Introduction

DMATS is committed to providing a transportation system that is safe, affordable, and reliable for all users, regardless of age, ability, or mode of travel. Safety is a fundamental consideration in transportation planning in the DMATS planning area and improving safety is a key goal of the Long Range Transportation Plan.

Through recently completed Safety Action Plans, DMATS and its partner agencies have committed to a long-term goal of reducing, and eventually eliminating, roadway fatalities and serious injuries. These plans establish a data-driven foundation for identifying safety challenges and advancing effective strategies to improve safety outcomes.

This chapter uses a strategic approach to systematically identify problem locations and direct limited resources to areas where they will have the greatest impact. The chapter includes an overview of area crash and injury data for the entire DMATS area and a summary of specific location analysis from the region's safety action plans.

The chapter concludes with a set of recommended safety projects, strategies, and policies that will directly inform the project identification and investment priorities described in the Projects and Project Prioritization chapter of this plan.

Comprehensive Safety Action Plans

The Infrastructure Investment and Jobs Act (IIJA) introduced several transportation safety initiatives, including the Safe Streets and Roads for All (SS4A) program. Congress appropriated $5 billion over 5 fiscal years to the SS4A program to fund local, regional, and tribal initiatives aimed at preventing roadway fatalities and serious injuries. The program offers two main types of grants: Planning and Demonstration and Implementation.

DMATS and other area agencies received SS4A planning grants to develop comprehensive safety action plans. Three plans, all adopted in 2025, cover portions of the DMATS planning area. DMATS partnered with Regional Planning Affiliation 8 (RPA 8) to develop a plan focused on incorporated cities, Dubuque County adopted a plan covering its unincorporated areas, and Blackhawk Hills Regional Council, in partnership with six counties completed a plan for the Northwest Illinois area. With the completion of these safety action plans, the cities and counties covered by a plan are eligible to apply for implementation grant funding through the SS4A program.

This chapter of the DMATS Long Range Transportation Plan builds on the foundation established by these plans and identifies opportunities to implement their recommended strategies and countermeasures. The goals and recommended strategies identified in these safety action plans will guide future investments and advance progress toward the region's long-term safety goals. Each plan is briefly described below.

East Central Iowa Transportation Safety Plan

DMATS partnered with RPA 8 to develop the *East Central Iowa Transportation Safety Plan*, a comprehensive safety action plan 58 cities in the DMATS and RPA 8 planning areas. In the DMATS area, this includes the cities of Dubuque, East Dubuque, Peosta, Asbury, Centralia, Durango, and Sageville. Through the plan, DMATS and RPA 8 committed to the goal of reducing roadway fatalities and serious injuries by 50% by 2050, with the eventual goal of eliminating all roadway fatalities and serious injuries.

Dubuque County Safety Action Plan

The *Dubuque County Safety Action Plan* focuses on county-owned roads including County-maintained paved roadway segments and intersections including at least one county-maintained approach. Through the plan, the Dubuque County committed to a goal of zero roadway fatalities and serious injuries by 2050.

Northwest Illinois Traffic Safety Action Pan

In 2023, Northwest Illinois (NWIL) was awarded a SS4A grant to create a traffic safety action plan for the Northwest Illinois region. The *Northwest Illinois Traffic Safety Plan* was developed through a partnership among the counties of Carroll, Jo Daviess, Lee, Ogle, Stephenson, Whiteside, and Blackhawk Hills Regional Council (BHRC) - northwest Illinois' economic development district and regional planning organization. The study area encompassed the BHRC planning region, which includes the above-mentioned counties and 64 municipalities. The plan established the goal of zero fatalities and serious injuries on areas roadways by 2040.

Safety Planning Framework

Transportation safety planning is typically organized around three complementary conceptual frameworks:

- **The Safe System Approach** provides a broad, high-level approach for improving transportation safety.
- **Key Emphasis Areas** identify general strategies with the greatest potential to address priority the safety challenges identified in the area through data-driven analysis.
- **The 5 Es of Transportation Safety** help organize and implement specific safety strategies and actions.

The following section summarizes each framework and describes how they are applied within the DMATS planning area.

The Safe System Approach

The DMATS Long Range Transportation Plan aligns with the U.S. DOT's Safe System Approach by incorporating multiple layers of protection to prevent crashes and minimize harm when they occur. The Safe System Approach takes a holistic and comprehensive perspective, offering a guiding framework to create safer environments for everyone. It represents a shift from a conventional safety approach because it focuses both on human mistakes and vulnerability and designs a system with many redundancies in place to protect everyone.

Principles of a Safe System Approach

A Safe System Approach incorporates the following principles:

Death and Serious Injuries are Unacceptable A Safe System Approach prioritizes the elimination of crashes that result in death and serious injuries.

Humans Make Mistakes People will inevitably make mistakes and decisions that can lead or contribute to crashes, but the transportation system can be designed and operated to accommodate certain types and levels of human mistakes and avoid death and serious injuries when a crash occurs.

Humans Are Vulnerable Human bodies have physical limits for tolerating crash forces before death or serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates physical human vulnerabilities.

Responsibility is Shared All stakeholders—including government at all levels, industry, nonprofit/advocacy, researchers, and the general public—are vital to preventing fatalities and serious injuries on our roadways.

Safety is Proactive Proactive tools should be used to identify and address safety issues in the transportation system, rather than waiting for crashes to occur and reacting afterwards.

Redundancy is Crucial Reducing risks requires that all parts of the transportation system be strengthened, so that if one part fails, the other parts still protect people.

Objectives of a Safe System Approach

Implementation of the Safe System Approach will be arranged around five complementary objectives corresponding to the Safe System Approach elements:

Safer People Encourage safe, responsible driving and behavior by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed.

Safer Roads Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.

Safer Vehicles Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.

Safer Speeds Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed-limit setting, targeted education, outreach campaigns, and enforcement.

Post-Crash Care Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.

Image: Safe System Approach graphic, by U.S. DOT

Key Emphasis Areas

Safety emphasis areas represent the crash types, roadway conditions, and user groups that contribute disproportionately to fatalities and serious injuries and therefore warrant focused investment and targeted countermeasures. The DMATS LRTP will focus on two sets of Key Emphasis Areas: the Iowa Statewide Key Emphasis Areas from the *Iowa Strategic Highway Safety Plan* and Local Key *Emphasis Areas established in the East Central Iowa Transportation Safety Plan*. Both sets of Key Emphasis Areas are described below.

Iowa Statewide Key Emphasis Areas

The Federal Highway Administration (FHWA) requires state departments of transportation to develop a Strategic Highway Safety Plan (SHSP) using a data-driven approach to identify key emphasis areas and strategies with the greatest potential to reduce highway fatalities and serious injuries. The Iowa, Illinois, and Wisconsin SHSPs will be considered in the development of the LRTP; however, the Iowa SHSP will serve as the primary reference, as the majority of the DMATS planning area population is located in Iowa.

The Iowa Department of Transportation (Iowa DOT), along with several other states, has modeled its SHSP on a national framework developed by the American Association of State Highway and Transportation Officials (AASHTO). Iowa DOT's current SHSP covers the five-year period from 2024 to 2028. It includes 18 Key Emphasis Areas developed with input from transportation safety professionals across the state. These emphasis areas are organized into five safe system elements, consistent with the national Safe System Approach.

The DMATS Long Range Transportation Plan will incorporate the Iowa DOT's 2024–2028 SHSP Emphasis Areas to support the shared state and regional goal of eliminating roadway fatalities and serious injuries. The list includes the percentage of all statewide fatalities and serious injuries attributed to each priority.

Safer People

Bicyclists | 3% - A person who rides a pedal-driven vehicle.

Distracted Driving | 15% - Any driving or non-driving activity that takes a driver or non-motorist's focus off the task of navigating the roadway (phone use, eating, drinking, smoking, passengers, fatigue)

Occupant Protection | 37% - No restraint or protective device (such as a seatbelt, child restraint system, helmet, or other device).

Older Drivers | 19% – 65 and older.

Pedestrians | 6% - A person walking or in a wheelchair.

Impairment Involved | 23% - When any driver or non-motorist is found to be under the influence of drugs or alcohol, which includes those who have a positive drug or alcohol test or who refused to be tested.

Younger Drivers | 19% - 14 to 20 years old.

Safer Vehicles

Heavy Trucks | 9% - A large motor vehicle used for transporting goods or materials weighing 10,000 pounds or more.

Other Special Vehicles | 2% - Includes buses and farm equipment.

Motorcycles | 17% - Two or three-wheeled motor vehicle steered by a handlebar.

Trains | 0.4% - A series of railroad cars moved as a unit by a locomotive or by integral motors.

Safer Roads

Intersections | 29% - Junction where two or more roads converge, diverge, meet, or cross at the same grade.

Lane Departures | 53% - Vehicle leaves the travel lane, encroaches onto the shoulder, or crosses the centerline or median and crashes; this Emphasis Area encompasses roadside collisions.

Local Roads | 69% - Roads not owned by the Iowa DOT, such as city or county roads.

Roadside Collisions | 40% - When a vehicle departs the roadway and crashes into a natural or artificial object.

Winter Road Conditions | 6% - Conditions such as snow, ice, and slush.

Work Zones | 2% - An area of a road with construction, maintenance, or utility work activities.

Safer Speeds

Speed-Related | 52% - Driver consciously choosing an inappropriate speed or inappropriately responding to the roadway conditions (e.g., during weather events such as ice or fog)

The full Iowa Five-Year Strategic Highway Safety Plan (SHSP) 2024-2028 is available on the Iowa DOT's website.

https://iowadot.gov/consultants-contractors/traffic-safety/programs/Iowa-strategic-highway-safety-plan-shsp

Local Key Emphasis Areas

Through the *East Central Iowa Transportation Safety Plan's* engagement efforts and data analysis, the following local safety priorities were identified. These Local Key Emphasis Areas should be considered alongside Iowa DOT's Key Emphasis Areas to guide future safety improvements.

