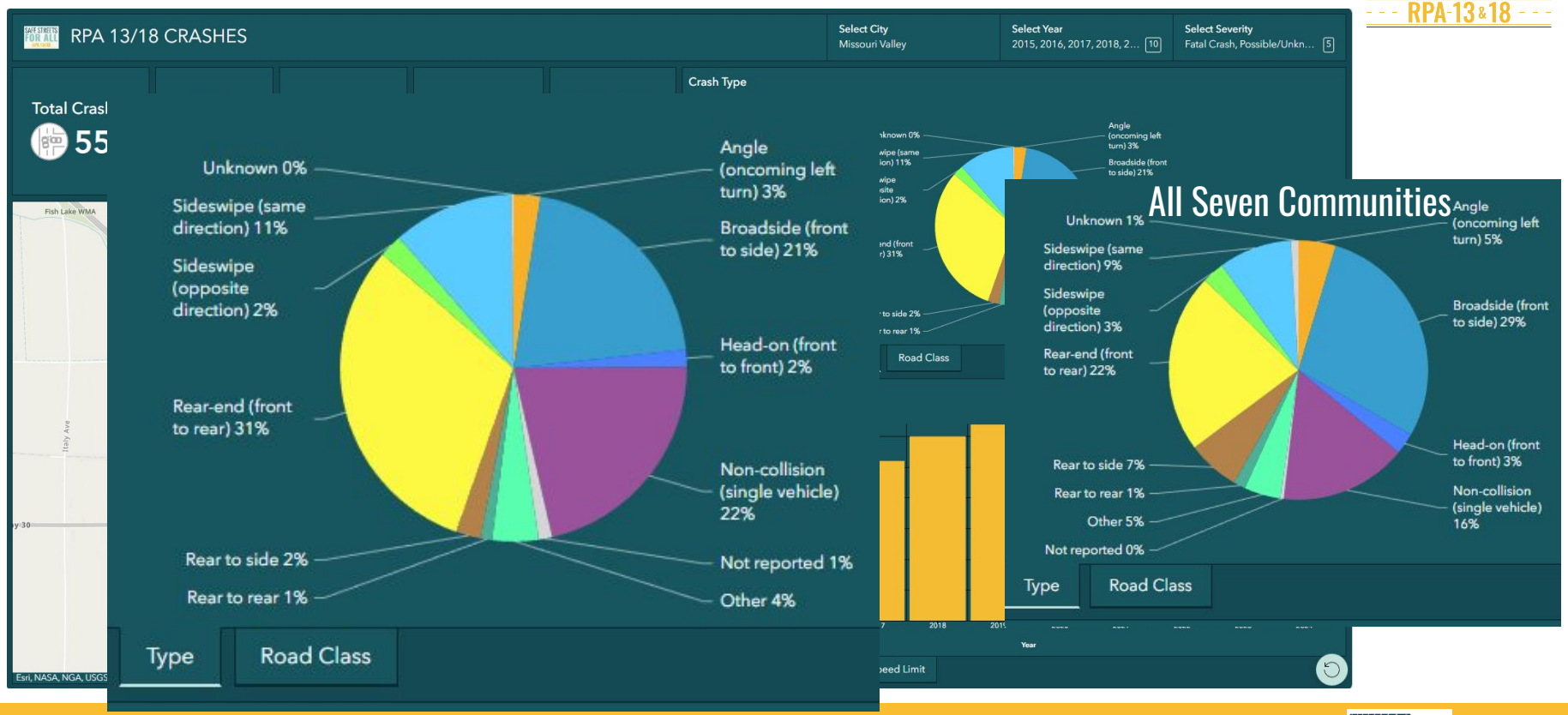

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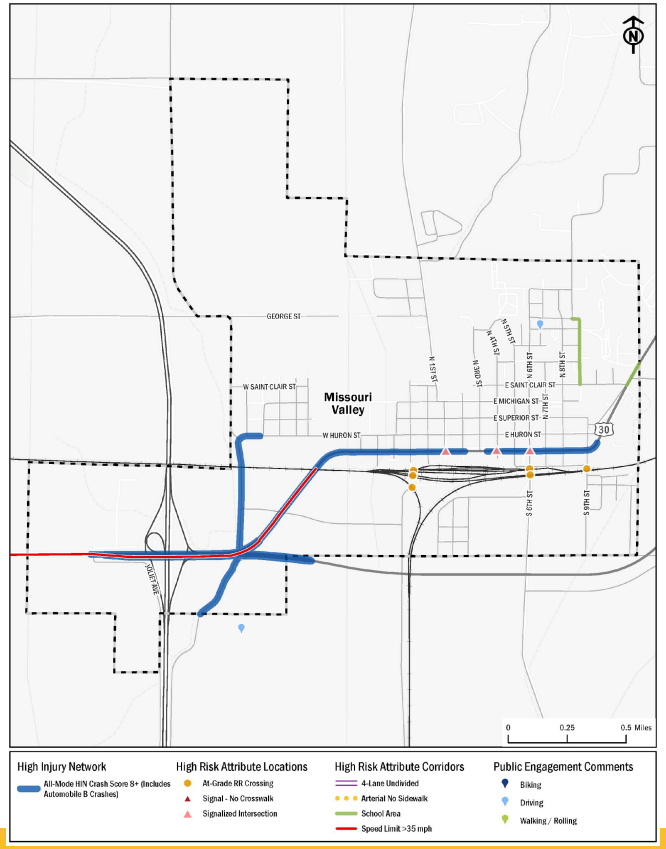

- Construct US 30 Bypass
- Priorities:
  - Pedestrian visibility
  - Safe crossings
  - US 30 (Old 30?) freight management
- Assess "Old 30" Options through Town:
  - Lanes
  - Intersections (curb extensions)
  - Intersection control
- 4th Street Croswalk:
