2026 WARREN COUNTY SAFETY ACTION PLAN

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SAFETY ACTION PLAN OVERVIEW

The Warren County Safety Action Plan is a county-specific supplement to the KIRPC Comprehensive Safety Action Plan. It is designed to help translate regional safety goals into clear, locally relevant priorities that reflect Warren County's rural and urban roadway network and travel patterns.

Where should Warren County focus to reduce fatal and severe injury crashes?

Warren County's transportation system is shaped by high-speed rural roadways, a small number of state and U.S. routes carrying regional traffic, and compact town centers that serve as focal points for local travel. The county's largely rural character means crashes are less frequent overall, but higher operating speeds, limited roadway shoulders, and long distances to trauma care increase the likelihood that crashes result in fatal or severe injuries. At the same time, communities such as Williamsport and West Lebanon experience concentrated activity near intersections, schools, and community destinations, where conflicts between local traffic and through-travel elevate safety risks.

This plan is intended to support county-level decision-making by identifying where safety investments can have the greatest impact in Warren County, with an emphasis on high-risk rural corridors and key locations within town centers. It provides a practical framework for prioritizing projects, coordinating with state and regional partners, and supporting future funding applications focused on reducing fatal and severe injury crashes while addressing the county's rural context and limited transportation network.

How to **USE THIS PLAN**

This plan is designed to be used, not archived. Warren County should reference it to:

1. **Focus safety efforts where they matter most**
   Use the High Injury Network and emphasis areas to identify roadway segments, intersections, and communities where safety improvements are most likely to reduce fatal and severe injury crashes.

2. **Guide project planning and prioritization**
   Apply the plan's findings when evaluating capital projects, maintenance activities, and operational improvements, especially when resources are limited.

3. **Support coordination and funding**
   Reference this plan when working with INDOT, KIRPC, municipalities, and emergency response partners, and when preparing state or federal grant applications.

4. **Select context-appropriate solutions**
   Use the emphasis areas and prioritization framework to match the scale of safety improvements to Warren County's rural roadway conditions and needs.

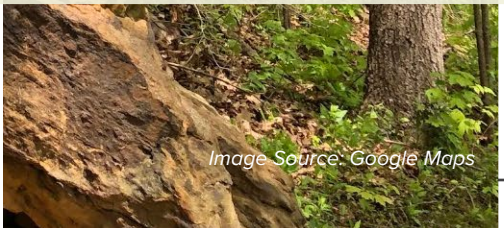


Image Source: Google Maps

County at a Glance

Warren County is in the southwest corner of the KIRPC region and shares a border with Illinois to the west and the Wabash River in the south. Williamsport is the county seat and home to Ascension St. Vincent Williamsport Hospital. There are four public schools in the county. US Route 41 and IN SR 63 split in the southern portion of the county and merge together south of Carbondale where they continue north. IN SR 28 is another major roadway in the county travelling east-west ***(Figure 1)***.

On average, 51,400 daily trips occur on roadways in Warren County. Four in every five residents are employed outside the county, with one in every five working in Lafyette or West Lafayette.

4
Number of Public Schools

1
Number of Hospitals

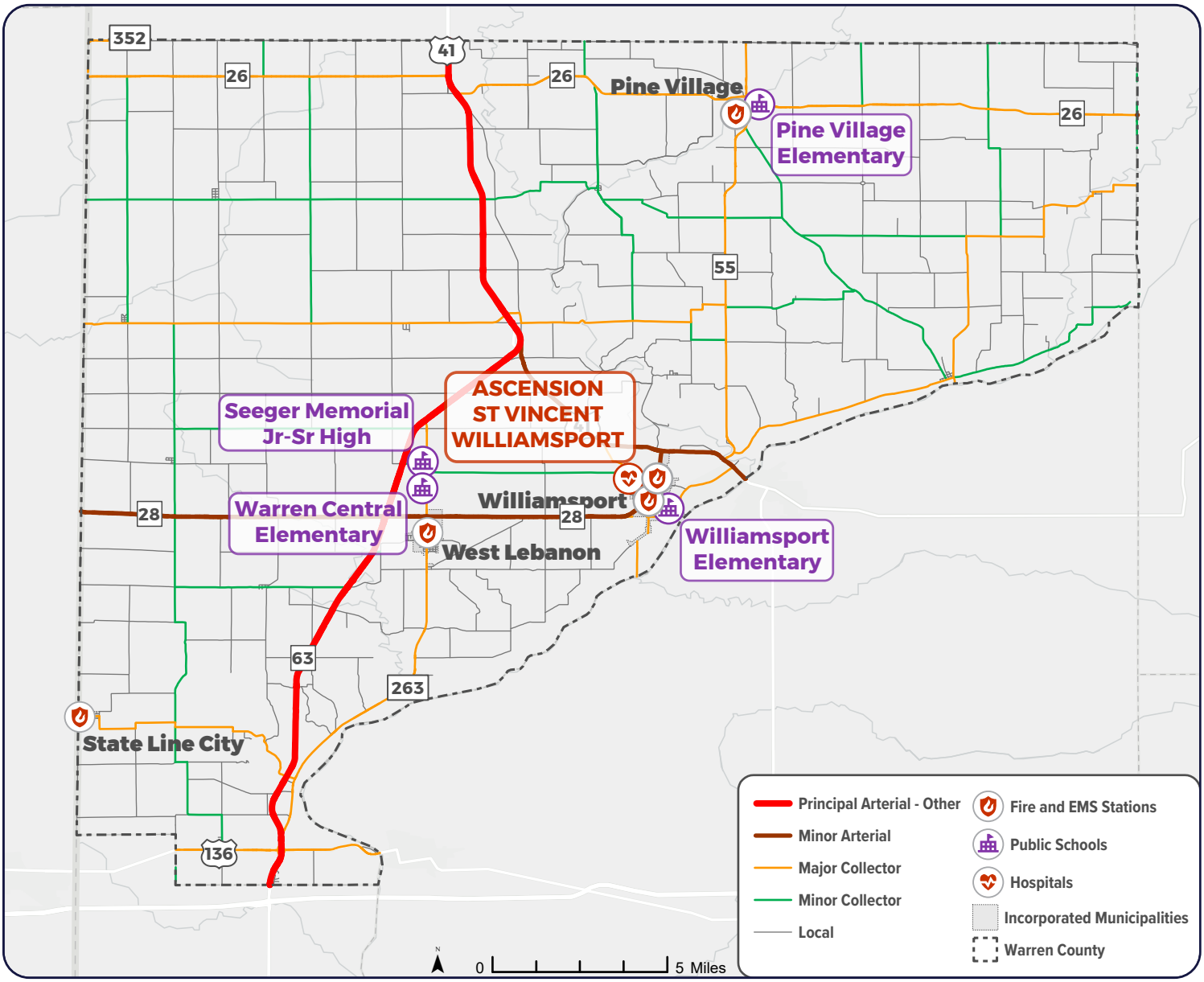


Figure 1. **Warren County Plan Study Area**

Warren County's travel patterns are closely tied to corridors such as State Road 28, State Road 26 and US 41, which connect communities including Williamsport, West Lebanon, and Pine Village. Residents rely on these routes for daily travel between towns and for access to essential services.

