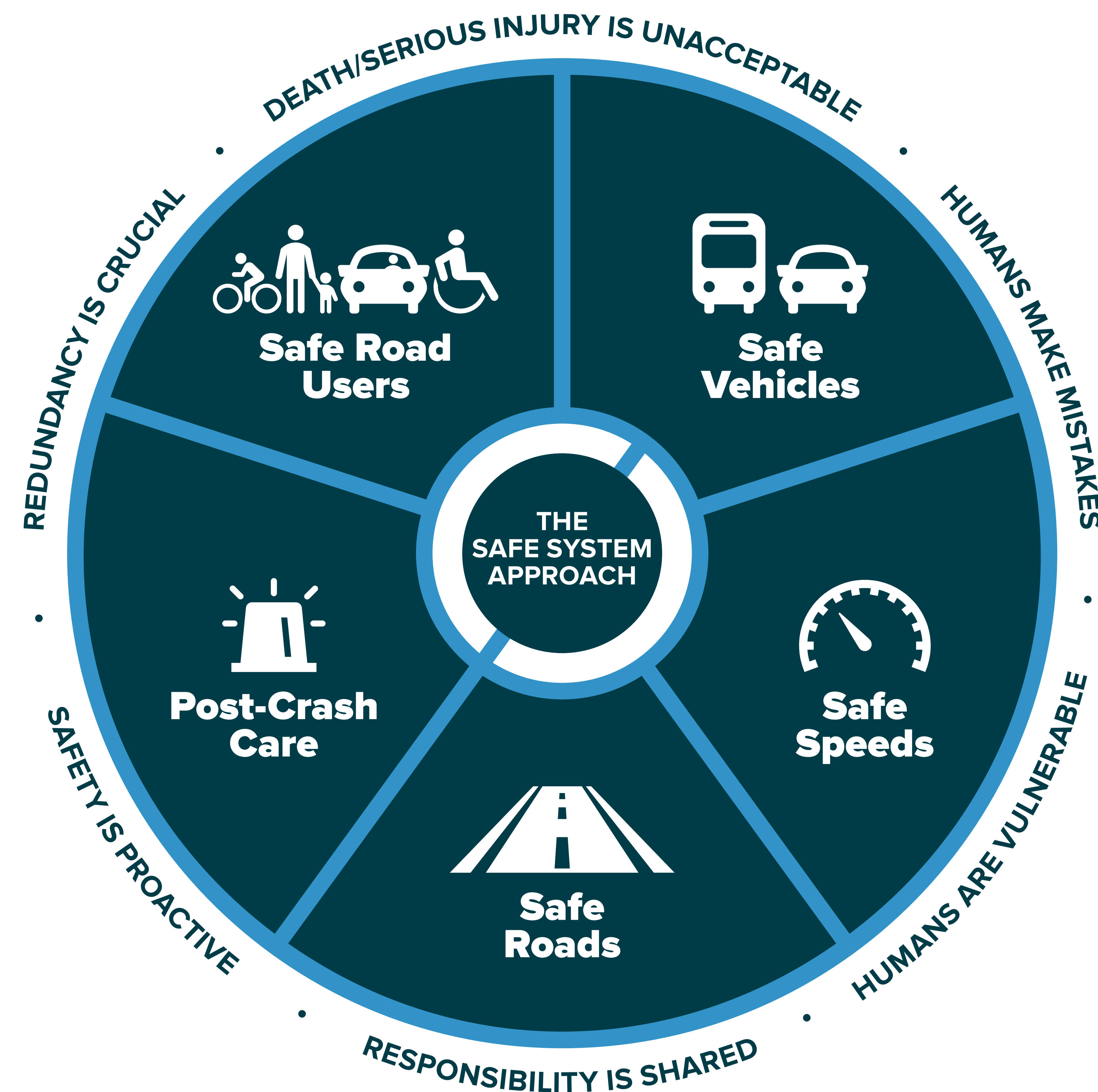


THE SAFE SYSTEMS APPROACH



Shift from a conventional safety approach that was reactive to an approach that is **PROACTIVE**

TRADITIONAL APPROACH

Prevent crashes

Improve human behavior

Control speeding

Individuals are responsible

React based on crash history

SAFE SYSTEM APPROACH

Prevent death and serious injuries

Design for human mistakes / limitations

Reduce system kinetic energy

Share responsibilities

Proactively identify and address risks

SAFE SYSTEMS PRINCIPLES

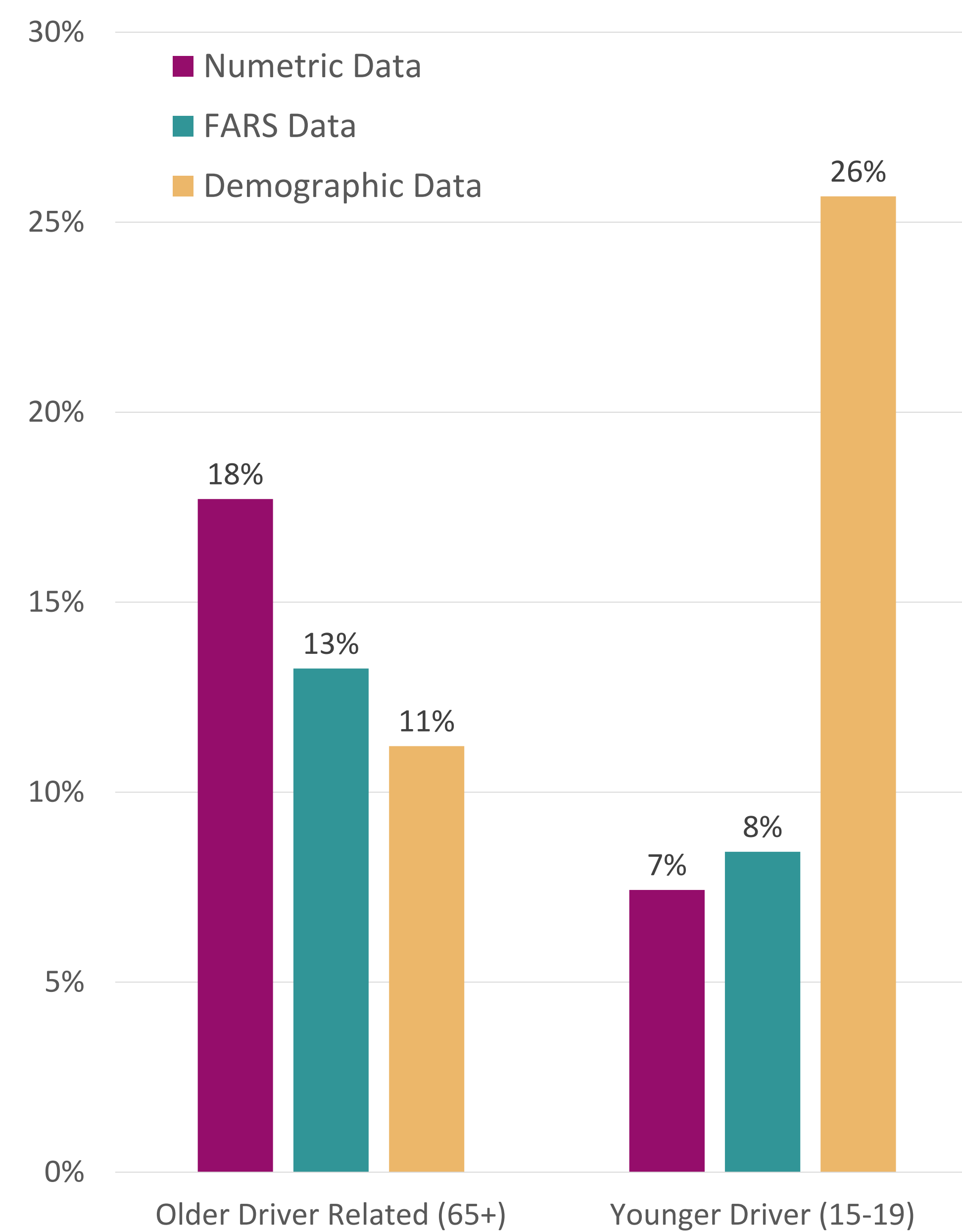
- ▶ **Death and Serious Injuries are Unacceptable** and we should prioritize the elimination of these kinds of crashes
- ▶ **Humans Make Mistakes** so we should design our roads so that mistakes that result in crashes don't lead to serious injury or death
- ▶ **Humans Are Vulnerable** so our transportation system should accommodate our vulnerabilities
- ▶ **Responsibility is Shared** so the government, advocates, researchers, the public – everybody – plays a role in preventing fatalities and serious injuries
- ▶ **Safety is Proactive** so we should use tools that identify safety issues within the transportation system before accidents occur, not after
- ▶ **Redundancy is Crucial** so we should strengthen the entire transportation system so that if one part fails other parts still protect people

PAULDING COUNTY CRASH TRENDS

There were 22,178 total crashes in Paulding County between 2019 – 2023

- ▶ 93 were fatal crashes
- ▶ 376 were serious injury crashes
- ▶ 86 fatal and serious injury crashes were in Dallas
- ▶ 86 fatal and serious injury crashes were in Hiram
- ▶ 17 involved active transportation modes (bicycles & pedestrians)

What drivers were involved in fatal crashes?



