VISION ZERO OMAHA

ENDING TRAFFIC DEATHS

ACTION PLAN

FALL 2023

Omaha has committed to eliminating traffic deaths and serious injuries on our streets. We can and will make our streets safer for everyone in Omaha.

NO LOSS OF LIFE IS ACCEPTABLE.

VISION ZERO OMAHA

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» INTRODUCTION

» A LETTER FROM THE MAYOR

Public safety is my primary responsibility. The safety of everyone who uses our roads is critically important for a safe city like Omaha.

The recommendation to join the Vision Zero network started with the Active Living Advisory Committee, a volunteer group I created by Executive Order. For several years, traffic deaths and serious crash injuries have increased at an alarming rate. This is why we have made a commitment to become a Vision Zero City.

Vision Zero is based on the principal that traffic deaths and injuries are preventable. It's a common-sense goal we should strive for.

I named a task force to study crash trends, roadway design and other factors that contribute to fatal and personal injury crashes. That work was the first step, resulting in the Vision Zero Action Plan.

Our plan will be focused on safe speeds, safe users and safe streets.

This process has been guided by a project team and a Technical Advisory Committee that includes citizen representatives, safety advocates, non-profit organizations, transit agencies, Omaha Police, Fire, Planning and Public Works Departments and our consultants WSP and JEO Consulting Group.

Thank you to these team members and to everyone who has provided input at public meetings, pop-up events and online. Community involvement and buy in will be the key to reducing deaths through Vision Zero.

We all have a role and a responsibility to successfully implement the plan. If there is a city that has the will and expertise to accomplish the Vision Zero goals, Omaha is the city, and now is the time!

Sincerely,

Jean Stothert

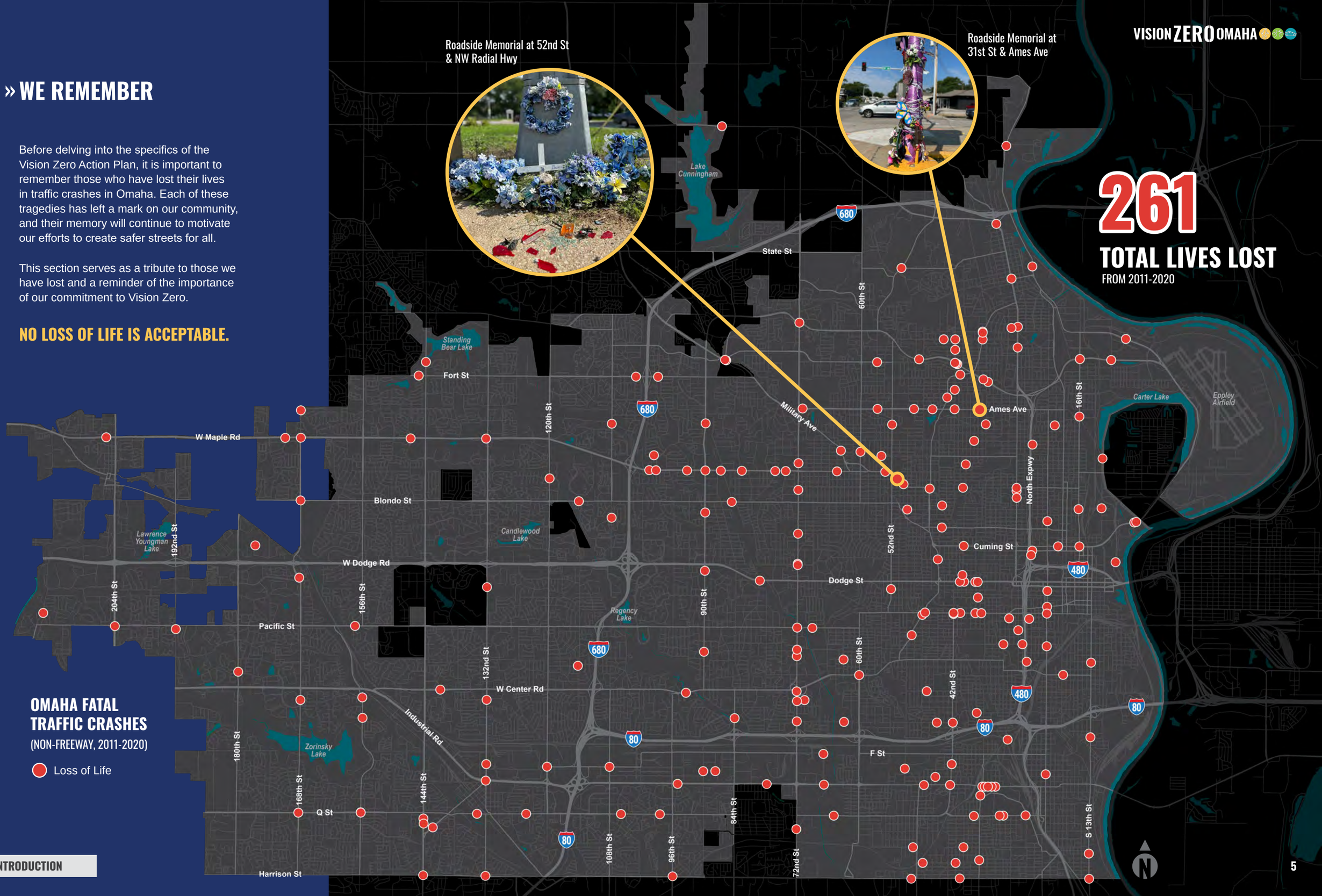
Jean Stothert
Mayor, City of Omaha

» WE REMEMBER

Before delving into the specifics of the Vision Zero Action Plan, it is important to remember those who have lost their lives in traffic crashes in Omaha. Each of these tragedies has left a mark on our community, and their memory will continue to motivate our efforts to create safer streets for all.

This section serves as a tribute to those we have lost and a reminder of the importance of our commitment to Vision Zero.

NO LOSS OF LIFE IS ACCEPTABLE.



» ACKNOWLEDGMENTS

This Vision Zero effort started over five years ago and has culminated in a year-long analysis, planning, and public engagement process that involved community members, city officials, and transportation experts. This plan outlines a wide range of strategies and actions that are intended to reduce traffic-related fatalities and injuries by addressing the underlying causes of crashes.

PROJECT TEAM

CITY OF OMAHA

Austin Rowser, *City Engineer*

Jeff Sobczyk, *Vision Zero Coordinator*

Jeff Riesselman, *Omaha Public Works*

Krista Wassenaar, *Omaha Public Works*

Nick Gordon, *Omaha Public Works*

WSP

Jay Aber
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Josh Boehm
David Church
Karin Hassner
Steff Hedenkamp
Joe Milsap
Le Zhang

JEO CONSULTING GROUP

Lonnie Burklund
Mark Lutjeharms
Matt Selinger
Kari Slattery
Alyssa Vaughan

CITYFI

Karla Peralta
Story Bellows
Camron Bridgford

EXECUTIVE COMMITTEE

Keith Station*, *Office of the Mayor*

Jacquelyn Morrison*, *Office of the Mayor*

Robert Stubbe, *Public Works Director*

Eric Englund, *Assistant Planning Director*

Daniel Seder, *Assistant Parks Director*

Steve Scarpello, *City Council Assistant*

Chief Kathy Bossman*, *Omaha Fire Department*

Lt Allen Straub, *Omaha Police Department*

Mike Helgerson, *Executive Director of MAPA*

** Also on Technical Advisory Council*

TECHNICAL ADVISORY COMMITTEE

Derek Miller, *Omaha Planning*

Kevin Carder, *Omaha Planning*

Ken Smith, *Omaha Parking and Mobility*

Evan Schweitz, *Metro Transit*

Chris Wagner, *Project Extra Mile*

Trilety Wade, *Safe Omaha Streets*

Benny Foltz, *Heartland Bike Share*

Ryan Wishart, *Creighton - Sociology, Social Science Data lab*

Brittany Dabestani, *Benson BID*

LaVonya Goodwin, *North 24th St BID*

Matt Oberst, *Blackstone BID*

Daniel Lawse, *Verdis Group*

Andy Wessel, *Douglas County Dept. of Health*

Carlos Morales, *MAPA*

Tom Everson, *Keeps Kids Alive, Drive 25*

Eric Koeppe, *National Safety Council - Nebraska Chapter*

Karen Saxton, *UNMC - Nebraska Med Trauma*

Katie Pierce, *CHI Trauma Center*

James Hubbard, *Sherwood Foundation*

Holly Barrett, *Downtown BID*

Pell Duvall, *Active Living Advisory Committee*

Meaghan Fitzgerald Walls, *Advisory Commission for Citizens with Disabilities*

» CITY COUNCIL RESOLUTION

» EXECUTIVE SUMMARY

Omaha's Vision Zero Action Plan is a comprehensive and data-driven plan to eliminate traffic fatalities and serious injuries on Omaha's streets. The plan is based on the Safe System Approach, which recognizes that no one is immune to traffic crashes and that all road users have a role to play in creating safe streets.

The plan includes a number of proven strategies for Omaha to achieve Vision Zero, including:

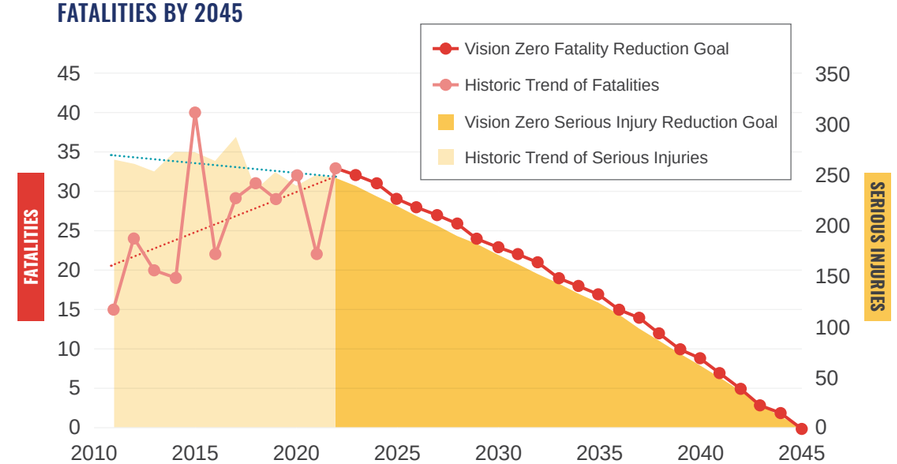
Safe Speeds: Reducing speeds on Omaha's streets is one of the most important things we can do to prevent traffic fatalities and serious injuries. The plan includes a number of strategies to reduce speeds, such as traffic calming devices, reconfiguring lanes, and speed management plans.

Safe Users: The plan also includes several strategies to make Omaha's streets safer for drivers, pedestrians, cyclists, and other vulnerable road users. These strategies include supporting communication and outreach efforts, expanding transit use, enhanced police enforcement, and traffic safety education.

Safe Streets: These strategies are intended to make Omaha's streets themselves safer and more accessible to people of all ages and abilities. These strategies include improving road design with a more context-sensitive approach and addressing new and existing policies through the perspective of a Safe System Approach.

The Vision Zero Omaha Action Plan is a bold and ambitious plan, but it is one that is necessary to prevent traffic fatalities and serious injuries in our city. The plan is based on the best available evidence, and it has the support of the city and community. We are confident that, by working together, we can achieve Vision Zero and make Omaha's streets safer for everyone.