Excessive Speed

Excessive speed is a widespread issue, especially in smaller communities where highways pass directly through town. These communities often have limited resources to enforce traffic laws, making it difficult to address speeding effectively.

Walking and Biking

Many communities lack safe walking and biking routes to schools, businesses, and other key destinations. This makes crossing busy roads hazardous. Specific concerns include children walking to school on the outskirts of town and residents crossing a highway on foot to reach nearby stores or services.

Reckless / Careless Driving

Impaired and distracted driving remain significant concerns across the region, contributing to increased crash risks. Addressing these high-risk behaviors will require a combination of infrastructure changes, educational campaigns, and law enforcement strategies.

Hidden High-Risk Areas

High-risk locations are not always apparent in crash data, particularly in smaller communities with lower traffic volumes, where a lower number of crashes makes identifying trends more difficult. Achieving the goals of this plan will require implementing safety improvements in locations that may not show up in a crash data analysis.

Funding

Although many communities have identified high-risk areas, they often lack the financial resources to implement needed safety improvements. In some cases, federal funding is available, but local agencies may not have the staff capacity or expertise to apply for and manage these grants. Identifying and expanding funding strategies—especially those tailored to small and rural communities—will be essential to reducing fatalities and serious injuries.

Public Transit and Taxi Service

Many communities have limited access to transit or taxi services. Expanding the availability of these transportation options can improve quality of life and increase access to opportunities for area residents. It can also enhance safety in the region by providing alternatives for individuals who are unable to drive due to physical disabilities. Additionally, transit and taxi services offer a safe option for those who might otherwise drive while impaired by drugs or alcohol.

Arterial and Collector Roads and Intersections

Crash data shows that within cities, higher-volume roads with a mix of land uses and frequent access points have a greater number of fatal and serious injury crashes. These roads are also more difficult for pedestrians to cross safely. Many serious crashes occur at intersections along these corridors.

Highways and Small Communities

In many small communities, the city's main street also functions as a county or state highway. These roadways serve a dual purpose: providing access to local businesses while accommodating regional traffic. This dual role can create safety challenges, as local activity must share

the roadway with higher traffic speeds and volumes associated with highway travel. Striking the right balance between making these streets safe for local use and maintaining efficient through traffic is critical for many of the region's small towns.

ATV and UTV Safety

Changes in state law have led to a significant increase in the number of All-Terrain Vehicles (ATVs) and Utility Task Vehicles (UTVs) operating on public roads. This has corresponded with a rise in injuries and fatalities involving these vehicles. Targeted safety programs may help reduce crash risk and improve out-comes for ATV and UTV users.

The 5 Es of Transportation Safety

DMATS focuses its efforts on key areas of transportation safety improvement including Education, Engineering, Enforcement, Emergency Response, and Everyone.

Education

Education involves informing users about unsafe behaviors and suggesting ways to improve safety when they use the transportation system. Police, fire, and engineering departments across the region use education as a transportation safety tool.

Engineering

Local public works departments or state departments of transportation often implement engineering strategies to improve roadway safety. In some cases, infrastructure solutions are low-cost, reactionary improvements that focus on crash hot spots or corridors. However, transportation safety improvements can also be implemented proactively. Under this approach, safety improvements are implemented in the planning stages of a project. This proactive method takes a system wide approach to addressing transportation safety issues that will prevent crashes through incremental changes on a corridor level. A good safety plan will include a balance of reactionary and proactive improvements.

Enforcement

Law enforcement agencies play a valuable role in maintaining the region's transportation safety and security. Their presence can encourage appropriate driving behaviors, prevent motor vehicle collisions, and deter criminal acts. Enforcement officers also are the source of most transportation safety data — typically crash data. In addition, these individuals must coordinate traffic flow around incidents that may create congestion and motorist delays along the region's roadways.

Emergency Response

Emergency response personnel play a critical role in preventing additional deaths and injuries following an initial incident. This sector includes emergency medical services (EMS) paramedics, first responders, trauma nurses, and physicians. Other services, such as motorist assist programs that help drivers with vehicle issues, also contribute to transportation safety by reducing the amount of time vehicles are stopped on roadways. These efforts, in coordination with regional transportation management systems, help minimize traffic delays and reduce the risk of secondary crashes. In addition, emergency management agencies develop hazard mitigation and disaster response plans that help communities prepare for and respond to large-scale emergencies.

Everyone

The significant challenge of reaching aero fatalities requires not only the dedication of committed professionals who represent the first four Es of roadway safety, but also those who use

Iowa's roadways. The National Highway Traffic Safety Administration (NHTSA) reports that driver error can be attributed as a contributing factor to 94% of crashes nationwide. This finding suggests the important role that everyone plays in ensuring their own safety and the safety of others when traveling. Further, this statistic also points to a broader need for an improved transportation safety culture.

Crash Analysis

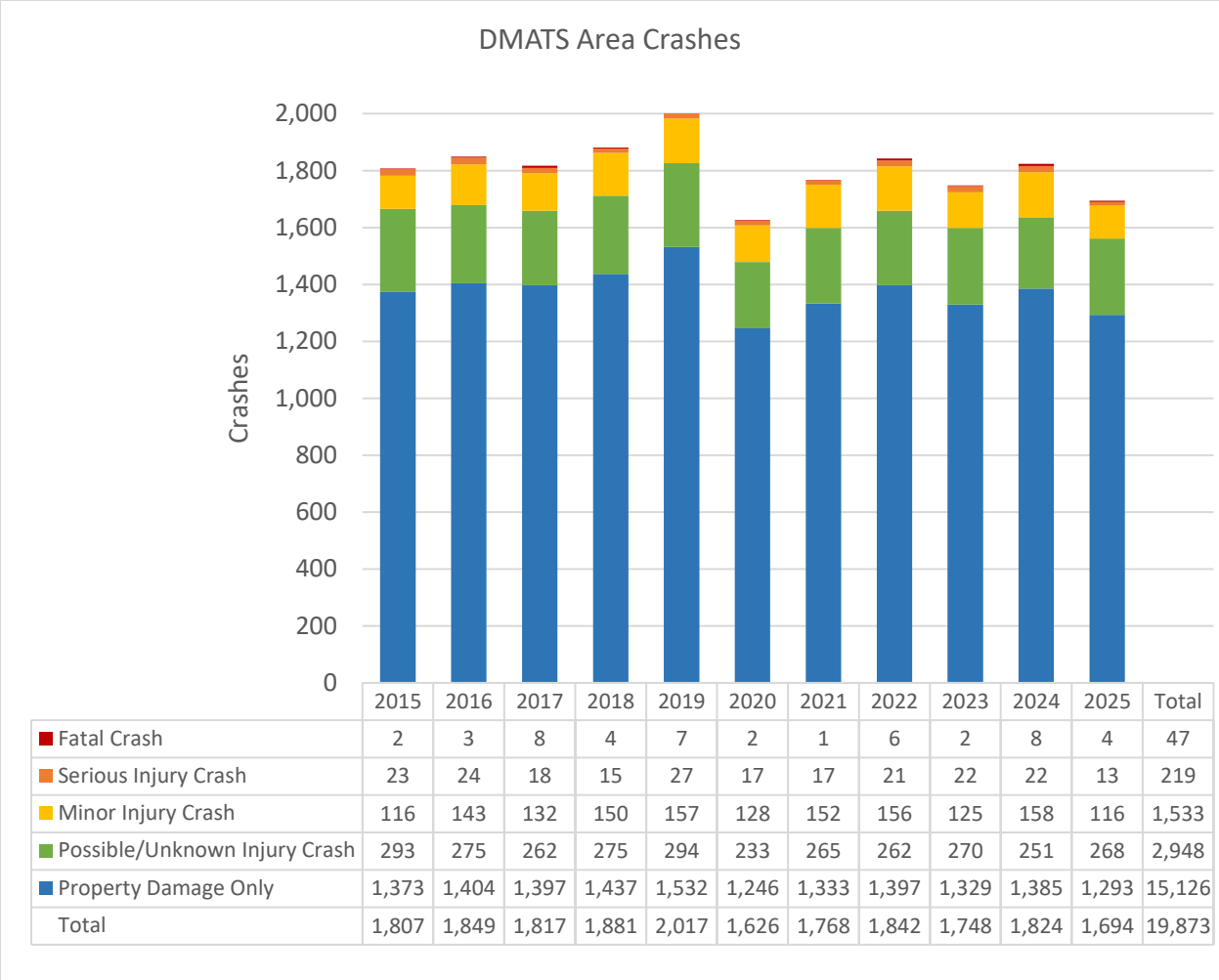
A key element of transportation safety planning is using a data-driven approach to systematically identify problem areas and direct limited resources to where they will have the most impact. This method ensures that safety decisions are grounded in evidence, aligning with best practices from the Federal Highway Administration and state departments of transportation.

The crash analysis section of this chapter is divided into two parts. Part one provides an overview of crash and injury data for the entire DMATS area. Part two summarizes the specific location analysis from the region's recently completed safety action plans.

DMATS Area Crash Analysis

DMATS closely monitors the number and severity of vehicle crashes and injuries using data from the Iowa, Illinois, and Wisconsin Departments of Transportation (DOT). The state DOTs compile data from law enforcement crash reports into a state-wide database. Each database record includes the crash location and key information about the crash such as the number of vehicles involved; the number and severity of injuries; and the actions or conditions that contributed to the crash. The data also includes information on pedestrians, bicyclists, animals, and fixed objects involved in the crash.