A significant share of commuters travel outside the county for work, particularly to Lafayette and West Lafayette, reflecting Warren County's proximity to the Greater Lafayette employment center ***(Figure 2) (Table 2)***. These commuting trends highlight the county's role as a residential community supported by regional roadway connections.

Image Source: Google Maps

County by the Numbers

Warren County **COMMUNITY PROFILE** In 2024

8,451
TOTAL POPULATION
(2024)[1]

2,108
TOTAL JOBS
(2024)[2]

366.4
TOTAL AREA
(Square Miles)

Table 1. **Warren County Municipalities**

	Warren County Municipalities
1	Pine Village
2	State Line City
3	West Lebanon
4	Williamsport

Warren County **ROADWAY NETWORK**

1,613
TOTAL ROADWAY
(Miles)

100.8
TOTAL URBAN ROADWAY
(Miles)

1,512.2
TOTAL RURAL ROADWAY
(Miles)

Source: [1] U.S Census Bureau, ACS 5-Year Estimates Subject Tables
[2] U.S Census Bureau, ACS 5-Year Estimates Subject Tables

Warren County **COMMUTER TRENDS** In 2024 [1]

Table 2. **Top 5 Commuting Destinations**

Rank	Commuting Destinations	% of County Workforce
1	Lafayette, IN	15.8%
2	Williamsport, IN	8.0%
3	Attica, IN	6.6%
4	Indianapolis, IN	6.5%
5	West Lafayette, IN	5.6%
	All Other Locations	57.5%

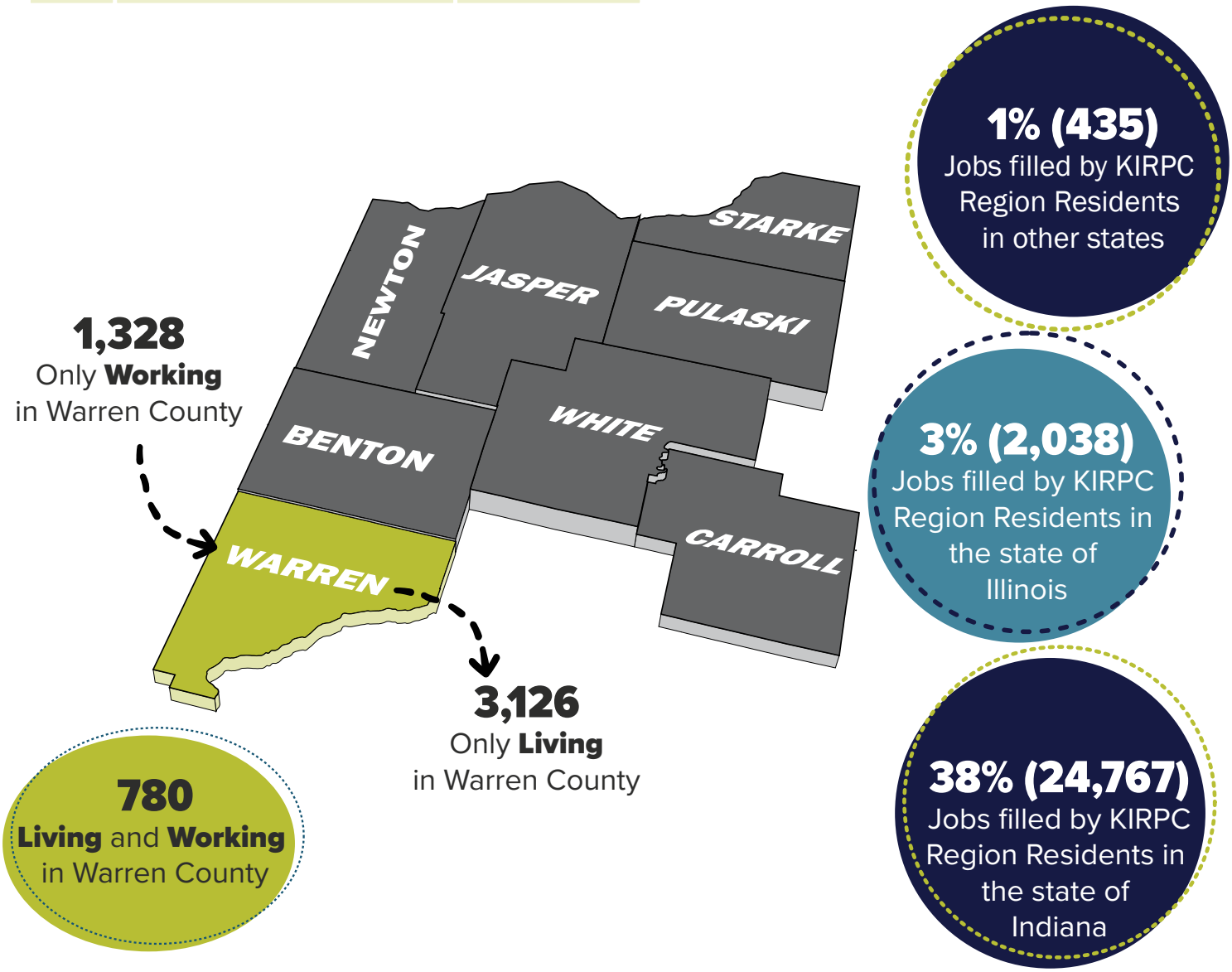


Figure 2. **Warren County Travel Patterns**

Source: [1] U.S Census Bureau, ACS 5-Year Estimates Subject Tables

CURRENT STATE OF SAFETY

Safety Overview

Crash safety analysis examined all crashes in Warren County that resulted in an injury or fatality from 2015 to 2023. In that nine-year period, of all crashes 8% involved fatalities, 49% resulted in incapacitating injuries, 27% were non-incapacitating injuries, and 16% were classified as possible injuries ***(Figure 3)***.

Rate of crash fatality measures the likelihood any crash that occurs results in a fatality. Warren County's rate is 1.2 fatalities per 10,000 crashes, slightly lower than the state average (1.3) ***(Table 4)***. This combined with a high percentage of incapacitating injury crashes emphasizes the urgency to address traffic safety.