THE VISION ZERO OMAHA ACTION PLAN'S GOAL IS TO ELIMINATE ALL TRAFFIC FATALITIES BY 2045



» WHY VISION ZERO?

> "Vision Zero is a comprehensive and holistic approach to safer streets that enhances the quality of life for ALL of us in Omaha. The work of Vision Zero requires collaboration and leadership to improve safe mobility and access through a Safe System Approach."
>
> *– Omaha Mayor Jean Stothert*

Omaha is embracing Vision Zero, a global initiative that rejects the belief that deaths and serious injuries on our roads are an acceptable cost of transportation mobility. The vision is **ZERO** deaths and **ZERO** serious injuries on our roads. Life-altering traffic crashes can be prevented. Mayor Jean Stothert made the commitment for Omaha to implement Vision Zero following the recommendations of the Omaha Vision Zero Task Force.

FROM 2011 TO 2020 ON OMAHA STREETS THERE WERE:

261
People Killed

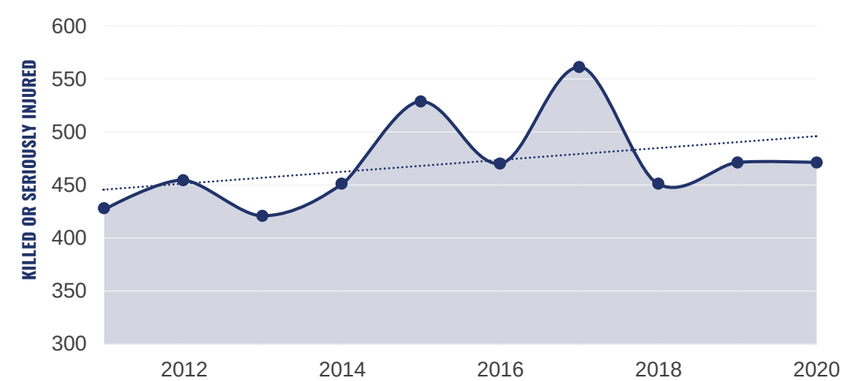
4,456
People Injured

$4.1 B
Economic Cost to Society

5
People Seriously Injured Every Week
on average

1
Death Every 10 Days
on average

FROM 2011 TO 2020 IN OMAHA, THERE WAS AN UPWARD TREND IN THE NUMBER OF PERSONS KILLED AND SERIOUSLY INJURED IN CRASHES



Source: NDOT

» VISION ZERO GUIDING PRINCIPLES

The City of Omaha, with the help of the Technical Advisory Committee (TAC) and Executive Committee, created a set of guiding principles that influenced all aspects of this plan. The Vision Zero Omaha Action Plan will address:

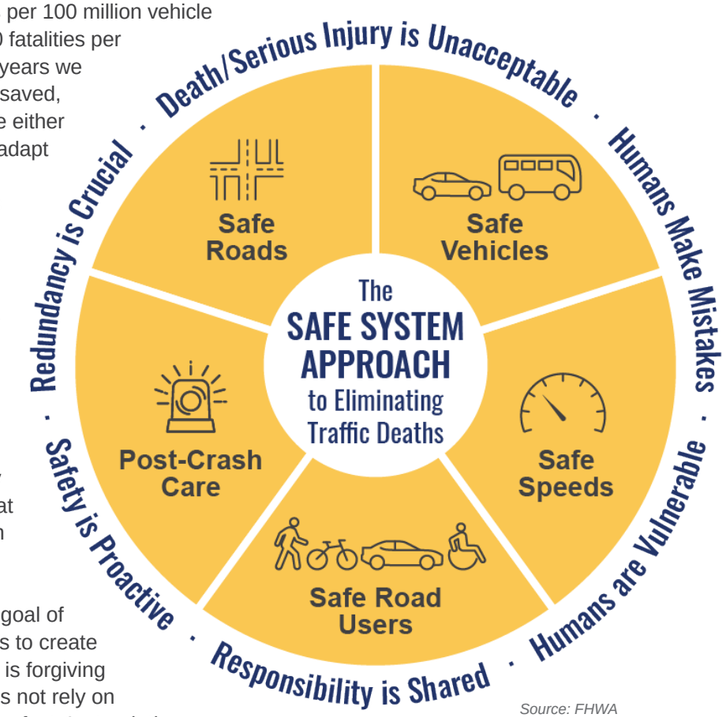
ALL MODES OF TRANSPORTATION	**Eliminating traffic deaths for people walking, biking, accessing transit, and driving.**
EQUITY	**Focusing on equitable safety solutions prioritized to the areas of greatest need to ensure safe access is available to everyone.**
DATA-DRIVEN SOLUTIONS	**Following industry best practices, evidence-based solutions, and local data analysis.**
PUBLIC INPUT	**Being guided by feedback from the public.**
EDUCATION	**Informing the public of the importance of Vision Zero and a shared responsibility of all roadway users and city officials.**
COMMITMENT & ACCOUNTABILITY	**Gaining buy-in at all levels of leadership and guide alignment of funding, policies, and processes.**
URGENCY	**Focusing on quick action to address the urgent need to stop the continued loss of life and severe injuries.**

» WHAT IS VISION ZERO?

Vision Zero is a global road safety initiative that originated in Sweden in the late 1990s. The core principle of Vision Zero is the belief that all traffic fatalities and serious injuries are preventable, and that no loss of life is acceptable. The goal of Vision Zero is to create a transportation system that prioritizes safety above all else, using a data-driven approach to identify and address the root causes of traffic crashes.

THE SAFE SYSTEM APPROACH

Over the last six decades, traffic fatalities in Nebraska have decreased from 5.0 fatalities per 100 million vehicle miles (HMVM) in 1966 to 1.0 fatalities per HMVM in 2010. In those 45-years we should be proud of the lives saved, but the same strategies have either been exhausted or failed to adapt to the changing problems. This incredible progress has stagnated over the last decade, having ticked upward by 20% to 1.2 fatalities per HMVM in 2020. The Safe System Approach is a new way of addressing transportation safety.



Source: FHWA

The Safe System Approach is a comprehensive strategy for managing road safety that is closely aligned with Vision Zero principles. Developed by the Federal Highway Administration (FHWA), the goal of the Safe System Approach is to create a transportation system that is forgiving to human error and that does not rely on individual road users to be perfect. Instead, the approach recognizes that people will make mistakes and that the transportation system must be designed to protect the road user from the consequences of those mistakes.

The Safe System Approach is based on four fundamental principles:

1 PEOPLE MAKE MISTAKES

The Safe System Approach recognizes that human error is inevitable, and that people will make mistakes when using the transportation system.

2 SYSTEMATIC SAFETY

The transportation system must be designed to be safe, even when road users make mistakes.

3 SHARED RESPONSIBILITY

All stakeholders, including road users, engineers, elected officials, emergency responders, and transportation planners, have a role to play in creating a safe transportation system.

4 CONTINUOUS IMPROVEMENT

The Safe System Approach is a continuous process of improvement, with a focus on identifying and addressing the root causes of traffic crashes.

By implementing the Safe System Approach, cities and countries can create transportation systems that are more accommodating to human error, and that prioritize the safety of all road users.

WORDS MATTER

Words used in conversation and shared by the news media to describe traffic crashes are important. Words communicate ideas, and these ideas influence how individuals, readers, listeners and viewers think about what has happened and what should be done about it. Those that report news and the public can help advance the work of the City and the Omaha Vision Zero efforts by keeping in mind:

- **Using the term "crash" instead of "accident."** The word "accident" implies that the crash was unavoidable, but traffic crashes can be prevented.
- **Don't assign a simple cause to a crash.** There are specific risk factors that contribute to serious crashes. When talking or reporting on a crash, it is important to highlight these factors. Instead of assigning blame, ask questions about what could have prevented the crash.
- **Report with compassion about the people involved in a crash.** Small mistakes can have fatal consequences in traffic crashes. Be mindful of the victims and their families when discussing a crash.
- **Don't blame crash victims.** Pedestrians and cyclists are often blamed for crashes, even though they are not the only ones at fault. We need to be fair and accurate in discussing those involved.
- **Be aware of survivorship bias.** If there are two witnesses to a crash, and one is killed, the person who died cannot speak on their own behalf. Don't take one party's word at face value.

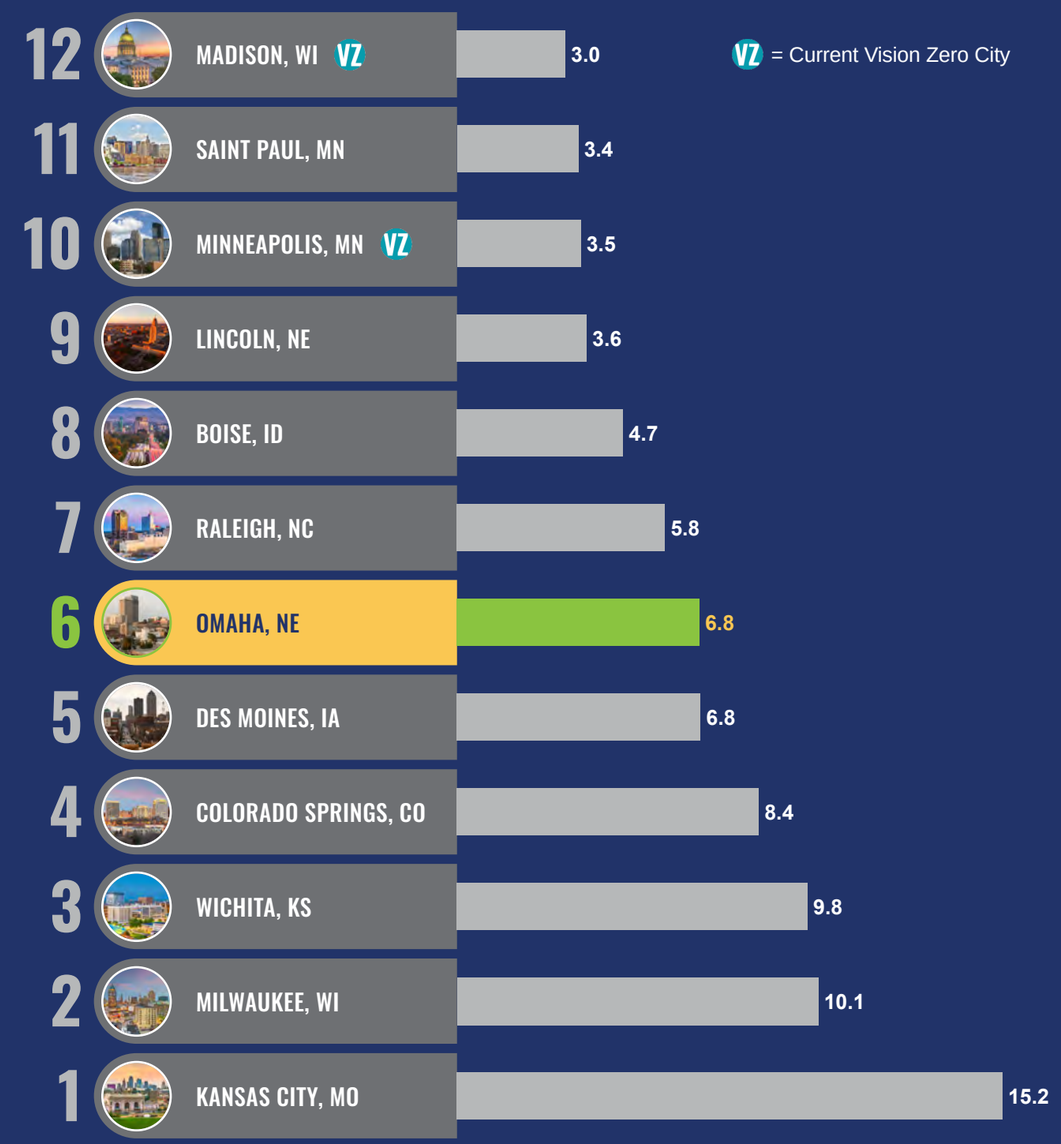
» A COMMUNITY OF VISION ZERO CITIES

A goal of the Vision Zero Omaha movement is to become a member of the Vision Zero Network of cities. More than 45 communities have committed to Vision Zero in the U.S. and the concrete goals of moving the needle further on safety, they include:

- A clear goal of eliminating traffic fatalities and severe injuries has been set.
- The Mayor has publicly, officially committed to Vision Zero.
- A Vision Zero plan or strategy is in place.
- Key departments (including transportation, public health and mayors' offices) are leading.

