

# Priority Safety Projects



A data-driven project identification and prioritization process was used to identify proposed safety improvements along the High Priority Network, drawing on the tools summarized in the Safety Countermeasures Toolbox.

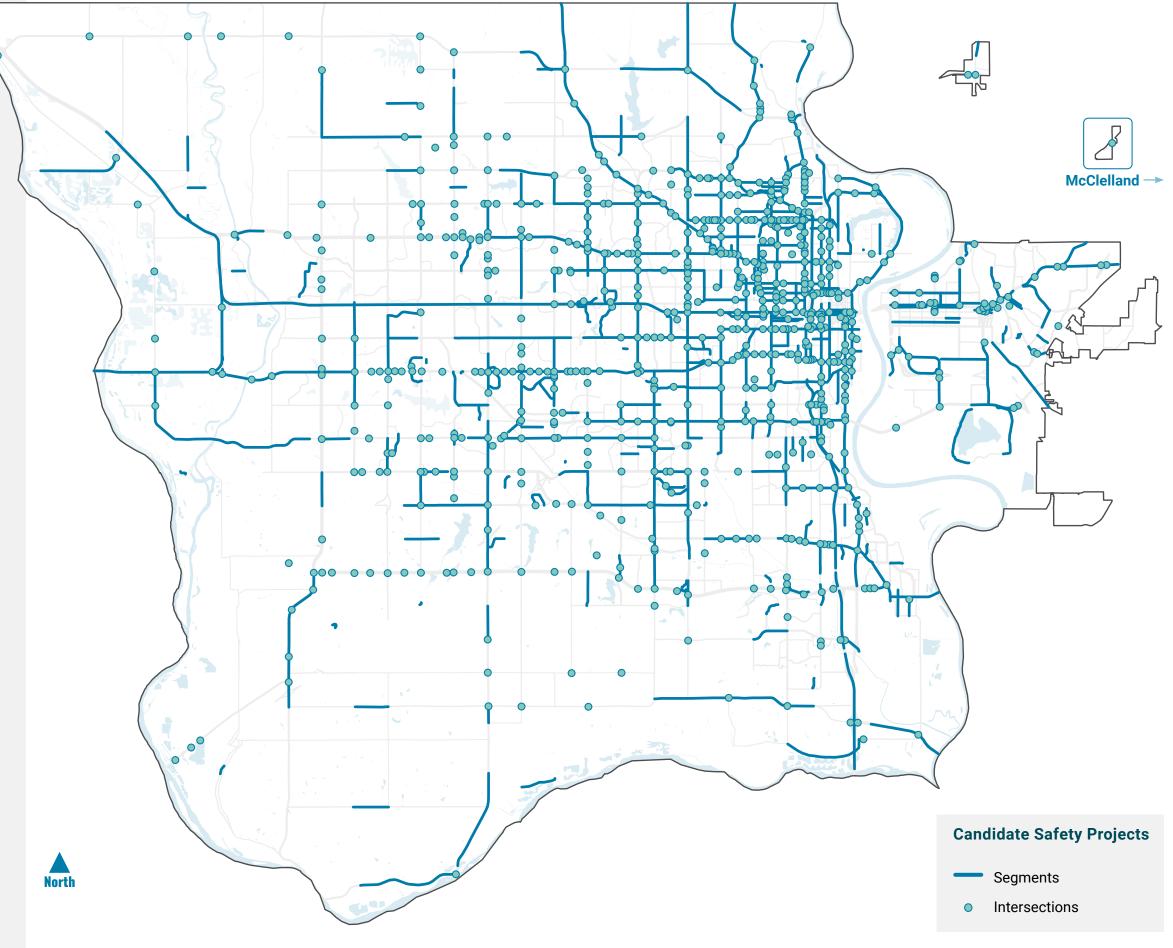
In total, improvements at 597 intersections and along 451 miles of roadway segments have been identified as potential Candidate Safety Projects.

These Candidate Safety Projects are intended to provide a broad menu of options that communities may draw from when prioritizing street improvements or when identifying strong candidates for safety-related grant funding opportunities.

The following pages outline the project identification and prioritization process and results, including maps of the prioritized projects.

It should be noted that the scope and proposed recommendations of each project should not be taken as conclusive, but rather a starting place for further study when moving towards implementation.





# PROJECT IDENTIFICATION

THE PROJECT IDENTIFICATION PROCESS INCLUDED A HIGH-LEVEL REVIEW OF ALL HIGH PRIORITY NETWORK **ROADWAY SEGMENTS AND INTERSECTIONS TO IDENTIFY** POTENTIAL SAFETY COUNTERMEASURES THAT COULD AD-DRESS THE SPECIFIC SAFETY NEEDS AND RISK FACTORS AT EACH LOCATION.

Proposed countermeasures were linked to each project through a high-level planning analysis. Each proposed segment and intersection improvement location was assigned one of the project types listed in the tables at right. These project types draw from the Vision Zero Toolbox in Chapter 4, with the specific countermeasures being grouped into broader project types appropriate for the generalized planning-level nature of this project identification process. Throughout this process, the 2018-2022 crash history was referenced to gain a general understanding of crash patterns at each potential project location and to determine which project types would likely be most effective at mitigating those crash patterns.

#### Note:

Some of the priority projects extend beyond the specific bounds of the High Priority Network (HPN) and some HPN segments and intersections are not covered by recommended priority projects. The typical reasons for recommending projects that extend outside of the HPN include:

- ▶ To achieve logical project termini
- ▶ To address HPN intersections where the crash history and/or risk factors could logically be mitigated by a segment-level project that extends across/beyond the intersection.
- ▶ To address a significant grouping of crashes that lay just beyond the extents of an HPN segment or intersection.

The typical reasons for not recommending projects along an HPN segment or at an HPN intersection include:

- Recently completed or planned improvements are likely to have mitigated historical crash patterns or risk factors
- ▶ The crash history or risk factors at a HPN intersection would be mitigated by a proposed overlapping segment project (or vice versa)
- ▶ There is no clear potential for crash mitigation or prevention through physical design countermeasures
- ▶ The planning-level benefit-to-cost ratios for a proposed project at the location would not exceed target thresholds to be considered a priority (see the "Project Prioritization" section that follows)

#### **Segment Project Types**

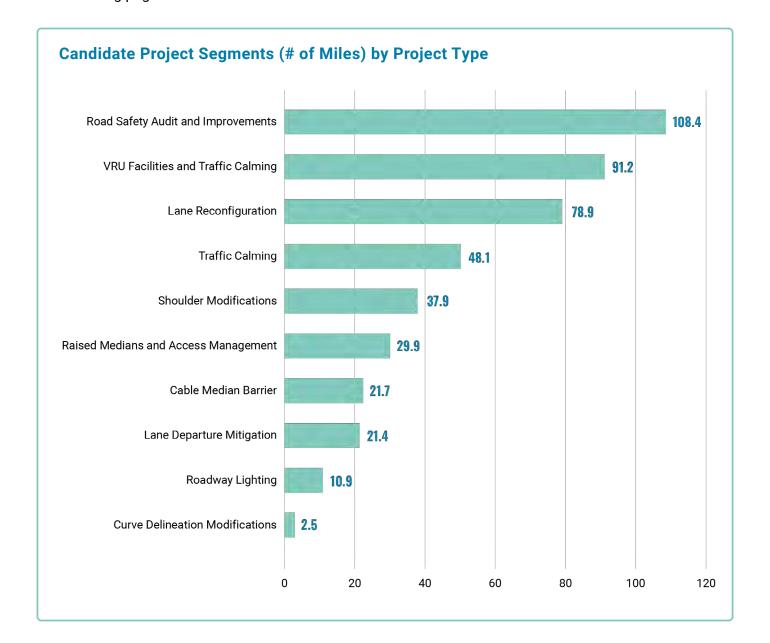
	Lane Reconfiguration	Raised Medians & Access Management	VRU Facilities and Traffic Calming	Traffic Calming	Shoulder Modifications	Lane Departure Mitigation	Curve Delieation Modifications	Cable Median Barrier	Roadway Lighting	Road Safety Audit & Improvements
Crash Reduction Factor	29%	39%	32%	32%	25%	15%	28%	38%	20%	25%
Constr. Cost (Per Mile)	\$650,000	\$1,500,000	\$500,000	\$70,000	\$250,000	\$85,000	\$300,000	\$1,500,000	\$300,000	\$1,500,000
Primary Countermeasures*		41				THE				?
Typical Secondary Countermeasures*									-	?
Generalized Project Type (and Symbol for Maps)	Lane Reconfiguration	Raised Medians & Access Management	Traffic (	Calming			Roadway Lighting	RSA & Improvements		

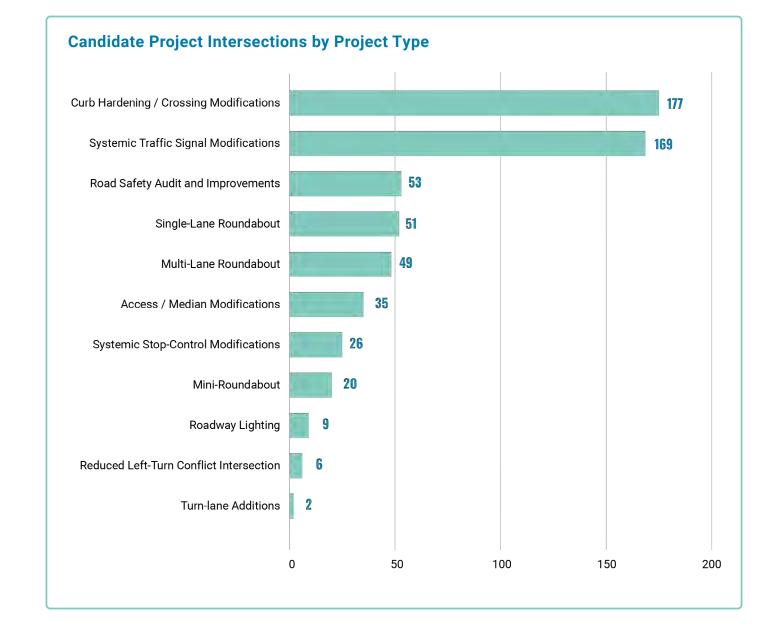
# **Intersection Project Types**

	Mini Round-About	Single-Lane Round-About	Multi-Lane Round-About	Systemic Traffic Signal Modifications	*Curb Hardening / Crossing Modifications	Access / Median Modifications	RCUT or MUT	All-Way Stop Conversion	Systemic Stop- Control Modifica- tions	Turn Lane Additions	Roadway Lighting	Road Safety Audit & Improvements
Crash Reduction Factor	67%	67%	67%	15%	32%	22%	35%	48%	40%	44%	20%	25%
Constr. Cost (Per Intersection)	\$500k	\$1.5 M (urban) \$4 M (rural)	\$2.5 M	\$50k	\$44k	\$150k	\$2 M	\$5.5k	\$30k	\$350k	\$30k	\$1 M
Primary Countermeasures*				Frank Page				STOP		1 1		?
Typical Secondary Countermeasures*	**				***************************************	*					-	?
Generalized Project Type (and Symbol for Maps)		Roundabout		Systemic Traffic Signal Modifications	Curb Hardening/ Crossing Modifications	Access / Media	an Modification	Stop Control	Modifications	ı	RSA & Improvements	S

- \* Planning level cost estimates and crash reduction factors for each project type are based on its Primary Countermeasures. The Typical Secondary Countermeasures represent other potential additional countermeasures that may commonly be included within each project type.
- \*\* "Curb hardening" refers to geometric changes to an intersection to reduce the overall footprint of the intersection, slow turning speeds, improve sightlines, and reduce pedestrian exposure. For example, this could include adding curb extensions at the corners, reducing curb radii, or extending a median nose to create a pedestrian refuge in the crosswalk.

The candidate safety projects include a wide range of the different project types as shown in the maps on the following pages and the charts below.





# Notes:

(1) For purposes of map readability and accessibility, the maps on the following pages consolidate some of the above project types into more general categories and also do not display intersection project candidates

that are located along segment projects (except for roundabouts).

(2) Scan this QR code or click the link below to view an online map where you can click on each project location to see more details.