Figure 1 includes a chart of all crashes that occurred in the DMATS area from 2015 to 2025 by crash severity. Overall, crashes were trending up prior to the Covid-19 pandemic, reaching a peak of 1,942 in 2019. The number of crashes fell sharply in 2020 as many people stayed at home during the pandemic, reducing vehicle travel. As travel ramped back up post-pandemic, so did crashes, growing in 2021 and 2022 before leveling off at around 1,700 crashes per year, which is about 180 crashes less than the pre pandemic high in 2019. Total crashes fell to 1,624 in 2025, which is the lowest total since 2020. DMATS will continue to monitor crash totals in future years to see if this trend continues.



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Fatal Crash	2	3	8	4	7	2	1	6	2	8	4	47
Serious Injury Crash	23	24	18	15	27	17	17	21	22	22	13	219
Minor Injury Crash	116	143	132	150	157	128	152	156	125	158	116	1,533
Possible/Unknown Injury Crash	293	275	262	275	294	233	265	262	270	251	268	2,948
Property Damage Only	1,373	1,404	1,397	1,437	1,532	1,246	1,333	1,397	1,329	1,385	1,293	15,126
Total	1,807	1,849	1,817	1,881	2,017	1,626	1,768	1,842	1,748	1,824	1,694	19,873

Figure 1. DMATS Area Crashes
Source: Iowa DOT & Wisconsin DOT 2015-2025, Illinois DOT 2015-2024.
Note: Illinois DOT crash data not available for 2025. The Illinois portion of the DMATS area typically sees approximately 35-50 crashes per year.

Fatalities and Injuries

Figures 2, 3, and 4 illustrate the number of fatalities, serious injuries, and minor injuries that occurred within the DMATS planning area between 2015 and 2025. Over this 11-year period, the region averaged approximately 4.5 fatalities, 23.5 serious (incapacitating) injuries, and 169.7 minor (non-incapacitating) injuries per year. In 2025, totals in all three categories were below the long-term average.

Serious injuries generally followed the overall crash trend observed since the onset of the Covid-19 pandemic, with a sharp decline in 2020, followed by increases in 2021 and 2022, and then a leveling off below pre-pandemic highs. Fatalities, due to their relatively low annual totals, exhibit greater year-to-year variability and do not display a clear long-term trend. Minor injuries, by contrast, have remained relatively consistent from year to year, showing less fluctuation regardless of changes in overall crash totals.

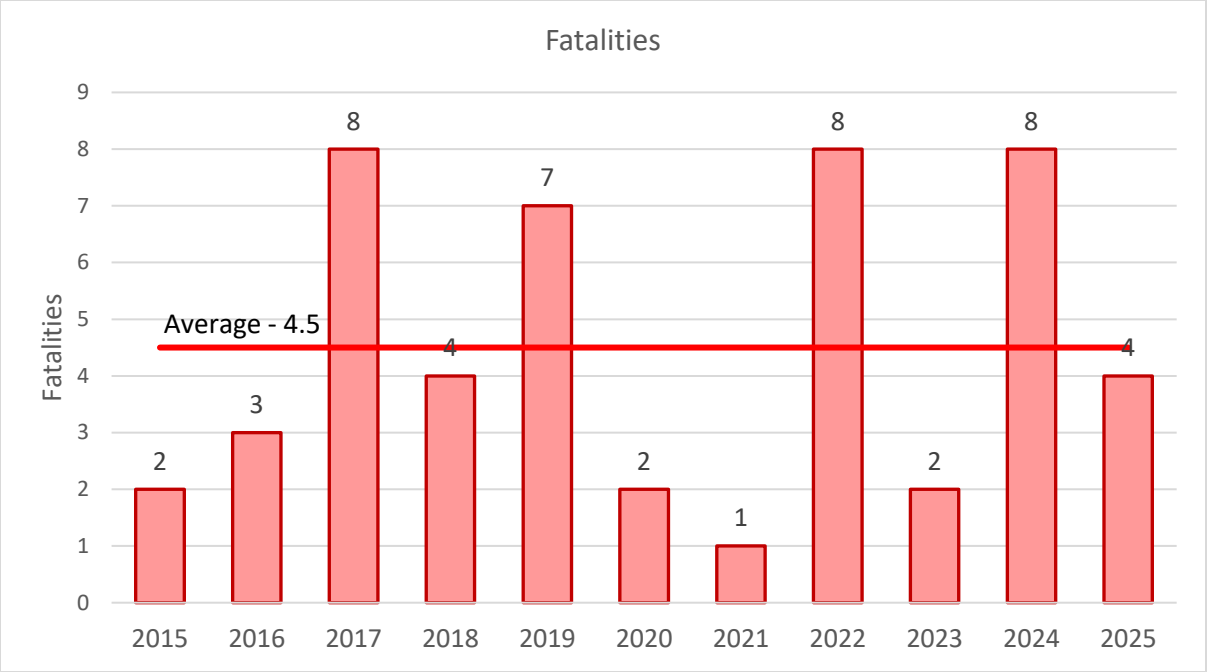


Figure 2. DMATS Area Fatalities
Source: Iowa DOT & Wisconsin DOT 2015-2025, Illinois DOT 2015-2024.
Note: Illinois DOT crash data not available for 2025. The Illinois portion of the DMATS area had 5 fatalities between 2015 and 2024 and has not had one since 2018.

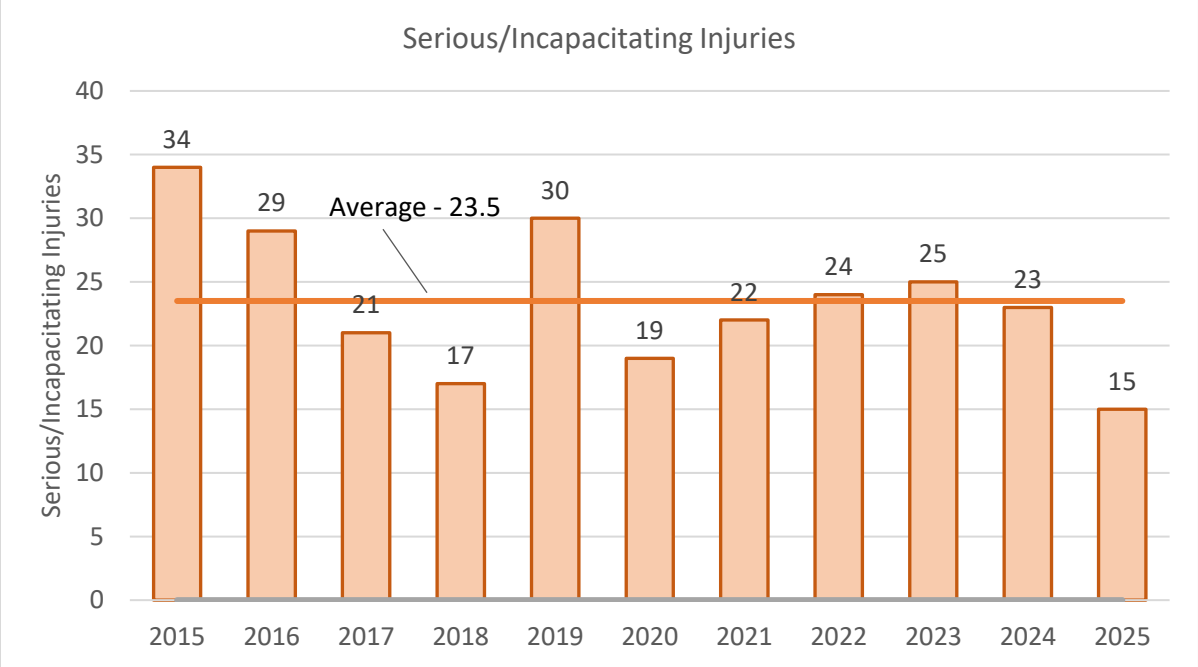


Figure 3. DMATS Area Serious/Incapacitating Injuries
Source: Iowa DOT & Wisconsin DOT 2015-2025, Illinois DOT 2015-2024.
Note: Illinois DOT crash data not available for 2025. The Illinois portion of the DMATS area typically sees approximately 1-6 serious injuries per year.

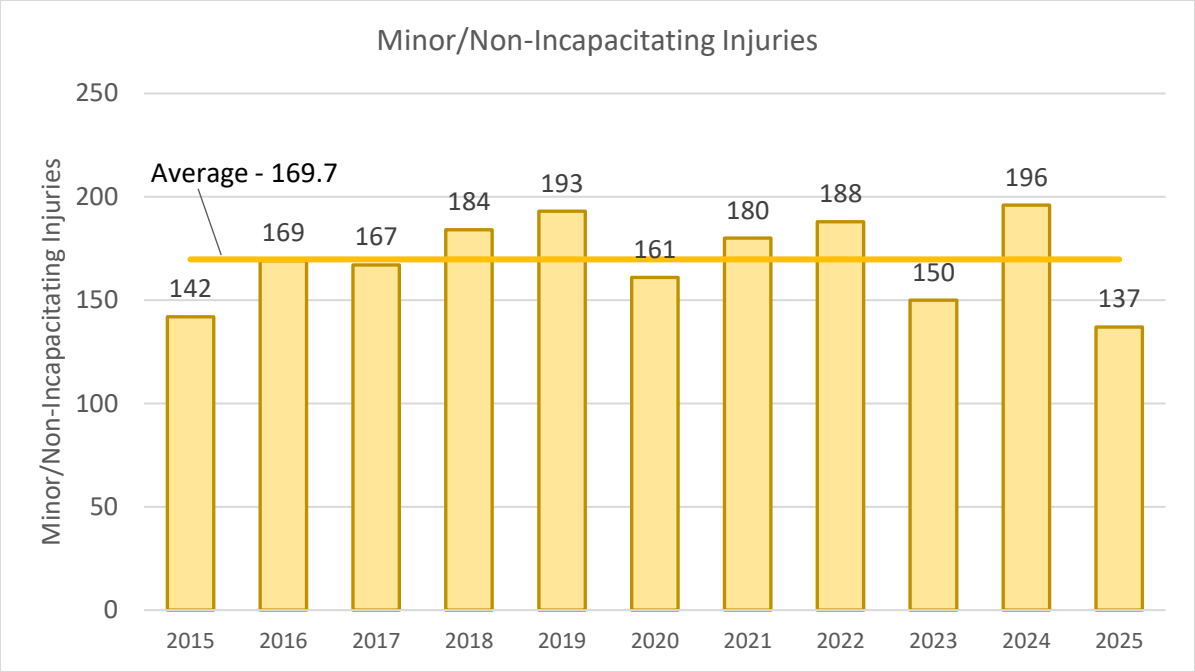


Figure 4. DMATS Area Minor/Non-Incapacitating Injuries
Source: Iowa DOT & Wisconsin DOT 2015-2025, Illinois DOT 2015-2024.
Note: Illinois DOT crash data not available for 2025. The Illinois portion of the DMATS area typically sees approximately 3-11 minor injuries per year.