When compared to peer cities (of similar size and in those in geographic area), Omaha is the middle of the pack. This does not mean there isn't more we can do to continue to improve safety in the City. By becoming a part of the Vision Zero Network and looking to our peers, we can analyze best practices and how to move forward most effectively to reduce fatal and serious injury crashes to zero.

CRASH FATALITIES PER 100,000 POPULATION



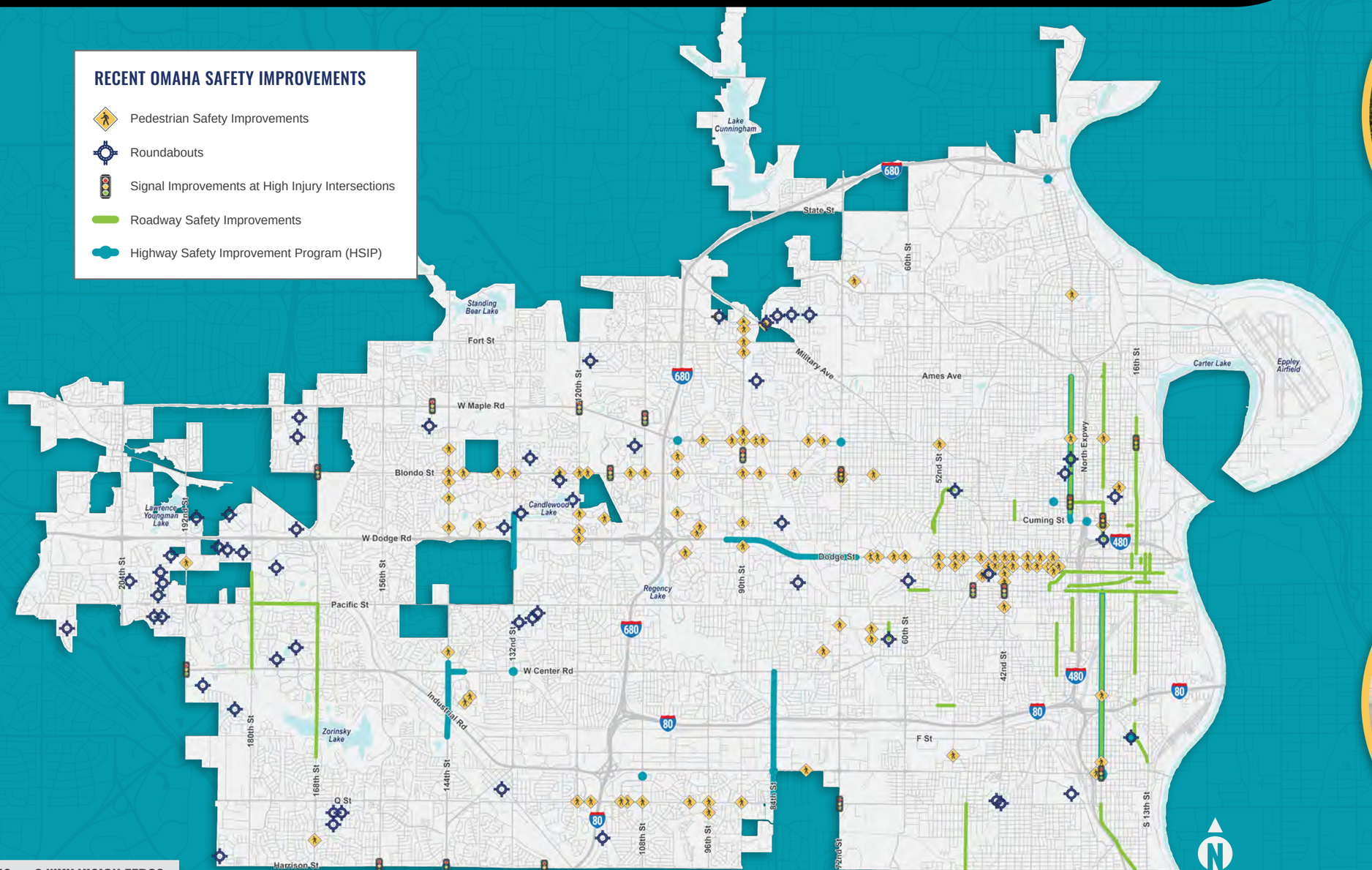
Source: NHTSA 2015-2019

» RECENT SUCCESSES IN OMAHA

Safety has always been a top priority in Omaha. There are many new strategies as part of the Vision Zero Action Plan, and many recommendations are building on existing efforts.

Omaha has Completed or Planned Construction for:

- **57** ROUNDABOUTS
- **19** SIGNAL IMPROVEMENTS AT HIGH INJURY INTERSECTIONS
- **107** PEDESTRIAN CROSSING IMPROVEMENTS
- **25+** MILES OF ROADWAY SAFETY IMPROVEMENTS



SUCCESS STORY: 42nd & Q Roundabouts

In 2016 two signals at this location were converted to dual roundabouts. In a before-after study, **crashes were reduced by 20-40% and severity crashes were decreased by 60%.**

SUCCESS STORY: Farnam Street

In 2022, Farnam Street in the Blackstone District was converted from three through-lanes to two. Additionally, enhanced pedestrian crossings were added and leading pedestrian intervals implemented at the signals. From a before-after study the **average speeds have decreased from 30 mph to 25 mph** and these improvements are anticipated to **decrease crashes by 20-50%.**

» WHAT WE HAVE HEARD

In the fall of 2019, the Omaha Vision Zero Task Force made the recommendations that the City hire a Vision Zero Coordinator, develop an action plan, and start a robust engagement effort to build community knowledge and momentum around traffic safety. In 2022, the task force expanded and became the **Vision Zero Technical Advisory Committee (TAC),** which has been critical in guiding the Vision Zero Action Plan's progress.

ORGANIZATIONS AND MEMBERS OF THE TAC INCLUDE:

- Benson Business Improvement District (BID)
- Blackstone BID
- CHI Trauma Center
- Creighton - Sociology, Social Science Data Lab
- Douglas County Department of Health
- Downtown BID
- Heartland Bike Share
- Keeps Kids Alive, Drive 25
- (Mayor's) Active Living Advisory Committee
- (Mayor's) Advisory Commission for Citizens with Disabilities
- Metro Area Planning Agency
- Metro Transit
- National Safety Council - Nebraska Chapter
- North 24th St BID
- North Saddle Creek BID
- Office of the Mayor
- Old Elkhorn BID
- Omaha Fire Department
- Omaha Parks Department
- Omaha Planning Department
- Omaha Police Department
- Omaha Public Schools
- Omaha Public Works Department (Traffic; Design)
- Park Omaha
- Project Extra Mile
- Safe Omaha Streets
- Sherwood Foundation
- South Omaha BID
- UNMC - Nebraska Med Trauma
- Verdis Group

COMMUNITY ENGAGEMENT

Engaging the public is essential to the success of the Vision Zero Action Plan. Pop-up events were hosted around the city at community centers, farmer's markets, fish frys, and neighborhood festivals. By listening to public opinions and collaborating on solutions, we built a foundation for success. Additionally, celebrating the plan's achievements will help the community see the benefits of improved driver behavior and engineering projects. Twelve pop-up events were held between January and July 2023, with more than 450 attendees at these events and more than 580 comments received. All input provided was collected and considered for the plan's recommendations. On August 15, 2023, nearly 90 people attended the open house meeting at the UNO Barbara Weitz Community Engagement Center. An overview of the plan plus draft recommendations were presented. Twenty-three comment forms were completed following a two-week public comment period. Appendix A contains a comprehensive summary of all community and public engagement activities.

POP-UP EVENTS

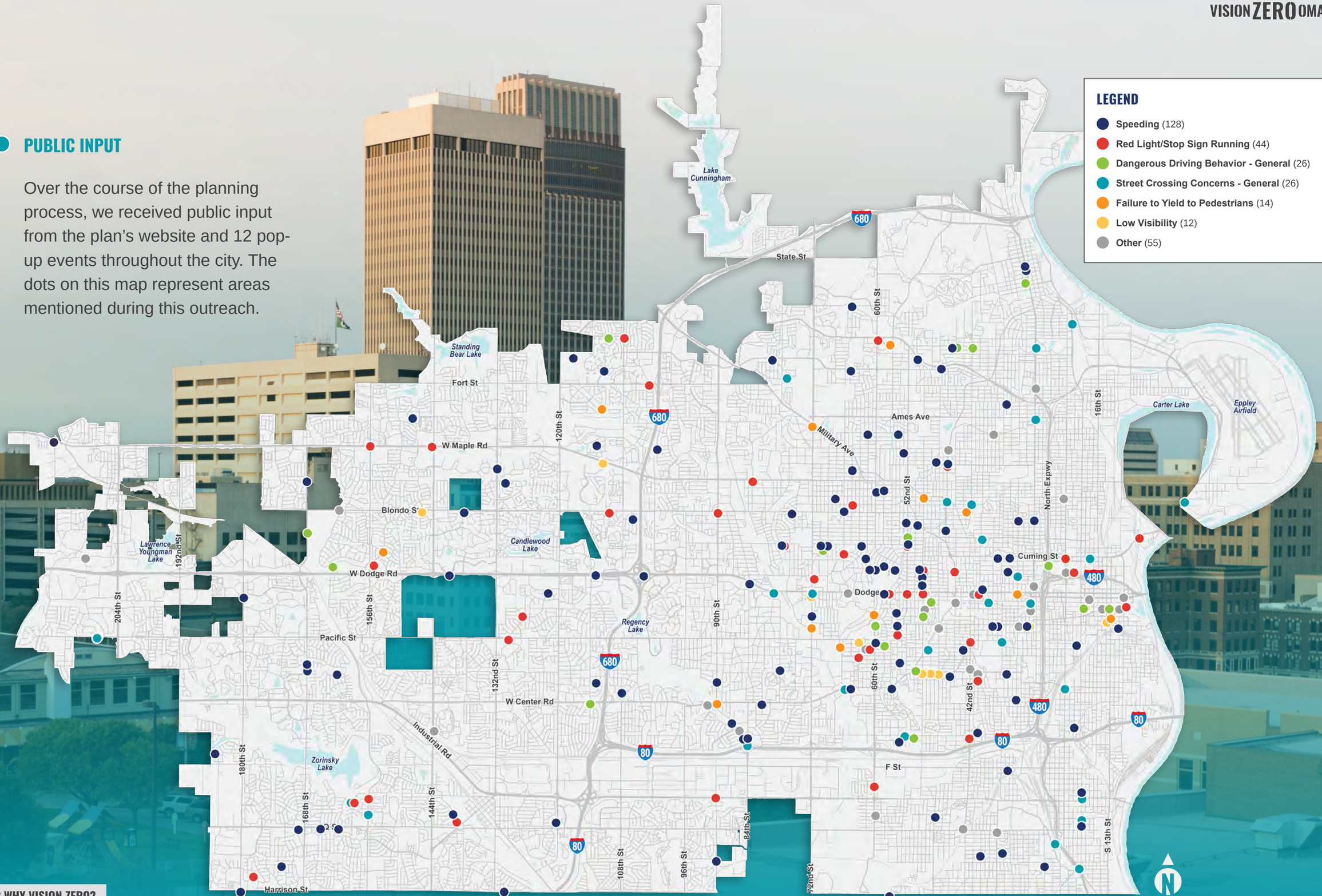
- **01/25/23:** Saddlebrook Community Center
- **01/26/23:** Florence Community Center
- **01/28/23:** State of North Omaha & State of African Americans
- **03/08/23:** South Omaha Library
- **03/10/23:** Our Lady of Lourdes Fish Fry
- **03/16/23:** Keep Kids Alive Drive 25 Classic Car Fundraiser
- **04/22/23:** Earth Day
- **04/23/23:** Healthy Kids Day
- **05/13/23:** Cinco de Mayo
- **05/27/23:** Sheelytown Night Market
- **06/17/23:** Freedom Festival
- **07/29/23:** Benson Days