  - Add Audible indication
  - Pavement markings
- 1st Street/6th Street:
  - Pavement markings
- 5th Street/Huron Street:
  - Add marked crosswalk (Culavin Heights)
- US 30 – Turn Lane at High School/Middle School Drive

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HPN and Priorities – Missouri Valley

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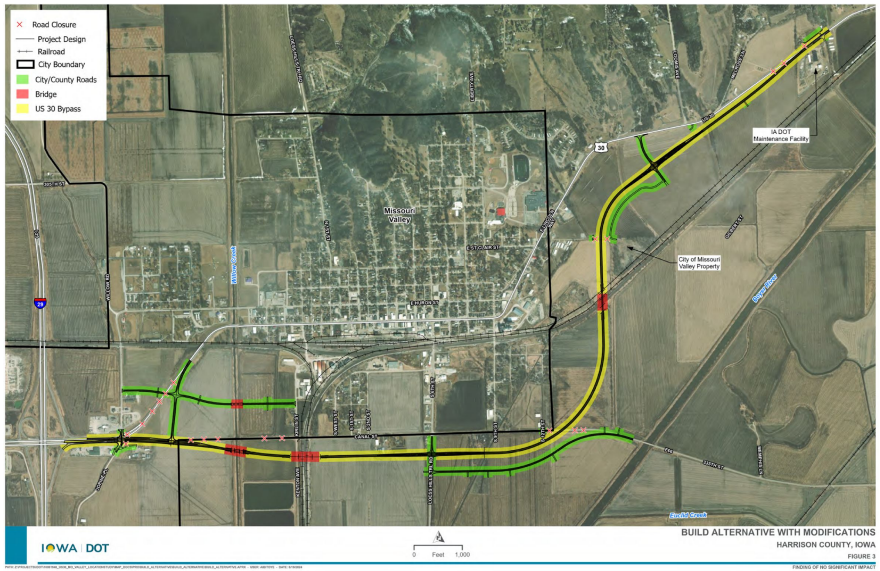