An analysis of state crash data shows that 57% of all reported crashes that result in a person being injured or killed occur on just 13% of Warren County's roads. The High Injury Network (HIN) identifies roadway segments and intersection locations with the highest concentrations of severe crashes. The HIN should be prioritized when considering crash countermeasures.

Image Source: Google Maps

Table 4. **Crash Comparison**

Jurisdiction	Crash Fatality Rate (Per 10k Crashes)
Warren County	1.2
KIRPC Region	2.5
Indiana	1.3

Understanding **Crash Severity**

For the purposes of this report, Crash severity can be identified as:

K **Fatal Injury** Any injury that results in death within a 30 day period after the crash occurred.

A **Incapacitating Injury** Any non-fatal injury that prevents the injured person from walking, driving or normally continuing the activities the person was capable of performing before the injury occurred. Hospitalization is usually required.

B **Non Incapacitating Injury** Any injury, other than a fatal or incapacitating injury, which is evident to the officer at the scene of the crash and may require medical treatment. Although, hospitalization is usually not required.

C **Possible Injury** Any injury reported or claimed which is not visible.

Crash Severity **By the numbers**

	Angle	Backing	Head On	Non Collision	Object/ Animal	Ran Off Road	Rear End	Side Swipe	Other
K	5	0	0	0	1	9	0	0	2
A	16	1	11	1	9	42	6	5	11
B	9	1	1	1	10	21	6	3	4
C	5	0	1	0	0	18	5	2	2

Table 3. **Crash Type Totals by Severity**

Crash Severity Heatmap

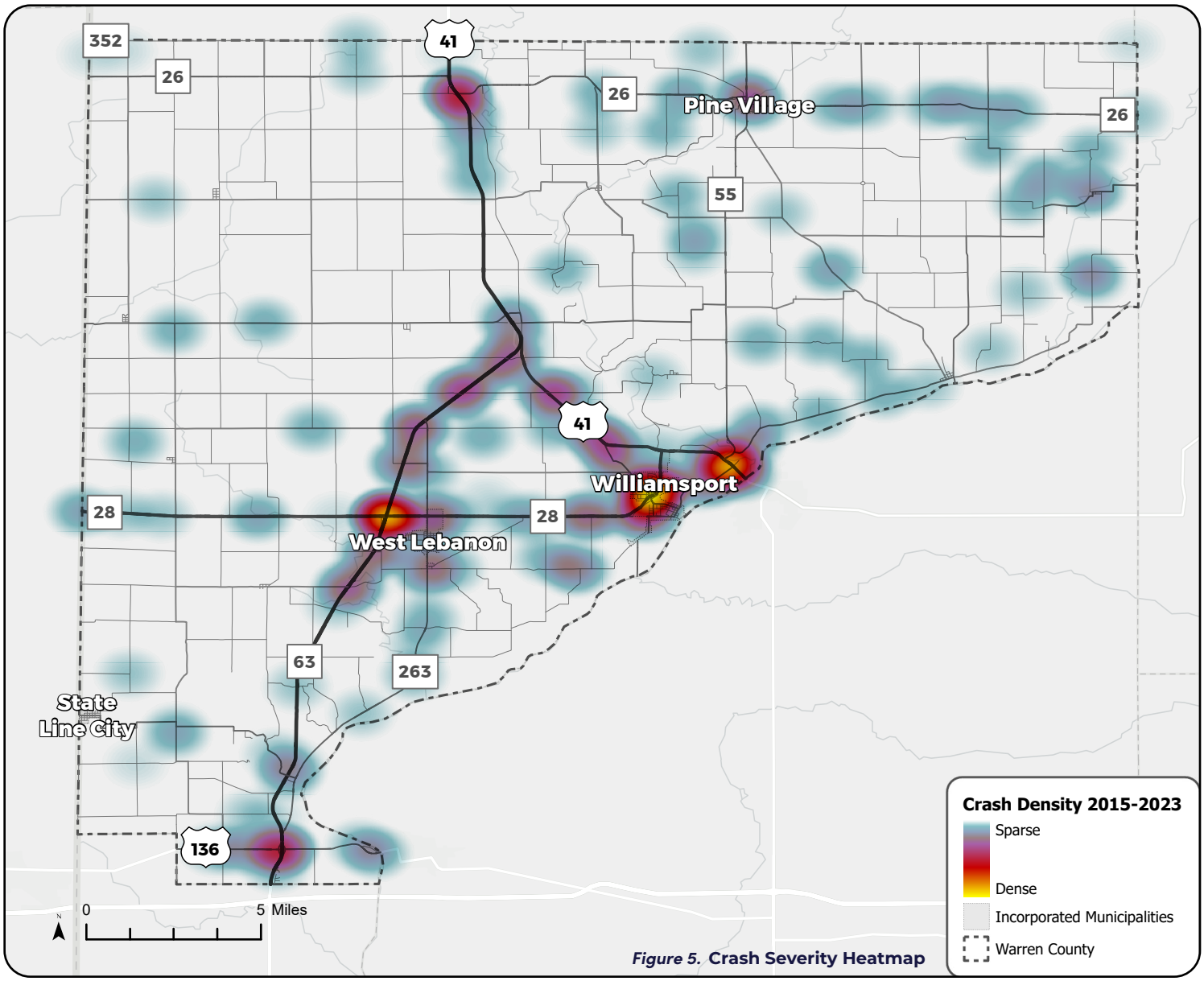


Figure 5. **Crash Severity Heatmap**

Figure 4. **Crash Types Resulting in Death or Severe Injury (%)**

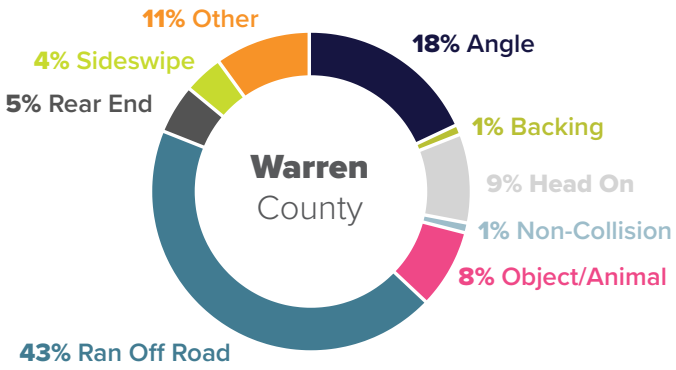
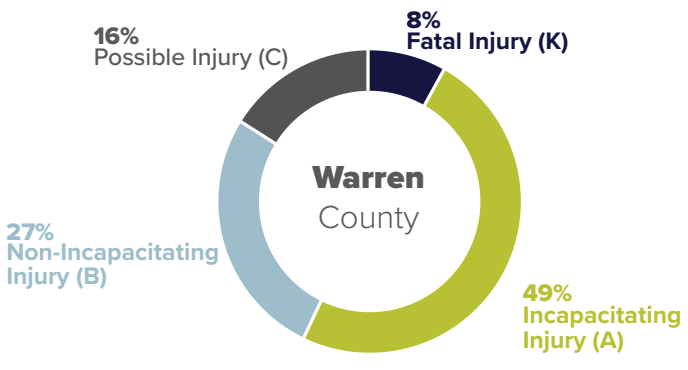


Figure 3. **Crash Severity (%)**



HIGH INJURY NETWORK

A High Injury Network is a selection of the roadways in an area with the highest incidences of fatal and severe injury crashes ***(Figure 6)***. To produce this high injury network, fatal and severe injury crashes from 2015 to 2023 were used. Intersection crashes were assigned to be half weight to identify the top 10 HIN Segments ***(Table 5)*** and Intersections ***(Table 6)***.