ONLINE ENGAGEMENT

In order to meet the public where they are, OmahaVisionZero.com was leveraged to help engage the public to provide comments. The site includes information about the ongoing Vision Zero planning efforts, media guide, upcoming events, and online engagement opportunities. One of these opportunities is an interactive traffic safety issues map that invites citizens to identify locations where they feel unsafe driving, walking, or biking in Omaha.

PUBLIC INPUT

Over the course of the planning process, we received public input from the plan's website and 12 pop-up events throughout the city. The dots on this map represent areas mentioned during this outreach.



» WHO IS IMPACTED?

The City of Omaha carried out a comprehensive analysis of crash data across the city. Data-driven is a guiding principle of this action plan and indispensable to the Vision Zero effort. This data-driven approach aids in pinpointing precise crash concerns linked to equity, mode share, roadway characteristics, intersection types, and behavioral elements. By merging this data analysis with active involvement from the Vision Zero Technical Advisory Committee and public input, we established purposeful areas for enhancement, identified effect countermeasures, and created an Action Plan poised to propel Omaha's journey towards zero.

It should be noted that only crashes on non-freeway roadways were analyzed. This is due to the City of Omaha having a limited control of how they operate (Nebraska DOT has primary jurisdiction) and the characteristics of freeway crashes are much different than those on local, collector, and arterial roadways.

» CRASH MAPPING

HIGH INJURY NETWORK

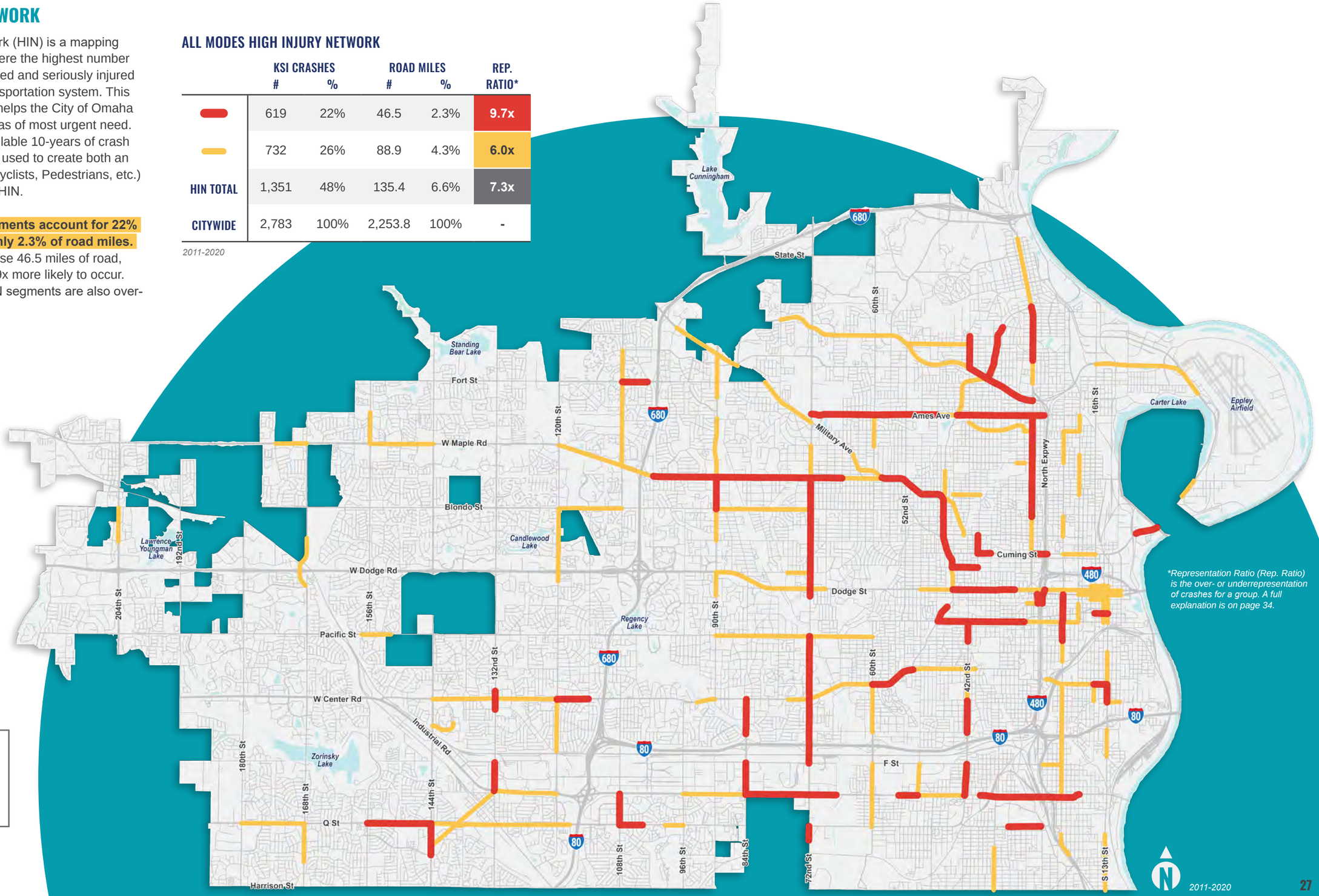
The High Injury Network (HIN) is a mapping tool to help identify where the highest number of people are being killed and seriously injured (KSI) on Omaha's transportation system. This data-driven approach helps the City of Omaha focus resources in areas of most urgent need. The most recently available 10-years of crash data (2011–2020) was used to create both an All Modes (Vehicles, Cyclists, Pedestrians, etc.) HIN and a Pedestrian HIN.

The Priority HIN segments account for 22% of KSI crashes but only 2.3% of road miles. This shows that on these 46.5 miles of road, KSI crashes are over 9x more likely to occur. Similarly, the other HIN segments are also over-represented.

ALL MODES HIGH INJURY NETWORK

	KSI CRASHES #	KSI CRASHES %	ROAD MILES #	ROAD MILES %	REP. RATIO*
	619	22%	46.5	2.3%	9.7x
	732	26%	88.9	4.3%	6.0x
HIN TOTAL	1,351	48%	135.4	6.6%	7.3x
CITYWIDE	2,783	100%	2,253.8	100%	-

2011-2020



Representation Ratio (Rep. Ratio) is the over- or underrepresentation of crashes for a group. A full explanation is on page 34.

LEGEND
- Priority HIN
- HIN

2011-2020

PEDESTRIAN HIGH INJURY NETWORK

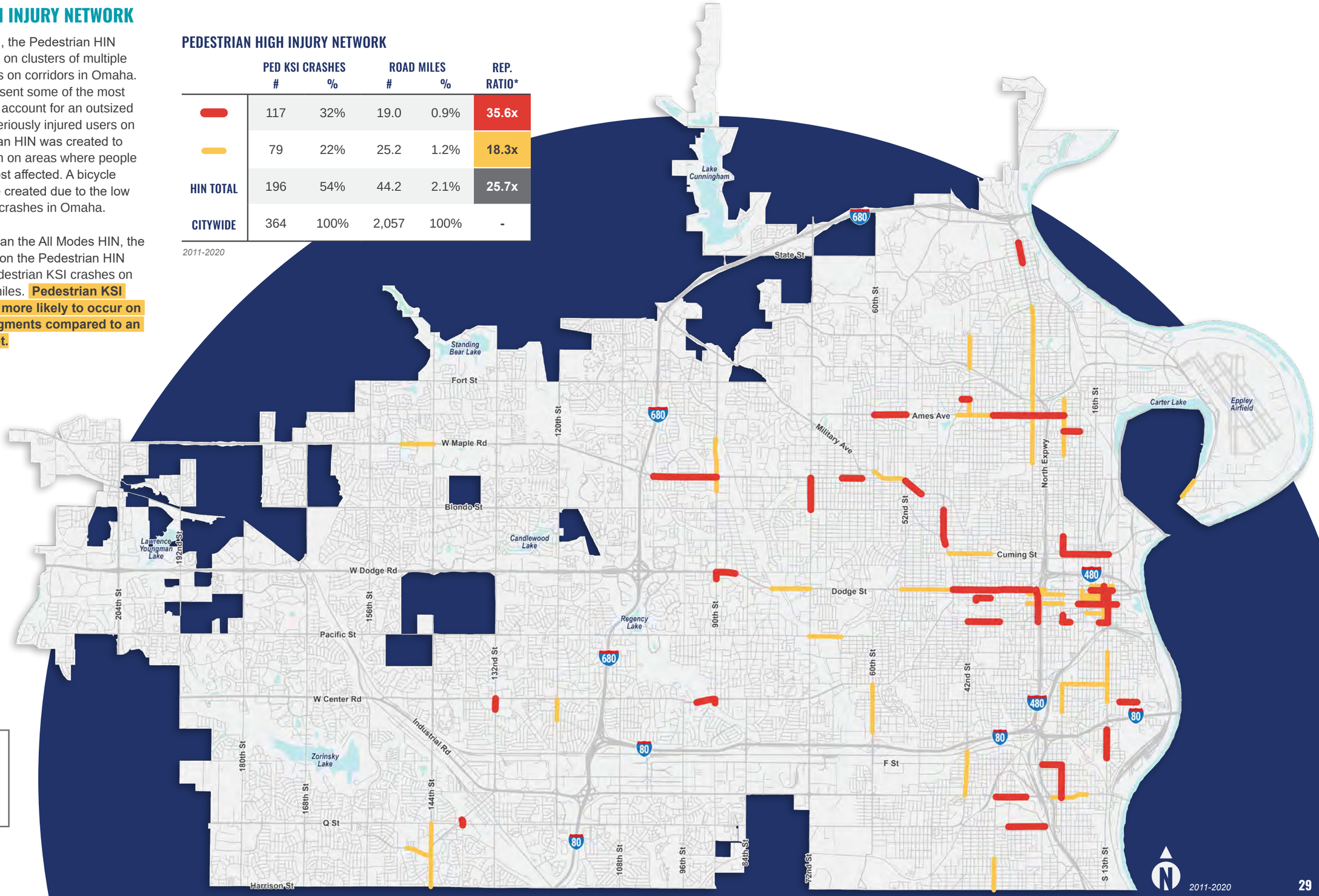
Like the All Modes HIN, the Pedestrian HIN was determined based on clusters of multiple pedestrian KSI crashes on corridors in Omaha. Pedestrians who represent some of the most vulnerable road users, account for an outsized number of killed and seriously injured users on our streets. A Pedestrian HIN was created to help focus the attention on areas where people that walk or roll are most affected. A bicycle HIN was not able to be created due to the low amount of KSI bicycle crashes in Omaha.