Fatal and Serious Injury Crash Map

DMATS has mapped the crashes to illustrate the distribution of fatal and serious injury crashes and locations experiencing the most crashes. Figure 5 maps the location of all fatal and serious injury crashes that occurred between 2015 and 2025. The 47 fatal and 219 serious injury crashes from this time are spread across the region, but with the majority occurring on area's arterials and major collectors. Higher traffic volumes and higher speeds on arterials and collectors likely play a role in the higher occurrence of fatal serious injury crashes.

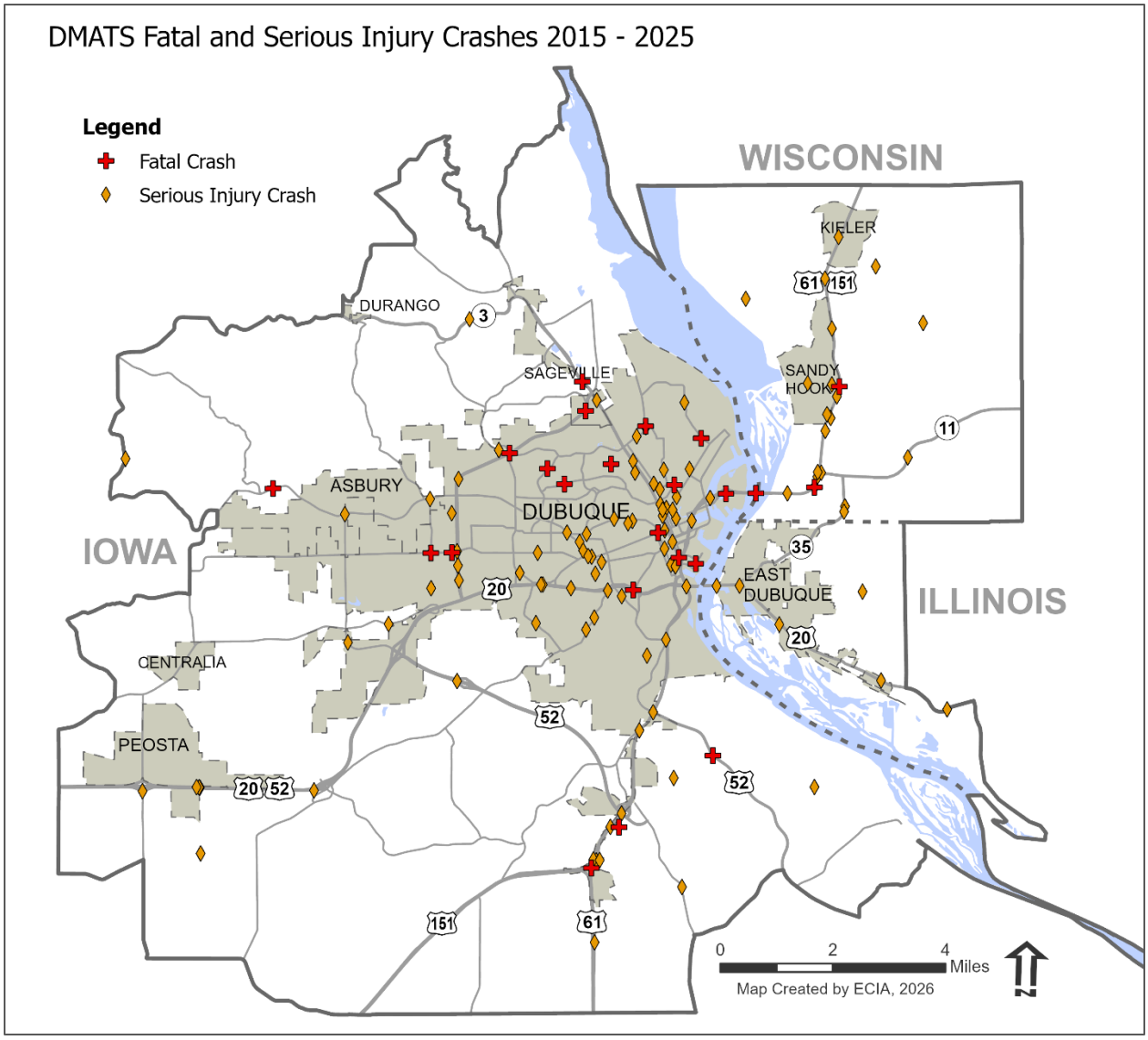


Figure 5. Fatal and Serious Injury Crash Map
Source: Iowa DOT & Wisconsin DOT 2015-2025, Illinois DOT 2015-2024.
Note: Illinois DOT crash data not available for 2025.

Safety Action Plan Analysis

Three safety action plans, all completed in 2025, cover a portion of the DMATS planning area. The *East Central Iowa Transportation Safety Plan* addresses the areas within incorporated cities, the *Dubuque County Safety Action Plan* focuses on the unincorporated areas of the county, and the *Northwest Illinois Traffic Safety Action Plan* includes a six-county region in northwest Illinois.

All three plans employed a data-driven approach to systematically identify problem areas and direct limited resources to locations where they can achieve the greatest safety benefit. While each plan used a unique approach tailored to its geographic context and roadway network, they all share a common emphasis on identifying locations of concern and recommending effective countermeasures. This section summarizes the analysis methodology and key findings from each plan.

East Central Iowa Transportation Safety Plan Analysis

Potential for Crash Reduction (PCR) Based Network Screening

As part of the *East Central Iowa Transportation Safety Plan*, the Institute for Transportation at Iowa State University (InTrans) conducted a Potential for Crash Reduction (PCR) analysis to screen the transportation network and identify locations where safety investments are likely to be most effective.

The Iowa Department of Transportation (Iowa DOT), with support from InTrans, has developed Safety Performance Functions (SPFs) for paved roadway segments and intersections throughout the State of Iowa. These SPFs are statistical models that predict the average annual number of crashes—both total crashes (KABCO) and injury crashes (KAB)—based on roadway exposure and site characteristics.

The PCR value for a given location represents the difference between the observed number of crashes and the number of crashes predicted by the applicable SPF. Iowa DOT has established three PCR categories—high, medium, and negligible—for both injury and total crashes at intersections and along roadway segments. Additional information on PCR methodology is available through the Iowa DOT's online resources:

https://experience.arcgis.com/experience/ba1618dc121545b8b3a13455e74e18b5

In developing the plan, PCR values were used to screen intersections and roadway segments within the 57 Iowa cities included in the study area using Iowa crash data from 2018-2022. The High Injury Network was defined based on injury crash (KAB) PCR values, while the High Crash Network was defined based on total crash (KABCO) PCR values. Locations may appear in both networks.

Intersections

Intersections of interest within the 57 Iowa cities were identified using Iowa DOT's high and medium PCR thresholds. Intersections within the City of Dubuque were further refined based on annual total crashes and injury crashes. Of the 3,861 intersections screened using KAB and KABCO PCR values, 237 met the selection criteria, including 197 intersections within the DMATS planning area. Each selected intersection was evaluated using street-level imagery to identify potential contributing factors to crashes. Based on this review, site-specific safety issues were identified, and potential countermeasures were developed for each location.

Segments

Due to variability in segment length and the range of characteristics present along roadway segments, a refined set of PCR thresholds was used to screen roadway segments within the 57 Iowa cities. A total of 5,032 segments were evaluated using KAB and KABCO PCR values, of which 18 segments met the selection criteria within the DMATS planning area. These segments were reviewed using street-level imagery to identify safety concerns contributing to crash occurrence. Based on these observations, appropriate countermeasures were identified to address the documented issues.

PCR Screening Results

Figures 6 and 7 present maps of intersections and roadway segments identified through the PCR-based screening process. These figures are followed by tables summarizing locations with the highest PCR values, including:

- Top ten injury crash intersections (Table 1)
- Top ten total crash intersections (Table 2)

- Top injury crash segments (Table 3)
- Top total crash segments (Table 4)

Together, these figures and tables provide a high-level overview of priority safety locations within the DMATS planning area. Additional materials, including detailed location reports, recommended countermeasures, and an interactive map, are available through the *East Central Iowa Transportation Safety Plan* website:

https://eciatrans.org/transportation_safety_plan .