 $\underline{https://experience.arcgis.com/experience/e67969be84dc4853abc51fbacdce685e}$ 

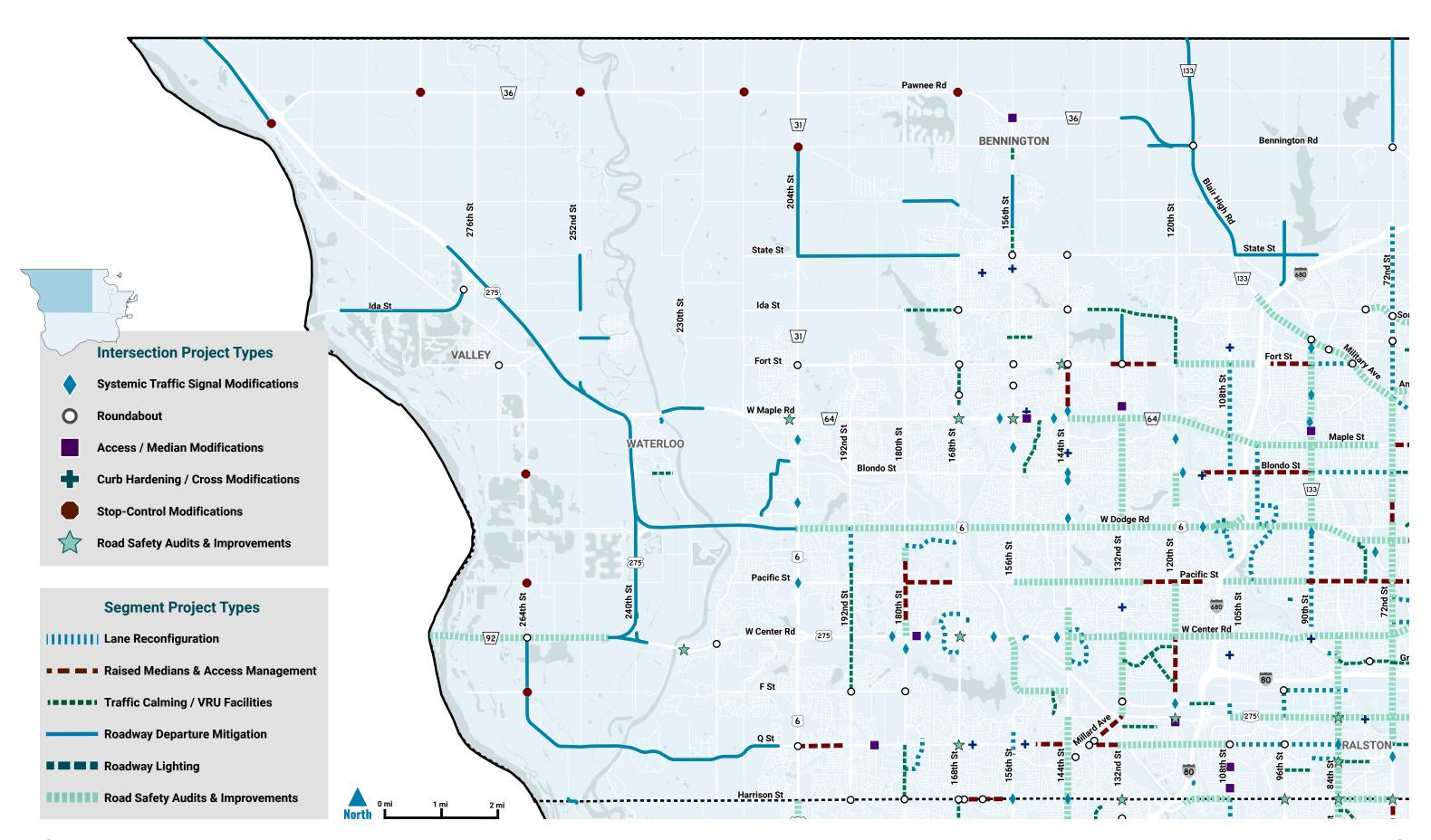


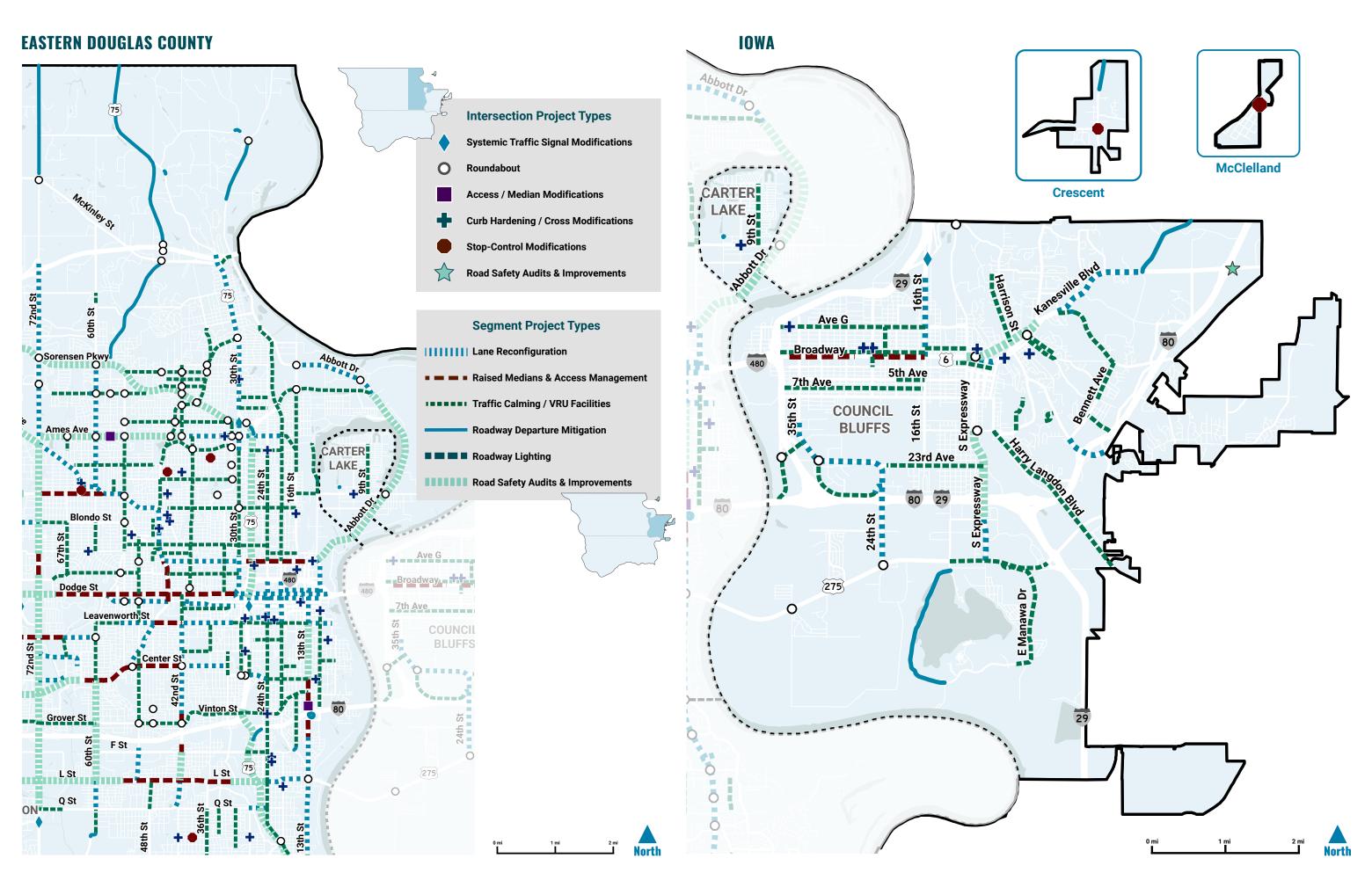


83 05 PRIORITY SAFETY PROJECTS

Comprehensive Safety Action Plan 84

# **WESTERN DOUGLAS COUNTY**





# **SARPY COUNTY** 0 50/ Giles St ₩ Cornhusker Rd -----Lincoln Rd **GRETNA** 370/ BELLEVUE West Angus Rd Capehart Rd Fairview Rd Platteview Rd OPlatteview Rd Platteview Rd **SPRINGFIELD** 134 **6** Pflug Rd **Intersection Project Types Segment Project Types Systemic Traffic Signal Modifications** Lane Reconfiguration Roundabout Raised Medians & Access Management **Access / Median Modifications** Traffic Calming / VRU Facilities **Curb Hardening / Cross Modifications Roadway Departure Mitigation**

**Stop-Control Modifications** 

**Road Safety Audits & Improvements** 

■ Roadway Lighting

Road Safety Audits & Improvements

# PROJECT PRIORITIZATION

A safety benefit-to-cost ratio (BCR) was calculated for each project using three different benefit-to-cost analysis (BCA) methods, based on guidance for:

- ▶ USDOT's Discretionary Grants
- ▶ NDOT's Highway Safety Improvement Program (HSIP)
- ▶ IDOT's Safety Programs

All three of the BCA methods use planning-level cost estimates of each project (based on their project type) and a projection of the project's 20-year crash reduction benefit. The table below outlines the different assumptions used in calculating the BCRs for CSAP projects using the three different benefit-to-cost analysis methods.

Specific target level BCRs were used to ensure that the list of Candidate Safety Projects only includes projects that are likely to be eligible candidates for federal and state funding opportunities. In order to be considered a Candidate Safety Project, an identified project candidate in Nebraska needed to have a USDOT-method BCR exceeding 2.0 or an NDOT-method BCR exceeding 5.0. Project candidates in Iowa needed to have a USDOTmethod BCR exceeding 2.0 or an IDOT-method BCR exceeding 1.0.



# **PRIORITIZATION RESULTS**

The maps on the following pages show the relative benefit-to-cost ratios of the Candidate Safety Projects using each benefit-to-cost analysis method. Overall, the prioritization results show a widespread distribution of strong candidates for federal and state safety program funding across the MAPA region. Projects with a safety benefit-to-cost ratio exceeding 1.0 were identified in all jurisdictions\*, with the highest concentration of Candidate Safety Projects occurring within older, more urbanized areas of the region (e.g., Omaha east of 72nd Street and Council Bluffs).

\* Boys Town is the only exception. All streets within Boy Town are privately-owned, generally low-speed (25 mph or less) streets with roundabouts at key intersections, and no project candidates that would exceed target benefit-to-cost ratios were identified within Boys Town. However, projects that border Boys Town were identified.