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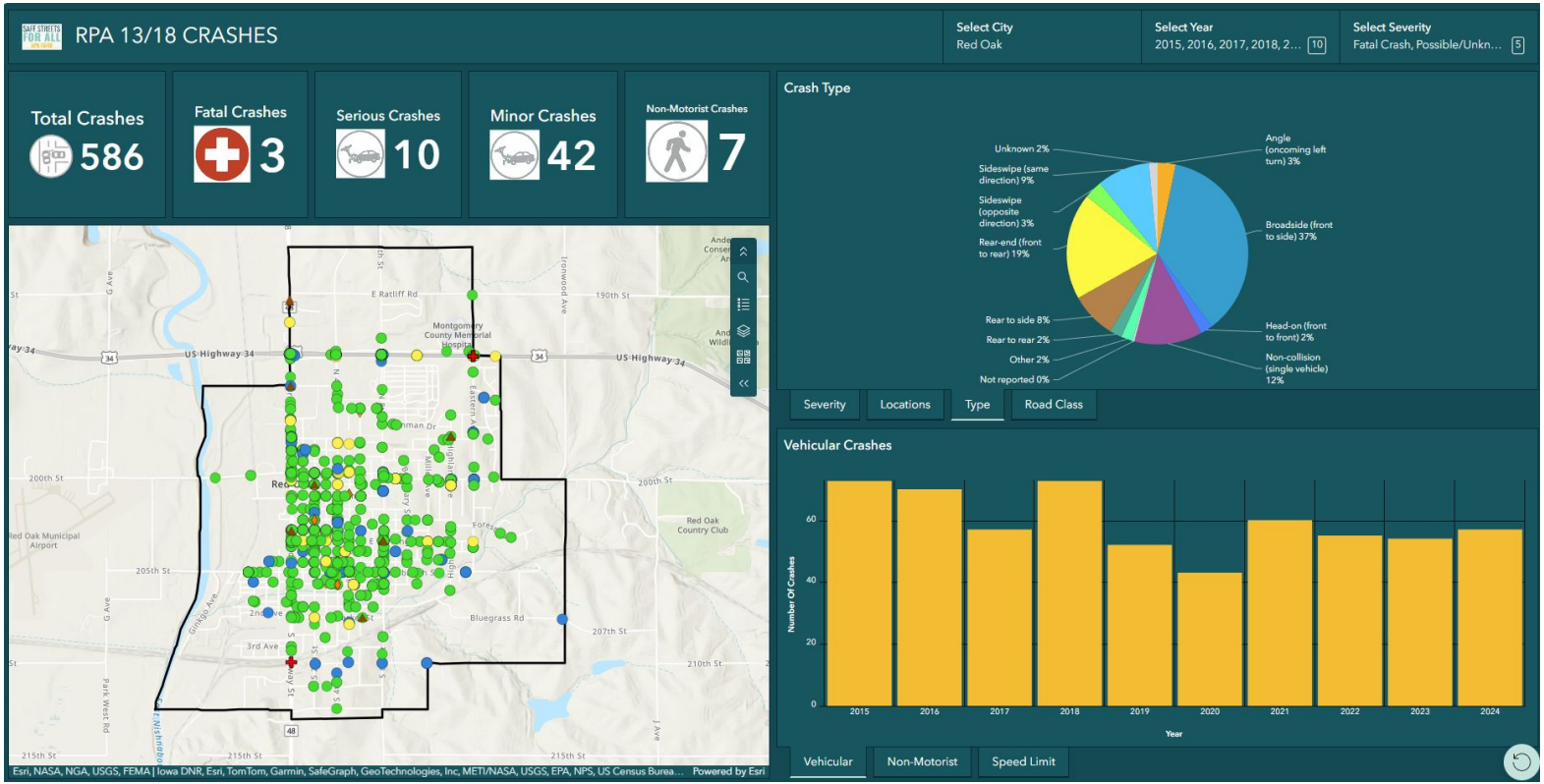