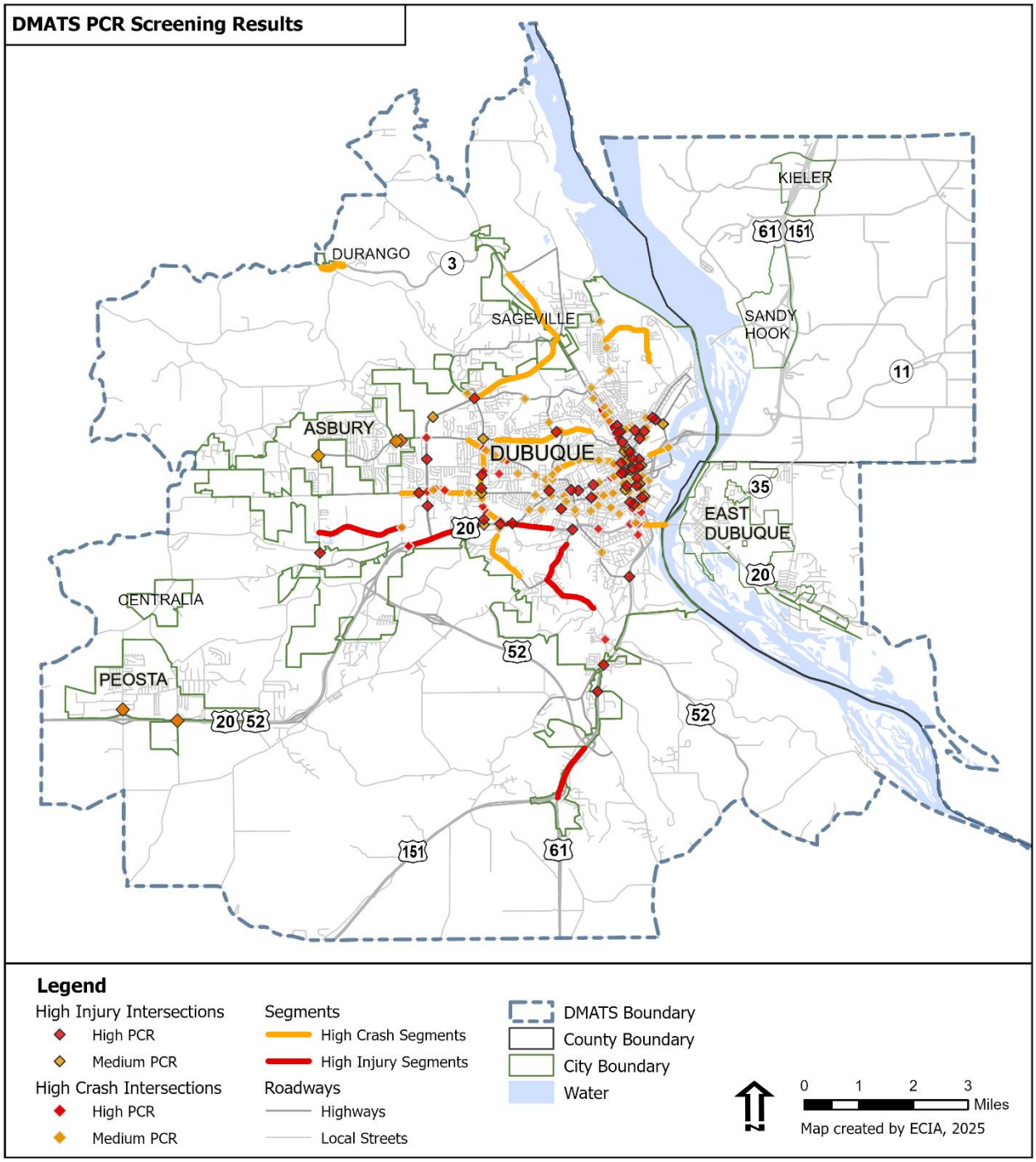


Figure 6. DMATS PCR Screening Results, 2018-2022
Source: East Central Iowa Transportation Safety Plan, ECIA and InTrans, 2025.

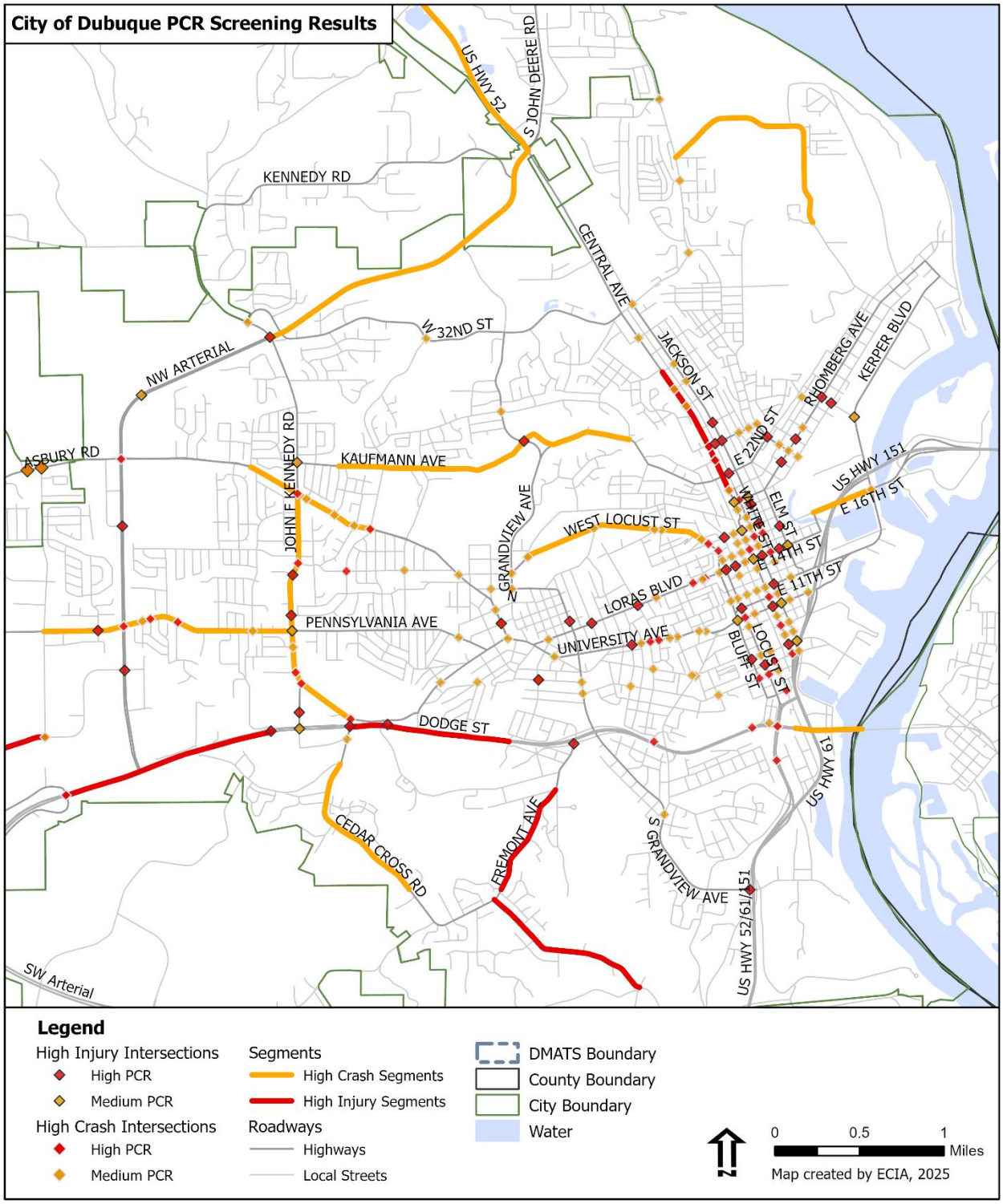


Figure 7. City of Dubuque PCR Screening Results, 2018-2022
Source: East Central Iowa Transportation Safety Plan, ECIA and InTrans, 2025.

Table 1. Top Ten Intersections – Injury Crashes

Ranking	Street Name	Total Crashes	Injury Crashes	Non-Injury Crashes	Crash Type(s)	PCR Score - Injury Crashes
1	Bluff St and West 9th St	54	8	46	Broadside	0.79
2	Kennedy Road and Pennsylvania Ave	59	8	51	Broadside, Rear-end	0.54
3	Central Ave and East 20th Str	27	6	21	Rear-end, Sideswipe, Non-collision	0.53
4	Northwest Arterial and Plaza Dr	18	6	12	Broadside, Angle	0.46
5	East 20th St and Jackson St	27	5	22	Broadside, Rear-end, Non-collision	0.42
6	US 20/Dodge St and Wacker Dr	84	9	75	Rear-end, Broadside, An-gle	0.41
7	East 14th St and Elm St	29	5	24	Broadside	0.41
8	Central Ave and 14th St	40	5	35	Broadside, Sideswipe	0.41
9	East 9th St and White St	18	4	14	Broadside	0.30
10	Fengler St and Kerper Blvd	18	4	14	Angle, Broadside	0.30

Source: East Central Iowa Transportation Safety Plan, ECIA and InTrans, 2025.

Table 2. Top Ten Intersections – All Crashes

Ranking	Street Name	Total Crashes	Injury Crashes	Non-Injury Crashes	Crash Type(s)	PCR Score - All Crashes
1	US 20 and Bryant St	48	1	47	Rear-end	6.00
2	Kennedy Rd and Hillcrest Rd	40	1	39	Broadside, Angle	5.27
3	Northwest Arterial and Pennsylvania Ave	58	3	55	Rear-end, Broadside, Side-swipe	4.59
4	Asbury Rd and Kennedy Rd	59	3	56	Rear-end	4.17
5	East 16th St and White St	28	1	27	Broadside	3.43
6	Northwest Arterial and Asbury Rd	63	4	59	Rear-end, Sideswipe, Broadside	3.41
7	Kennedy Rd and Wacker Dr	40	2	38	Rear-end, Sideswipe	3.39
8	East 20th St and White St	30	0	30	Broadside, Sideswipe, Non-collision, Rear-end	3.11
9	Bellevue Rd and Rockdale Rd	21	3	18	Rear-end	2.33
10	Locust St and West 3rd St	23	0	23	Broadside, Sideswipe	2.29
11	US 20 and Bluff St	38	3	35	Rear-end	2.28

Source: East Central Iowa Transportation Safety Plan, ECIA and InTrans, 2025.