# **Benefit-to-Cost Analysis Assumptions**

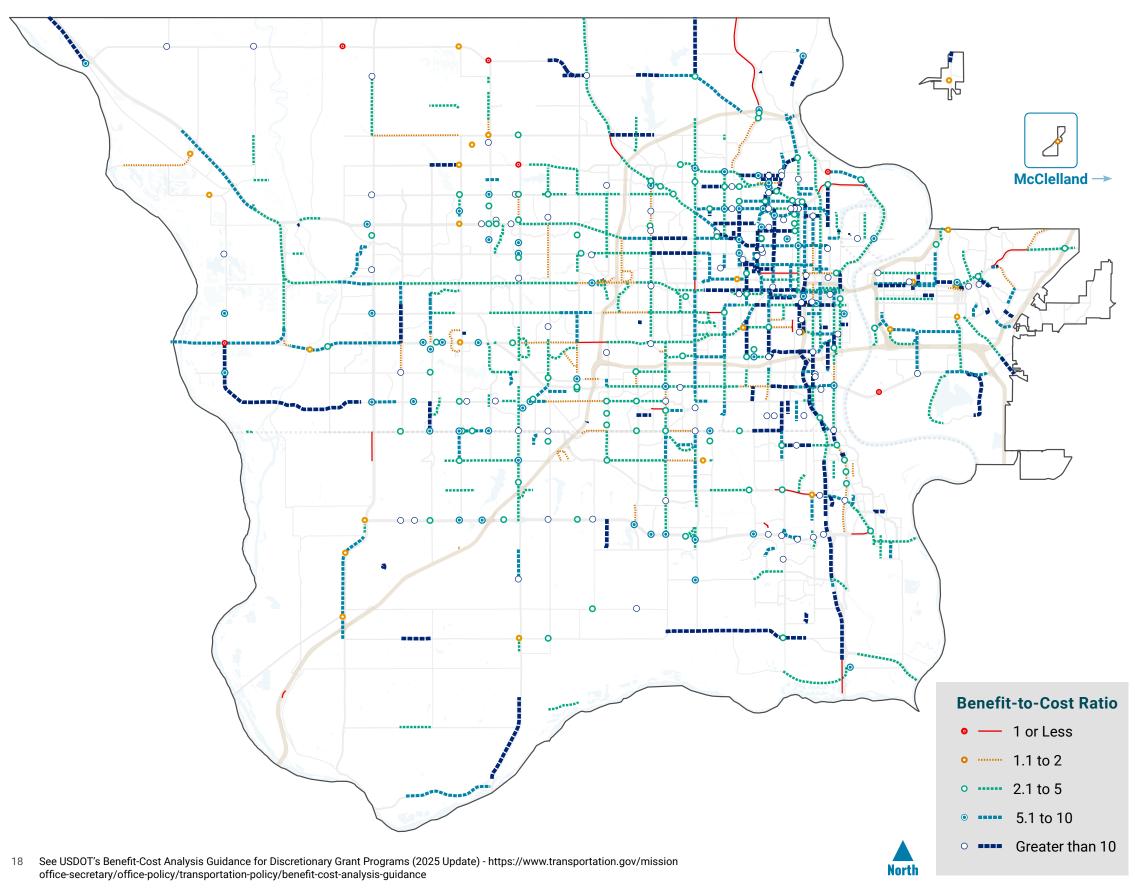
		USDOT Discretionary Grants BCA Method	NDOT HSIP BCA Method	IDOT Safety Programs BCA Method		
	Urban intersection crash assignment	All crashes within 250 ft of intersection	Crashes within 0.05 mi (264 ft) of intersection AND flagged as "Intersection" or "Intersection Related"	All crashes within 250 ft of intersection		
tions	Rural intersection crash assignment	All crashes within 250 ft of intersection	Crashes within 0.1 mi (528 ft) of intersection AND flagged as "Intersection" or "Intersection Related"	All crashes within 250 ft of intersection		
Calcula	Segment crash assignment		Crashes located along and within 50 ft of segment (roadway co to an intersection or interchange project location are assigned			
Benefits Calculations	Crash reduction benefit (crash societal cost) calculation	Use the societal costs per person by their KABCO injury severity (and per vehicle for property damage) as recommended by "USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs" (2025 Update) <sup>16</sup>	Use NDOT's standard societal costs for each crash type and context (urban/rural) based on the severity levels of all statewide crashes of that type and context <sup>17</sup>	Use IDOT's standard societal costs based on the <b>crash severity</b> (KABCO scale)		
	Crash history included	All reported crashes (all sever	ity levels) from 2018-2022 in the	MAPA CSAP Study Area		
Cost Calculations	Cost	Total upfront project cost (design, construction, CE, etc.) + Replacement costs if service life is less than 20 years + Projected annual maintenance costs over 20 years (assume 2% of construction cost annually)	Construction cost + Replacement costs if service life is less than 20 years	Construction cost + Replacement costs if service life is less than 20 years + Projected annual maintenance costs over 20 years (assume 2% of construction cost annually)		
Cost Ca	Service Life (for calculating replacement costs)	No detailed guidance - used IDOT's recommended service life assumptions as they are generally more conservative than NDOT's	Used the service life column from NDOT's Crash Modification Factors table For countermeasures not listed in the NDOT table, used service life of countermeasures with similar scope	Used the "Service Life" sheet in IDOT's TSIP Benefit-Cost Worksheet For countermeasures not listed in the worksheet, used service life of countermeasures with similar scope		

https://www.transportation.gov/mission/office-secretary/office-policy/transportation-policy/benefit-cost-analysis-guidance

https://dot.nebraska.gov/media/vpsgcssy/societal-cost-2023.pdf

# **CANDIDATE SAFETY PROJECT BENEFIT-TO-COST RATIO**

Using USDOT Discretionary Grants BCA Method<sup>18</sup>



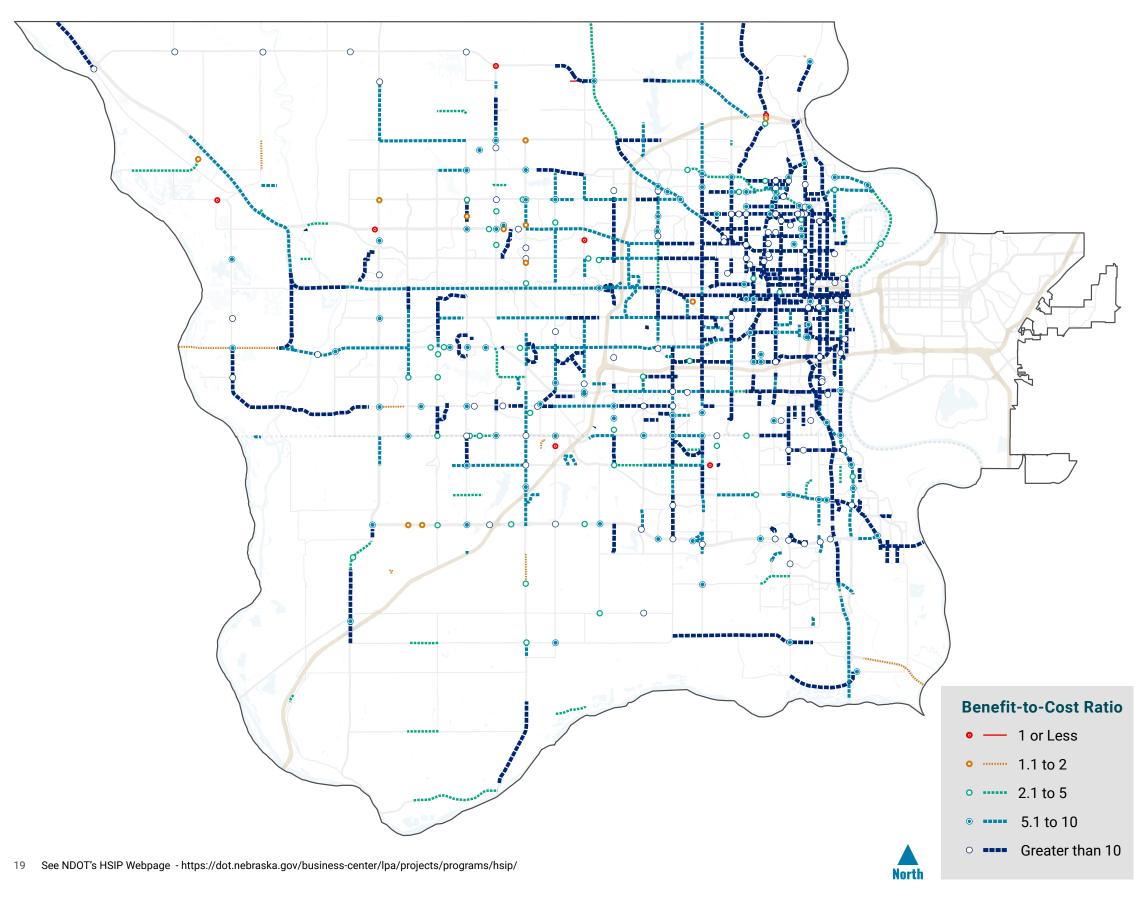
# **Summary by Jurisdiction**

Jurisdiction	Project Count	Lives Saved	Serious Injuries	Benefit- Cost
	Count	Javea	Avoided	Ratio
Omaha	697	157.2	1,463.9	6.21
Ralston	5	-	6.6	3.39
Valley	2	1.5	7.2	5.95
Bennington	1	-	-	2.13
Waterloo	2	-	2.4	6.51
Boys Town	-	-	-	n/a
Unincorporated Douglas County	64	38.1	107.1	6.74
*Ralston & Omaha	6	0.6	9.6	5.01
All Douglas County Total	777	197	1,597	6.23
Bellevue	61	61	128.8	7.48
Papillion	19	19	32.7	4.41
La Vista	11	11	14.7	3.78
Gretna	9	9	14.8	4.24
Springfield	1	1	-	2.49
Unincorporated Sarpy County	44	44	106.3	6.92
*La Vista & Papillion	2	2	1.0	2.14
*Papillion & Springfield	1	1	-	16.92
All Sarpy County Total	148	53	298	6.24
*Bellevue & Omaha	3	2.7	12.8	12.20
*La Vista & Omaha	6	2.0	6.0	4.31
*Omaha & Unincorporated Sarpy County	10	7.4	33.2	6.73
*Unincorporated Douglas County & Unincorporated Sarpy County	1	-	1.1	4.59
*Douglas/Sarpy Multi- Jurisdictional Total	20	12	53	6.60
Nebraska Jurisdictions Total	945	263	1,948	6.24
Council Bluffs	77	9.8	99.8	5.30
Carter Lake	3	-	5.0	6.51
Crescent	2	0.6	0.6	14.33
McClelland	1	-	-	0.83
Iowa Jurisdictions Total	83	10	105	5.35
All Region Total	1,028	273	2,053	6.19

<sup>\*</sup> Multi-jurisdictional projects

# **CANDIDATE SAFETY PROJECT BENEFIT-TO-COST RATIO**

Using NDOT HSIP BCA Method19



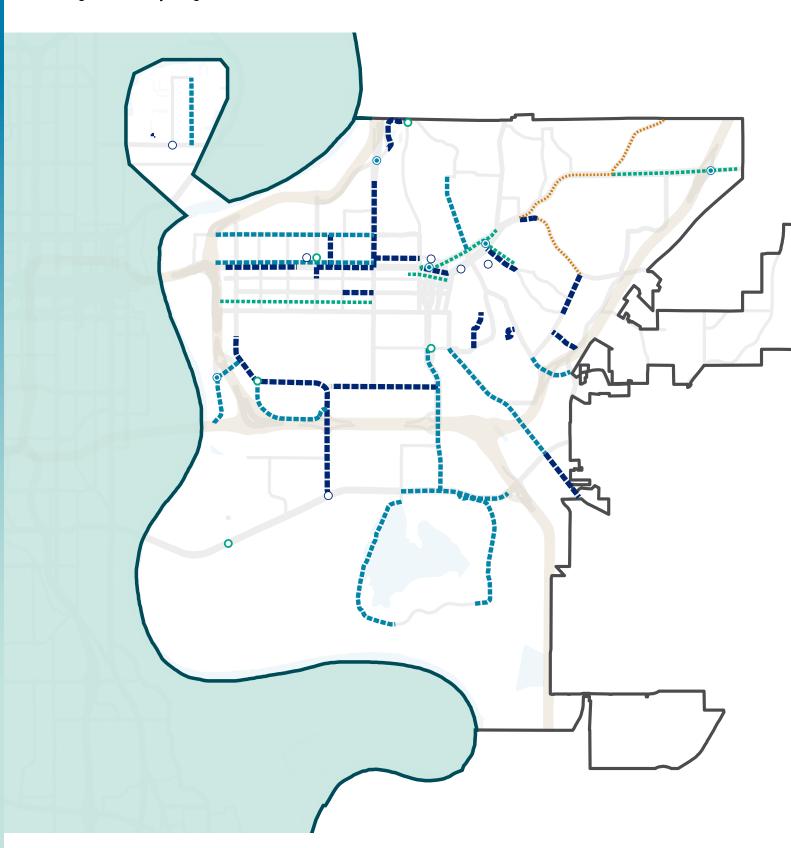
# **Summary by Jurisdiction**

Jurisdiction	Project Count	Lives Saved	Serious Injuries Avoided	Benefit- Cost Ratio
Omaha	697	150.4	1,447.1	12.20
Ralston	5	-	6.6	9.47
Valley	2	1.5	7.2	8.74
Bennington	1	-	-	5.67
Waterloo	2	-	2.4	6.17
Boys Town	-	-	-	n/a
Unincorporated Douglas County	64	39.8	107.8	8.14
*Ralston & Omaha	6	-	4.6	9.03
All Douglas County Total	777	192	1,576	11.81
Bellevue	61	24.5	126.0	10.51
Papillion	19	2.0	33.6	8.61
La Vista	11	-	14.7	10.18
Gretna	9	4.4	14.8	7.23
Springfield	1	-	-	7.56
Unincorporated Sarpy County	44	21.4	106.5	7.26
*Papillion & Springfield	2	-	1.0	6.44
*La Vista & Papillion	1	0.6	-	3.26
All Sarpy County Total	148	53	297	8.83
*Bellevue & Omaha	3	2.7	12.8	14.33
*La Vista & Omaha	6	2.0	6.0	7.31
*Omaha & Unincorporated Sarpy County	10	7.4	30.8	6.45
*Unincorporated Douglas County & Unincorporated Sarpy County	1	-	1.1	9.00
*Douglas/Sarpy Multi- Jurisdictional Total	20	12	51	7.58
Nebraska Jurisdictions Total	945	257	1,923	11.19

<sup>\*</sup> Multi-jurisdictional projects



Using IDOT Safety Programs BCA Method <sup>20</sup>





Crescent



**McClelland** 

# **Benefit-to-Cost Ratio**

- — 1 or Less
- 1.1 to 2
- o ..... 2.1 to 5

North

- 5.1 to 10
- ■■■ Greater than 10



# **Summary by Jurisdiction**

Jurisdiction	Project Count	Lives Saved	Serious Injuries Avoided	Benefit-Cost Ratio
Council Bluffs	77	9.8	99.8	8.89
Carter Lake	3	-	5.0	17.55
Crescent	2	0.6	0.6	8.03
McClelland	1	-	-	1.50
lowa Jurisdictions Total	83	10	105	8.97