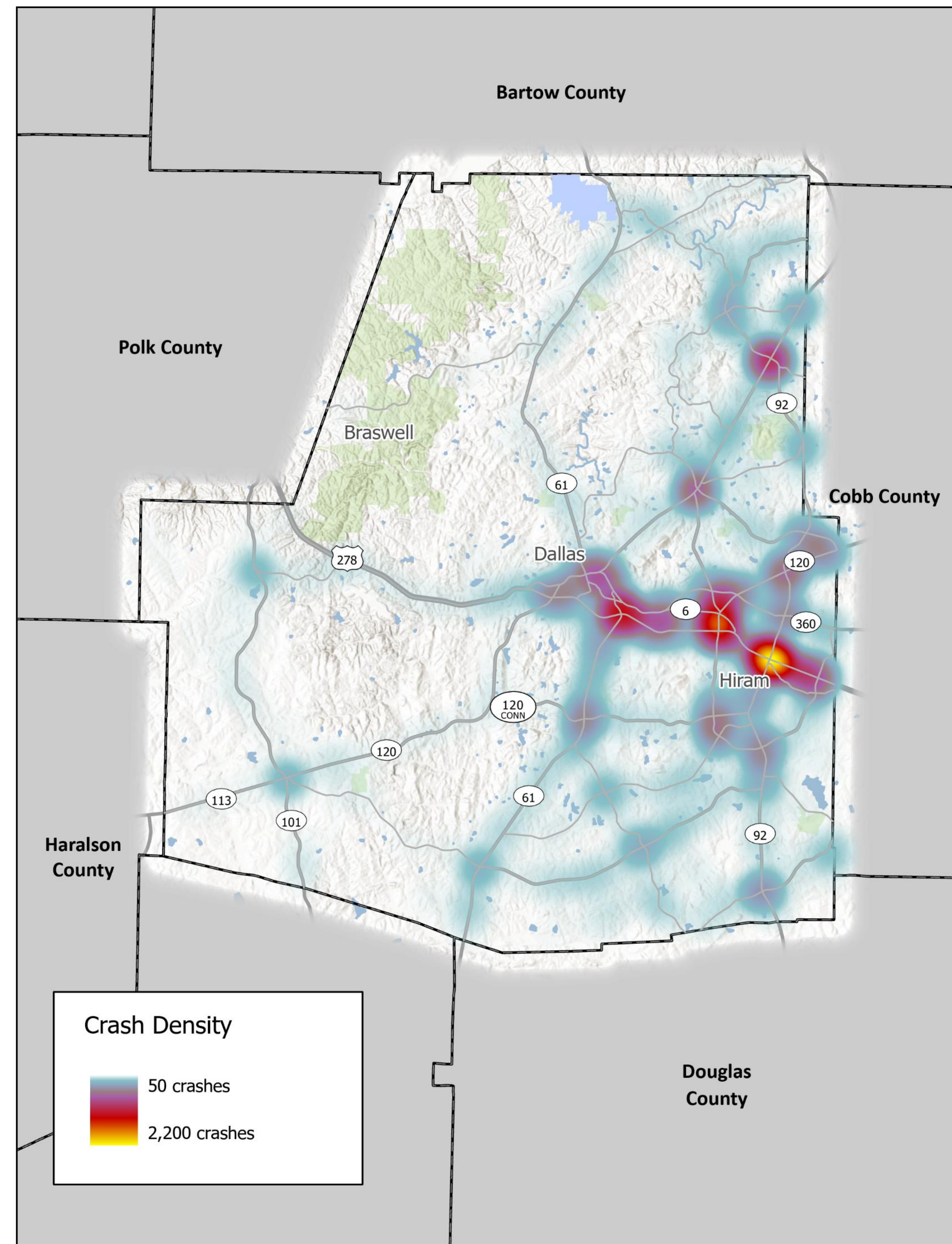
Older drivers are overrepresented in fatal crashes

How do Paulding Crash Trends Compare to the State?

% of all crashes between 2019-2023

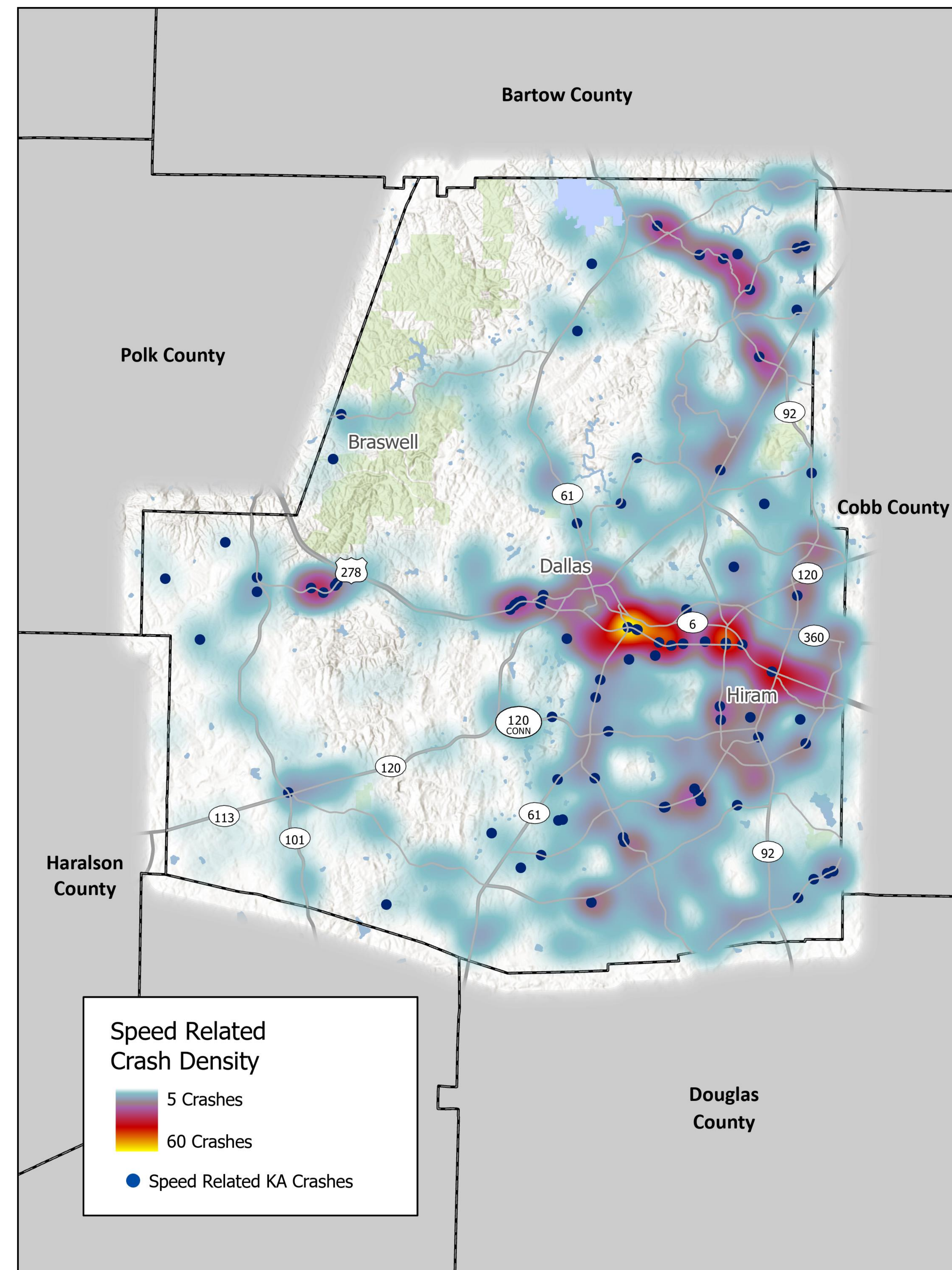
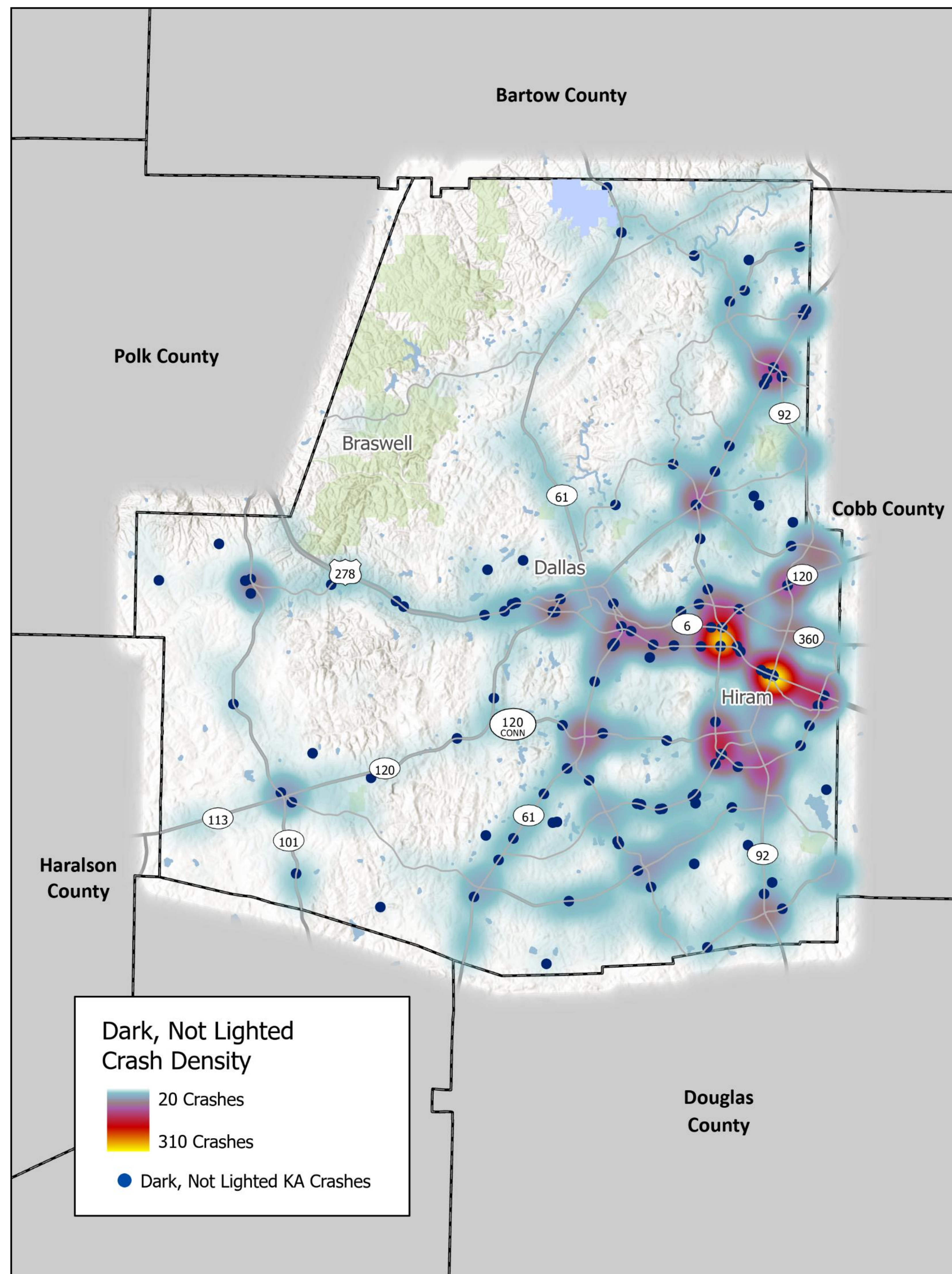
	Statewide	Paulding
Fatal crashes	0.4%	0.4%
Serious injury	1.7%	1.6%
Bike/ped	0.9%	0.5%
Older driver	15%	12%
Younger driver	13%	21%
Speeding	4.1%	6.2%