Table 3. Top Segments – Injury Crashes

Ranking	Street Name	Total Crashes	Injury Crashes	Non-Injury Crashes	Crash Type(s)	PCR Score - Injury Crashes
1	Dodge Street/US 20 Century Dr to Old Highway Rd	319	21	298	Rear-end, sideswipe, broadside	2.56
2	Dodge Street/US 20 Gandolfo St and Kennedy Rd	211	16	195	Rear-end, sideswipe, broadside, non-collision single-vehicle	1.04
3	Chavenelle Road Radford Rd to Seippel Rd	211	16	195	Rear-end, and sideswipe, broadside, and non-collision	0.99
4	Highway 61 Near Dubuque Regional Airport	57	11	46	Non-collision single-vehicle, rear-end and broadside (front-to-side)	0.71
5	Kelly Lane Corridor Fremont Ave to Manson Rd	31	4	27	Non-collision single-vehicle, rear-end, sideswipe (same direction), and broadside.	0.53
6	Fremont Avenue Corridor Knob Hill Dr to Simpson St	24	4	20	Non-collision single-vehicle, rear-end, broadside, and angle	0.53
7	Central Avenue Corridor 21st St to 28th St	139	15	124	Non-collision single-vehicle, head-on, rear-end, angle, broadside, and same-direction sideswipe.	0.53

Source: East Central Iowa Transportation Safety Plan, ECIA and InTrans, 2025.

Table 4. Top Segments – All Crashes

Ranking	Street Name	Total Crashes	Injury Crashes	Non-Injury Crashes	Crash Type(s)	PCR Score - All Crashes
1	Dodge Street/US 20 Mississippi River Bridge	68	1	67	Rear end	6.77
2	Asbury Road Corridor Bonson Rd to Carter Rd	238	20	218	Rear-end	4.75
3	West Locust Street Clarke Dr to Clarke St	146	12	134	Running off the road to the right, rear-end, same-direction sideswipe.	4.25
4	Northwest Arterial John F Kennedy Rd to Iowa Hwy 3	63	5	58	Rear-end, non-collisions, non-reported and lane departures	4.21
5	Roosevelt Street Peru Rd to Amelia Dr	62	8	54	Lane departure	3.94
6	John F Kennedy Road University Ave to Asbury Rd	99	9	90	Broadside and rear end	0*
7	Cedar Cross Road Crescent Ridge to Cedar Crest Ct	62	5	57	Lane departure, broadside, non-collision, and rear-end.	3.17
8	Pennsylvania Avenue Radford Rd to John F Kennedy Rd	326	30	296	Broadside, rear end, angle	2.66
9	Highway 3 NW Arterial to W John Deere Rd	18	3	15	Loss of control	1.84
10	Kaufman Ave Kane St to Theda Dr	87	10	77	Broadside, rear-end, and angle	1.76
11	East 16th St Sycamore St to Kerper Blvd	67	8	59	Broadside, rear-end, and sideswipe same direction.	1.5

* John F Kennedy Road had a lower score but was included because of the large number of non- intersection crashes.

Source: East Central Iowa Transportation Safety Plan, ECIA and InTrans, 2025.

Vulnerable Road User Assessment

In addition to the PCR-based network screening, the East Central Iowa Transportation Safety Plan included a Vulnerable Road User (VRU) assessment focused on identifying locations with elevated risk for pedestrians and bicyclists. The assessment was informed by the Iowa DOT's Statewide Bicycle and Pedestrian Systemic Safety Analysis (2020), which evaluates pedestrian and bicycle crash risk based on roadway and intersection characteristics.

Results from this analysis, specifically high urban composite risk values, were integrated with additional datasets to identify intersections, corridors, and areas of potential concern. These datasets included locations of fatal VRU crashes, spatial and temporal groupings of VRU crashes, proximity to schools, input from agencies and the public, and observations from the network review process.

A total of 332 VRU crashes that occurred during the ten-year analysis period were initially evaluated, with additional emphasis placed on the 162 VRU crashes that occurred during the most recent five-year period. Through this screening process, 20 locations within the DMATS planning area were identified for further analysis.

Each of the 20 locations was reviewed using street-level imagery to identify potential VRU safety issues. Based on this review, appropriate countermeasures were identified to address observed conditions. Table 5 lists the 20 VRU priority locations identified within the DMATS area. A detailed discussion of each location, including recommended countermeasures, is provided in Appendix A (pages 263–291) of the *East Central Iowa Transportation Safety Plan*.

Table 5. Vulnerable Road User Identified Locations

Asbury
Intersection of Asbury Road and Radford Road
Dubuque – Fatal Crash Locations
Bell Street between E 3rd Street and E 6th
Intersection of NW Arterial and Holliday Drive
Dubuque - Other Screened Locations
Grandview Avenue near George Washington Middle School
Grandview Avenue at US 61 Interchange
Intersection of Rhomberg Avenue and Johnson Street
Intersection of Central Avenue and 14th Street/Loras Blvd
Intersection of Asbury Road and NW Arterial
Intersection of Locust Street and 9th Street
Intersection of Jackson Street and 20th Street
Central Avenue, Including Intersections with E 24th Street
White Street, including Intersection with E 24th Street
Intersection of Jackson St and 25th St
Intersection of Jackson Street and 24th Street
Main Street and W 5th Street
Intersection of NW Arterial and Pennsylvania Avenue
Intersection of Rhomberg Avenue and Dock Street
Loras Boulevard Near Cornell Street and Montrose Terrace
Locust Street and W 3rd Street
Peru Road

Source: East Central Iowa Transportation Safety Plan, ECIA and InTrans, 2025.

Dubuque County Safety Action Plan Analysis

The *Dubuque County Safety Action Plan* data analysis was based on a risk factor assessment methodology designed to evaluate risk across the county roadway network. Risk factors along roadway segments, at intersections, and along horizontal curves were analyzed to identify locations with a higher likelihood of future crashes involving fatalities and serious injuries. The results of this analysis were used to select candidate project locations and to identify appropriate safety improvements on county-owned roadways.

The analysis was organized into three categories: roadway segments, intersections, and horizontal curves. Each category was evaluated using the attributes listed in Table 6.

Table 6. Risk Factor Analysis Attributes

Segment	Intersection	Horizontal Curves
Traffic Volume	Distance from Previous Stop Sign	Traffic Volume
Pavement and Shoulder Width	Intersection Skew	Curve Radius
Access Density	Horizontal Curvature	Shoulder Width
Curve Density	Traffic Volume	Access Management
Pavement Condition	Minor Street Volume	Pavement Condition
Crash Experience	Access Management	Crash Experience
Potential for Crash Reduction	Crash Experience	
	Intersection Configuration	
	Potential for Crash Reduction	

Source: Dubuque County Safety Action Plan, Dubuque County and Kimley Horn, 2025.

Segments, intersections, and horizontal curves were ranked using the risk factor analysis. The assessment focused exclusively on paved roadways. Unpaved roads were excluded due to limited data availability, low traffic volumes, and the limited range of safety improvements that can be systematically implemented on unpaved facilities. Following the ranking process, safety improvement recommendations were developed for the highest-risk locations. These recommendations, combined with input from local officials and residents, were used to select prioritized candidate locations for safety improvements.

Tables 7, 8, and 9 present the top ten results of the risk factor analysis for each category. DMATS area locations are highlighted yellow. Additional details on the analysis methodology, prioritization results, and recommended countermeasures can be found in the *Dubuque County Safety Action Plan.*

Table 7. Top Ten Segment Risk Factor Results

Rank	Paved Road	Beginning of Segment	End of Segment	Length (mi)	Total Risk Factor Points
1	OLD HIGHWAY ROAD	500 feet W of SUNDOWN RD	500 feet E of COUSINS RD	3.54	**18**
2	OLD HIGHWAY ROAD	Michigan Ave	500 feet W of 7TH AVE SW	2.74	**18**
3	NORTH CASCADE ROAD	Sundown Rd	Park View Ln	9.05	**17**
4	KENNEDY ROAD	RUPP HOLLOW RD	Collison Dr	1.87	**17**
5	MILITARY ROAD	US 151	Key West Dr	3.32	**17**
6	OLDE HAWKEYE ROAD	0.3 miles NW of PRIER RD	0.3 miles SE of Wuchter Rd	1.22	**17**
7	HALES MILL ROAD	300 feet S of BROOK HOLLOW DR	BURTONS FURNACE RD	3.02	**16**
8	SUNDOWN ROAD	400 feet NW of Old Highway Rd	Asbury Rd	2.65	**15**
9	OLD HIGHWAY ROAD	400 feet NE of CROWN LINE DR	SUNDOWN RD	3.50	**15**
10	PERU ROAD	TANZANITE DR	Co Rd Y35/JOHN DEERE RD S	1.30	**15**

Source: Dubuque County Safety Action Plan, Dubuque County and Kimley Horn, 2025.

Table 8. Top Ten Intersection Risk Factor Results

Rank	Road Name	Intersecting Road	Total Risk Factor Points
1	US 52	South Mound Rd	**19**
2	US 151	D41/Monastery Rd/Skyline Rd	**18**
3	Co Rd Y21/OLD HIGHWAY RD	COX SPRINGS RD	**18**
4	US 52	Kemp Rd	**17**
5	US 151	D35/Jecklin Ln	**17**
6	Co Rd D35/MILITARY RD	OAKLAND FARMS RD	**17**
7	Co Rd D41/MONASTERY RD	Co Rd Y21/SUNDOWN RD	**17**
8	OLDE HAWKEYE RD	PRIER RD	**17**
9	CIRCLE RIDGE RD	MUD LAKE RD	**17**
10	IA 32/IOWA 32	JFK RD	**17**

Source: Dubuque County Safety Action Plan, Dubuque County and Kimley Horn, 2025.