Even more dramatic than the All Modes HIN, the Priority HIN segments on the Pedestrian HIN account for 32% of Pedestrian KSI crashes on less than 1% of road miles. **Pedestrian KSI crashes are over 38x more likely to occur on these Priority HIN segments compared to an average Omaha street.**

PEDESTRIAN HIGH INJURY NETWORK

	PED KSI CRASHES #	PED KSI CRASHES %	ROAD MILES #	ROAD MILES %	REP. RATIO*
	117	32%	19.0	0.9%	35.6x
	79	22%	25.2	1.2%	18.3x
HIN TOTAL	196	54%	44.2	2.1%	25.7x
CITYWIDE	364	100%	2,057	100%	-

2011-2020



LEGEND

- Priority HIN
- HIN

2011-2020

HIGH INJURY INTERSECTIONS

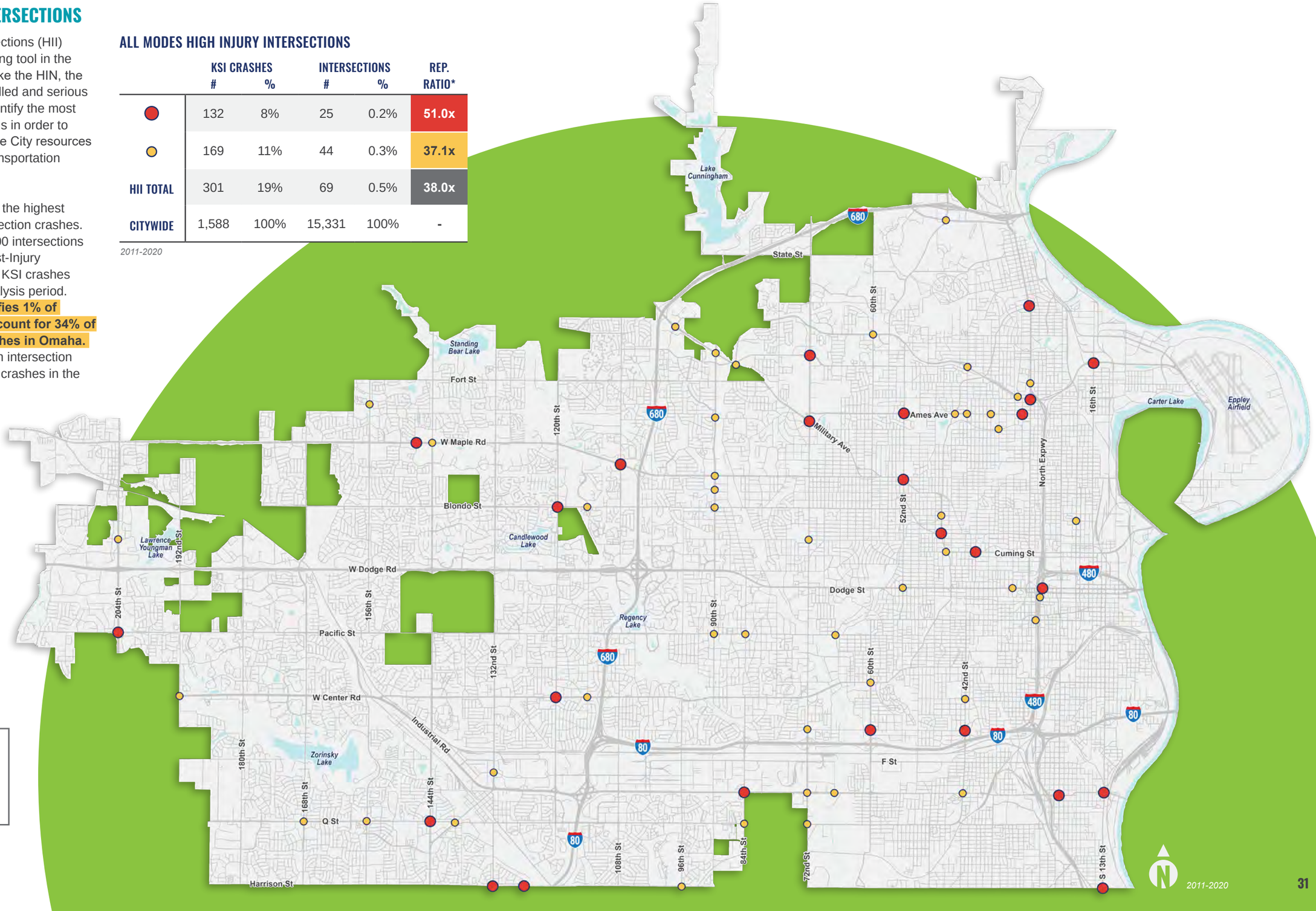
The High Injury Intersections (HII) are another key mapping tool in the Vision Zero toolbox. Like the HIN, the HII uses 10-years of killed and serious injury crash data to identify the most dangerous intersections in order to most effectively allocate City resources and give context to transportation safety problems.

The HII locations have the highest concentration of intersection crashes. Omaha has over 15,000 intersections and just seven "Highest-Injury Intersections" had 132 KSI crashes during the 10-year analysis period. In total, **the HII identifies 1% of intersections that account for 34% of KSI intersection crashes in Omaha.** Each dot represents an intersection that had at least 4 KSI crashes in the 10-year period

ALL MODES HIGH INJURY INTERSECTIONS

	KSI CRASHES #	KSI CRASHES %	INTERSECTIONS #	INTERSECTIONS %	REP. RATIO*
●	132	8%	25	0.2%	51.0x
●	169	11%	44	0.3%	37.1x
HII TOTAL	301	19%	69	0.5%	38.0x
CITYWIDE	1,588	100%	15,331	100%	-

2011-2020



LEGEND

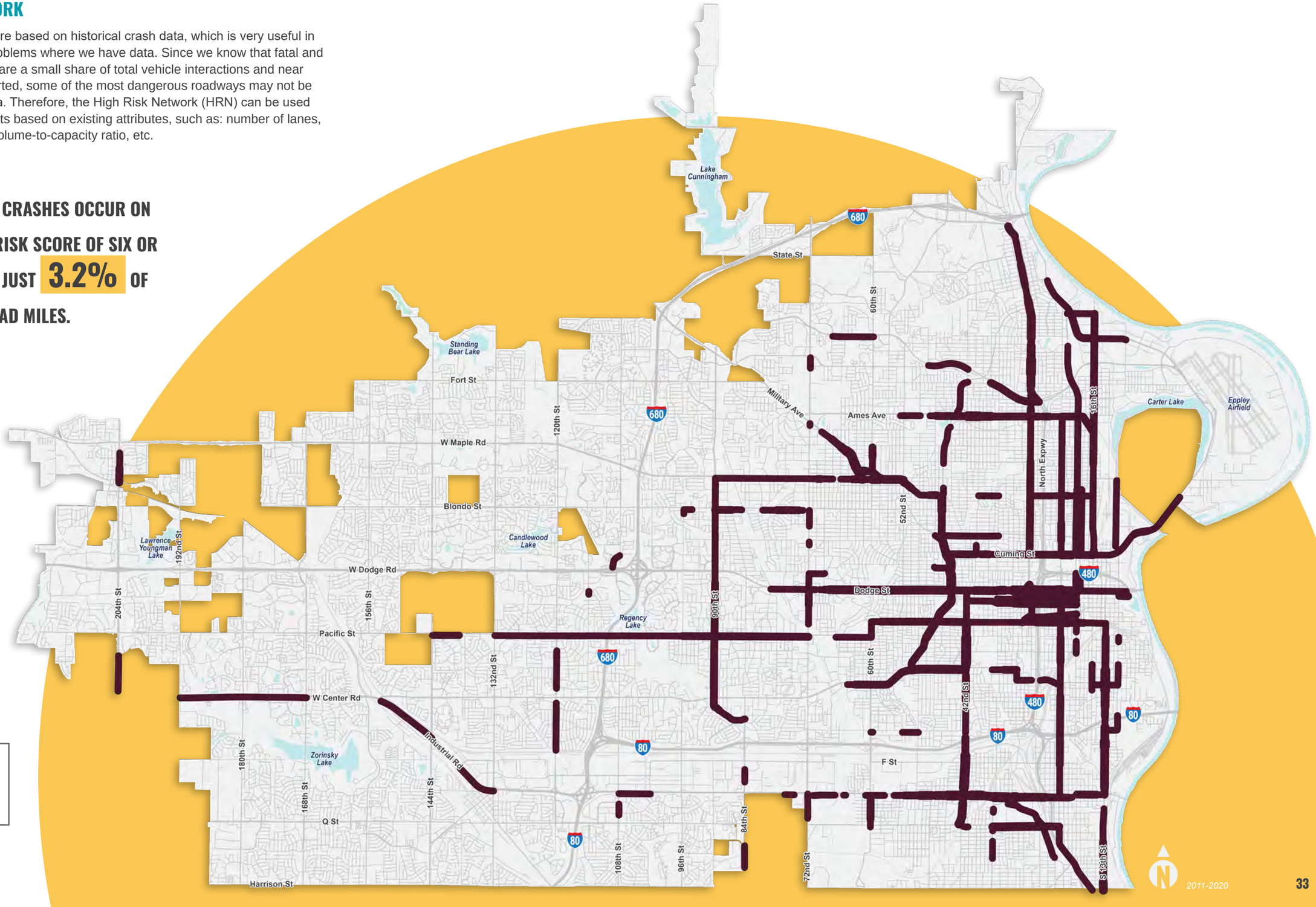
- Priority HII
- HII

2011-2020

HIGH RISK NETWORK

Both the HIN and HII are based on historical crash data, which is very useful in addressing existing problems where we have data. Since we know that fatal and serious injury crashes are a small share of total vehicle interactions and near misses never get reported, some of the most dangerous roadways may not be represented in the data. Therefore, the High Risk Network (HRN) can be used to identify unsafe streets based on existing attributes, such as: number of lanes, presence of median, volume-to-capacity ratio, etc.