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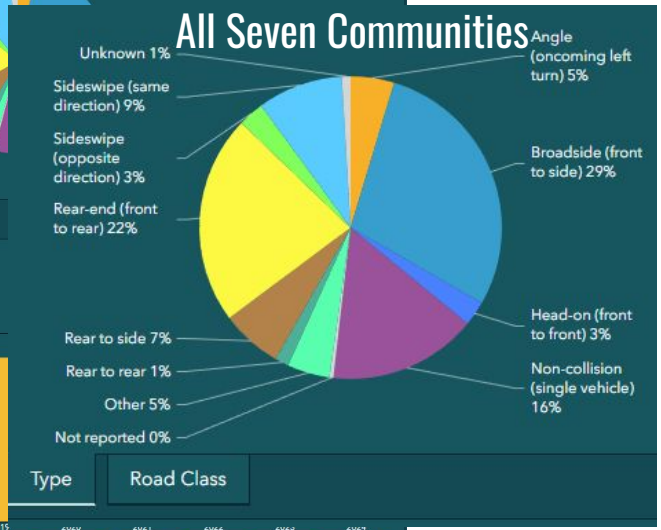

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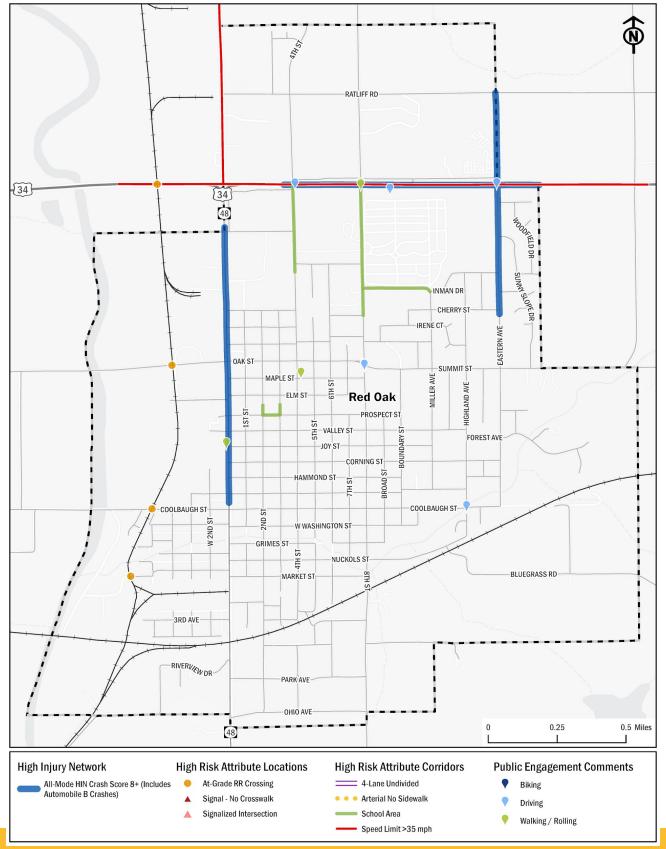
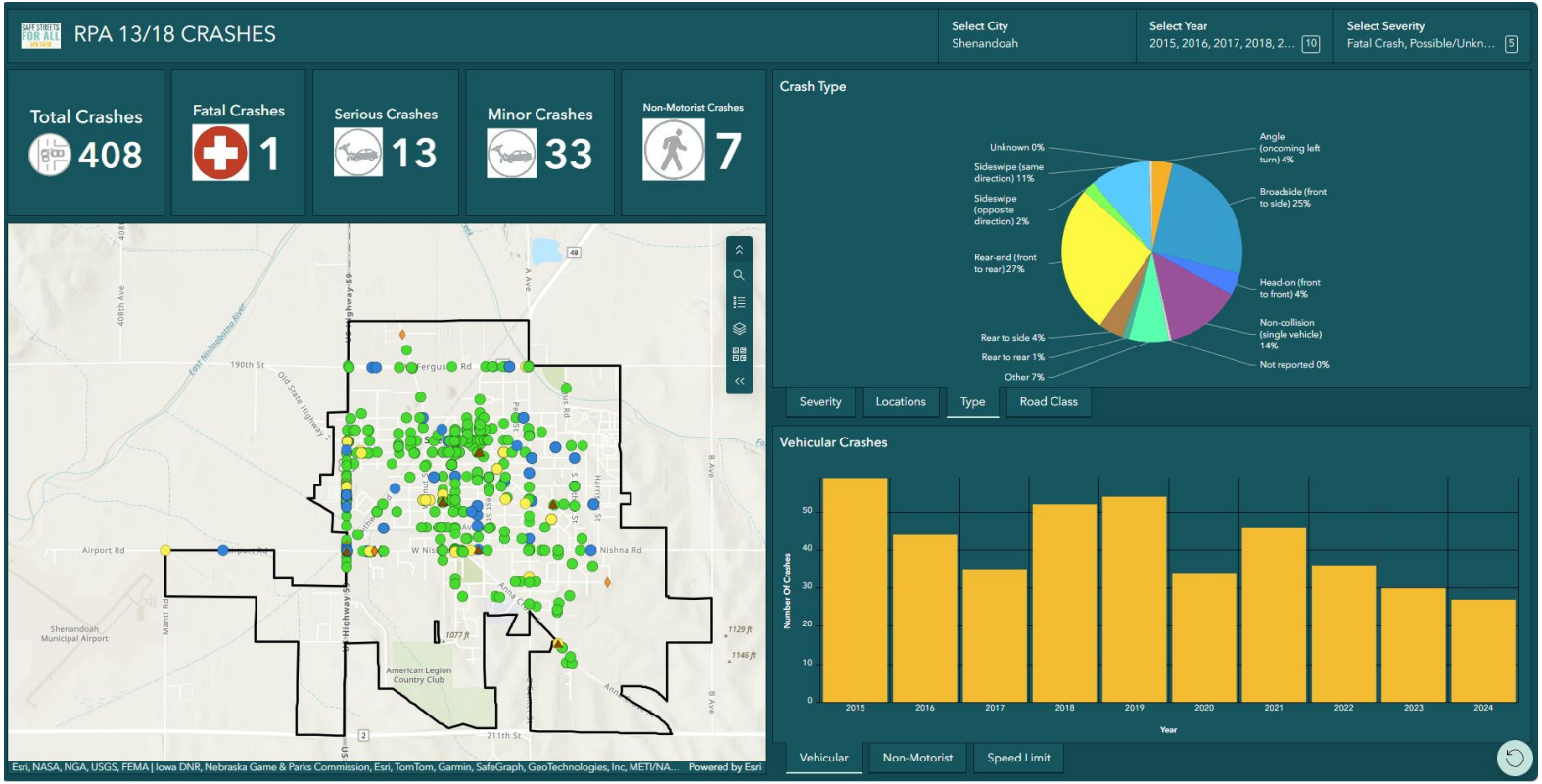
A Bright Look Ahead

HPN – Red Oak



- Crosswalks:
  - Multiple locations on Highway 34
    - Highest priorities 4th Street and 8th Street
- School Areas:
  - Sidewalks - especially on North 4th Street
  - Sidewalk - 8th Street from Hwy 34 to Inman Drive
- Recent Safety Improvement:
  - East Coolbaugh Street/Highland Avenue - Stop Signs installed
- US 34:
  - Broadside/Rear-end crashes – Reduce speed/add signal