Table 9. Top Ten Horizontal Curve Risk Factor Results

Rank	Paved Road	Length (ft)	Total Risk Factor Points
1	OLDE HAWKEYE ROAD	272.6	19
2	MUD LAKE ROAD	259.4	19
3	OLD HIGHWAY ROAD	278.1	18
4	MUD LAKE ROAD	175.5	18
5	OLD HIGHWAY ROAD	157.6	17
6	OLD HIGHWAY ROAD	118.6	17
7	NORTH CASCADE ROAD	362.7	17
8	HALES MILL ROAD	372.0	17
9	CLAY HILL ROAD	189.6	17
10	CLAY HILL ROAD	212.0	17

Source: Dubuque County Safety Action Plan, Dubuque County and Kimley Horn, 2025.

Northwest Illinois Traffic Safety Action Plan

The Northwest Illinois Traffic Safety Action Plan used a crash data–driven analysis to identify high-priority crash locations throughout the region. Crash data from 2013 through 2022 were analyzed to develop a statistical summary of both regional crash trends and location-specific safety issues. During this 10-year period, a total of 5,273 crashes occurred in Jo Daviess County, including 33 fatalities and 257 incapacitating injuries. Of these crashes, 323 occurred within the City of East Dubuque, resulting in five fatalities and 14 incapacitating injuries.

Crash data were further analyzed to identify the highest-crash locations across the region. Crash frequency and injury severity were summarized by location, and potential countermeasures were identified for each site. The plan identifies the top ten crash locations in each county, categorized by roadway jurisdiction (state, county, and local). Several locations within the DMATS planning area were included among the top crash locations identified for Jo Daviess County.

Jo Daviess County top crash locations are listed in Table 10. DMATS area locations are highlighted yellow. It should be noted that the Illinois Department of Transportation has recently completed a safety improvement project at the top two locations on the list, the intersections

of U.S. Highway 20 with Frentress Lake Road and Barge Terminal Road. This project included the addition of acceleration and deceleration lanes in both directions along U.S. Highway 20, addressing safety concerns identified through the planning process.

Table 10. Jo Daviess County Top Crash Locations

	Lat	Long	Top Locations	Potential Countermeasure(s)	Total Collisions	K+A Collisions	HIN
State	42.47183	-90.6073	US-20 & Frentress Lake Rd	Crossing Divided Highways	19	5	Yes
	42.4672	-90.5939	US-20 & Barge Terminal Rd	Crossing Divided Highways	9	5	Yes
	42.49182	-90.6432	US-20 On Ramp (JD Bridge)	Signage, Merge Lane Design	26	3	Yes
	42.46463	-90.5822	US-20 & Dunn Rd	Crossing Divided Highways	24	3	Yes
	42.48198	-90.6291	US-20 & Hilltop Rd	Crossing Divided Highways	20	3	Yes
	42.38317	-90.3721	US-20 & Glen Hollow Rd	Signage	18	3	0
	42.44048	-90.4541	US-20	Roadway Departure Solution	9	3	Yes
	42.31955	-90.256	US-20 & Lone St / Longhollow Rd	Signage	9	3	0
	42.21256	-90.259	IL-84	Roadway Departure Solution	3	3	Yes
	42.44645	-90.4549	IL-84 & Norris Ln	Signage	40	2	0
County	42.46797	-90.2531	Co Hwy 3 (Stagecoach Trail) & Co Hwy 4 (Elizabeth Scales Mound Rd)	Roundabout, Signage	12	6	0
	42.49613	-90.0803	Co Hwy 3 (Stagecoach Trail) & Hayes Rd	Signage	8	3	Yes
	42.46375	-90.2734	Co Hwy 1 (Council Hill Rd) & Co Hwy 3 (Stagecoach Trail)	Signage	6	2	Yes
	42.42288	-90.386	Co Hwy 3 (Stagecoach Trail)	Roadway Departure Solution	9	1	Yes
	42.42546	-90.3659	Co Hwy 3 (Stagecoach Trail) & Guilford Rd	Signage	8	1	Yes
	42.31272	-90.2378	Co Hwy 4 (Elizabeth Hanover Rd) & Betsy Dr	Signage	6	1	0
	42.42218	-90.3958	Co Hwy 3 (Stagecoach Trail)	Roadway Departure Solution	6	1	Yes
	42.49962	-90.163	Co Hwy 3 (Stagecoach Trail) & Roberts Rd	Roadway Departure Solution	5	1	Yes
	42.43117	-90.4234	Co Hwy 2 (Council Hill Rd) & Buckhill Rd	Roadway Departure Solution	5	1	Yes
	42.44589	-90.2952	Co Hwy 3 (Stagecoach Trails)	Roadway Departure Solution, Enhanced Delineation	5	1	Yes
Local	42.49895	-89.9867	Cole St & North Ave	Signage	5	2	Yes
	42.32269	-90.3753	Blackjack Rd	Roadway Departure Solution	2	2	Yes
	42.4184	-90.4249	Broadway St & Meeker St	Signage	32	1	Yes
	42.41541	-90.4298	Main St	Signage	8	1	Yes
	42.33442	-90.3891	Blackjack Rd	Enhanced Delineation for Horizonal Curves	5	1	Yes
	42.46346	-90.5386	Imbus Rd	Signage, Roadway Departure Solution	5	1	0
	42.29237	-90.3313	Blackjack Rd	Roadway Departure Solution	5	1	Yes
	42.35041	-90.3964	Blackjack Rd	Roadway Departure Solution	4	1	Yes
	42.36203	-90.3491	Devils Ladder Rd & Hoof It Goat Treks Driveway	Signage	4	1	0
	42.42081	-90.4109	Field St	Roadway Departure Solution	3	1	Yes

Source: Northwest Illinois Traffic Safety Action Plan, Blackhawk Hills Regional Council and Kaskaskia Engineering, 2025, p107.

DMATS Transportation Safety Efforts

DMATS has implemented a range of transportation safety initiatives to address the key findings identified above. These efforts include establishing a Multi-Disciplinary Safety Team (MDST) to coordinate regional safety activities, adopting safety goals, and supporting strategies to guide transportation safety investments, improving safety at signalized intersections through the STREETS project, and installing roundabouts to reduce crashes at unsignalized intersections. The following sections describe these safety efforts in greater detail.

Dubuque Multi-Disciplinary Safety Team

Collaboration is critical to the implementation of a safe and efficient transportation system. With limited time, funding, and personnel, public safety agencies must work together to avoid duplication of efforts and ensure that response strategies have the greatest possible impact

on regional transportation safety challenges. In 2002, public safety agencies in Dubuque County came together to form the Multi-Disciplinary Safety Team (MDST).

Since its formation, the MDST has implemented a range of coordinated strategies aimed at improving transportation safety within the DMATS planning area. The goal of the Dubuque County MDST is to collaborate and cooperate across agencies to enhance safety outcomes throughout the region.

Roundabouts

DMATS and its member agencies are installing roundabouts on regional and municipal roadway systems to improve transportation safety. Roundabouts are a proven safety countermeasure that can substantially reduce crashes resulting in serious injuries or fatalities. Traffic safety research has shown that roundabouts improve safety by promoting lower vehicle speeds and traffic calming, reducing conflict points, improving operational performance, and accommodating a wide range of traffic volumes due to their flexibility in size, shape, and design.

Several roundabouts have been constructed within the DMATS planning area, with additional installations planned by multiple jurisdictions. Table 11 lists the existing and planned roundabouts in the DMATS area by jurisdiction.

Table 11. DMATS Area Roundabouts

Existing Roundabouts	
Jurisdiction	Location
City of Dubuque	Grandview Ave and Delhi St
City of Dubuque	Grandview Ave and University
City of Dubuque	Kerper Blvd and Kerper Ct
City of Peosta	Peosta St and NICC Dr
Iowa DOT	Southwest Arterial and Chesterfield Dr
Planned Roundabouts	
Jurisdiction	Location
City of Asbury	Asbury Rd and Hales Mill Rd
City of Dubuque	16th St and Sycamore
City of Dubuque	16th St and Greyhound Park/Admiral Sheehy Dr
City of Dubuque	Asbury Rd and University Ave
City of Dubuque	University Ave and Pennsylvania Ave
City of Dubuque	University Ave and Loras Blvd
City of Dubuque	University Ave and Delhi St

STREETS Project

DMATS and the City of Dubuque have partnered to develop a next-generation integrated traffic signal system that incorporates real-time data collection and rapid simulation of future traffic conditions. Once fully implemented, the Smart Traffic Rerouting with Efficient and Effective Traffic Systems (STREETS) project will communicate modeled route changes to road users both before they begin a trip and while en route, helping to balance traffic demand, reduce congestion, and improve system efficiency.

The system's ability to dynamically reroute traffic during incidents is expected to enhance roadway safety by reducing traffic delays, minimizing driver confusion, and lowering the risk

of secondary crashes. Additional information on the STREETS project is provided in the Roads and Bridges chapter.

DMATS Safety Projects

DMATS and its members have identified several projects, strategies, and policies that will help the area improve transportation safety by reducing crashes and resulting roadway fatalities and serious injuries. DMATS uses the projects listed in this section to directly inform the project identification and investment priorities described in the Projects and Project Prioritization chapter of this plan.

Construction Projects

The *East Central Iowa Transportation Safety* Plan highlighted several key construction projects that will help improve transportation safety. projects are intended to be implemented over the next five to ten years. Table 12 includes a list of these projects.