41% OF KSI CRASHES OCCUR ON STREETS WITH A RISK SCORE OF SIX OR ABOVE, WHICH IS JUST 3.2% OF TOTAL OMAHA ROAD MILES.



LEGEND

High Risk Network

» FOCUS AREAS

Eight focus areas were identified as part of the Technical Advisory Committee's working groups. They include:

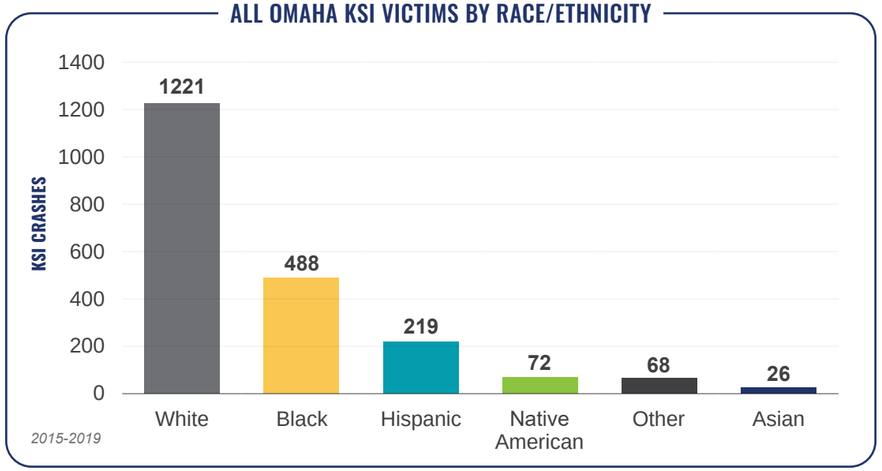
- EQUITY
- SPEED
- HIGH-RISK ARTERIAL ROADS
- IMPAIRMENT & INATTENTION
- INTERSECTIONS
- OCCUPANT PROTECTION
- PEDESTRIANS & BICYCLISTS
- HIGH RISK USERS

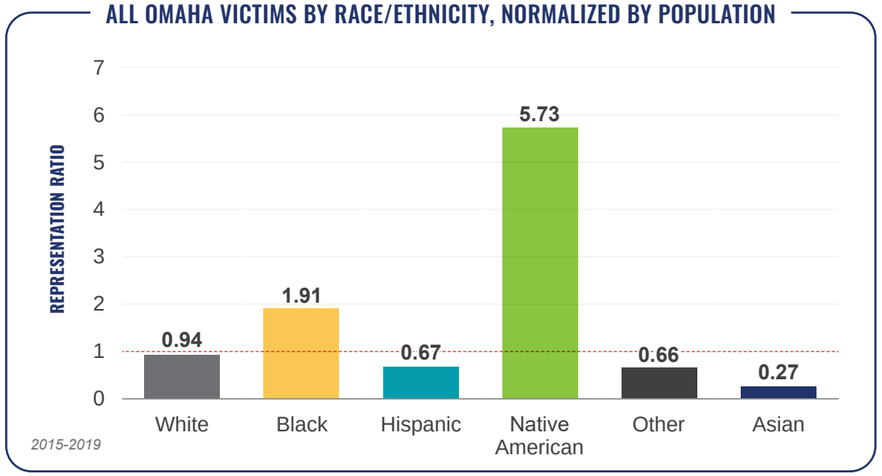
The following sections highlight the relationship between each focus area, Killed & Serious Injury (KSI) crashes, and their respective over or under representation in the data. The term 'representation ratio' in the upcoming sections refers to the proportion of KSI crashes to the given attribute (i.e. – race, intersection type, transportation mode). A representation ratio of 1.0 means that KSI crashes are equally represented to the attribute, 3.0 would mean KSI crashes are 3x over-represented, and 0.5 means KSI crashes are only half of what would be expected.

EQUITY

An effectively planned and fair transportation system ensures accessible and safe roadways for all users; however, we can see from the data that our existing transportation system is lacking. **Our historically disadvantaged neighborhoods (as defined by the USDOT) face significantly greater dangers of fatalities or serious injuries on our roads.** Low income neighborhoods have unique circumstances impacting a community's mobility and connectivity needs. Those who cannot afford a car, or are physically unable to drive due to age or disability, rely on walking, biking and public transportation to get around.

Looking at KSI crash rates compared to race, those that are white make up the largest group. After adjusting the data by population, a different story emerges. **Native Americans are nearly six times as likely to be involved in a KSI crash** and **the Black population is almost twice as likely.**





EQUITY IN HIGH INJURY NETWORK

	MILES NOT IN EQUITY AREA	MILES IN EQUITY AREA	% IN EQUITY AREA
	23.8	22.8	49%
	55.3	33.6	38%
HIN TOTAL	79.1	56.4	42%
CITYWIDE	1,820.8	433	19%

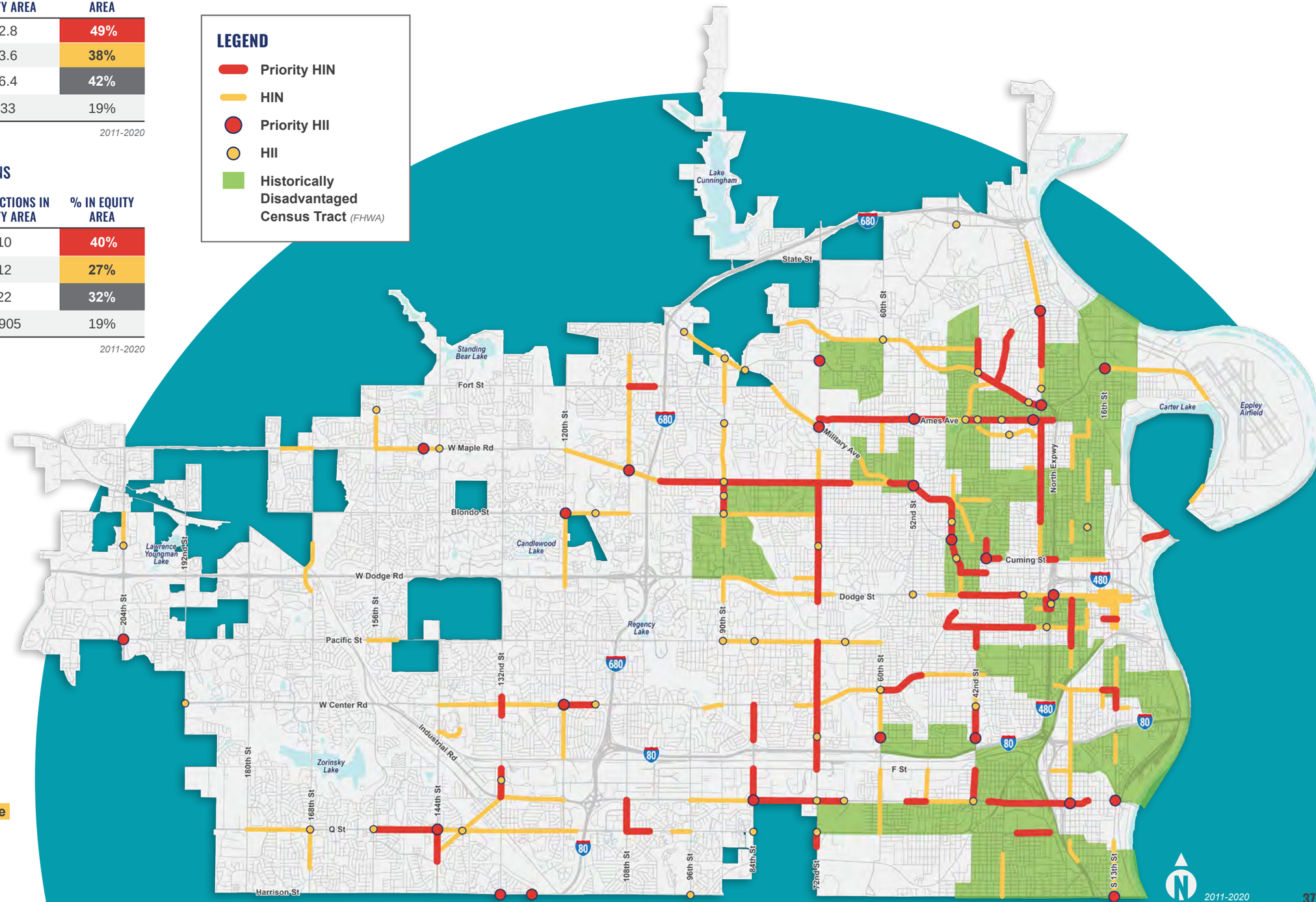
2011-2020

EQUITY IN HIGH INJURY INTERSECTIONS

	INTERSECTIONS NOT IN EQUITY AREA	INTERSECTIONS IN EQUITY AREA	% IN EQUITY AREA
	15	10	40%
	32	12	27%
HII TOTAL	47	22	32%
CITYWIDE	12,426	2,905	19%

2011-2020

The vast majority of KSI crashes that make up our HIN and HII are located on the east side of Omaha, especially in North and South Omaha. This directly correlates with known socio-economic conditions. Equity is one of our eight guiding principles and is defined as "focusing on equitable safety solutions prioritized to the areas of greatest need to ensure safe access is available to everyone". By prioritizing the areas of greatest need, the disparities in KSI crash rates for over-represented populations will be reduced. **By simply following the data, we can start creating equitable solutions that get us to Zero.**

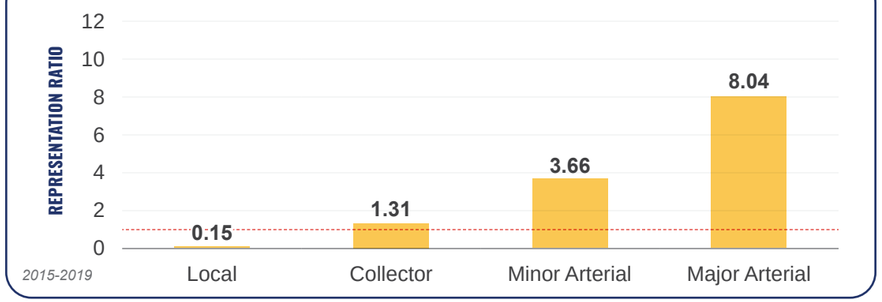


2011-2020

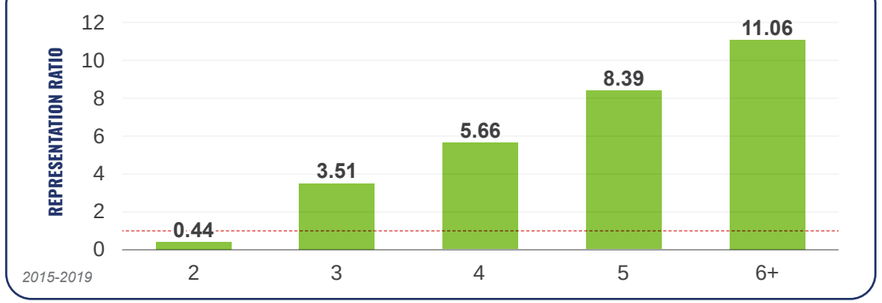
HIGH-RISK ARTERIAL ROADS

The majority of KSI crashes occur on a minority of our roadways. **Major arterial roadways are over-represented in the data by a factor of 8x, and 23.4% of major arterials in Omaha fall in a disadvantaged census tract.** Additionally, more lanes of travel translates to a higher risk in KSI crashes. It might seem confusing then that the highest congested roadways see a drop in associated KSI crashes, but this lines up with the known relationship between congestion, travel speed, and crash severity. Once a certain level of congestion is hit, traffic speeds start to decline, and when crashes do occur, they are less severe than at higher rates of speed.