Crashes were averaged over a distance of 2,600 feet. Only corridors over a half mile were considered. HIN segments had a minimum length of 1,500 feet. Segments that were closer than 900 feet together were merged.

Each county has a different threshold of fatal and severe injury crashes, so that even if a county has fewer crashes, it still identify a robust set of priority corridors for targeted safety improvements.

Top 10 HIN Segments

Rank	Primary Roadway	Segment Start	Segment End
1	River Rd	4th St	U.S. 41
2	CR 100 (N)	SR 63	Potholes Rd
3	CR 400 (S)	Main St	Grant St
4	Independence Rd	Kickapoo Rd	SR 55
5	Monroe St	CR 125 (S)	Old 3rd St
6	Washington St	Market St	SR 28
7	CR 100 (S)	SR 263	SR 63
8	CR 1000 (E)	Green Hill Rd	Green Hill Rd
9	High St	SR 263	SR 263
10	Independence Pine Village Rd	CR 550 (N)	CR 400 (N)

See map on next page with all HIN segment locations.

Table 5. **Top 10 High Crash Segments**

Top 10 HIN Intersections

Rank	Primary Roadway	Secondary Roadway
1	U.S. 41	SR 55
2	SR 63	U.S. 136
3	SR 28	SR 63
4	CR 950 (N)	U.S. 41
5	CR 100 (N)	SR 63
6	CR 100 (S)	SR 63
7	CR 200 (N)	SR 63
8	Second St	Monroe St
9	SR 63	Division Rd
10	Washington St	Edgewood Dr

See map on next page with corresponding numbers labeled.

Table 6. **Top 10 High Crash Intersections**

HIN Facts

13% **OF ALL ROADS IN THE COUNTY** ARE IN THE HIN

59% **OF ALL CRASHES** OCCUR ON HIN ROADWAYS

769.2
TOTAL COUNTY ROAD (CENTERLINE MILES)

67.1
TOTAL HIN COUNTY ROADS (CENTERLINE MILES)

62
TOTAL HIN INTERSECTIONS

Image Source: Google Maps

High Injury Network Map

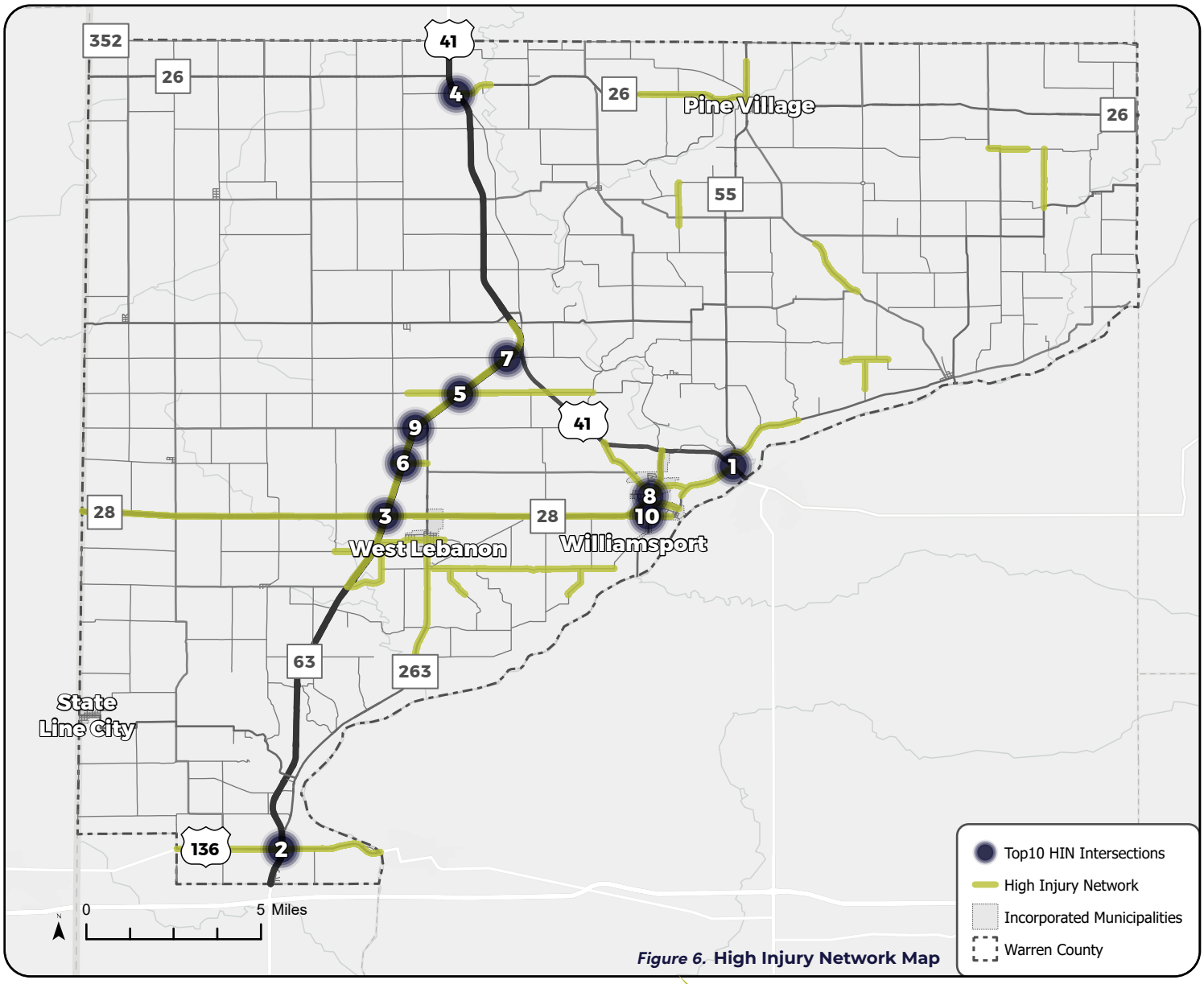


Figure 6. **High Injury Network Map**

Check the **REGIONAL PLAN** to see the HIN for the rest of the **KIRPC REGION!**

ROAD SAFETY AUDIT

In Fall 2025, KIRPC launched a series of Road Safety Audits across the region, focusing attention at the highest priority location in each county. The following is a summary of the corridor selected for this county along with a set of short-term, mid-term, and long term recommendations for improving safety.