20 See IDOT's Safety Analysis Guide - https://iowadot.gov/traffic/documents/2021-12-20-Draft-SAG-V5.pdf

# **COMMUNITY PRIORITY PROJECTS**

The project prioritization process yielded over 1,000 intersection and segment projects that could be good candidates for federal or state safety funding. A smaller sub-set of 120 Community Priority Projects are highlighted on the map below and listed in more detail in Appendix E.\*

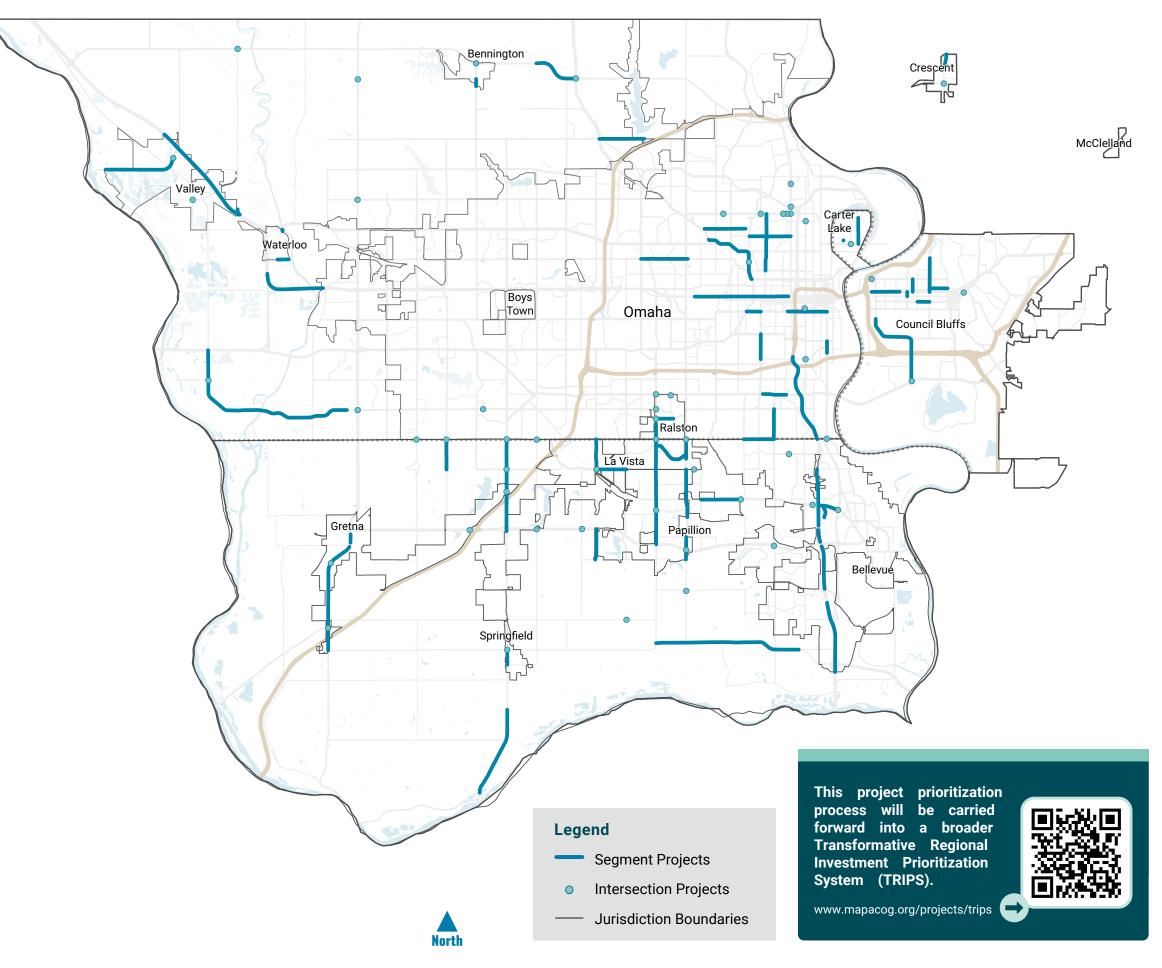
These Community Priority Projects represent the most impactful projects within each jurisdiction, as measured using the following criteria:

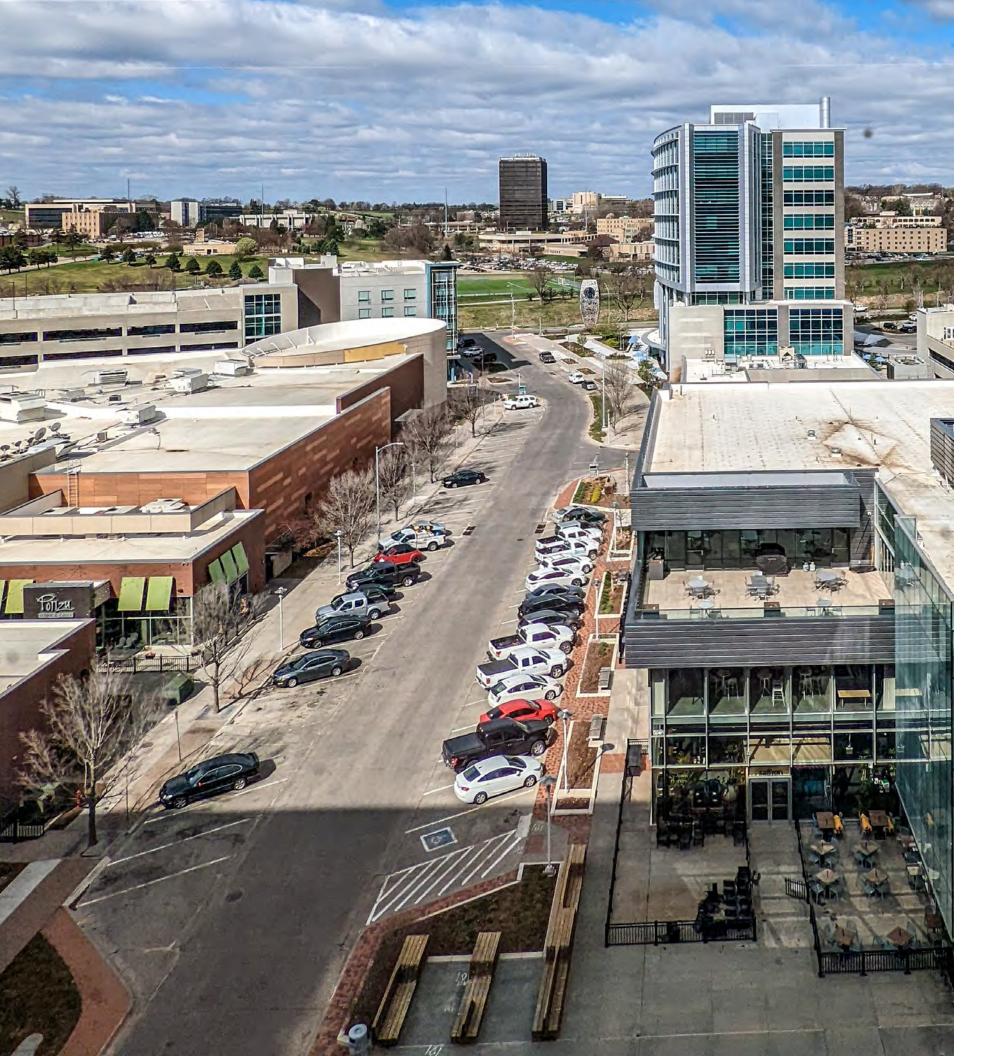
- ▶ USDOT-method Benefit-to-Cost Ratio
- ▶ State DOT method Benefit-to-Cost Ratio (based on which state the project is in)
- Total projected 20-year reduction in fatalities and serious injuries (KSIs)
- ▶ Total projected 20-year reduction in all injuries and fatalities.

All Candidate Safety Projects were assigned a percentile rank based on their overall ranking within each of these four criteria. The percentile ranks were converted to a score of 0.0 to 1.0 for each criteria. Thus, a "Community Priority Score" of up to 4.0 was assigned to all projects. A set of the highest scoring projects was selected for each community, based on the relative size of the community. For example, Omaha's list includes 25 projects. Council Bluffs, Bellevue, Papillion, Unincorporated Sarpy County, and Unincorporated Douglas County each have ten (10) projects. All other jurisdictions (except Boys Town and McLelland) have between two (2) and seven (7) Community Priority Projects.

This process and scoring criteria results in a set of Community Priority Projects that provide a diverse range of project types, sizes, and costs, with planninglevel project costs ranging from approximately \$10,000 to over \$7 million (with an average of \$1.34 million per project). If every Community Priority Project were implemented, the 20-year benefits would include preventing an estimated 96 deaths and 495 serious injuries, and over 5,000 minor injuries.

\* Multi-jurisdicitional projects are not listed in Appendix E, but they are highlighted on the map of Community Priority Projects at right. These include seven intersection projects and one segment project along Harrison Street (which runs along the border of Douglas and Sarpy County) and two intersection projects on 84th Street along the border between Omaha and Ralston.





# **Action Plan**



# RECOMMENDATIONS

The urgency of achieving the regional goal of eliminating traffic fatalities and serious injuries by 2040 cannot be overstated. Every year, lives are lost or forever altered due to preventable traffic-related incidents, underscoring the need for immediate, concerted action. In response, this CSAP presents a comprehensive set of recommendations designed to guide communities toward safer roads for all users.



The goal of this action plan is not to prescribe a onesize-fits-all solution but to provide a robust menu of options that jurisdictions can tailor to their contexts. Whether through safety-focused street design and funding prioritization, legislation and enforcement strategies, education initiatives, or enhancements to emergency response systems, local governments and communities can choose the most effective mix of interventions that best address the traffic safety challenges they face. Together, these efforts will move us closer to the ambitious goal of a future with zero fatalities and serious injuries on our roadways by 2040.

perspectives, we can address all aspects of the

Safe Systems Approach and address the key safety

challenges that the region faces.

# **ORGANIZATION OF** RECOMMENDATIONS

The recommendations are divided into eight sections. The first six sections are based on the Safe System Approach and cover policy, education, planning, prioritization, design updates, enforcement, funding, and legislation. The last section, Safety Metrics, contains the measures of effectiveness that will assist MAPA in tracking tangible safety goals year over year. Below is an outline of the recommendation's layout:

# 1. Leadership & Commitment

- a. Commitment
- **b.** Planning Structure
- c. Funding & Prioritization

#### 2. Post-crash Care

#### 3. Safer Roads

- a. Supplemental Planning
- b. Standards & Guidance **Updates**
- c. Policy & Funding

#### 4. Safer Speeds

- a. Planning & Policy
- **b.** Legislative

#### 5. Safer Users

- a. Legislative
- **b.** Education & Enforcement

#### 6. Safer Vehicles

#### 7. Data, Transparency, & Accountability

#### 8. Safety Metrics

- a. Infrastructure
- **b.** Planning
- c. Legislative
- d. Behavioral

#### STRUCTURE OF RECOMMENDATIONS

#### Name:

The title of each recommendation.

#### Recommendation:

1-2 sentences describing the action for the applicable party.

#### **Description / Justification:**

1-2 sentences providing further description and justification.

#### Cost:

The relative cost figure is associated with the descriptions displayed to the right.

#### Timeline:

Relative time frame associated with the descriptions below. All timeframes were kept under 5 years to account for (1) the urgency of eliminating traffic fatalities and (2) the plan is anticipated to be updated every 3-5 years and timelines updated.

#### Applicable Parties:

Jurisdiction that the recommendation applies towards.

#### **Focus Areas:**

Through the crash data analysis and the CSAP engagement process, fourteen Focus Areas were identified that emerged as key issues or opportunities to address the region's safety challenges.

These focus areas were grouped into a set of five broader Focus Categories.

Cost	Description
-	Not applicable
\$	Can be implemented with current staff, perhaps with training; limited costs for equipment or facilities.
\$\$	Requires some additional staff time, equipment, facilities, and/or publicity.
\$\$\$	Requires extensive new facilities, staff, equipment, or publicity, or makes heavy demands on current resources.