Paulding is overrepresented in young driver and speeding crashes



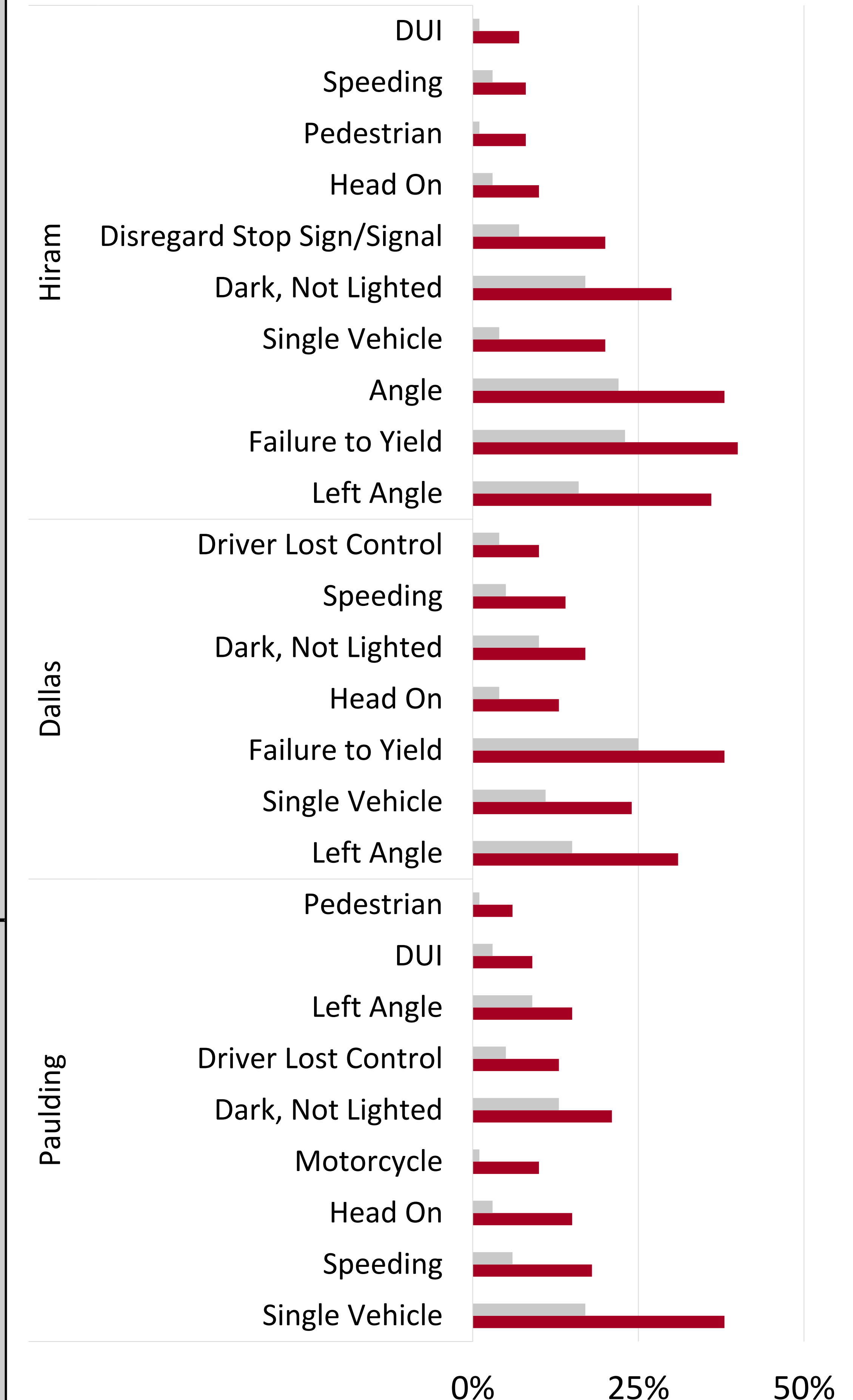
CRASH CONTRIBUTING FACTORS

Dark, Not Lighted and Speeding crashes were the most prevalent crash type in Paulding County



Proportion of Fatal and Serious Injury vs Total Crashes by Factor

■ Total Crash Proportion
■ Fatal and Serious Injury Crash Proportion



Contributing factors represented in fatal and serious injury crashes countywide:

1. Head-On Collisions
2. Single Vehicle Crashes
3. Speeding
4. Left Angle
5. Dark, Not Lighted

Contributing factors represented in fatal and serious injury crashes unique to a jurisdiction:

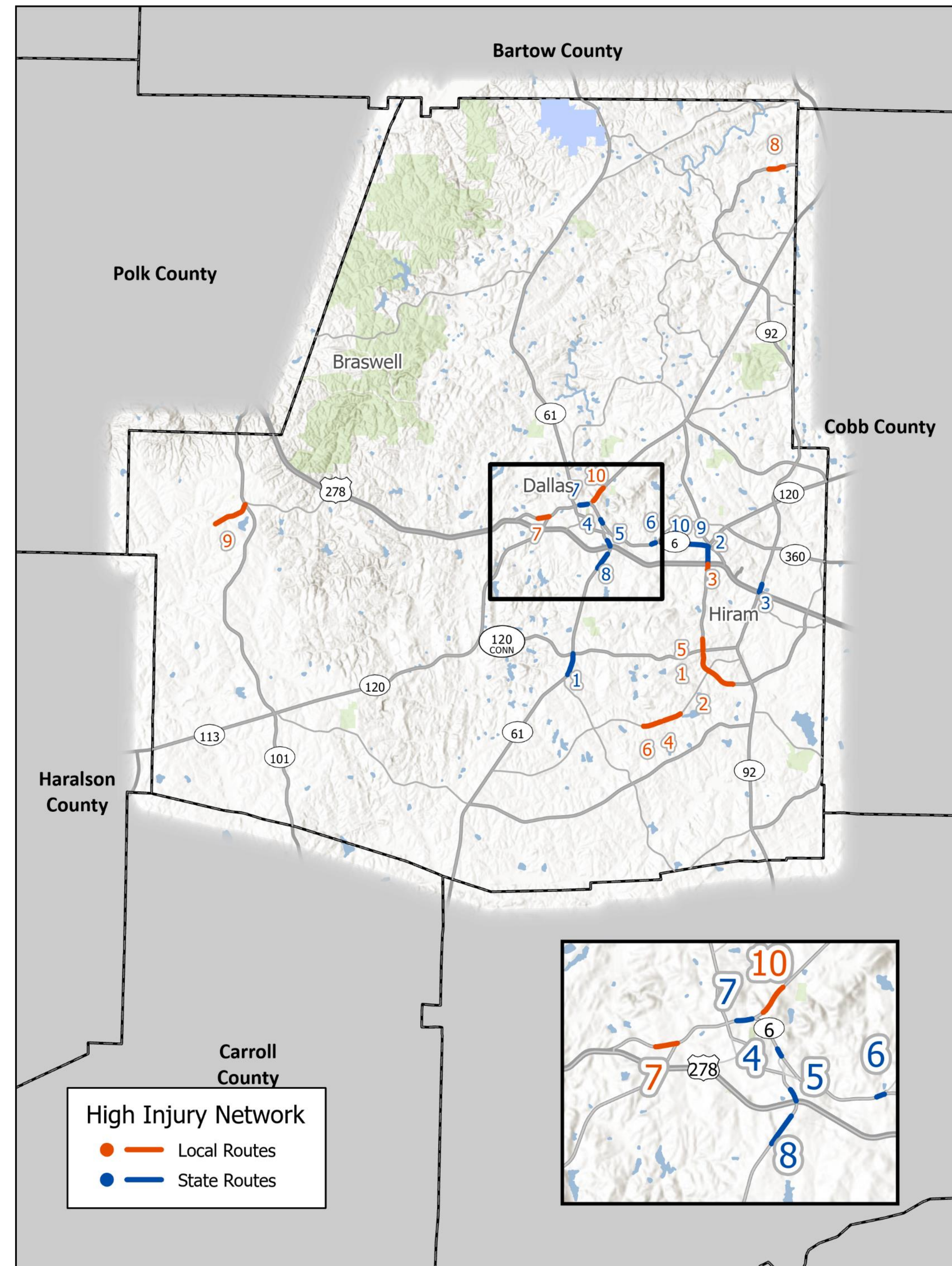
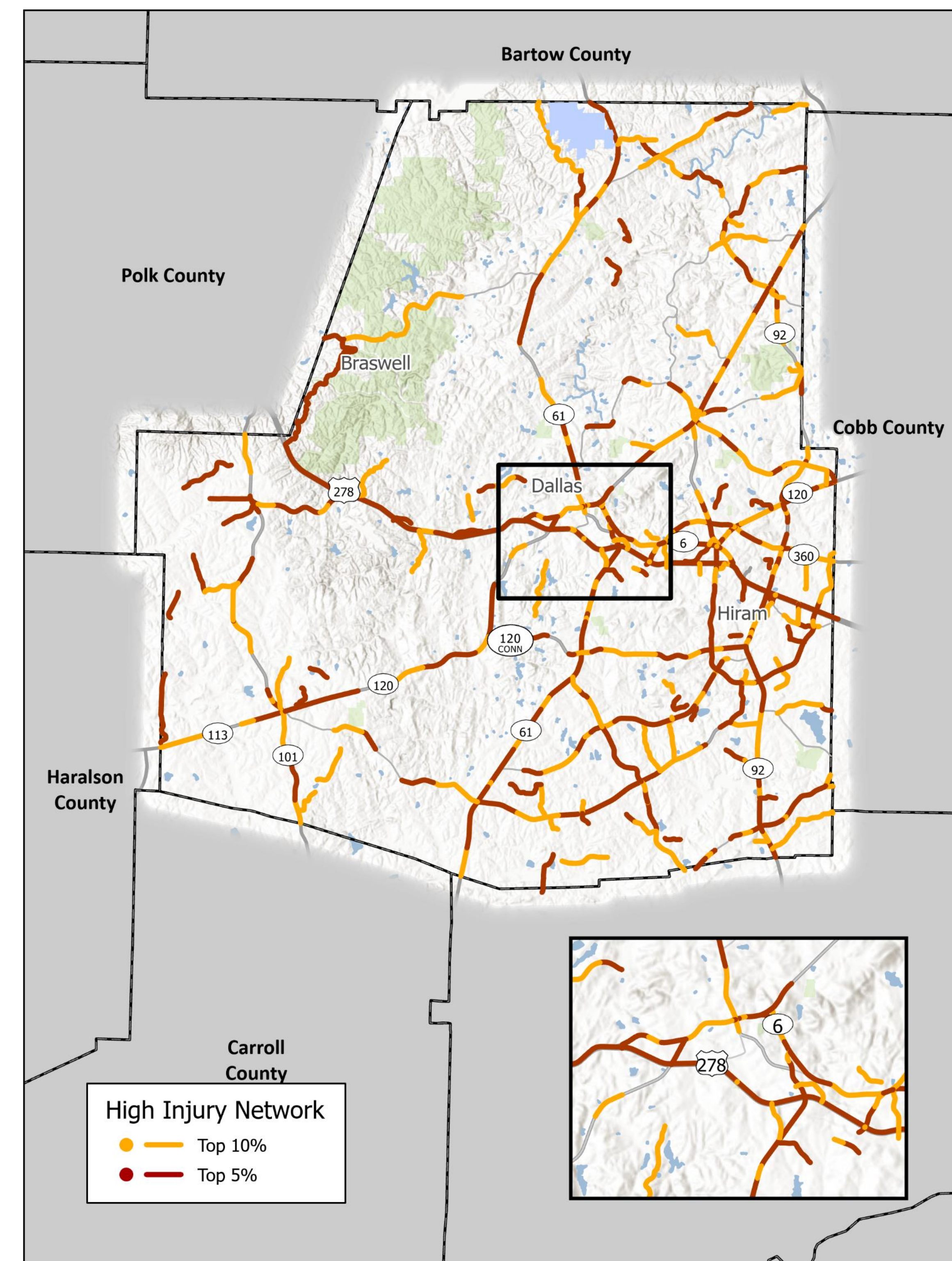
- ▶ Disregarding stop signs/signals was overrepresented only in Hiram
- ▶ Failure to yield was overrepresented in both cities, but not the County
- ▶ Motorcycle crashes are overrepresented at the County level only