INTERSECTION OVERVIEW

CROSS STREETS
SR 28 + SR 63

CORRIDOR LENGTH:
Intersection

ADJACENT KIRPC COUNTIES:
Benton Co.

State Route 28 + State Route 63

LEGEND:

- Priority Intersection
- Study Area

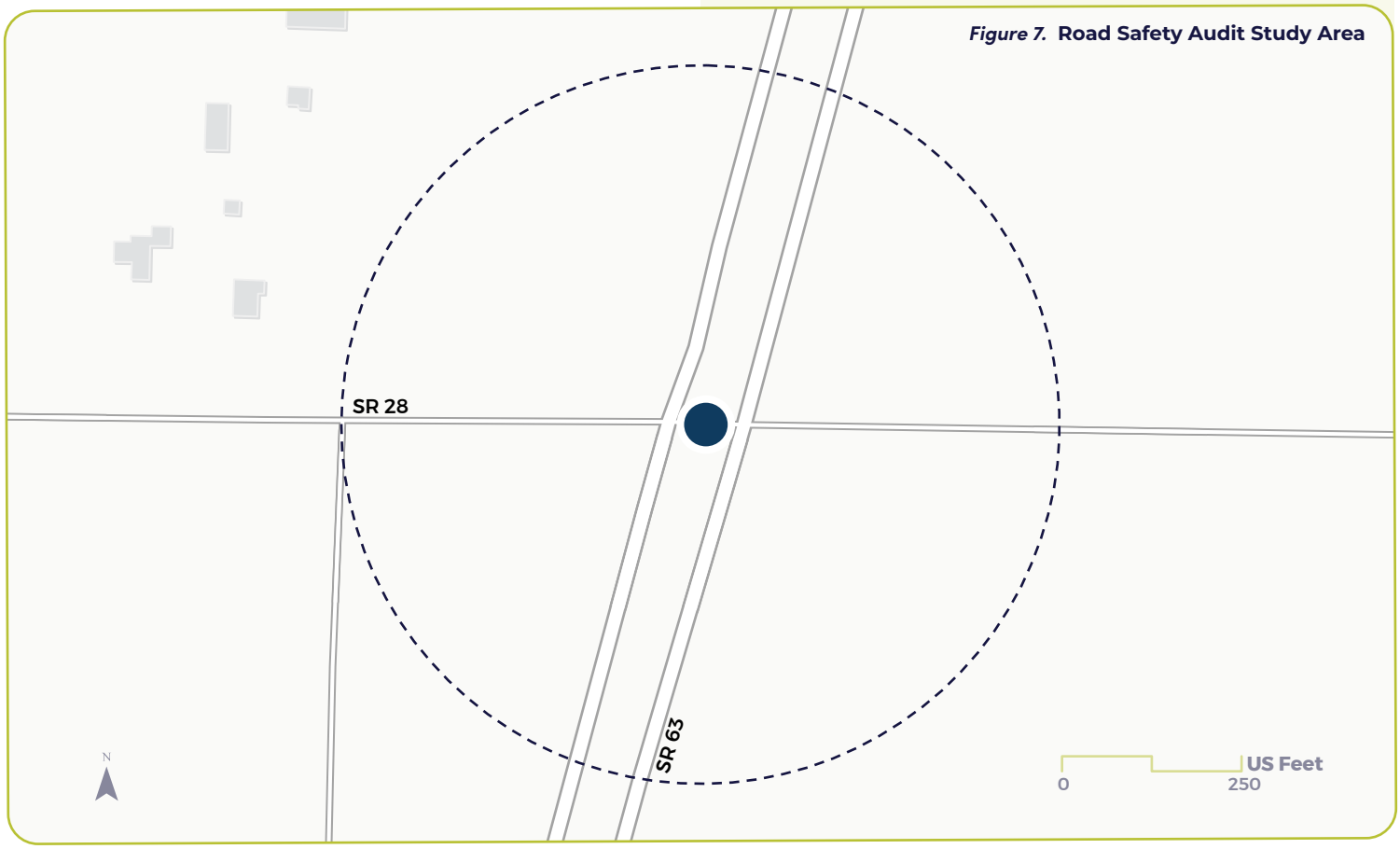


Figure 7. **Road Safety Audit Study Area**

SR 63 ROADWAY DESIGN

FUNCTIONAL CLASSIFICATION:
Principal Arterial (rural)

ROADWAY CHARACTERISTICS:
Ample paved shoulder along every approach

NUMBER OF LANES:
4-lane divided (depressed grass), with dedicated left- and right-turn lanes along each approach

POSTED SPEED LIMIT:
60 mph

TRAFFIC VOLUME:
2,769 - 4,130 AADT (2024)

SR 28 ROADWAY DESIGN

FUNCTIONAL CLASSIFICATION:
Minor Arterial (rural)

ROADWAY CHARACTERISTICS:
Paved shoulder near approach to intersection

NUMBER OF LANES:
Two-lane , undivided with centerline rumble strips and no dedicated turn lanes

POSTED SPEED LIMIT:
55 mph

TRAFFIC VOLUME:
1,303 - 2,261 AADT (2024)

COUNTERMEASURES recommended:

SHORT-TERM IMPROVEMENTS	
Relocate route markers	Install "Stop Ahead" (W3-1) signage
Install transverse rumble strips	Provide angled stop bars
Short-Term Improvements Total Cost: $30,000 – $40,000	

LONG-TERM IMPROVEMENTS
Convert the intersection to a reduced conflict intersection (RCI)
Long-Term Improvements Total Cost: $2,000,000 – $2,500,000