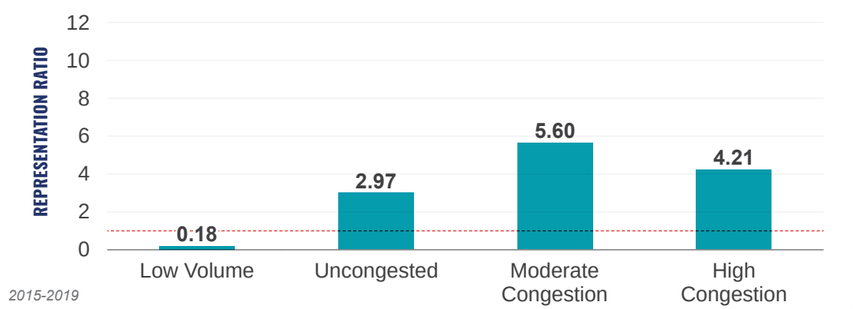
ALL OMAHA KSI CRASHES BY ROAD CLASSIFICATION



ALL OMAHA KSI CRASHES BY NUMBER OF THROUGH LANES



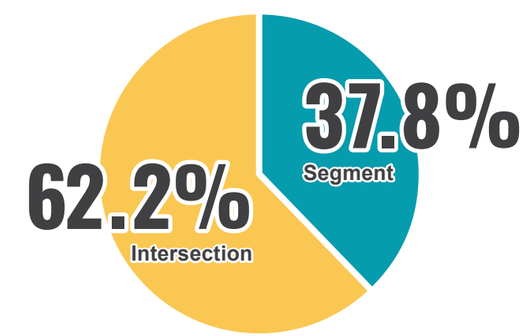
ALL OMAHA KSI CRASHES BY ROAD CONGESTION



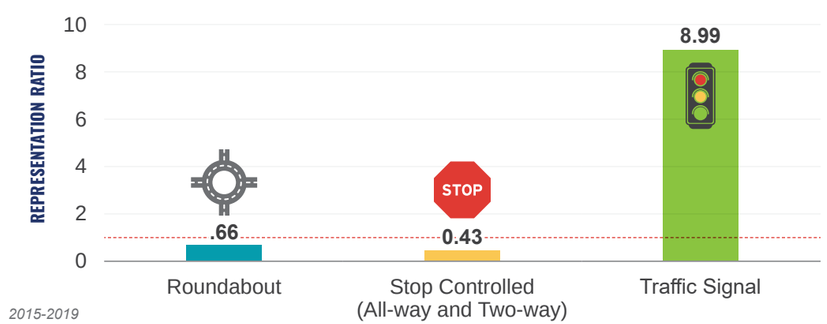
INTERSECTIONS

Most KSI crashes on non-freeway roadways in Omaha occur at intersections, compared to mid-block segments. Looking at intersection control types, **traffic signals are almost 9x more likely to have a KSI crash occur,** compared to stop and roundabout controlled intersections. Stop controlled intersection are safest when used in low to moderate traffic volume situations, as shown in the data.

ALL OMAHA KSI CRASHES BY ROAD SEGMENT OR INTERSECTION



ALL OMAHA KSI CRASHES BY INTERSECTION CONTROL



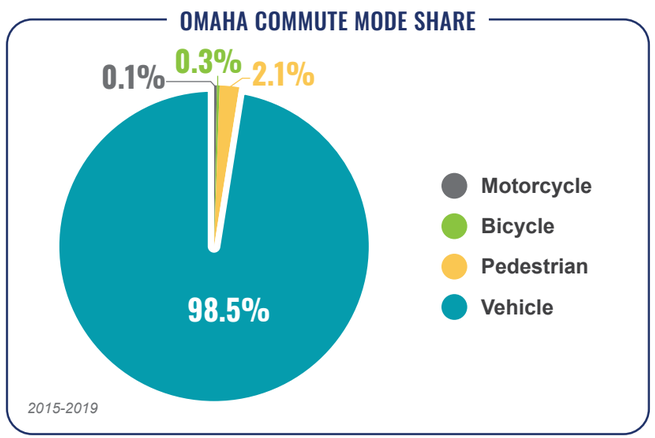
Roundabouts have a slightly higher representation ratio than Stop Controlled intersections due to the presence of some serious injury crashes and limited inventory of roundabouts in Omaha. In the crash data from 2015-2019, there were no reported fatalities at roundabouts in Omaha or Nebraska as a whole.

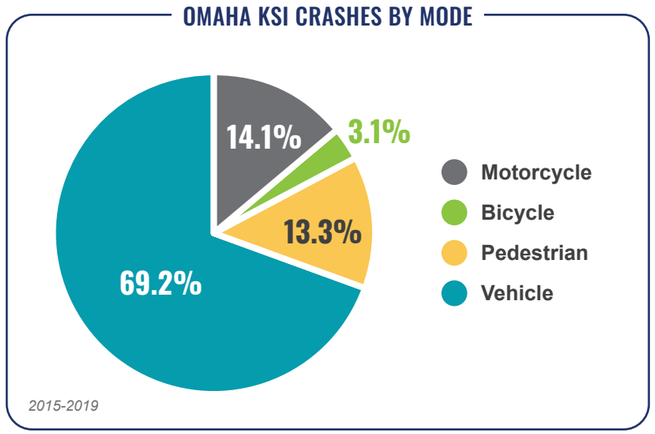
PEDESTRIANS & BICYCLISTS

Pedestrians and bicyclists make up the bedrock of the vulnerable road users (VRUs) on our streets. Between 2011 and 2020, **the 5-year moving average for pedestrian traffic fatalities has increased by 48%** in Omaha. Most pedestrian and bicycle KSI crashes occur in urbanized core of Omaha.

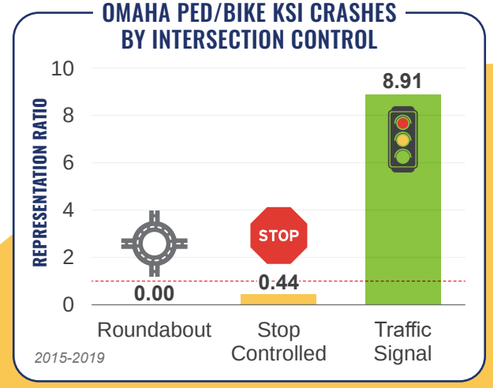
When we examine transportation mode share in Omaha, vehicle traffic makes up 98.5% of commute trips but less than 70% of KSI crashes. This means that the other modes of travel in Omaha are far over-represented:

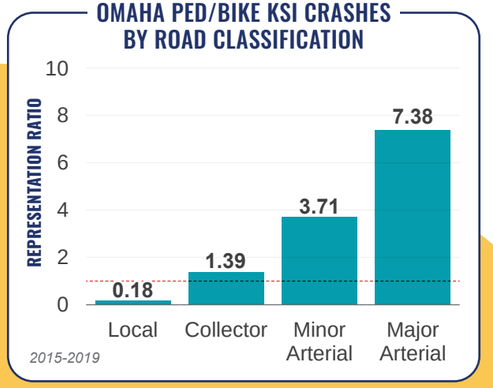
- **Pedestrians** are **6 times more likely** to be KSI crashes based on mode share
- **Bicyclists** are **10 times more likely** to be KSI crashes based on mode share
- **Motorcyclists** are **141 times more likely** to be KSI crashes based on mode share



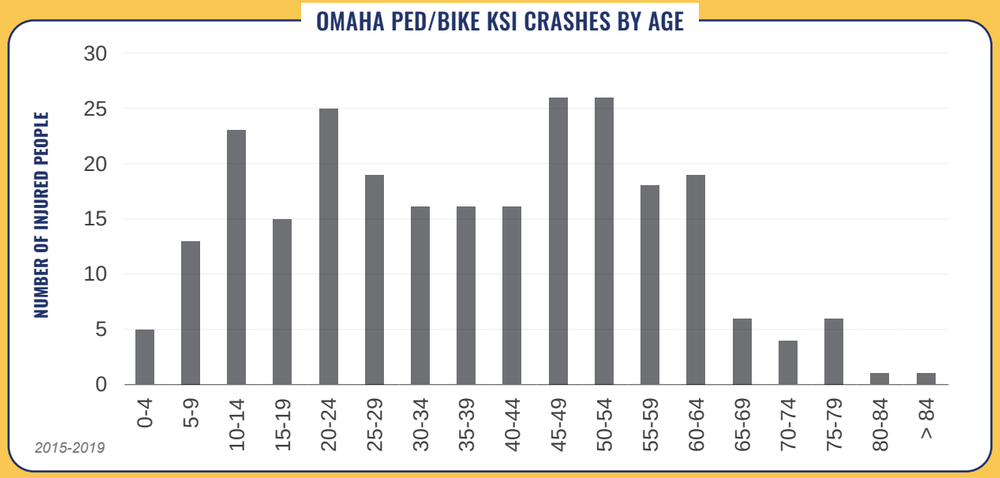


Pedestrian and bicyclist fatal and serious injury crashes exhibit differing patterns based on intersection control type and roadway classification. When it comes to intersection control type, the data shows that a higher proportion of pedestrian and bicyclist KSI crashes occur at signalized intersections compared to unsignalized intersections, by a factor of 9x the baseline. Regarding roadway classification, pedestrian and bicycle KSI crashes are more likely to occur on arterial roadways, particularly in areas with high pedestrian activity, such as communities east of 72nd Street.





Pedestrian and bicyclist KSI crashes show distinct patterns when compared to the overall trend of KSI crashes, particularly when considering age groups. In general, the rate of KSI crashes involving pedestrians and bicyclist tends to be high among the very young and the old. For older users, this can be attributed to factors such as decreased mobility, impaired vision, slower reaction times, and increased severity of injury when a crash occurs. Alongside older populations, younger age groups suffer from factors like risk-taking behaviors, lack of experience, and smaller physical stature to be recognized by drivers. Overall, understanding these age-related differences is crucial for designing targeted safety measures and interventions to reduce pedestrian and bicyclist crashes.

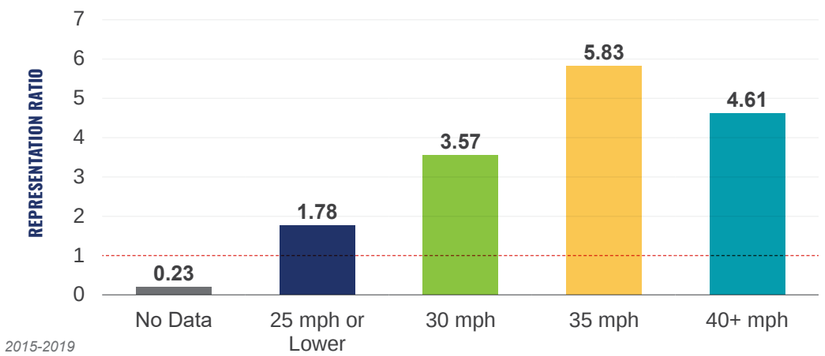


SPEED

Speed is one of, if not the most, important factor that dictates if a crash results in a serious injury or fatality rather than a minor injury or merely property damage. **65% of KSI crashes happened where the posted speed limits were 35 mph or higher.**

We can see that roadways with higher speeds have an increasing over-representation of KSI crashes for All Modes and Pedestrians/Bicyclists, up to a point. For roadways with a posted speed limit of 40+ mph the trend starts to go down. This is primarily due to most roadway facilities with higher speeds have increased safety infrastructure such as medians, separated pedestrian/bicycle paths, access management, and improved shoulders. It is the mismatch of higher speeds on local roads that contributes to the safety problem.