HIGH INJURY NETWORK: TOP 10 SEGMENTS

The High Injury Network (HIN) defines the stretches of roadways and intersections in Paulding County that have the highest concentrations of severe (fatal and serious injury) crashes.

US 278 makes up 8 of the top 10 High Injury Network state route segments

Five years of crash data (2019-2023) was analyzed to develop the HIN



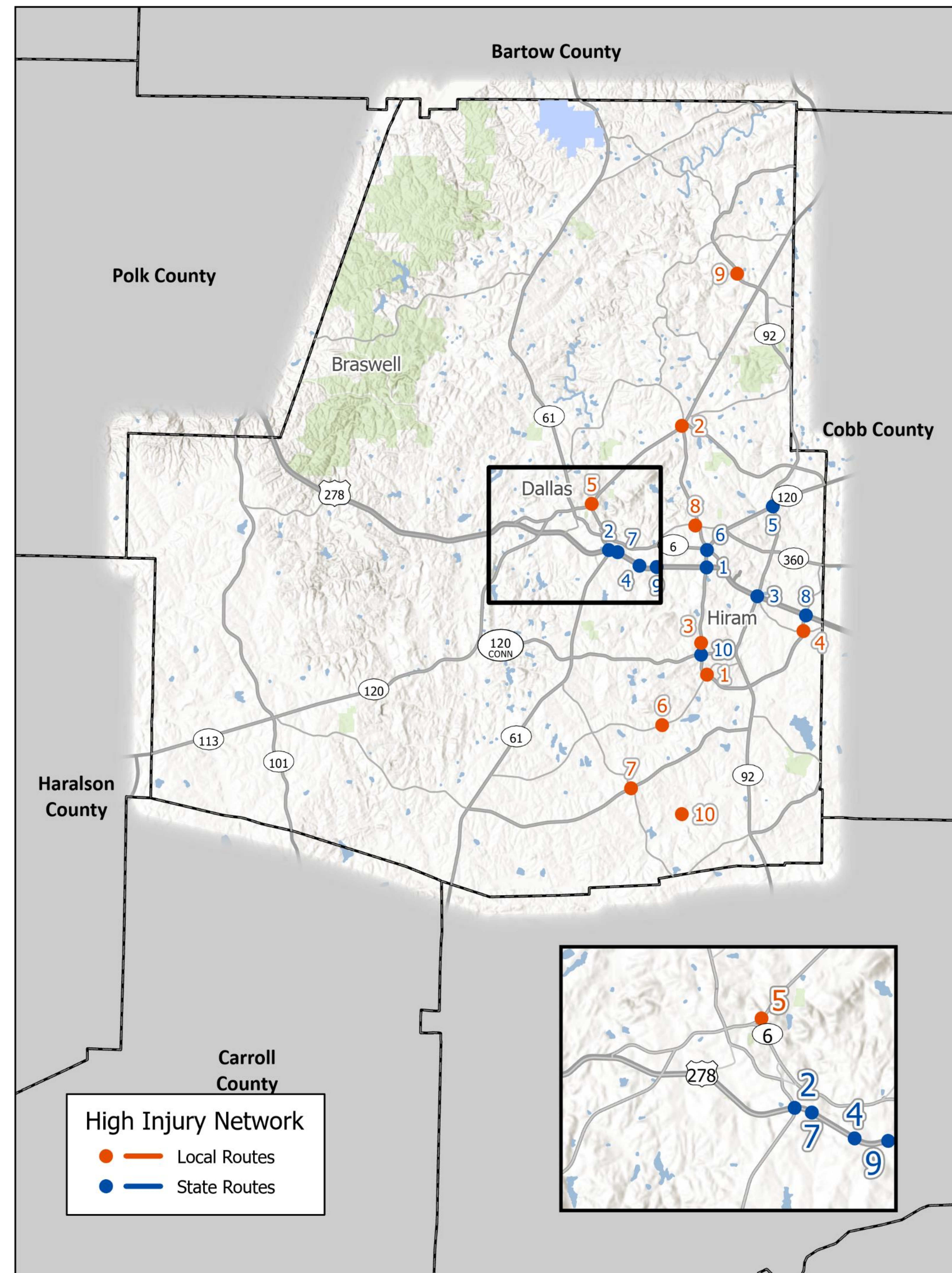
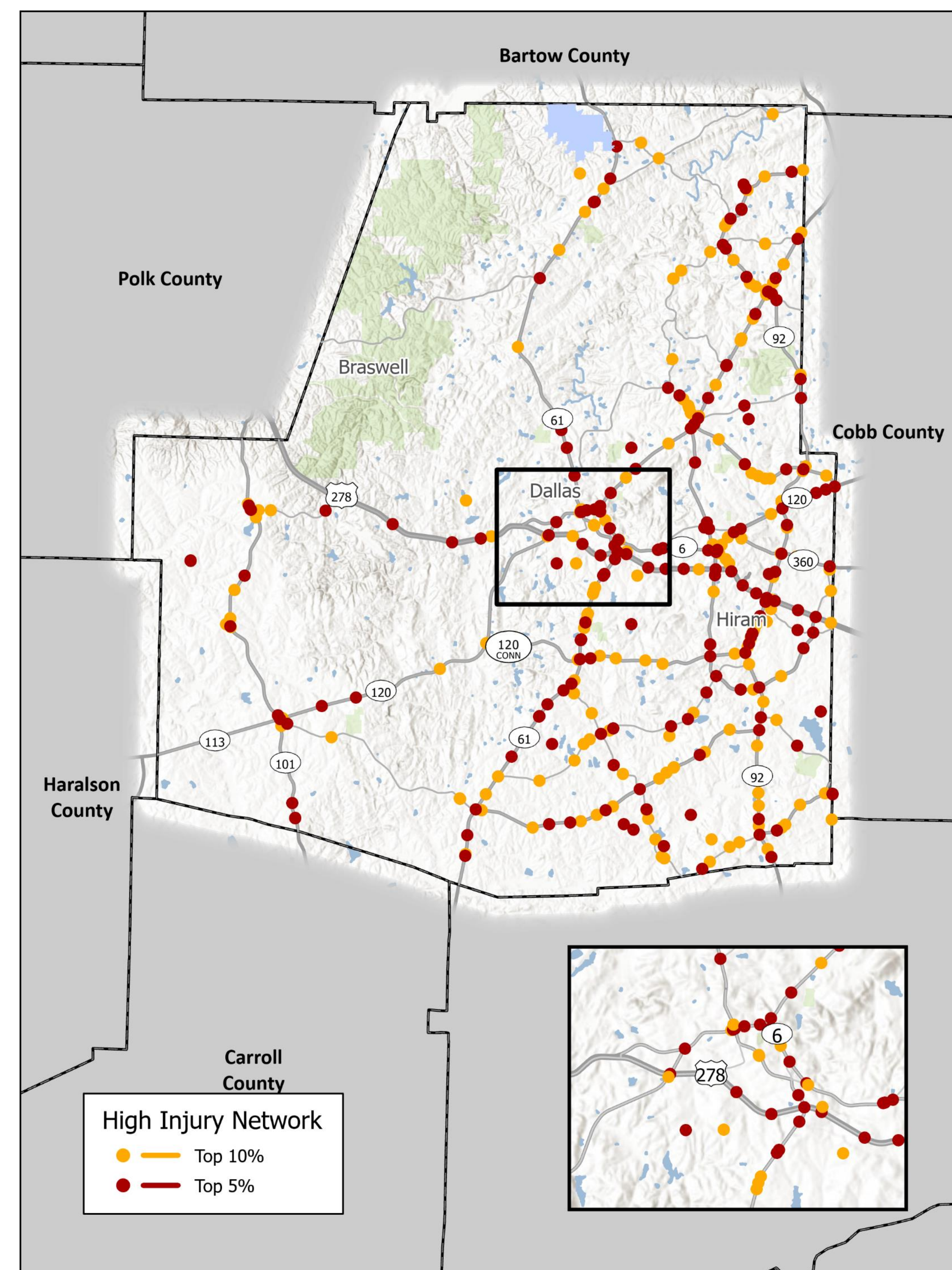
State Routes (excluding US 278)				Local Routes			
#	Road	From	To	#	Road	From	To
1	SR 61/Villa Rica Hwy	Campground School Rd	Hiram Sudie Rd	1	Bill Carruth Pkwy	Willow Bend Dr	Nebo Rd
2	SR 120/Charles Hardy Pkwy	US 278	SR 6 BUS/Atlanta Hwy	2	Bill Carruth Pkwy	Nebo Rd	Laird Rd
3	SR 92	US 278	0.25 mi n/o US 278	3	Bill Carruth Pkwy	US 278	Breezy Valley Conn
4	SR 61/Merchants Dr	Hampton Dr	USPS Driveway	4	Nebo Rd	Wall Rd	McClung Rd
5	SR 61/Nathan Dean Blvd	US 278	Thomas B Murphy Dr	5	Bill Carruth Pkwy	Regency Dr	Hiram Sudie Rd
6	SR 6 BUS/Merchants Dr	Coach Bobby Dodd Rd	Macland Rd	6	Nebo Rd	Riverstone Dr	Normas Way
7	E Memorial Dr	Old Acworth Rd	Lester Dr	7	W Memorial Dr	Johns Rd	Buchanan St
8	SR 61/Villa Rica Hwy	Vernoy Aiken Rd	Winndale Rd	8	Cedarcrest Rd	Kingsford Way	Highcrest Dr
9	SR 6 BUS/Atlanta Hwy	Summerhill Rd	SR 120	9	Holly Springs Rd	Woodwind Dr	SR 101
10	SR 6 BUS/Atlanta Hwy	Wilbanks Cir	Summerhill Rd	10	E Memorial Dr	Legion Rd	Crocker Dr