Table 7. **Countermeasures Recommended**

CRASHES BETWEEN 2015 AND 2023

9 Injury Crashes

2 Fatal Crashes

4 Severe Injury Crashes

TOP FACTOR

89% Failure to Yield

TOP CRASH TYPE

89% Right Angle

Figure 8. **Crash Percent by Primary Factor**

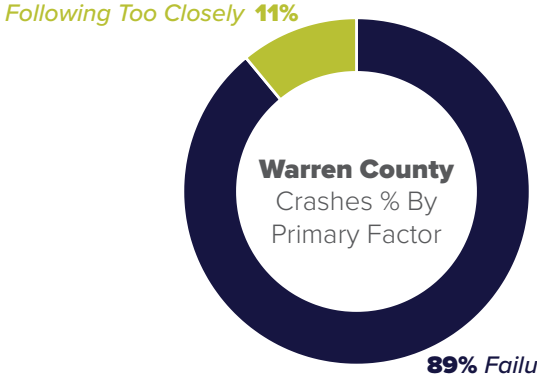
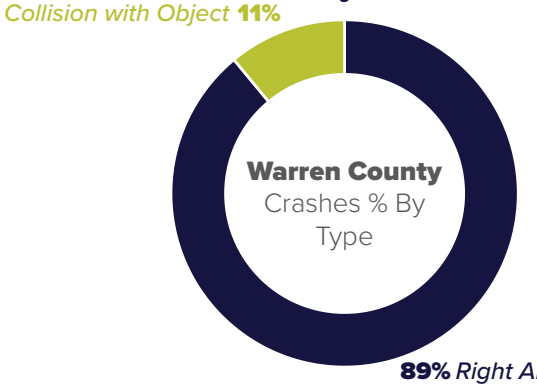


Figure 9. **Crash Percent by Type**



WARREN COUNTY EMPHASIS AREAS

EMPHASIS AREA OVERVIEW

As part of the KIRPC Comprehensive Safety Action Plan (CSAP), six emphasis areas were identified to address the most critical roadway safety challenges across the eight-county region: Benton, Carroll, Jasper, Newton, Pulaski, Starke, Warren, and White Counties.

These emphasis areas were selected through a comprehensive analysis of regional crash data and stakeholder input. These areas reflect the most pressing roadway safety concerns across the region and serve as the foundation for identifying appropriate countermeasures.

By examining the types and patterns of crashes associated with each emphasis area ***(Figure 10)***, the plan ensures that recommended interventions are both targeted and evidence-based. This approach supports the overarching goal of reducing severe injuries and fatalities.

Crashes By Emphasis Areas:

90 RUN-OFF-ROAD Crashes

218 EMS RESPONSE HOSPITALIZATION Crashes

7 INTERSECTION KSI RELATED CRASHES

16 HIN SEGMENT Crashes Near Schools

WARREN COUNTY EMPHASIS AREAS

RURAL RUN-OFF-ROAD CRASHES

Run-of-road crashes involve a vehicle departing the roadway. Typically, a single vehicle collides with fixed objects or terrain beside the road. Of all crash types, run-off-road crashes are the most common in Warren County, accounting for 43 percent of all injury crash types. These crash types result in the most fatal and severe injury crashes at 57 percent.

Majority of run-off-road crashes occur in rural areas. Roadways containing the highest concentration of rural run-off-road crashes include US Route 41 and Indiana SR 28 and 63. Run-off-road crashes can be caused by a variety of things including unsafe roadway geometry, speed, distracted driving, vehicle defects, and swerving to avoid objects in the road.

EMERGENCY RESPONSE / POST-CRASH CARE

Post crash care is a component in the safe system approach, a holistic method for strategies to reduce traffic fatalities and injuries. Post crash care involves the handling of crashes after they have occurred. The effectiveness of fire, police, and EMS personnel at crash scenes to treat patients involved could make the difference between life and death in severe situations.

Warren County has Ascension St Vincent Williamsport hospital, but the facility cannot handle major traumatic incidents. Areas in the eastern and western parts of the county are over 5 miles away from the nearest fire or EMS station. These areas had 41 crashes with injuries or fatalities from 2015-2023.

RURAL PEDESTRIAN AND CYCLIST SAFETY

In Warren County, there were no injury crashes reported involving a pedestrian or cyclist on rural roadways from 2015-2023. However, there is still a higher risk to pedestrians and cyclists on rural roadways. The roads where these take place are often state and county roads with higher operating speeds, limited lighting, and no sidewalks or designated crossing facilities.

Common contributing factors included pedestrian actions, such as walking along high-speed roads, driver failure to yield, and distraction. Several crashes happened in low-light conditions, where visibility was limited and roadway design offered little margin of safety for non-motorized users.