In addition to the projects listed in the table, the plan also includes a full list of site-specific countermeasure recommendations that were developed based on data-driven analysis and input from local officials and residents. These smaller, lower-cost projects undertaken by individual communities. These projects will be an important part of the overall strategy and will collectively contribute to achieving the region's safety goals. A full list of site-specific countermeasure recommendations can be found in the *East Central Iowa Transportation Safety Plan.*

Table 12. East Central Iowa Transportation Safety Plan Projects

City	Project Agencies	Project Name	Project Type
Asbury	City of Asbury, DMATS	Asbury Road at Hales Mill Road Roundabout Project	Intersection Improvement
Dubuque	City of Dubuque, DMATS	Building Bridges to Elevate Employment (B2E2) Project	Corridor Improvement
Dubuque	Iowa DOT, City of Dubuque, DMATS	US Highway 20 and Northwest Arterial Intersection Project	Intersection Improvement
Dubuque	City of Dubuque, DMATS	SRTEETS Project	ITS
Dubuque	City of Dubuque, DMATS	SMART Project	ITS
Dubuque	City of Dubuque, DMATS	Central Ave & White St Project	Corridor Improvement
Dubuque	City of Dubuque, DMATS	East-West Corridor Project	Corridor Improvement
Peosta	Iowa DOT, City of Peosta, DMATS	U.S. Highway 20 Corridor from Sundown Rd to Swiss Valley Rd	Corridor Improvement

Source: East Central Iowa Transportation Safety Plan, ECIA and InTrans, 2025.

The *Dubuque County Safety Action Plan* developed a list list of recommended projects for paved roadway segments, intersections, and curves. Figure 8 maps the recommended project locations and Table 13 includes the plan's engineering countermeasure cost summary. Full

details on these projects, including full cost sheets, can be found in the *Dubuque County Safety Action Plan.*

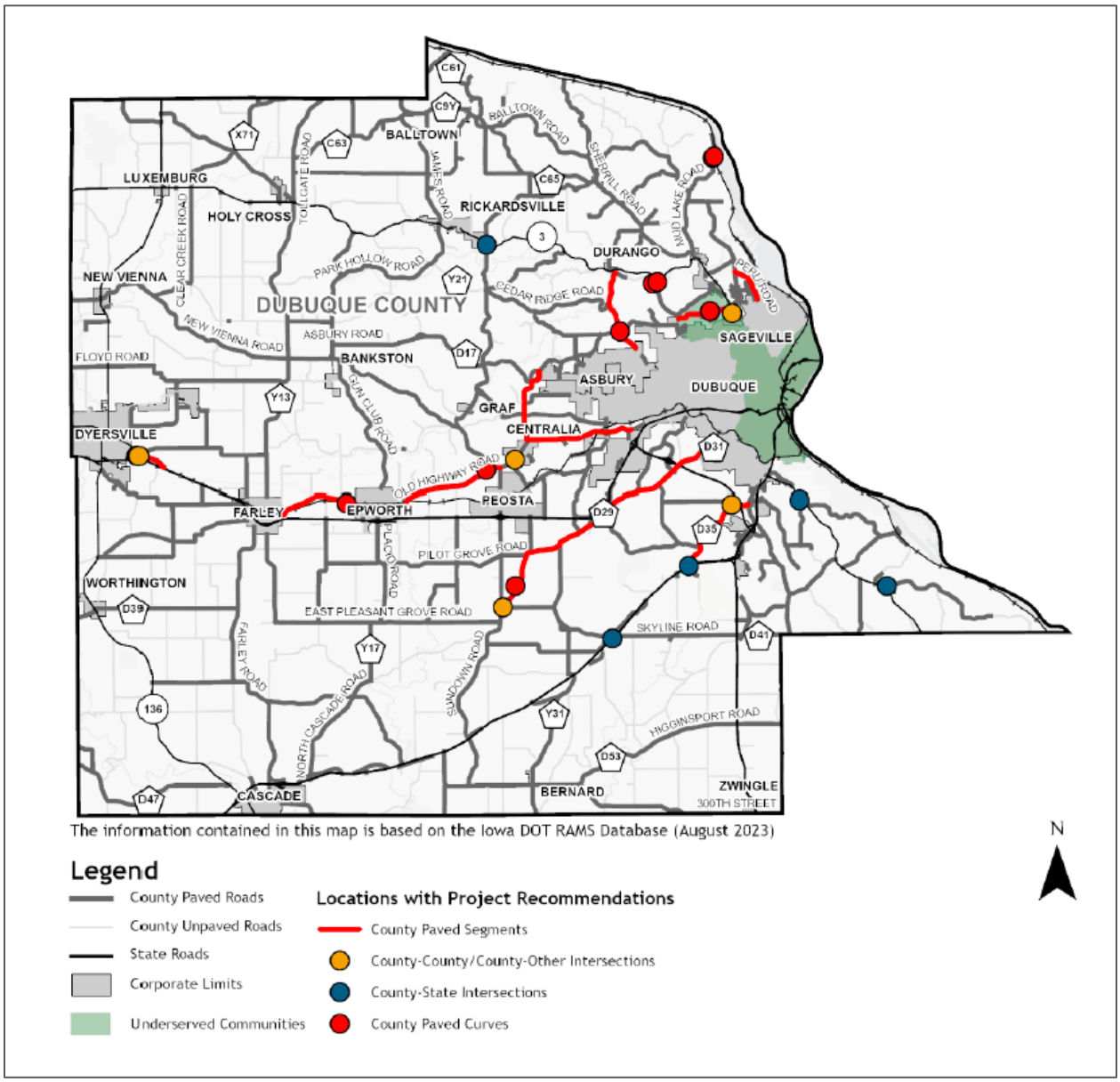


Figure 8: Dubuque County Prioritized Project Locations
Source: Dubuque County Safety Action Plan, Dubuque County and Kimley Horn, 2025.

Table 13. Dubuque County Engineering Project Cost Summary

Facility Type	Number of Locations	Estimated Project Cost
Segment	10	$3,025,000
Intersection	10	$1,202,000
Curve	11	$425,000
Total Improvement Costs	31	$4,652,000

Source: Dubuque County Safety Action Plan, Dubuque County and Kimley Horn, 2025.

Safety Strategies and Policies

In addition to addressing transportation safety through capital improvement projects, DMATS will examine, evaluate, and implement applicable regional strategies identified in state Strategic Highway Safety Plans (SHSP). SHSPs establish highway safety priorities and address critical safety issues monitored by state departments of transportation. DMATS will also support transportation system goals identified in these plans through appropriate policies, programs, and investments.

The Iowa, Illinois, and Wisconsin SHSPs will be considered in the development of the LRTP; however, the Iowa SHSP will serve as the primary reference, as the majority of the DMATS planning area population is located in Iowa.

In coordination with regional partners, DMATS will work to implement safety strategies with the greatest potential to reduce fatalities, serious injuries area roadways. These strategies are organized under the Five Es of Transportation Safety: Education, Engineering, Enforcement, Emergency Response, and Everyone.

Education

- Conduct targeted education campaigns addressing key traffic safety issues, including speeding, red-light running, distracted driving, impaired driving, bicycle and pedestrian awareness, seat belt and helmet use, speed management, alternative intersection designs, traffic signals, and traffic laws.
- Promote public understanding of new roadway designs and safety countermeasures implemented within the region.

Engineering

- Implement countermeasures at access locations to reduce wrong way driving on multi-lane divided highways.
- Evaluate high-speed-related corridors for speed reduction countermeasures and implement geometric design strategies to reduce speeds.
- Implement speed feedback signs at targeted locations.
- Evaluate high-lane departure crash corridors for two-lane highways and deploy Road Safety Audit (RSA) teams to evaluate.
- Evaluate high-friction surface treatments at targeted locations on the primary and local systems.
- Implement countermeasures to reduce lane departure crashes on rural two-lane highways on the primary and local systems (edge line rumble strips, shoulder rumble strips, wider edge lines, Safety Edge, wider shoulders).
- Implement countermeasures to reduce lane departures in curves (retroreflective sign posts, upgraded signage, enhanced delineation, roadside design improvements)
- Initiate median cable barrier installations on multi-lane divided highways.
- Systemic application of multiple low-cost countermeasures at stop-controlled intersections.
- Implement roundabouts and other alternative intersection designs that reduce conflict points and enhance safety and mobility.
- Install traffic cameras at major intersections to help with law enforcement and criminal investigations.

- Implement ITS that can aid in incident management, e.g., display boards that warn drivers of an incident, and can help route traffic away from the area.
- Implement safety countermeasures that provide safe walking and biking routes to schools, parks, and other locations frequently used by children.

Enforcement

- Conduct highly publicized enforcement campaigns focused on restraint use.
- Supporting training for new Drug Recognition Expert (DRE) and Advanced Roadside Impaired Driving Enforcement (ARIDE) officers.
- Enhance detection through special OWI patrols and related traffic enforcement.
- Support high visibility enforcement campaigns for hands- free cell phone law.
- Identify corridors with a high frequency of speed-related crashes (safety corridors) and implement high visibility enforcement.
- Conduct high visibility enforcement campaigns related to driver awareness of bicycles and pedestrians at targeted intersections.

Emergency Response

- Support coordinated incident response to reduce roadway clearance times and the risk of secondary crashes.
- Ensure that roadways and bridges remain passable during emergency events.
- Encourage transit agencies to review security measures and conduct emergency exercises using Federal Transit Administration (FTA) and Iowa Public Transit Association (IPTA) guidance.
- Coordinate with the Multi-Disciplinary Safety Team (MDST) and county emergency medical services on security, emergency preparedness, and hazard mitigation planning.
- Review and coordinate regional evacuation plans, with a focus on transit security plans and clarity of roles and responsibilities.
- Work with state DOT rail divisions on planning and project development activities related to rail safety, including rail grade separation projects at targeted locations.

Everyone

- Buckle up every trip, every time.
- Avoid impaired driving by designating a driver, calling a cab, or using a transportation network company.
- Eliminate distractions by putting cell phones away and remaining alert and focused on the roadway.
- Approach intersections with caution and become familiar with new intersection designs in the community.
- Allow sufficient travel time, practice patience, reduce speed, and avoid engaging with aggressive drivers.
- Maintain control of the vehicle and avoid sudden overcorrections or swerving for objects or animals in the roadway.