Timeline	Description
Short-term	Complete in 6 months – 2 years
Long-term	Complete in 2 – 5 years
Ongoing	Start within 1 year with no end date
Upon Plan Adoption	Complete within 6 months

Focus Category	Focus Area
	Arterial Roadways
High-Risk	Signalized Intersections
Infrastructure	Rural Roads & Highways
	Lighting
Safety Zones	Maintenance & Work Zones
	School & Pedestrian Zones
	Pedestrians & Bicyclists
Vulnerable Road Users	Motorcyclists
	Young & Male Drivers
	Impairment & Inattention
Contributing Crash Factors	Occupant Protection
	Speed Management
0-6-0	Safer Vehicles
Safe System	Post-crash Care

#### LEADERSHIP AND COMMITMENT

The following recommendations establish a regional commitment to a Vision Zero Resolution by 2040 and create a framework for ongoing planning, funding, and implementation of safe streets initiatives.

#### **COORDINATION / EDUCATION**

# **Adopt a Vision Zero Resolution**

**Recommendation:** Adopt a Vision Zero Resolution that specifies 2040 as the date to reach zero traffic fatalities and serious injuries with interim goals that align with defined safety metrics.

Justification: A regional commitment to an ambitious target date for eliminating traffic fatalities and serious injuries creates a sense of urgency and focuses resources on achieving measurable outcomes. A clear deadline raises public awareness and supports inter-jurisdictional coordination to improve the safety of the transportation system.







TIMELINE

**Upon Plan Adoption** 



LC-01

#### **COORDINATION / EDUCATION**

# **Safety Pledge**

**Recommendation:** Create an online safety pledge where community members can pledge to practice safe driving habits and support funding for regional safety initiatives, demonstrating your commitment to protecting all road users.

Justification: An individual safety pledge asks residents to take personal responsibility for their actions while fostering a culture of safety. Such pledges can generate public awareness and support for safety programs and policies at the regional level.



© COST





TIMELINE

Short-term



**APPLICABLE PARTIES** 

MAPA

LC-02

#### **POLICY / PLANNING**

# **Annual Safety Summit**

**Recommendation:** Plan an Annual Safety Summit to emphasize and reward safety successes and focus training to build the safety culture.

Justification: An annual safety summit would unite member communities with safety advocates and champions from different focus groups to address pressing safety challenges and celebrate safety successes. MAPA's leadership in organizing the event would provide the opportunity to make a state of safety address and award model projects and practices with recognition that may breed further action. The recommended safety summit could engage various invested organizations such as LTAP, local universities, ASCE, ITE, etc.









TIMELINE Short-term



MAPA

LC-04

#### **POLICY / PLANNING**

# **Establish an ongoing Safe Streets for All Committee**

Recommendation: Re-establish the purpose, goals, and vision for the MAPA Safety Committee, including a schedule of meetings beyond plan adoption. Some responsibilities could include: (1) regularly assembling transportation and safety agencies to discuss safety priorities and progress, (2) hosting a regional safety summit, (3) standardizing safety performance measures across agencies, (4) sharing best practices and successes across the MPO, or (5) reviewing fatal crashes within the region.

**Justification:** An expanded or re-vamped Safety Committee would help provide direction for key safety initiatives and foster ideas that reflect the community's needs and desires.





TIMELINE

Ongoing



MAPA

LC-05

#### **COORDINATION / EDUCATION**

# **Public-Private Partnerships**

Recommendation: Pursue public-private partnerships with advocacy groups, community organizations, nonprofits, neighborhood organizations, and foundations to address local safety concerns.

Justification: Collaborations between public entities and private organizations can harness various resources and expertise to create community-focused solutions. Since public safety is a concern for many community foundations, pursuing grants from these organizations can support safety initiatives. Additionally, private entities often have greater capacity to advocate for legislative priorities, enhancing the effectiveness of public safety efforts.







Short-term



APPLICABLE PARTIES

ΑII

LC-03

#### **POLICY / PLANNING**

# **MAPA Staff Capacity Building**

Recommendation: Designate a MAPA transportation safety coordinator or director. The coordinator or director should implement actions within MAPA's control and are consistent with the CSAP. The appointment of a safety coordinator should follow the development of a financial plan to identify the funding for this role and whether it would be a newly opened position or a re-organization of existing staff responsibilities.

Justification: A dedicated MAPA safety coordinator would manage implementation and updates to the Safety Action Plan. While MAPA has identified a need to expand efforts in this area, the availability of resources, staff, and time is currently limited.





Short-term



APPLICABLE PARTIES

LC-06

#### **FUNDING & PRIORITIZATION**

# **Safety Specific Funding**

**Recommendation:** Increase the share of projects in Capital Improvement Program (CIP) updates (including One- and Six-Year Street Improvement Plans) and Transportation Improvement Program (TIP) budgets, whose primary focus is safety, by at least 0.75% of the total budget each year.

Justification: By targeting funding for transportation projects that provide the greatest safety benefits, communities can maximize their reductions in fatal and serious injury crashes.







TIMELINE Ongoing



**APPLICABLE PARTIES** 

Jurisdictions >10,000 People

LC-07

#### **FUNDING & PRIORITIZATION**

# **MTP Project Identification and Prioritization**

**Recommendation:** Modify the long-range Metropolitan Transportation Plan (MTP) project identification and prioritization to heavily emphasize CSAP projects.

Justification: The MTP brings a comprehensive view to transportation needs - identifying many corridors that are planned for future projects; projects that could advance a Safe System Approach. Inclusion of a project in the MTP is necessary for it to be eligible for federal funding, which will often be needed to implement CSAP projects.









TIMELINE





**APPLICABLE PARTIES** 

MAPA

LC-08

#### **FUNDING & PRIORITIZATION**

# **TIP Project Identification**

Recommendation: Modify the Transportation Improvement Program (TIP) process to allocate federal funding to Safe System projects and activities.

Justification: The project identification and prioritization work previously noted, along with potential TIP updates identified, would increase focus on eliminating fatalities and serious injuries, promoting safe roads and users, developing systemic solutions, and exploring emerging safety trends. Including safety project identification efforts in TIP creation will help prioritize CSAP projects for funding.











**APPLICABLE PARTIES** 

MAPA

LC-09

#### **FUNDING & PRIORITIZATION**

# **Local CIP Project Identification and Prioritization**

Recommendation: As part of the annual capital improvement program and One- and Six-Year Street Improvement Plan updates, develop and apply safety-focused criteria for transportation project identification and prioritization. The criteria should include fatal and serious injury crash reductions.

Justification: A jurisdiction's CIP outlines its planned infrastructure improvements over the next six-year period. The CIP process provides an opportunity to prioritize projects that align with a community's safety goals







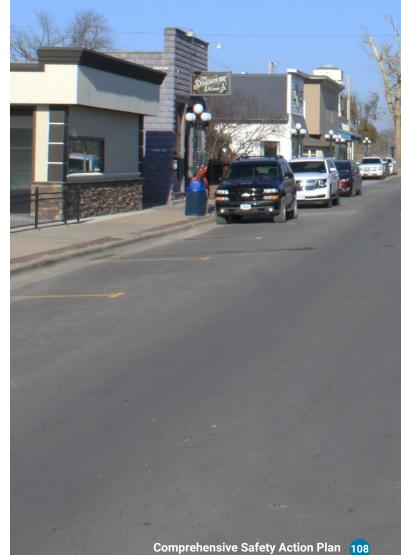
TIMELINE Short-term

\$ \$ \$



Jurisdictions >10,000 People

LC-10



# **POST-CRASH CARE**

A Safe System has multiple layers of protection for road users, and the post-crash care provided by first responders and trauma response teams is the critical last line of defense against a crash outcome becoming more serious or resulting in a fatality. The following recommendations highlight opportunities for increased collaboration and communication, as well as infrastructure and wayfinding that can enhance emergency response efficiency and safety.

#### **COORDINATION / EDUCATION**

# Trauma and EMS Collaboration and Coordination

**Recommendation:** Foster coordination between EMS, fire departments, police, and hospitals to collaborate on safety solutions and the state of the practice. This can be done through existing groups such as traffic incident management or statewide trauma board, or via a region-wide safety summit.

Justification: Regular communication among Post-crash Care professionals ensures a unified and efficient response to traffic incidents, enhancing overall safety and care. Collaborating on best practices helps provide continuous improvement in emergency response protocols.

#### **STANDARDS & GUIDANCE UPDATE**

# **Emergency Pull-Off Areas**

Recommendation: Create designated areas for vehicles involved in crashes along high-speed roads. Use a data-driven approach and engage with EMS providers to identify the locations with the highest impact.

Justification: Emergency pull-off areas provide safe spaces for vehicles involved in crashes, reducing the risk of secondary collisions and ensuring safer conditions for responders and motorists. Building on Nebraska DOT's initial efforts along I-80, expanding these areas through data-driven analysis and collaboration with EMS providers will maximize their impact on high-speed road safety.

# © COST







TIMELINE

Ongoing



APPLICABLE PARTIES

MAPA

**FOCUS AREA(S)** 

Post-crash Care

PCC-01









**TIMELINE** 

Long-term

**APPLICABLE PARTIES** 

Jurisdictions >10,000 People States of Nebraska and Iowa

# **FOCUS AREA(S)**

Post-crash Care

PCC-02

#### **STANDARDS & GUIDANCE UPDATE**

# **Enhanced Wayfinding**

**Recommendation:** Coordinate with EMS providers, especially in outlying rural communities, to establish clear signage and mile markers to assist responders and motorists in identifying crash locations. Additionally, wayfinding directing volunteer EMS and the general public to level 1 and 2 trauma centers should be evaluated.

Justification: Enhanced wayfinding improves emergency response efficiency by helping first responders and motorists quickly identify crash locations, especially in rural or remote areas with sparse landmarks. Clear signage and guidance for accessing the appropriate level of trauma centers ensure timely and accurate navigation.



© COST





TIMELINE

Long-term



**APPLICABLE PARTIES** 

ΑII

# **FOCUS AREA(S)**

Post-crash Care Rural Roads & Highways

PCC-03

#### **DATA MANAGEMENT**

# **EMS and Hospital Data**

**Recommendation:** Coordinate with state departments and regional trauma centers to gather, compile, analyze, and share anonymized EMS and hospital data related to motor vehicle crashes to policymakers, safety professionals, and jurisdiction leaders.

Justification: Studies have shown that longer EMS response times are associated with higher rates of motor vehicle crash mortality, highlighting the importance of timely medical intervention. With access to comprehensive data from both EMS and hospital sources, policymakers and safety professionals can identify critical factors influencing crash outcomes and develop targeted interventions to reduce fatalities.



COST





TIMELINE

Short-term



**APPLICABLE PARTIES** 

MAPA

# **FOCUS AREA(S)**

Post-crash Care

PCC-04

#### **DATA MANAGEMENT**

# **Digital Alerting Technology**

Recommendation: Equip DOT, police, fire, and EMS roadside vehicles with digital alerting technology to provide early warnings to approaching drivers, reducing crash risks. Coordinate agency efforts to ensure effective implementation and integration.

Justification: Digital alerting technology differs from all past methods utilized to notify a driver of an approaching hazard by bringing the alert to within the vehicle to gain the drivers attention. Digital alerting has been found to be an effective countermeasure at reducing motorist speed and hard braking events near roadside incidents.











MAPA

**FOCUS AREA(S)** 

Post-crash Care

Maintenance & Work Zones PCC-05

#### SAFER ROADS

The physical characteristics and design of roadways can influence the likelihood and severity of crashes. Many communities across the region and nationally have implemented plans, policies, standards, and specific projects that have resulted in safer streets. The following Safer Roads recommendations present a range of options, drawing from local and national examples, which are grouped into the following sub-types: supplemental planning; standards and guidance updates; and policy and funding.

#### **POLICY / PLANNING**

# **Safety Lighting Action Plan**

**Recommendation:** Develop and implement a Safety Lighting Action Plan to enhance roadway illumination, aiming to reduce nighttime traffic fatalities and serious injuries.

Justification: Adequate lighting is a proven countermeasure for improving traffic safety. Enhanced illumination at intersections, pedestrian crossings, and high-risk areas increases visibility for all road users, thereby reducing the likelihood of crashes during low-light conditions. FHWA provides guidance and resources for creating plans and overall best practices.

# © COST





TIMELINE

Short-term



**APPLICABLE PARTIES** 

ΑII

**FOCUS AREA(S)** 

Lighting Pedestrians & Bicyclists

SR-01

#### **POLICY / PLANNING**

# **Quick-Build Funding Program**

Recommendation: Develop a funding program for quick-build or demonstration safety improvements. Include monitoring and data gathering to assess the effectiveness of these projects, allowing for improvements, replication, or making them more permanent.