WARREN COUNTY EMPHASIS AREAS CRASH MAP

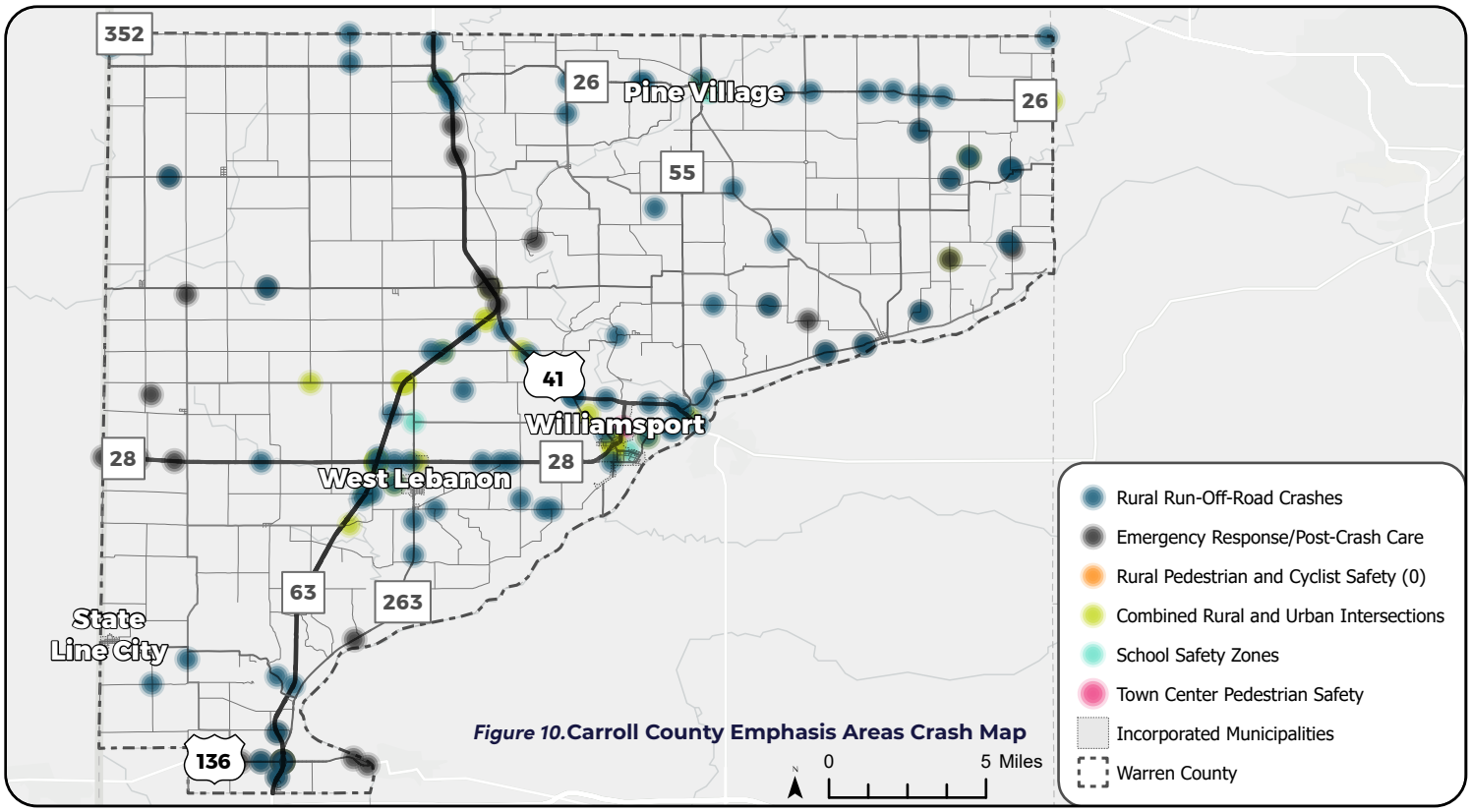


Figure 10. **Carroll County Emphasis Areas Crash Map**

COMBINED RURAL AND URBAN INTERSECTIONS

In Warren County, 37 injury crashes occurred at intersections accounting for 18 percent of all injury crashes in the county. Intersections are a particular area of concern because of the high number of potential conflicts that can occur between vehicles.

Rural intersections often present unique risks, such as higher travel speeds, limited sight distances, and fewer traffic control devices, while urban intersections typically see greater pedestrian and cyclist activity alongside higher traffic volumes. Intersections are a smaller location compared to long road segments and can be targeted for specific interventions.

SCHOOL ZONE SAFETY

School zones have an elevated risk of crashes involving vulnerable road users (VRUs), like children. From 2015-2023, there were 4 injury crashes within 1,000 feet from public school zones. The most common street for crashes was Indiana SR 26 near Pine Village Elementary School.

Contributing factors for crashes in school zones include speeding, distracted driving, improper turning, and failure to yield right-of-way. Challenges include high-speed arterial roads near schools, low-density rural land use, insufficient pedestrian infrastructure, traffic congestion during drop-off/pick-up times, and inadequate lighting during early morning hours.

TOWN CENTER PEDESTRIAN SAFETY

Town centers in Warren County, such as Williamsport serve as community hubs concentrating schools, shops, services, and civic spaces within walkable distances. From 2015-2023, 2 VRU crashes occurred in Williamsport, resulting in injuries or fatalities.

Contributing factors for pedestrian crashes is the failure of vehicles to yield to pedestrian right of way, underscoring the need for improved driver awareness and pedestrian-priority infrastructure. Notably, the majority of crashes occurred in clear, dry, daylight conditions, indicating that environmental factors were not the primary cause and reinforcing the role of behavioral and design-related issues.

RECOMMENDATIONS

Emphasis Area Recommendations

Rural Run-Off-Road Crashes

1. Conduct RSAs at sites where multiple rural run-off-road crashes have occurred.
2. Consider adding edge lines or widening the shoulder where applicable.
3. Advocate to INDOT on behalf of KIRPC in support of safety improvements on rural roads under state control

Emergency Response / Post-Crash Care

1. Convene a safety steering committee that includes representatives from the EMS community.
2. Look for opportunities to increase agency funding for supplies and life saving equipment.

Rural Pedestrian and Cyclist Safety

1. Identify areas along Warren County's rural road network that may be considered higher pedestrian and cyclist activity areas and implement low cost countermeasures such as reducing speed, narrowing lanes, and adding bicycle lanes or sidewalks.

Combined Rural and Urban Intersections

1. Intersection improvements are context sensitive. Conduct informal RSAs at the 10 high crash intersections defined earlier in this plan.
2. Implement high impact countermeasures that are contextually appropriate (examples at right).
3. Advocate to INDOT on behalf of KIRPC in support of safety improvements on rural roads under state control

School Zone Safety

1. Support KIRPC in developing a regional Safe Routes to School Plan.
2. Implement low-cost safety countermeasures within "school zones" such as pedestrian gateway treatments, RRFBs, and reduced speed limits.

Town Center Pedestrian Safety

1. Crashes involving pedestrians should be investigated further for causation with the KIRPC leadership team.
2. Soon after an incident occurs, low-cost quick-build crash countermeasures such as lane narrowing, left-turn traffic calming, and restrict right on red should be deployed to address geometric deficiencies.

Image Source: Google Maps

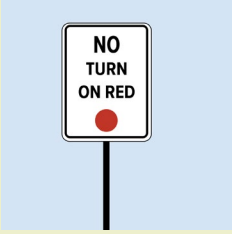
Countermeasure Recommendations

Low-Cost / Quick-Build

Restrict Right on Red

$$$$

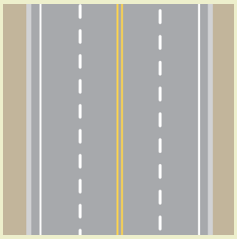
This tool could reduce crashes by **40%**



Edge Lines & Parking Lines

$$$$

This tool could reduce crashes by **52%**



Pedestrian gateway treatment

$$$$

This tool results in yield rates up to **80%**

Slow zones / reduced speed

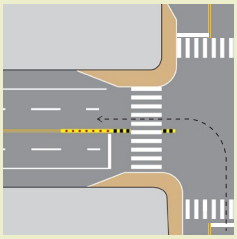
$$$$

This tool could reduce crashes by **26%**

Left-turning traffic calming

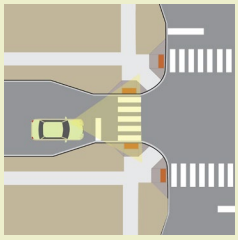
$$$$

This tool could reduce crashes by **24%**



Higher-Cost

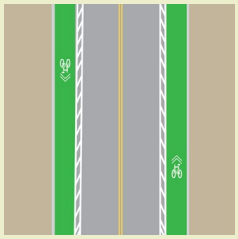
Intersection daylighting



$$$$

This tool could reduce crashes by **49%**

Protected bike lanes



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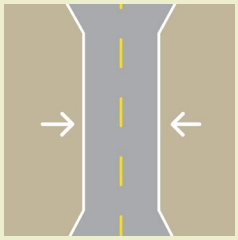
This tool could reduce crashes by **23%**

LANE NARROWING



$$$$

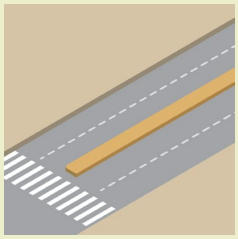
This tool could reduce crashes by **42%**