HIGH INJURY NETWORK: TOP 10 INTERSECTIONS

The High Injury Network (HIN) defines the stretches of roadways and intersections in Paulding County that have the highest concentrations of severe (fatal and serious injury) crashes.

US 278 makes up 8 of the top 10 High Injury Network state route segments

Five years of crash data (2019-2023) was analyzed to develop the HIN



State Routes		Local Routes	
#	Intersection	#	Intersection
1	US 278 & SR 120/Charles Hardy Pkwy	1	Bill Carruth Pkwy & Nebo Rd*
2	US 278 & SR 61/Nathan Dean Blvd	2	Dallas Acworth Hwy & Bobo Rd
3	US 278 & SR 92	3	Bill Carruth Pkwy & Virgie Ballentine Dr
4	US 278 & Old Harris Rd	4	Bill Carruth Pkwy & Rosedale Dr
5	SR 120/Charles Hardy Pkwy & SR 92	5	E Memorial Dr & Legion Rd
6	SR 120/Charles Hardy Pkwy & SR 6 BUS/Atlanta Highway	6	Nebo Rd & Wall Rd
7	US 278 & Thomas B Murphy Dr	7	Dallas Nebo Rd & Ridge Rd
8	US 278 & Poplar Springs Rd	8	Macland Rd & Mount Tabor Church Rd
9	US 278 & Butler Industrial Dr	9	Cedarcrest Rd & Meadows Dr
10	Hiram Sudie Rd (SR 120 Conn.) & Bill Carruth Pkwy	10	Austin Bridge Rd & Mein Mitchell Rd

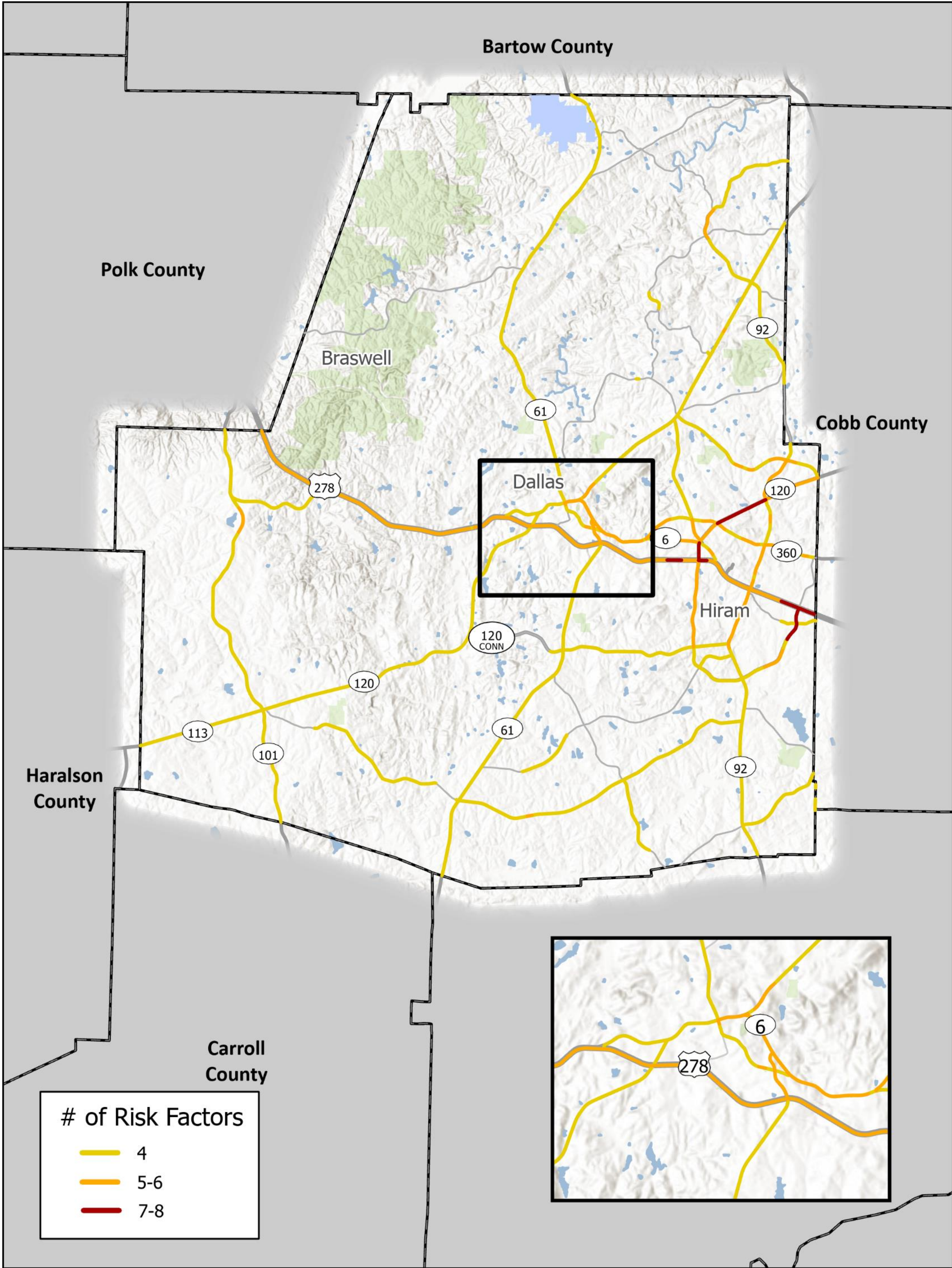
*Intersection improvements occurred in January 2024, which is not reflected in the data.

CRASH RISK

What factors increase crash risk?