Justification: Quick-build projects are easily adjustable safety improvements typically utilizing paint, posts, signage, and other widely available, low-cost materials. Examples of quick-build projects include installing intersection turn modifications (e.g., tightening turn radii), traffic calming/lane reconfigurations through paint and posts, and midblock crossing improvements with high-visibility crosswalk markings.







**TIMELINE** 

Short-term



**APPLICABLE PARTIES** 

Αll

**FOCUS AREA(S)** 

Speed Management Pedestrians & Bicyclists

SR-02

#### **POLICY / PLANNING**

# **Quick-Build Regional Toolkit**

**Recommendation:** Create a regional toolkit for the identification, prioritization, design, and implementation of quick-build projects.

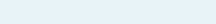
Justification: A regional quick-build assistance program could be developed to assist smaller communities that lack in-house resources for planning and designing guick-build and demonstration projects.

#### **POLICY / PLANNING**

# Safe Routes to School

Recommendation: Every school should be covered by a Safe Routes to School (SRTS) plan that ensures safe pick-up and drop-off and encourages independent walking and bicycling to school. Priority should be given to elementary schools and those in denser built environments with designated walking-only distances. SRTS plans should be updated at least every 10 years.

**Justification:** The Safe Routes to School (SRTS) program is a national initiative that enhances the safety of students walking and biking to school by assessing and improving school area infrastructure, with federal funding available for plan development. Implementing SRTS programs has led to a 10%-20% reduction in severe pedestrian and cyclist crashes near schools and has increased active transportation among students, thereby decreasing vehicle traffic during school hours.







© COST



Short-term



Αll

#### **FOCUS AREA(S)**

Speed Management Pedestrians & Bicyclists

SR-03







TIMELINE





ΑII

# **FOCUS AREA(S)**

School & Pedestrian Zones Pedestrians & Bicyclists

Recommendation: Inventory and develop a prioritization framework for missing sidewalks/ trails or sidewalks/trails in poor condition throughout the Metro Area. Additionally, information such as sidewalk width, trees, and pedestrian lighting should be collected

Justification: Conducting a comprehensive inventory and prioritizing gaps in the sidewalk network are crucial steps to enhance pedestrian safety and improve transportation system utility. While some jurisdictions have made significant progress with a GIS inventory of sidewalk gaps, new methods utilizing LiDAR data and deep learning algorithms have been successfully implemented in other jurisdictions to efficiently update and maintain sidewalk inventories.

#### Sidewalk and Trail Snow Removal Plan

Recommendation: Develop and implement targeted snow removal strategies that prioritize critical pedestrian and cyclist pathways, such as bus routes, Safe Routes to School, bike facilities, trails, and areas identified as high-risk for pedestrian injuries.

Justification: Focusing snow removal on essential routes ensures safe access for vulnerable road users, promoting overall community safety during winter months. Establishing volunteer-based programs can support snow removal efforts for residents unable to clear their sidewalks, including seniors and individuals with disabilities.

# **Intersection Control Evaluation Policy**

**POLICY / PLANNING** 

**Recommendation:** Adopt an Intersection Control Evaluation (ICE) policy and update at least every 10 years. Jurisdictions should adopt an ICE process to evaluate the safety, traffic and transit operations, pedestrian and bicycle access, cost, right-of-way impact, and other factors. A benefitto-cost ratio will be utilized to select the most appropriate control type. The ICE process and evaluation effort can be waived for improvements that choose roundabouts from the project's outset.

Justification: Implementing an ICE process enables jurisdictions to make data-driven decisions, consider all viable intersection alternatives, and select cost-effective solutions, ultimately enhancing overall road safety. ICE reports should be conducted for all intersections in capital improvement projects and for collector and arterial street intersections that are constructed or reconstructed as part of private development projects.

# **Access Management / Traffic Impact Study Policy**

Recommendation: Adopt an Access Management / Traffic Impact Study Policy and update it at least every 10 years. the policy should (1) incorporate safety as a core evaluation criterion, (2) a crash analysis should be performed in alignment with Safe System principles, (3) all improvements constructed in the public right of way by private entities should demonstrate a safety benefit through the use of the Highway Safety Manual methodology, and (4) jurisdictions should remove the minimum operational level of service standards.

Justification: Implementing this policy through public-private partnerships will leverage privatesector funding to enhance transportation safety measures. Integrating safety countermeasures at the project's inception ensures that developments are designed with a proactive approach to crash prevention. Establishing regional standards holds all developers accountable, promoting consistency and uniformity in identifying and analyzing traffic impacts generated by local development and land use changes. WE-STEP's subregional standard is a good example to follow.







TIMELINE

Long-term



Jurisdictions >10,000 People

#### **FOCUS AREA(S)**

Pedestrians & Bicyclists Lighting

SR-05









TIMELINE

Long-term

# **APPLICABLE PARTIES**

Jurisdictions >10,000 People

# **FOCUS AREA(S)**

School & Pedestrian Zones Pedestrians & Bicyclists

SR-06







TIMELINE

Short-term

# **APPLICABLE PARTIES**

Jurisdictions >10,000 People **Douglas County Developing Areas** 

# **FOCUS AREA(S)**

Signalized Intersections **Arterial Roadways** 

SR-07









TIMELINE



**APPLICABLE PARTIES** 

Jurisdictions >10,000 People

# **FOCUS AREA(S)**

**Arterial Roadways** Signalized Intersections

#### **POLICY / PLANNING**

# **Complete Streets Policy**

**Recommendation:** Adopt a Complete Streets Policy and update at least every 10 years.

Justification: Complete Streets (CS) is an approach to planning, designing, and building streets that enables safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. A CS Policy outlines an agency's formal commitment to ensuring the implementation of safe, accessible streets for all users, and includes specific steps for implementation. A CS Policy is often accompanied by a design guide and/or updates to a city's existing street design criteria to ensure implementation in all public and private street projects.



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TIMELINE

Long-term



# **APPLICABLE PARTIES**

Jurisdictions >10,000 People

# **FOCUS AREA(S)**

**Arterial Roadways** Speed Management

SR-09

#### POLICY / PLANNING

# **Sidewalk Maintenance Policy**

Recommendation: Evaluate and enact policies that accelerate maintenance and development of sidewalk networks, such as a point-of-sale sidewalk repair program that requires property owners to repair sub-standard sidewalks at the time their property is sold.

Justification: Sidewalk maintenance policies such as point-of-sale repair programs can vastly accelerate buildout of a quality sidewalk network and minimize the financial burden of repairs by building them into the cost of selling a property.



© COST







Long-term



# **APPLICABLE PARTIES**

Jurisdictions >10,000 People

# **FOCUS AREA(S)**

Pedestrians & Bicyclists School & Pedestrian Zones

SR-10

#### **POLICY / PLANNING**

# **Local Rural Road Suface Shoulders**

**Recommendation:** Apply for Federal Highway Safety Improvement Program (HSIP) funding for Local Rural Road Surface Shoulders to add surface shoulders on eligible roadways within Douglas and Sarpy Counties.

Justification: NDOT has a systemic safety program to add surface shoulders on rural local roads to help reduce roadway departure crashes. HSIP funding is available to widen rural roads to 28-feet total width with shoulder in each direction. No safety analysis is required, and new surface shoulders can be constructed using a mainline mill/fill project for pavement continuity.



© COST



# TIMELINE

\$ \$ \$

Ongoing

# APPLICABLE PARTIES

Counties in Nebraska

# **FOCUS AREA(S)**

Rural Roads & Highways Impariment & Inattention

SR-12



Comprehensive Safety Action Plan 116

#### **POLICY / PLANNING**

# **Road Safety Audits**

Recommendation: Develop regional guidance for incorporating road safety audits and safety analysis into corridor studies, traffic impact analysis, and transportation planning efforts.

Justification: Road Safety Audits follow a formal process utilizing a multidisciplinary group that reviews street safety aspects and makes recommendations. Use of RSAs has shown up to 60% decrease in crashes where recommendations were implemented.



© COST





SSS Long-term



APPLICABLE PARTIES

**FOCUS AREA(S)** 

**Arterial Roadways** Speed Management



# **Regional Trail Crossing Standards**

**Recommendation:** Develop regional standards for at-grade crossings of trails and shareduse pathways. The standards should be based on national guidance such as FHWA's "Safe Transportation for Every Pedestrian (STEP): Improving Visibility at Trail Crossings" guide.

Justification: As trails increasingly incorporate atgrade street crossings, it's essential to implement safety measures that enhance visibility, reduce vehicle speeds, and improve traffic control. Developing a regional guide in collaboration with all relevant agencies can standardize the application of these proven safety countermeasures across the entire trail network.

# **Regional Roundabout Guidance**

Recommendation: Develop standard guidance for prioritizing roundabouts, based on regional and national best practices, that describe (1) traffic volume thresholds, (2) design considerations, and (3) maintenance of traffic for roundabouts.

Justification: Roundabouts reduce fatal crashes by more than 90% and all other crashes by more than 60%. They are the best tool we have to prevent roadway deaths. Regional guidance that helps jurisdictions easily identify locations for roundabouts, prioritize their implementation, and create standard designs will be key to reaching zero. MassDOT has developed nation-leading guidance that can used as a model and followed.

# **Street Design Criteria Updates**

Recommendation: Update local street design standards documents to incorporate Safe Systems and Complete Streets design principles, including reviewing design parameters for opportunities to: reduce minimum roadway and lane widths where appropriate, reduce the recommended Design Speeds and Posted Speeds, increase the level of separation of bike facilities along higher street classifications, and set sidewalk design standards.

Justification: Most local jurisdictions have published street design standards that guide the design, review, and construction of all improvements in the public right-of-way. Safetyfocused revisions to the design standards are essential to implementing a safe systems approach to the design of newly constructed streets and improvements along existing streets.

# **State DOT Design Relaxation**

Recommendation: Coordinate with the State Department of Transportation on relaxing design standards for local jurisdictions to implement safety countermeasures recommended in the Vision Zero Toolbox.

Justification: Collaborating with state DOTs to relax design standards that often prioritize highspeed, rural, or regional mobility enables local engineers to apply best practices in urban contexts to prioritize safety to the unique challenges of urban environments.







TIMELINE

Ongoing



Counties in Nebraska

#### **FOCUS AREA(S)**

Pedestrian & Bicyclists **Arterial Roadways** 

SR-13



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TIMELINE

Short-term



**APPLICABLE PARTIES** 

MAPA

#### **FOCUS AREA(S)**

Signalized Intersections Maintenance & Work Zones

SR-14









TIMELINE





Jurisdictions >1,000 People

# **FOCUS AREA(S)**

Speed Management **Arterial Roadways** 

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Short-term



SR-15

Jurisdictions >1,000 People

#### **FOCUS AREA(S)**

Speed Management **Arterial Roadways** 

#### **STANDARDS & GUIDANCE UPDATE**

# **Standard Details for Safety Countermeasures**

Recommendation: Create standard design details and construction specifications for specific safety countermeasures (e.g., miniroundabouts, curb extensions/bulb-outs, rectangular rapid flashing beacons, raised crossings, street tree planters, and protected bike lanes), including both their permanent and quick-build paint/post applications.

Justification: All new and upgraded existing signals should be required to install retroreflective backplates, intelligent transportation systems (ITS) sensors, pedestrian countdown timers, and high-visibility crosswalk striping and stop bars.

#### **STANDARDS & GUIDANCE UPDATE**

# **Work Zone Training and Standardization**

Recommendation: Develop or coordinate a standard work zone policy that matches national best practices, aligns with Public Right-of-Way Accessibility Guidelines (PROWAG) standards, and provides consistency across the MAPA region. These standards should be applied to and followed by public agencies and private contractors.

Justification: This policy is critical for keeping workers safe as they perform the essential task of maintaining our roads, ensuring they can do their jobs without unnecessary risks. Establishing consistent safety expectations across the region reduces confusion and enhances compliance, creating safer environments for both workers and the traveling public. Additionally, this standardized approach facilitates better coordination between public works and other internal departments or contractors, such as utilities and landscaping.

#### **STANDARDS & GUIDANCE UPDATE**

# **Systemic Signal Improvement Standards**

Recommendation: All signals at High-Priority Intersection locations should consider installing retroreflective backplates, ITS sensors, pedestrian countdown timers, high-visibility crosswalk striping / stop bars, and leading pedestrian intervals.

Justification: Systemic signing and visibility improvements at signalized intersections have been shown to reduce fatal and injury crashes by 15% to 25%.