Intersection Realignment

$$$$

*Benefits vary based on degree of intersection Skew

Raised median / limited access control



$$$$

This tool could reduce crashes by **71%**

Figure 11. **Countermeasure Recommendations**

Warren County Capital Project Recommendations

WARREN COUNTY						
ID	**Street**	**Start**	**End**	**Short-Term**	**Mid-Term**	**Long-Term**
1	**River Rd**	4th St	U.S 41	Install edge line striping.	Stone shoulder, safety edge, edge line rumble stripes.	Pavement widening and asphalt shoulders.
2	**CR 100 N***	SR 63	Potholes Rd	Add stop bars and an additional stop sign on the CR 100 approach.	Install approaching intersection signage on US 41.	Realign CR 100 with US 41.
3	**CR 400 S***	Main St	Grant St	Add binder to improve traction. Compact surface to reduce loose gravel.	Install chevrons and delineators at curves to provide a visual edge.	Upgrade pavement with widened shoulders and pavement markings.
4	**Independence Rd**	Kickapoo Rd	SR 55	Install edge line striping. Add chevron signs and advance warning signs for curves.	Stone shoulder, safety edge, edge line rumble stripes.	Pavement widening and asphalt shoulders.
5	**Moreoe St**	CR 125 S	Old 3rd St	Stripe edge lines and centerlines. Stripe shoulders and parking spaces.	Install radar speed limit signs to alert drivers to their speed.	Resurface Monroe Street and stripe for the appropriate traffic condition.
6	**Washington St**	Market St	SR 28	Stripe edge lines and center lines.	Stone shoulder, safety edge, edge line and center line rumble stripes.	Pavement widening and asphalt shoulders.
7	**CR 100 S***	SR 263	SR 63	Close the median and make CR 100N right-in/right-out.	Intersection conflict warning system.	Reduced conflict u-turn intersection.
8	**CR 1000 E***	Green Hill Rd	Green Hill Rd	Add stop bars on the approaches, and add stop signs. Add advanced warning signs alerting drivers of an intersection and stop ahead. Add speed limit signs on the county roads.	Pave the intersection so that stop bars can be striped at all of the approaches.	Roundabout intersection.
9	**High St**	SR 263	SR 263	Add signs to CR 400S stating that cross traffic doesn't stop. Add additional stop sign. Stripe stop bars.	Install radar speed signs to alert drivers of their speed.	Intersection conflict warning system.
10	**Independence Pine Village Rd**	CR 500 N	CR 400 N	Install edge line striping.	Resurface pavement, add stone shoulder, safety edge, and edge line rumble stripes.	Pavement widening and asphalt shoulders.

*** Non-Local Roads**

Table 8. **Warren County Capital Projects**

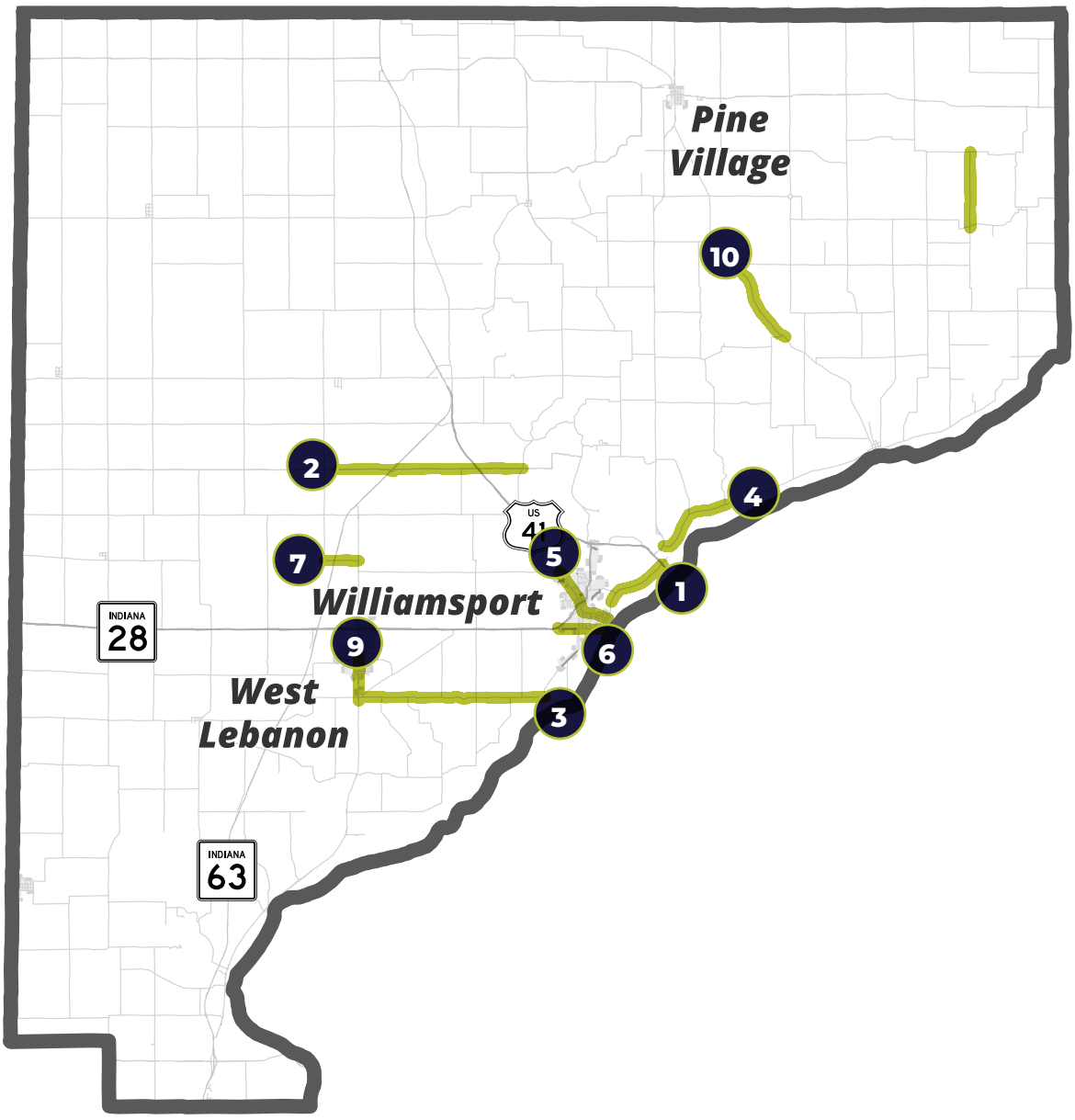


Figure 12. **Warren County Capital Project Recommendations Map**