Shenandoah – Crash Summary



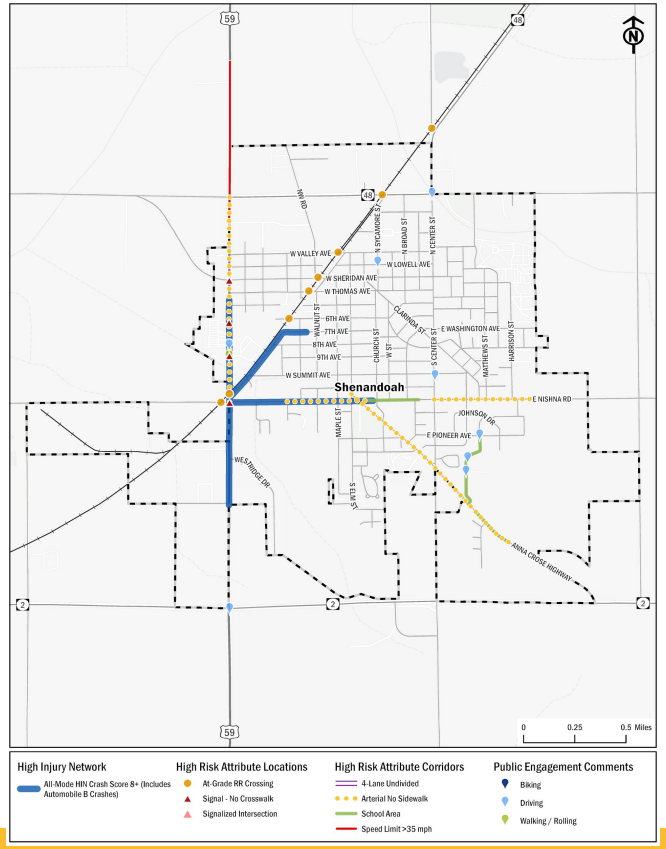
Shenandoah – Crash Summary

SAFE STREETS FOR ALL
RPA-13&18

MAPA

SWIPCO
A Bright Look Ahead

HPN and Priorities – Shenandoah



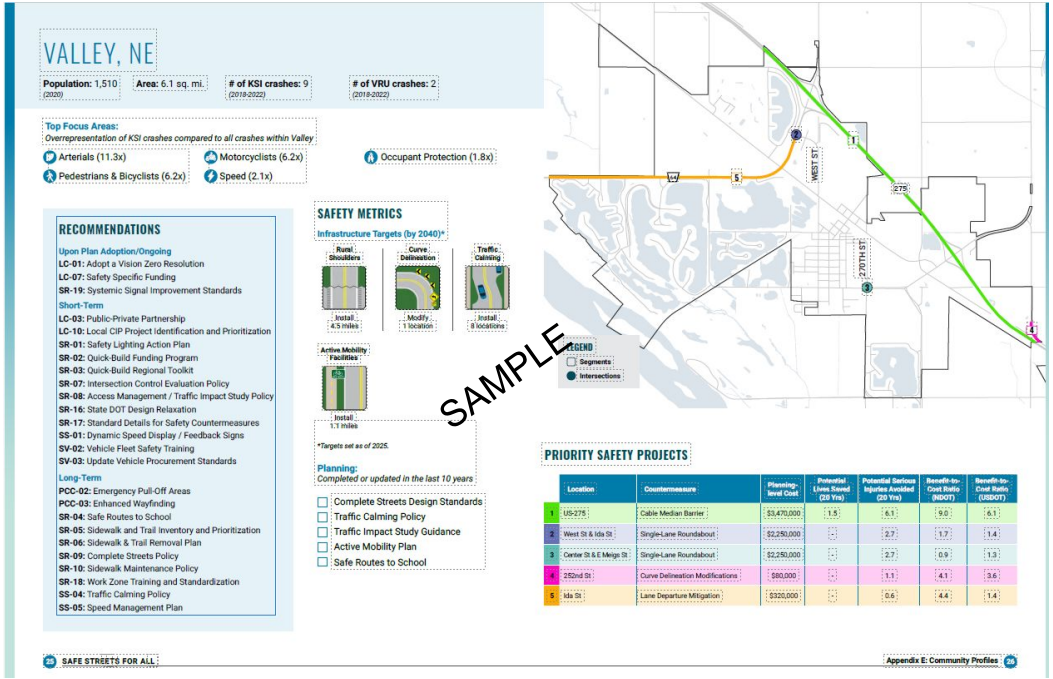
- Intersection of Fremont Street/Nishna Road
- Fremont Street Access at Walmart
- SW Road
- Nishna Road

Group Discussion

- What were the Primary Topics?
- Actions proposed include?