TIMELINE

Short-term



APPLICABLE PARTIES

Jurisdictions >1,000 People

#### **FOCUS AREA(S)**

Speed Management Pedestrians & Bicyclists

SR-17







TIMELINE

Long-term



**APPLICABLE PARTIES** 

Jurisdictions >1,000 People

# **FOCUS AREA(S)**

Maintenance & Work Zones

SR-18





TIMELINE

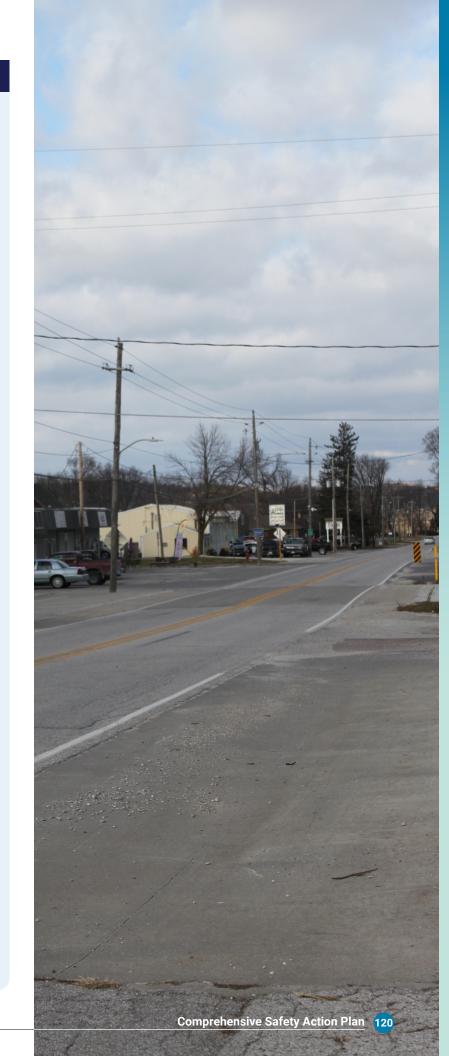




Jurisdictions >1,000 People

# **FOCUS AREA(S)**

Signalized Intersections Pedestrians & Bicyclists



#### **SAFER SPEEDS**

Speed is a key factor in traffic fatalities and serious injuries, and it is often the deciding factor that separates these from minor injury or property damage crashes.

#### **POLICY / PLANNING**

# **Dynamic Speed Display / Feedback** Signs

Recommendation: Expand deployment of speed feedback signs (temporary/mobile or permanent) in locations determined through a data-driven process, targeting locations with high rates of speed-related crashes, a high rate of prevailing speeds, a high number of pedestrian and bicycle users, and based on public input.

**Justification:** Speed feedback signs dynamically show the driver's speed alongside the posted speed limits and have been shown to slow overall speeds where deployed. They also can help to educate drivers on the importance of safe speeds.

#### **POLICY / PLANNING**

# 20 mph Residential Speed Limit

Recommendation: Develop a draft policy and strategy roadmap for local agencies to adopt a 20-miles-per-hour speed limit ("20 is Plenty") on residential streets, prioritizing school and pedestrian zones.

**Justification:** A growing body of research shows that lowering speed limits from 25 mph to 20 mph can significantly reduce speeding and crashes, even without increased enforcement or street design changes.

# **Recommendation:** Communities should prioritize automated enforcement camera installation at a limited set of locations or along a corridor with

**Iowa Automated Enforcement** 

the highest concentration of red-light running or speeding-related fatal and serious injury crashes, where the potential for design or traffic-controlrelated solutions is limited.

**POLICY / PLANNING** 

Justification: AE cameras are one of the most effective ways to reduce red-light running and excessive speeding, thus reducing serious injuries and fatalities. It is used worldwide and in the United States.





**Implementation** 





TIMELINE

Short-term



**APPLICABLE PARTIES** 

Jurisdictions in Iowa

# **FOCUS AREA(S)**

Signalized Intersections **Speed Management** 

SS-03

#### **POLICY / PLANNING**

# **Trafic Calming Policy**

Recommendation: Implement and update a comprehensive Traffic Calming Policy every 10 years that effectively reduces vehicle speeds and promotes a safe environment for pedestrians and cyclists. The policy should emphasize a systematic approach to identify eligible locations and prioritize interventions based on factors like traffic volume and speed.

Justification: Implementing traffic calming measures reduces vehicle speeds, decreases motor-vehicle collisions, and improves safety for all road users. These policies should incorporate a variety of physical measures, such as speed bumps, traffic circles, and raised crosswalks (referencing the countermeasure toolbox), thereby promoting safer environments for pedestrians and cyclists.







TIMELINE Long-term



**APPLICABLE PARTIES** 

Jurisdictions >1,000 People

# **FOCUS AREA(S)**

Speed Management Pedestrians & Bicyclists

SS-04

# © COST





TIMELINE

Short-term



APPLICABLE PARTIES

ΑII

# **FOCUS AREA(S)**

Speed Management School & Pedestrian Zones

SS-01







**TIMELINE** 

Ongoing



**APPLICABLE PARTIES** 

MAPA

# **FOCUS AREA(S)**

**Speed Management** School & Pedestrian Zones

SS-02

#### **POLICY / PLANNING**

# **Speed Management Plan**

Recommendation: Develop a speed management plan (SMP) and update it at least every 10 years. Key elements of the speed management plan should include (1) jurisdiction-wide data collection and analysis, (2) review of statutory speed limits, (3) traffic calming strategies, (4) enforcement strategies, and (5) public education and awareness.

Justification: A SMP systematically reviews posted statutory speed limits and actual prevailing driver speeds across an entire community. SMPs also include a review of policies used in setting speed limits and making recommendations to reduce speed limits in specific locations, identifying speed management areas, and designating areas for traffic calming implementation. FHWA provides guidance on creating plans and other resources.













Jurisdictions >1,000 People

# **FOCUS AREA(S)**

**Speed Management** Arterial Roadways

SS-05

# **Nebraska Speed Safety Camera** Legislation

Recommendation: Support state legislation allowing local jurisdictions to utilize automated enforcement to address speeding in their communities. Legislation can be drafted, if necessary, to limit implementation to school, pedestrian, and work zones.

Justification: Using Speed Safety Cameras is one of the most effective ways to reduce excessive speeding, thus reducing serious injuries and fatalities. Nebraska law prohibits automated speed and red-light running enforcement. Twentytwo (22) states currently use Speed Safety Cameras: Alabama, Arizona, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Louisiana, Maryland, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Virginia, Washington.

# **Nebraska Red Light Running Camera** Legislation

**Recommendation:** Support state legislation that allows local jurisdictions to utilize cameras to automate enforcement of red light running.

Justification: Red-light running crashes are usually severe, and cameras are shown to reduce injury crashes and fatalities by 35%-50%. Nebraska law prohibits red-light running enforcement. Twenty-three (23) states currently use Red-Light Running Cameras: Alabama, Arizona, California, Colorado, Delaware, Florida, Georgia, Hawaii, Illinois, Iowa, Louisiana, Maryland, Missouri, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Virginia, and Washington.

# **Iowa Automated Enforcement** Legislation

**Recommendation:** Support state legislation that revises Iowa's legislation regarding Safety Speed Cameras and Red-Light Running Cameras. The revisions should allow communities of less than 20,000 people to issue citations using automated enforcement (AE) and set more transparent and reasonable criteria for IDOT review and approval of AE locations, allowing for its use wherever it is determined to be an appropriate means of addressing speeding and fatal and injury crashes.

Justification: AE cameras are one of the most effective ways to reduce red-light running and excessive speeding, thus reducing serious injuries and fatalities. A new 2024 law severely limits AE in Iowa by requiring that it be "necessary" and the "least restrictive" means for addressing critical safety issues at a location. It also restricts communities with a population of less than 20,000 from using AE cameras from issuing citations (only warnings).





#### TIMELINE

Long-term



# **APPLICABLE PARTIES**

State of Nebraska

#### **FOCUS AREA(S)**

Signalized Interactions Speed Management

**SS-06** 





#### **TIMELINE**

Long-term



# **APPLICABLE PARTIES**

State of Nebraska

#### **FOCUS AREA(S)**

Signalized Intersections Speed Management

SS-07







#### TIMELINE

Long-term



# **APPLICABLE PARTIES**

State of Iowa

#### **FOCUS AREA(S)**

Signalized Intersections **Speed Management** 

SS-08



#### SAFER USERS

The following recommendations aim to promote safe and responsible behaviors among road users and foster conditions that prioritize their safe arrival at their destinations.

#### **LEGISLATIVE**

# **Statewide Distracted Driving** Legislation

**Recommendation:** Support state legislation that would ban and allow primary enforcement against hand-held cell phone use and text messaging for all drivers, electronic entertainment devices with video screens within the driver's view, and school bus drivers from text messaging or using electronic devices except in an emergency.

Justification: IIHS-cited research showed that Oregon saw an 8% reduction in all crashes after enacting statewide distracted driving legislation, compared with other states that already had similar legislation during the same time period.

#### **LEGISLATIVE**

# **Statewide Mandatory Safety Belt Use** Legislation

**Recommendation:** Support state legislation that would adopt and enforce primary safety belt use laws that apply to all occupants in all seating positions.

**Justification:** Nebraska currently has a secondary enforcement seat belt law, meaning that a driver can only be cited for not wearing a seat belt if pulled over for another violation. Nebraska's seat belt usage rate of 77% is the third lowest in the country. In contrast, lowa has primary enforcement seat belt law, and its seat belt usage rate is almost 96%, one of the country's highest rates. The national average is 92%. Primary seat belt laws increase seat belt usage and decrease the severity of traffic crashes. Proper seatbelt restraint reduces the risk of injury by 50% and death by up to 65%.

COST 

a primary offense.

**TIMELINE** 

Long-term

**202 APPLICABLE PARTIES** 

States of Nebraska and Iowa

**LEGISLATIVE** 

**Recommendation:** Support state legislation that

requires the use of DOT-certified helmets by

motorcycle riders of all ages. This law should be

Justification: Motorcycle helmet usage is the

best way to decrease fatal motorcycle crashes.

Unhelmeted riders are 14 times more likely to

be killed or seriously injured in a crash in the

MAPA region. Nebraska and Iowa do not require

**Statewide Primary Enforcement** 

**Motorcycle Helmet Legislation** 

**FOCUS AREA(S)** 

Signalized Intersections **Speed Management** 

SU-03

#### **LEGISLATIVE**

# **Statewide Motorcycle Training** Legislation

**Recommendation:** Support state legislation that requires motorcycle operator training for minors, novices, and re-entry riders by qualified instructors.

Justification: Motorcyclists are 220 times overrepresented in fatal and serious injury crashes compared to other modes of travel in the MAPA region. Comprehensive training equips riders with critical skills and knowledge, promoting safer riding behaviors and better hazard perception. After Missouri repealed its helmet law in 2020, there was a 47% increase in motorcycle fatalities between 2020-2023.



COST



**TIMELINE** 

Long-term



States of Nebraska and Iowa

# **FOCUS AREA(S)**

Signalized Intersections Speed Management

SU-04

# COST COST



#### TIMELINE

Long-term



# **APPLICABLE PARTIES**

States of Nebraska and Iowa

# **FOCUS AREA(S)**

Impairment & Inattention

© COST



#### TIMELINE

Long-term



SU-01

# **APPLICABLE PARTIES**

State of Nebraska

#### **FOCUS AREA(S)**

**Occupant Protection** 

SU-02

#### **LEGISLATIVE**

# Statewide .05% BAC Limit Legislation

Recommendation: Support laws setting the Blood Alcohol Content (BAC) level for driving under the influence (DUI) at .05% for drivers not already covered by stricter standards.

Justification: FHWA, NHTSA, NTSB, and other leading safety organizations recommend .05% BAC as the BAC limit for DUI enforcement. After Utah lowered its limit from 0.08% to 0.05%, the fatal crash rate dropped by 19.8% in 2019, the first year under the lower legal limit.









# APPLICABLE PARTIES

States of Nebraska and Iowa

# **FOCUS AREA(S)**

Signalized Intersections Speed Management SU-05

#### **COORDINATION / EDUCATION**

#### **COORDINATION / EDUCATION**

# **Enhanced Impairment Enforcement**

Recommendation: Coordinate a multi-agency driver impairment law enforcement campaign using alternate tactics such as high-visibility saturation patrols and publicized sobriety checkpoints. Impairment enforcement locations should be determined through a data-driven process, considering locations with high rates of impairment-related crashes, a high number of pedestrian and bicycle users, the land use context, and public input.

Justification: Enforcement effectively removes impaired drivers from the roads when paired with effective criminal justice and rehabilitation programs. The high-priority network tool can help enforcement officers target specific locations.