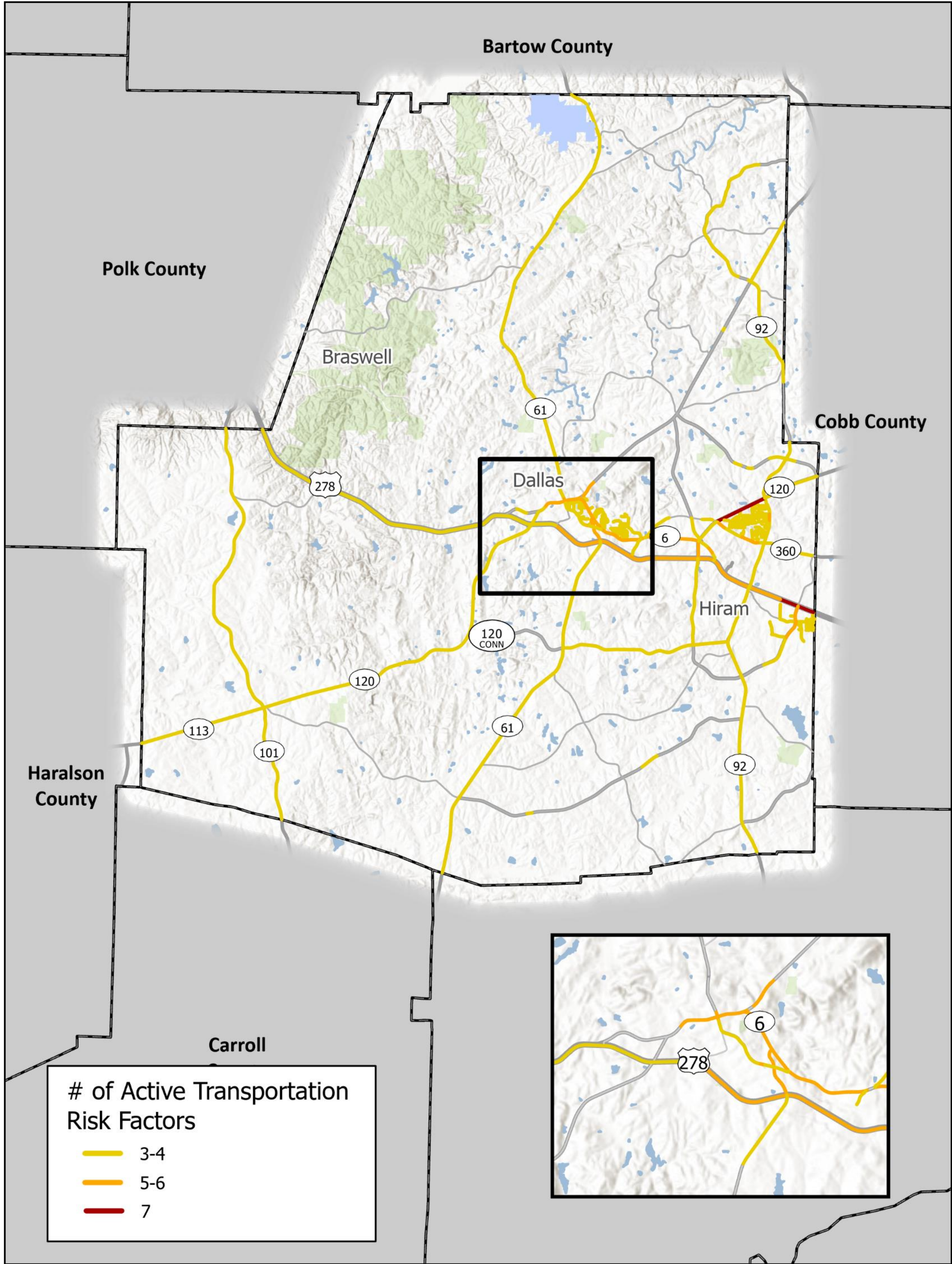
	Traffic Volumes	Signalized	Road Type	State Route	Speed Limit	# of Lanes/Legs	Median Home Value	% of Zero Car Households	Population & Employment Density	Land Use
Roadway	X		X		X	X	X	X		X
Active Transportation	X		X	X		X			X	X
Intersection	X	X				X		X	X	X

Roadways



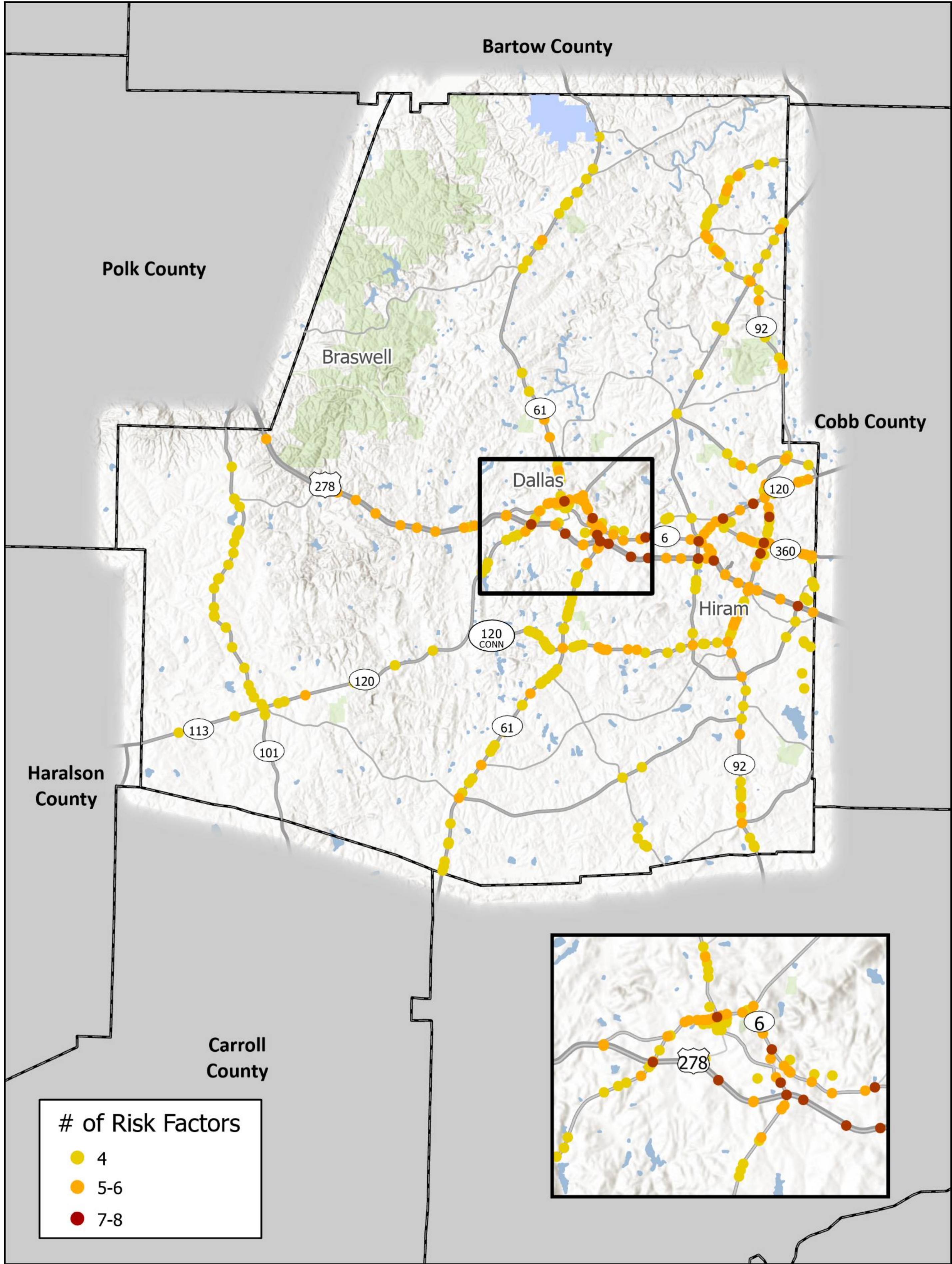
High-Risk Roadways		
Road	From	To
SR 120/Charles Hardy Pkwy	SR 360	SR 92
SR 120/SR 360/Charles Hardy Pkwy	SR 6 BUS	US 278
US 278	SR 120	Hiram Dr
US 278	Paris Rd	International Pkwy
US 278	Greenfield Rd	Isley Stamper Rd
Bill Carruth Pkwy	US 278	Angham Rd

Active Transportation



High-Risk Active Transportation		
Road	From	To
SR 120	SR 360	SR 92
US 278	Greenfield Rd	Isley Stamper Rd
US 278	S Main St	Greenfield Rd
Bill Carruth Pkwy	Angham Rd	US 278
W Memorial Dr	Pinecrest Cir	Confederate Ave
E Memorial Dr	Confederate Ave	SR 6/Merchants Dr
SR 120/Charles Hardy Pkwy	SR 6 BUS/Atlanta Hwy	US 278
SR 61/Nathan Dean Blvd	Merchants Dr	US 278
SR 360/Macland Rd	SR 120	SR 92
Merchants Dr	E Memorial Dr	SR 120/Charles Hardy Pkwy