Wrap-Up

- Continued Review – Countermeasures
- Create Profile for each Community



VALLEY, NE

Population: 1,510 (2020) | **Area:** 6.1 sq. mi. | **# of KSI crashes:** 9 (2018-2022) | **# of VRU crashes:** 2 (2018-2022)

Top Focus Areas:
Overrepresentation of KSI crashes compared to all crashes within Valley

- Arterials (11.3x)
- Motorcyclists (6.2x)
- Occupant Protection (1.8x)
- Pedestrians & Bicyclists (6.2x)
- Speed (2.1x)

RECOMMENDATIONS

Upon Plan Adoption/Ongoing
LC-01: Adopt a Vision Zero Resolution
LC-07: Safety Specific Funding
SR-19: Systemic Signal Improvement Standards

Short-Term
LC-03: Public-Private Partnership
LC-10: Local CIP Project Identification and Prioritization
SR-01: Safety Lighting Action Plan
SR-02: Quick-Build Funding Program
SR-03: Quick-Build Regional Toolkit
SR-07: Intersection Control Evaluation Policy
SR-08: Access Management / Traffic Impact Study Policy
SR-16: State DOT Design Relaxation
SR-17: Standard Details for Safety Countermeasures
SS-01: Dynamic Speed Display / Feedback Signs
SV-02: Vehicle Fleet Safety Training
SV-03: Update Vehicle Procurement Standards

Long-Term
PCC-02: Emergency Pull-Off Areas
PCC-03: Enhanced Wayfinding
SR-04: Safe Routes to School
SR-05: Sidewalk and Trail Inventory and Prioritization
SR-06: Sidewalk & Trail Removal Plan
SR-09: Complete Streets Policy
SR-10: Sidewalk Maintenance Policy
SR-18: Work Zone Training and Standardization
SS-04: Traffic Calming Policy
SS-05: Speed Management Plan

SAFETY METRICS
Infrastructure Targets (by 2040)*

Rural Shoulders: Install 4.5 miles
Curve Delineation: Modify 1 location
Traffic Calming: Install 8 locations
Active Mobility Facilities: Install 1.1 miles

*Targets set as of 2025.

Planning:
Completed or updated in the last 10 years

- ☐ Complete Streets Design Standards
- ☐ Traffic Calming Policy
- ☐ Traffic Impact Study Guidance
- ☐ Active Mobility Plan
- ☐ Safe Routes to School

SAMPLE

LEGEND: Segments, Intersections

PRIORITY SAFETY PROJECTS

	Location	Countermeasure	Planning-level Cost	Potential Lives Saved (20 Yrs)	Potential Serious Injuries Avoided (20 Yrs)	Benefit-to-Cost Ratio (NDOT)	Benefit-to-Cost Ratio (USDOT)
1	US-275	Cable Median Barrier	$3,470,000	1.5	6.1	9.0	6.1
2	West St & Ida St	Single-Lane Roundabout	$2,250,000	-	2.7	1.7	1.4
3	Center St & E Meigs St	Single-Lane Roundabout	$2,250,000	-	2.7	0.9	1.3
4	252nd St	Curve Delineation Modifications	$80,000	-	1.1	4.1	3.6
5	Ida St	Lane Departure Mitigation	$320,000	-	0.6	4.4	1.4

SAFE STREETS FOR ALL

Appendix E: Community Profiles

SAFE STREETS FOR ALL
RPA-13&18

MAPA Safety Targets and SS4A Planning Updates

STAG MEETING 3

February 10, 2026