# **Positive Community Norms Marketing Campaign**

Recommendation: Implement a Positive Community Norms (PCN) marketing campaign targeting young male drivers to promote safe driving behaviors, such as adhering to speed limits, consistent seat belt use, and avoiding driving under the influence. Engage influential community members from this demographic to serve as safety champions, reinforcing positive behaviors and correcting misperceptions about peer conduct.

Justification: The Montana Institute's PCN framework emphasizes that while most individuals engage in healthy behaviors, misperceptions about peer actions can lead to increased risk-taking. By highlighting the prevalence of safe driving practices and leveraging respected figures within the young male community, such campaigns can correct false norms, reduce risky behaviors, and enhance overall traffic safety.

# **Transit Access for Vulnerable Populations**

**Recommendation:** Coordinate with Metro Transit and organizations serving vulnerable populations in the MAPA region to provide increased transit access, understand the existing system, and strategize for further improvements.

Justification: Only 10% of the homeless population in the Omaha-Council Bluffs metro area has access to a vehicle. Vulnerable population service providers are unable to meet their communities' transportation needs, so they heavily rely on walking. MAPA's Coordinated Transit Committee can play a key role in implementing this recommendation.



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TIMELINE

Long-term



APPLICABLE PARTIES

State of Nebraska

**FOCUS AREA(S)** 

Impairment & Inattention

© COST





TIMELINE

Long-term



SU-06

**APPLICABLE PARTIES** 

MAPA

**FOCUS AREA(S)** 

**Occupant Protection** 

SU-07







TIMELINE

Ongoing



**APPLICABLE PARTIES** 

**MAPA** 



Young & Male Drivers Impairment & Inattention

SU-08

# **SAFER VEHICLES**

These recommendations focus on updating agencies' vehicle fleets to incorporate features that help to avoid or reduce the severity of crashes, as well as training programs for drivers and supporting the use of public transit.

#### **COORDINATION / EDUCATION**

# **Support Transit Use Expansion**

**Recommendation:** Local jurisdictions should support transit ridership by ensuring that all street improvement projects located along or intersecting with a bus route incorporate transit stop improvements as well as first-and-last mile connection improvements (integration with sidewalks, bike lanes, and pedestrian crossings). Projects should also consider ways to enhance transit operations and travel times through strategies such as transit signal priority (TSP) or dedicated bus lanes.

Justification: Public transit is the safest form of transportation, and increasing transit use correlates with reductions in fatal and serious injury crashes. To fully support the goals of the CSAP, it is essential to make strategic investments in first-mile/last-mile pedestrian infrastructure connections to transit stops and to improve bus service quality and operations. By creating these integrated transportation networks, more individuals will choose public transportation as a safe and convenient mode of travel.









Ongoing

# APPLICABLE PARTIES

Jurisdictions with Transit Service

# **FOCUS AREA(S)**

Pedestrians & Bicyclists **Arterial Roadways** 

SV-01

© COST

\$ \$ \$

TIMELINE

Short-term

Αll

**APPLICABLE PARTIES** 

**FOCUS AREA(S)** 

**Occupant Protection** 

Safer Vehicles

#### **COORDINATION / EDUCATION**

# **Vehicle Fleet Safety Training**

**Recommendation:** Develop and enforce comprehensive safety policies for all municipal vehicle operators. These policies should include regular training on safe driving practices, routine vehicle maintenance checks, and monitoring systems to track driver behavior.

**Justification:** Training programs for fleet vehicle drivers can lead to significant cost savings by decreasing accident-related expenses, enhancing operational efficiency, and promoting a safety culture within the fleet.

**Standards** 





TIMELINE

Short-term



APPLICABLE PARTIES

**POLICY / PLANNING** 

policies that prioritize vehicles equipped with

advanced safety features, such as automatic

emergency braking, lane departure warnings, and

Justification: Up-to-date vehicle safety

standards ensure that new fleet vehicles adhere

to the highest safety standards and protect

drivers who are choosing to serve the public.

procurement

**Update Vehicle Procurement** 

**Recommendation:** Establish

improved visibility for drivers.

ΑII

# **FOCUS AREA(S)**

Safer Vehicles **Occupant Protection** 

SV-03

#### **POLICY / PLANNING**

# **Intelligent Speed Assistance in Fleet Vehicles**

Recommendation: Implement Intelligent Speed Assistance (ISA) technology in fleet vehicles to enhance compliance with speed limits and reduce the incidence of speeding-related crashes. This proactive measure promotes safer driving behaviors, saves lives, and reduces jurisdiction liability.

**Justification:** ISA is vehicle technology that helps drivers adhere to posted speed limits by using GPS data to provide alerts or actively control the vehicle's speed to prevent speeding. As of 2024, the NTSB recommends requiring ISA technology in all new cars. NYC's ISA pilot program showed that fleet operators complied with speed limits 99% of the time and reduced instances of hard braking by 36%.



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Αll

#### **FOCUS AREA(S)**

Safer Vehicles Speed Management

SV-04

#### **POLICY / PLANNING**

# **Automatic Crash Management**

**Recommendation:** Require or incentivize the use of in-vehicle telematics systems or personal device applications to alert emergency services automatically after a crash. Coordination should be done with both public agencies and private employers.

Justification: NHTSA-cited research shows that Automatic Crash Notification (ACN) can potentially reduce roadway fatalities by 1.5% to 2.0%. ACN systems can significantly reduce emergency response times by immediately alerting services after a crash, providing precise location data, and potentially transmitting information about the severity of the incident. ACN is especially effective in rural areas.



SV-02



TIMELINE

Long-term



**APPLICABLE PARTIES** 

**FOCUS AREA(S)** 

Post-crash Care Maintenance & Work Zones

SV-05

# DATA, TRANSPARENCY, AND ACCOUNTABILITY

The data, transparency, and accountability recommendations aim to establish a framework for tracking progress, fostering public trust, and ensuring data-driven decision-making in achieving the goals of this action plan.

#### **DATA MANAGEMENT**

# **Crash Data Collection Training**

**Recommendation:** Develop a training program for law enforcement officers to ensure accurate and consistent reporting of crash details. Coordination should include education on how engineers and planners use crash reports and reconcile what level of effort is needed.

Justification: Ensuring accurate and consistent reporting of crash details is crucial, as inaccuracies can significantly impede traffic safety analysis, slow the development of effective countermeasures, make it harder to get funding for safety measures, and result in ineffective policy decisions.

#### **DATA MANAGEMENT**

#### **LRS and MIRE Improvements**

Recommendation: Support the continued development of the roadway network to incorporate a Linear Referencing System (LRS) and Minimum Inventory of Roadway Elements (MIRE).

Justification: These systems would enhance data quality, improve analysis capabilities, and support future-proof data management. The Highway Performance Monitoring System (HPMS) contains minimal characteristics and should be the primary dataset in the future for ease of conflation.





**TIMELINE** 





**APPLICABLE PARTIES** 

**DATA MANAGEMENT** 

**Recommendation:** Coordinate with state and

local jurisdictions to establish a framework for

collecting consistent and accurate data on work

zone locations, setup type, contractor presence,

Justification: Approximately 3% of the fatal

and serious injury crashes in the region from

2018-2022 were noted as work zone-related.

Construction workers and road maintenance

personnel are highly vulnerable in work zones,

**Work Zone Data Collection** 

mobile or permanent, time period, etc.

where traffic often moves nearby.

MAPA

#### DT-03

#### **COORDINATION / EDUCATION**

# **Progress to Zero Report**

**Recommendation:** Develop an annual Progress to Zero report that reports on progress toward the CSAP goals and metrics. The report should be based on regular updates to the High Priority Network (HPN) Tool and safety metrics. The findings from the annual reports can be utilized to update the action plan every 3-5 years, ensuring that the action plan is adjusted to keep on track to Zero by 2040. The report should be posted online and be available to the public.

Justification: Evidence-based safety analysis is an ongoing activity in communities proactively working toward zero fatalities and serious injuries. MAPA can support progress monitoring and streamlined safety analysis by regularly updating its HPN tool and coordinating improvements to its input data sources. This will allow the HPN to be the primary source of reporting progress to zero fatalities and serious injuries.



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Ongoing



MAPA

DT-04

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TIMELINE

Short-term



**APPLICABLE PARTIES** 

MAPA

# **FOCUS AREA(S)**

Pedestrians & Bicyclists **Arterial Roadways** 

DT-01



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**TIMELINE** 



**APPLICABLE PARTIES** 



**FOCUS AREA(S)** 

Safer Vehicles **Occupant Protection** 

DT-02

# **COORDINATION / EDUCATION**

#### Standardized Data Schema

Recommendation: Coordinate the format with NDOT for future NDOT Crash Data submissions to be standardized to avoid recurring schema changes, such as from pre-2021 to post-2021 NDOT crash data.

Justification: Modifying the HPN analysis code for NDOT data schema changes is inefficient and prone to errors. These changes can impact application functionality, cause bugs, and affect user experience. A standardized data schema is needed to ensure consistent data, streamline analysis, and maintain code integrity.



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DT-05

# SAFETY METRICS

The list below is a selection of metrics based on the recommendations and the goals for many, which are tied to the high-priority network or prioritized projects. Safety metrics were created to track the MAPA region's and communities' progress in implementing recommendations. Crash fatalities and serious injuries are lagging indicators, whereas these measures can be monitored in real-time and provide tangible targets to meet. All goals and rates are for the MAPA Region as a whole but are intended to be measured at the jurisdiction level.

# LEGISLATIVE

METRIC	GOAL	RATE	EXPECTED KSIS REDUCED ( / YEAR)
Primary Seatbelt Law	Pass a primary seatbelt law in Nebraska by 2030.	-	53.1
BAC Limit of 0.05% Law	Pass a 0.05% BAC limit law in Nebraska and lowa by 2030.	-	61.9
Red-light Running & Speed Safety Cameras Laws	Pass red-light and speed safety cameras laws in Nebraska by 2030.	-	66.4
Primary Handheld Device Law	Pass a primary handheld device law in Nebraska and lowa by 2030.	-	4.4
Motorcycle Helmet Law	Pass motorcycle helmet laws in Nebraska and lowa by 2030.	-	*

# **PLANNING**

METRIC	GOAL	RATE	EXPECTED KSIS REDUCED ( / YEAR)
Complete Streets Design Standards	All jurisdictions with or covered by a Complete Streets Design Standard less than 10 years old.	2 Jurisdictions per Year	*
Active Mobility Plans	All jurisdictions with or covered by an Active Mobility Plan less than 10 years old.	2 Jurisdictions per Year	*
Traffic Calming Policy	All jurisdictions with or covered by a Traffic Calming Policy less than 10 years old.	2 Jurisdictions per Year	*
Safe Routes to School	All jurisdictions with or covered by a Safe Routes to School less than 10 years old.	2 Jurisdictions per Year	*
Traffic Impact Study Guidance	All jurisdictions with or covered by a Traffic Impact Study Guidance less than 10 years old.	2 Jurisdictions per Year	*

#### **INFRASTRUCTURE**

METRIC	GOAL	RATE	EXPECTED KSIS REDUCED ( / YEAR)
4-lane Undivided	Eliminate 4- and 5-lane undivided roadways by 2040, prioritizing High Priority Network locations.	2.3 Miles per Year	17.7
Signal Conversions	Convert 25% of signals on the High Priority Network to a roundabout or reduced conflict intersection by 2040.	8 Signals per Year	18.0
Signal Modificaitons	Upgrade 35% of signals on the High Priority Network by 2040.	12 Signals per Year	5.8
Rural Shoulders	Install shoulders on 100% of identified candidate locations >1,000 ADT by 2040, prioritizing High Priority Network locations.	5.4 Miles per Year	2.4
Curve Delineation	Modify 100% of curve delineation locations on identified Prioritized Project locations by 2040.	2 Locations per Year	1.2
Traffic Calming	Install 1,000 neighborhood traffic calming countermeasures by 2040, utilizing the VZ Toolbox.	67 Locations per Year	*
Active Mobility Facilities	Install 75 miles of active mobility facilities by 2040, prioritizing locations on the High Priority Network and installation of separated facilities.	5 Miles per Year	*

# **BEHAVIORAL**

METRIC	GOAL	RATE	EXPECTED KSIS REDUCED ( / YEAR)
Traffic Safety Enforcement	Increase funding for local traffic enforcement by 30% by 2040.	-	*
Driver's Safety Education	Establish a youth driver education program by 2030, prioritizing engagements in Transportation Disadvantaged Communities.	-	*
Traffic Safety Marketing	Establish and allocate \$200k to traffic safety marketing per year by 2030.	-	*

<sup>\*</sup> Unable to estimate expected annual KSI reduction based on available data.