Intersections



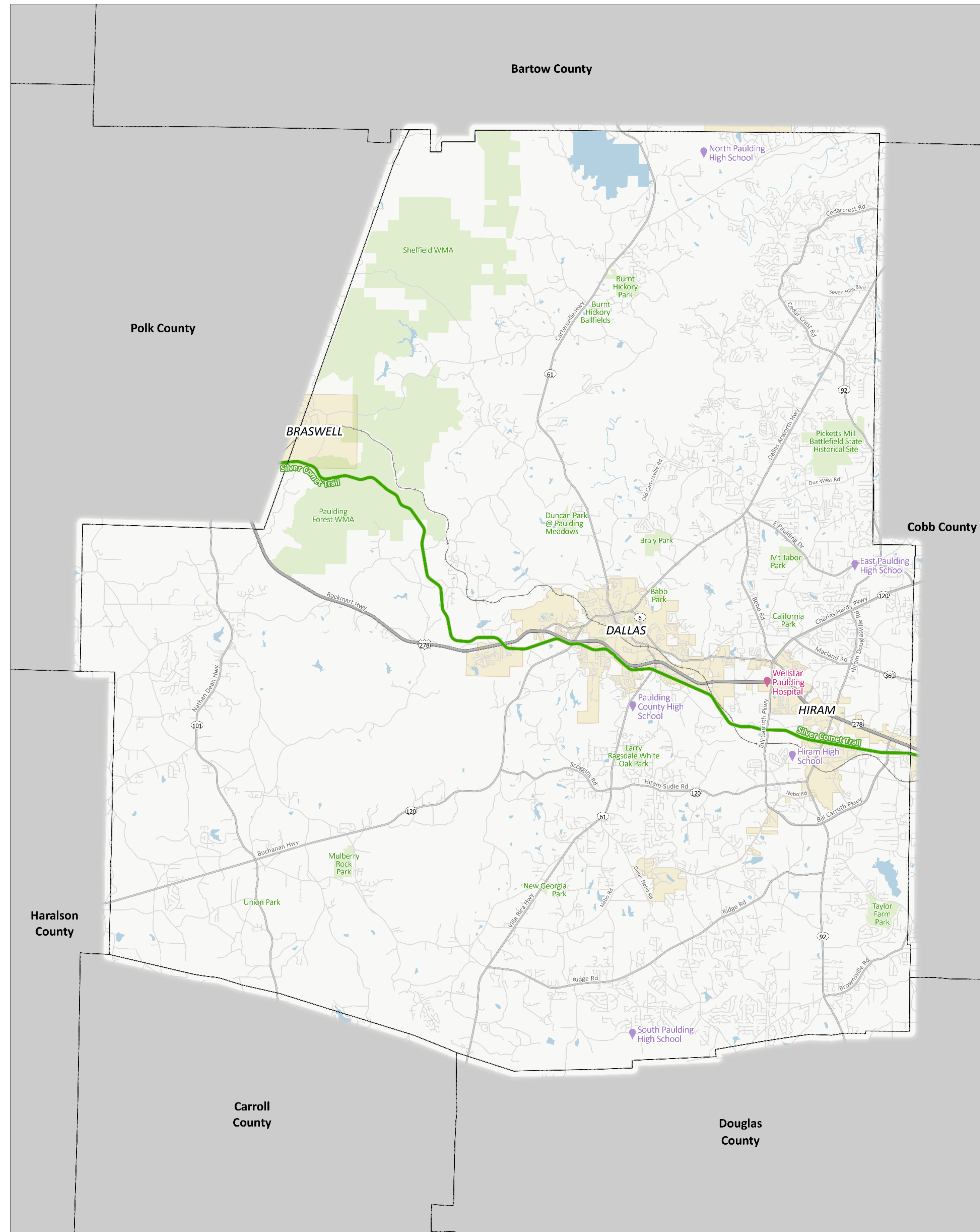
High-Risk Intersections	
US 278 & SR 120/Buchanan St	US 278 & Bill Carruth Pkwy/Poplar Springs Rd
US 278 & Seaboard Dr	Macland Rd & Merchants Dr
US 278 & SR 61	SR 61 & Main St
US 278 & Thomas B Murphy Dr	SR 61/Nathan Dean Blvd & SR 6/Merchants Dr
US 278 & Old Harris Rd	SR 61 & Thomas B Murphy Dr
US 278 & Butler Industrial Dr	SR 61 & Nathan Dean Blvd
US 278 & SR 120/Bill Carruth Pkwy	SR 6 BUS/Atlanta Hwy & SR 120
US 278 & SR 6 BUS/Atlanta Hwy	SR 120 & Evans Mill Dr
SR 120 & Sedgefield Dr	SR 92 & SR 360
SR 92 & Hanover Ave	SR 92 & Dailey Rd

COMMUNITY INPUT MAP

HELP US IDENTIFY SAFETY CONCERNS & CHALLENGES

Place a dot on the map to indicate a location you have a safety concern with or have experienced a safety challenge.

- Lighting
- Speeding
- Turning
- Active Transportation (Bicycle or Pedestrian)
- Other



What are your safety concerns or challenges?
Write your response on a sticky note and place it in the space below.

COMPREHENSIVE SAFETY ACTION PLAN:

WHERE DO WE GO FROM HERE?

**Spring 2024 to
October 2024**

Analyze Data & Identify Needs

- Crash Trends
- High Injury Network
- High-Risk Locations
- Equity Analysis
- Existing Policies & Practices Review
- Public Input

**This Phase is
nearing completion**

**November 2024 to
January 2025**

Develop Strategies

- Focus Groups – talk with HDP groups
- Major Corridors – refine safety recommendations, as needed
- Systemic – applicable to many locations across the transportation network
- Site-Specific – for individual segments and intersections
- Policies & Programs – actions to influence future design, enforcement, and education

**February 2025 to
Spring 2025**

Recommendations

- Public Input – share draft recommendations with community and receive feedback
- Funding – identify potential funding sources
- Responsibility – assign who will lead in implementing
- Prioritize – develop action plan
- Adopt the plan!



We are here!



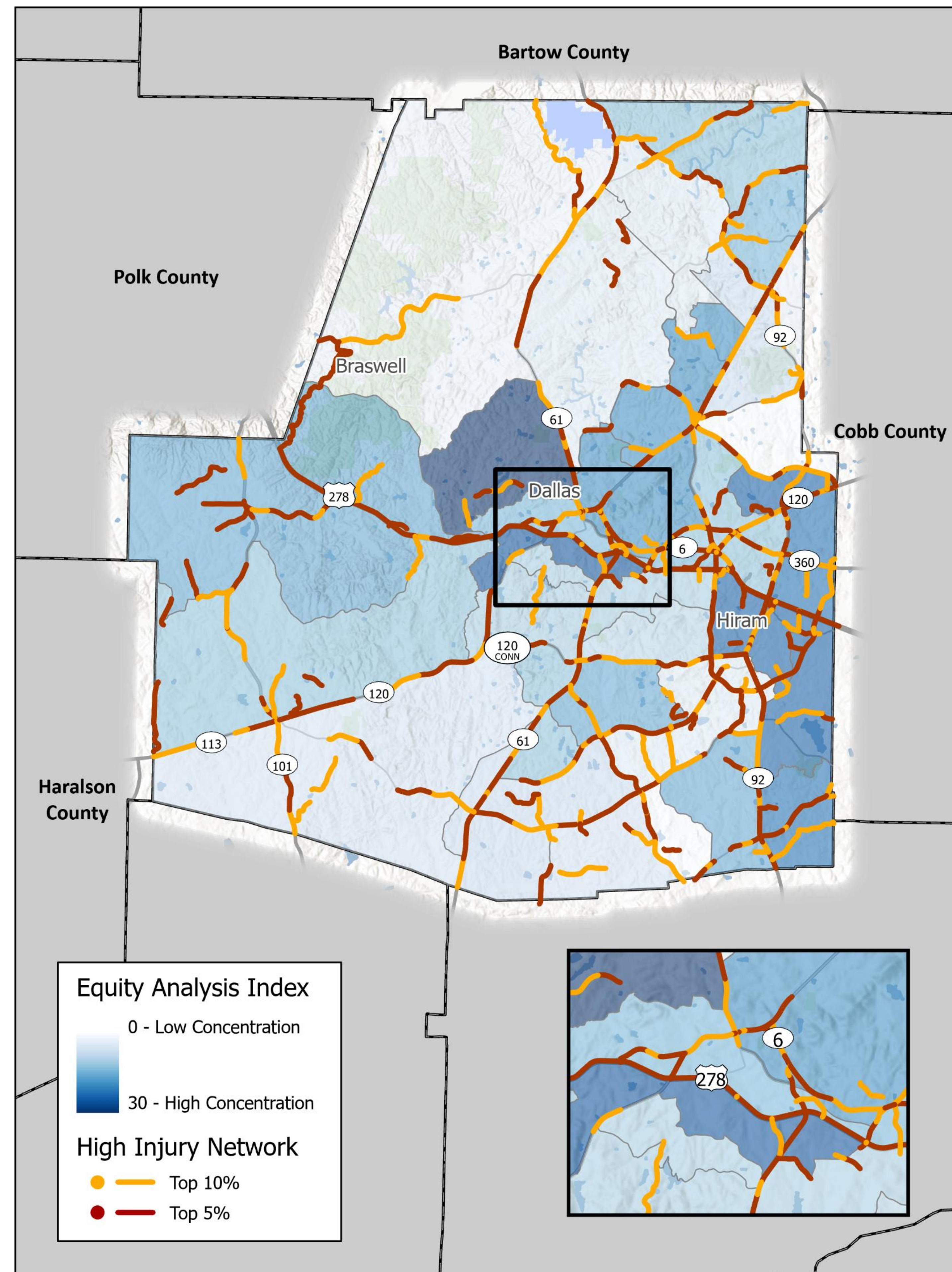
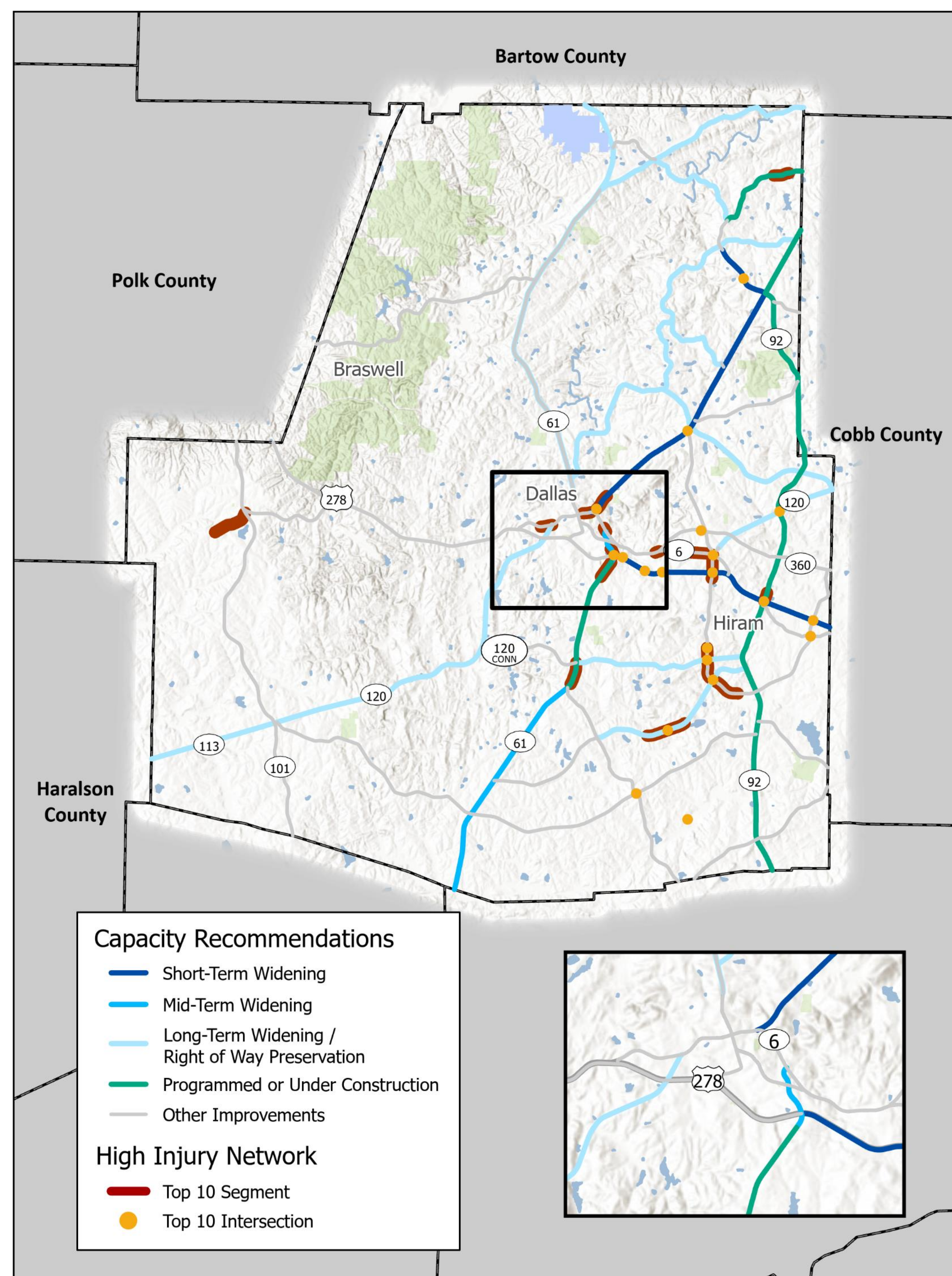
IDENTIFYING STRATEGIES FOR THE HIGH INJURY NETWORK

MAJOR CORRIDORS & EQUITY CONSIDERATIONS

The Comprehensive Safety Action Plan will identify safety improvement strategies and projects focused on the High Injury Network. Those strategies and projects will support the Major Corridors Study recommendations and to mitigate potential negative impacts to HDP groups.

The **Major Corridor Study** identifies improvements to major corridors in Paulding County, many of which also overlap with the Top 10 segments and intersections of the High Injury Network.

The **Comprehensive Safety Action Plan** will help to specify specific safety strategies for these major corridors as well as others on the High Injury Network.



The **Equity Analysis** identifies where concentrations of historically disadvantaged population (HDP) groups may be disproportionately impacted by traffic crashes.

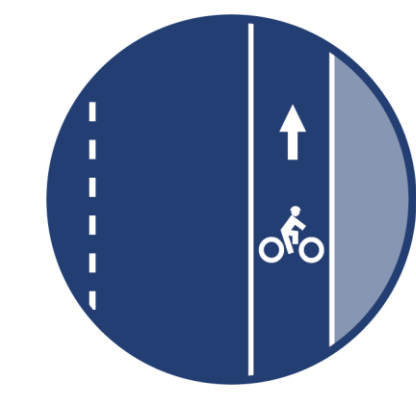
While the HDP populations might not be directly involved in the crashes, they are impacted by the high rates of crashes in the areas they live.

POTENTIAL STRATEGIES

PROVEN SAFETY COUNTERMEASURES

Remove Severe Conflicts

Eliminate specific high-risk conditions by separating road users of different modes, travel speeds, or directions.



Bicycle Lanes



Corridor Access Management



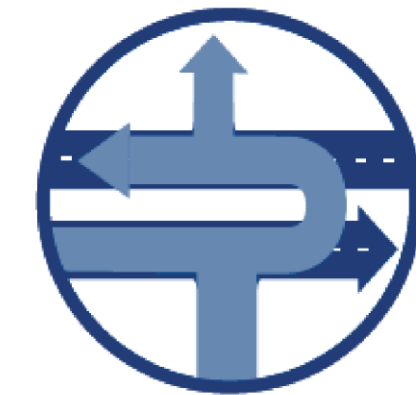
Medians and Pedestrian Refuge Islands in Urban and Suburban Areas



Dedicated Left- and Right-Turn Lanes at Intersections



Road Diets (Roadway Reconfiguration)



Reduced Left-Turn Conflict Intersections



Walkways



Roundabouts



Median Barriers



Pavement Friction Management



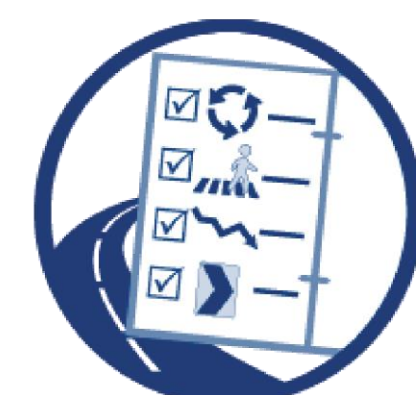
Roadside Design Improvements at Curves



Road Safety Audit



SafetyEdgeSM



Local Road Safety Plans

Manage Conflicts in Time

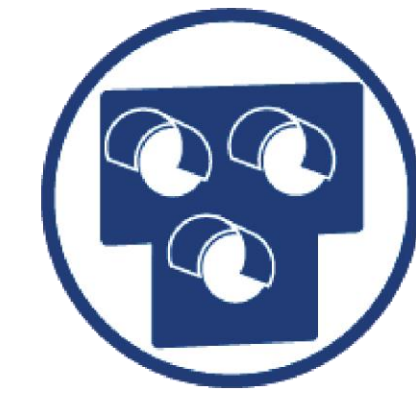
Separate users in time using traffic control devices to minimize conflicts with vehicles.



Leading Pedestrian Interval



Yellow Change Intervals



Pedestrian Hybrid Beacons



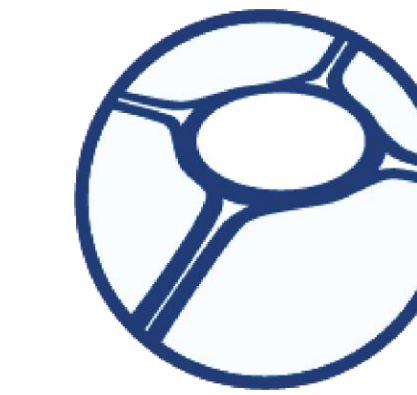
Road Safety Audit

Reduce Vehicle Speeds

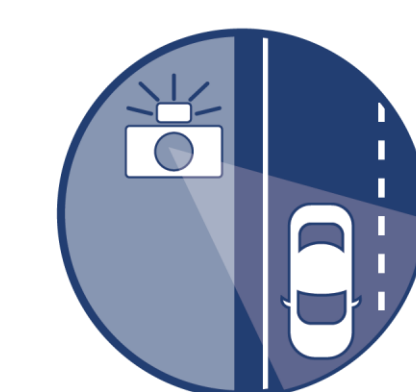
Implement design features and speed management strategies to reduce the kinetic energy of a crash.



Reduced Left-Turn Conflict Intersections



Roundabouts



Speed Safety Cameras



Pavement Friction Management



Variable Speed Limits



Road Safety Audit



Medians and Pedestrian Refuge Islands in Urban and Suburban Areas



Local Road Safety Plans



Road Diets (Roadway Reconfiguration)

Increase Attentiveness and Awareness

Alert road users to conflicts so appropriate action can be taken.



Variable Speed Limits



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



Crosswalk Visibility Enhancements



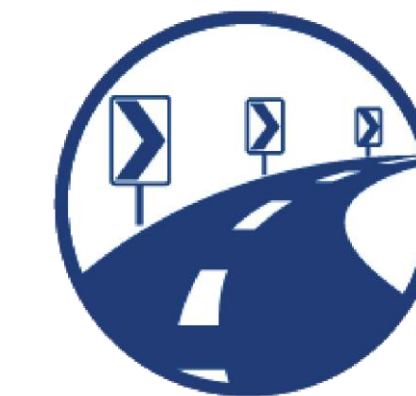
Backplates with Retroreflective Borders



Rectangular Rapid Flashing Beacons (RRFB)



Lighting



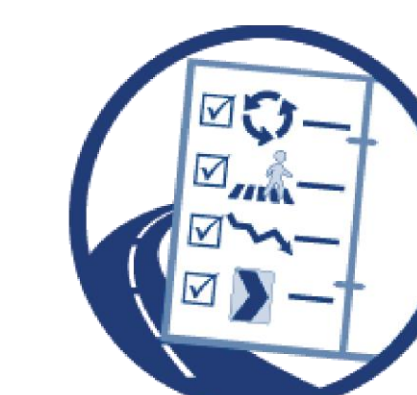
Enhanced Delineation for Horizontal Curves



Road Safety Audit



Longitudinal Rumble Strips and Stripes on Two-Lane Roads



Local Road Safety Plans



Wider Edge Lines

More information on FHWA's Proven Safety Countermeasures:

<https://highways.dot.gov/safety/proven-safety-countermeasures>