ALL OMAHA KSI CRASHES BY ROADWAY POSTED SPEED LIMIT



2015-2019

HIT BY A VEHICLE TRAVELING AT:
20 MPH
10% RISK OF DEATH

HIT BY A VEHICLE TRAVELING AT:
30 MPH
40% RISK OF DEATH

HIT BY A VEHICLE TRAVELING AT:
40 MPH
80% RISK OF DEATH

Source: https://visionzeronetwork.org/pioneering-study-affirms-vision-zero-focus-on-speed-management/

IMPAIRMENT & INATTENTION

Drivers will always make mistakes and people should not have to pay with their lives for a single choice or moment. **Some behaviors though may be considered reckless, or even negligent, and have an outsized impact on fatal and serious injury crashes.** Alcohol impairment is one of those.

ALCOHOL IS INVOLVED IN **OVER 25%** OF FATAL CRASHES

2015-2019

66% OF ALCOHOL RELATED CRASHES OCCUR BETWEEN 7PM-3AM

2015-2019

THE MAJORITY OF ALCOHOL-RELATED CRASHES OCCUR **EAST OF 72ND STREET**

2015-2019

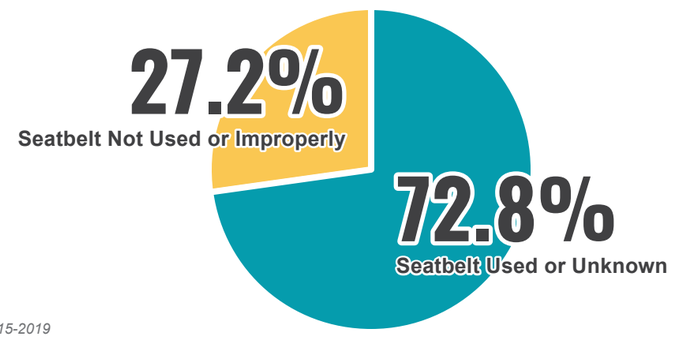
Unlike alcohol, the data does not point to inattention as a major factor in KSI crashes. This may be due to the limitations of both the crash report form and the ability of the investigating officer to determine it was a factor. Within the available data, police officers were able to only relate one or two attributes to how a crash occurred, when likely there were many more. This problem is already being addressed and future crash data should be more comprehensive.

OCCUPANT PROTECTION

More than 1 in 3 vehicle KSI crashes are correlated with a lack of or improper use of a seatbelt. Currently, Nebraska does not have a Primary Seatbelt Enforcement Law, but only secondary enforcement for front-row drivers/passengers. Nebraska has the fourth lowest seatbelt usage rate in the country[1]. Seven of the ten lowest seatbelt use states do not have a primary seat belt enforcement law for all ages. Research shows that states with primary enforcement have experienced up to a 10-12% increase in their observed seat belt use[1]. Primary enforcement, compared to secondary, is the power of a law enforcement officer to enforce a particular traffic law without the requirement of observing another violation simultaneously.

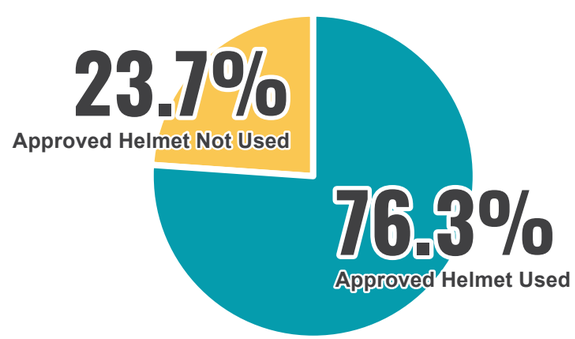
From the data that ended in 2020, **almost 25% of motorcycle KSI crashes involved improper use of a helmet or none at all.** Nebraska recently repealed its motorcycle helmet law, and as of January 1, 2024, a person can operate or be a passenger on a motorcycle or moped without a helmet if they are at least twenty-one years old and have completed the required safety course. We know that in states without these laws, helmet use goes down, and fatalities rise. After Missouri's helmet law was repealed, the state saw a 40% increase in motorcyclist traffic deaths[2]. As discussed in the pedestrian and bicycle focus area, motorcyclists are over-represented in Omaha traffic fatalities by 141x.

OMAHA VEHICLE KSI CRASHES BY SEATBELT USAGE



2015-2019

OMAHA MOTORCYCLE KSI CRASHES BY MOTORCYCLIST HELMET USAGE



2015-2019

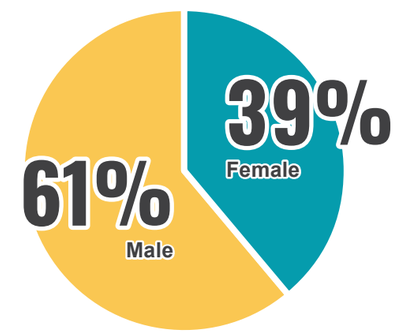
[1] NHTSA, 2021
[2] https://www.kcur.org/news/2021-06-23/missouri-motorcyclists-see-40-spike-in-deaths-after-2020-helmet-law-repeal

HIGH RISK USERS

From the data, male users account for an outsized proportion of KSI crashes. **Males are 1.5x more likely to be involved in a KSI crash compared to females.** The data shows that males on average drive more vehicle miles than females and are more likely to participate in risky driving behaviors, including driving under the influence of alcohol, lack of seat belt use, and driving aggressively.

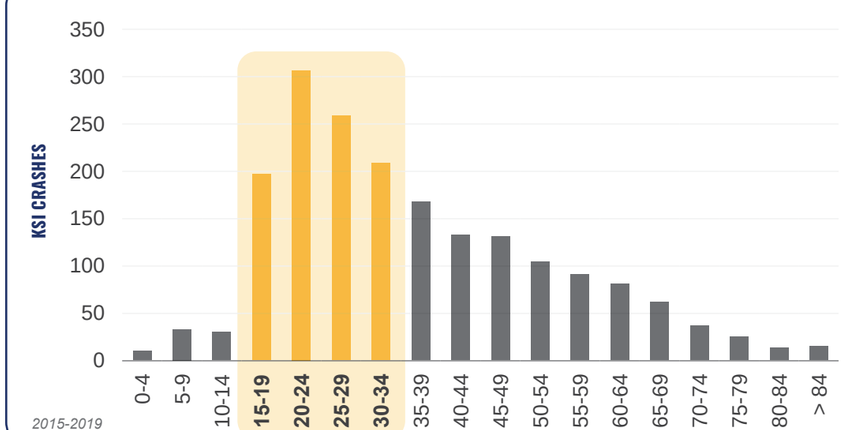
People between the ages of 15-34 make up over half of KSI crashes in Omaha. Much like male drivers, younger drivers are more likely to engage in risky behaviors. The age group of 20 to 24-year-olds accounts for the highest proportion of KSI crashes.

ALL OMAHA KSI CRASHES BY SEX



2015-2019

ALL OMAHA KSI CRASHES BY AGE



2015-2019

» HOW WE WILL ACHIEVE VISION ZERO

Recognizing that Vision Zero requires a multi-faceted approach, we are committed to building upon existing efforts and creating new solutions. With the overarching goal of eliminating traffic fatalities and mitigating severe injuries, our data-driven strategy encapsulates collaboration, policy enhancements, proven measures, and strategic projects, all working in harmony to realize this profound vision.

COLLABORATION

We forge partnerships among diverse stakeholders—government, communities, and citizens—to tap into knowledge and resources. This synergy enables comprehensive solutions addressing road crashes.

POLICY ENHANCEMENTS

Implement evidence-based regulations and measures, integrating safety and a data-driven approach to all policies and procedures. From speed management to street design, we prioritize saving lives.

PROVEN MEASURES

Drawing from global successes, we tailor effective strategies to Omaha's context. Pedestrian-friendly crossings, targeted enforcement, and context sensitive infrastructure reshape road behavior.

STRATEGIC PROJECTS

From transformative intersection redesigns to localized safety interventions, our projects reshape Omaha's roads. Enhanced visibility, traffic calming, and enhanced crossings pave the way to a safer future.

» KEY STRATEGIES

FOSTERING CULTURAL CHANGE AND EFFECTIVE COMMUNICATION

Central to the Vision Zero Omaha Action Plan is the cultivation of a safety-first culture and the establishment of effective communication channels. This involves fostering a mindset that elevates road safety for all road users within city departments, while simultaneously forging collaborative partnerships with external stakeholders. Transparent communication facilitates the exchange of insights, enabling the co-creation of targeted solutions to local road safety challenges. Through this approach, a collective commitment to safer streets is nurtured, cultivating a culture that places multi-modal road safety at the forefront. Strategies include:

- Building Vision Zero Knowledge and Awareness in All City Departments
- Develop a Vision Zero “Roadshow”, taking the Action Plan to the people
- Build a Communication Strategy to Change Perspectives and meet people where they are

ALIGNING POLICIES, REGULATIONS, AND INITIATIVES

The synergy was examined between current policies, regulations, and programs with the overarching objectives of the Action Plan. This analysis unveiled opportunities to integrate Vision Zero principles into existing policies, such as:

- Omaha Master Plan
- Complete Streets Design Guide
- Neighborhood Traffic Calming Policy
- Project Initiation Forms
- Driveway Regulations Guide
- Intersection Control Evaluation
- Speed Management Plan
- Prioritized Enforcement based on Safety Data

City policies aligned with Vision Zero principles create a domino effect, influencing street design, traffic management, enforcement, and public awareness, thus cultivating a safety-oriented culture that impacts decisions from urban planning to individual road behaviors.

NAVIGATING FUNDING HURDLES WITH STRATEGIC APPROACHES

Securing funding is a significant challenge in driving Vision Zero initiatives forward. The assessment recognized the potential to infuse strategies through a project prioritization criteria during the Capital Improvement Process (CIP). Opportunities were identified, offering avenues to rally backing for projects in line with Vision Zero.

- Expand & Rebrand CIP Safety Funding
- Utilize safety effectiveness scores for project prioritization
- Formally Adopt Safety as #1 Priority in CIP
- Leverage More Outside Funding Sources

WHAT PARTNERSHIPS ARE NEEDED TO INCREASE THE EFFICIENCY OF THE VZAP?

Achieving Vision Zero is a collaborative effort that involves various stakeholders. By fostering meaningful partnerships, the City of Omaha can leverage expertise, resources, and community engagement to enhance road safety awareness, enforcement, and education.

1. **Establish both internal and external collaborations with essential stakeholders to unearth funds for Vision Zero execution (Internally, identify funding channels through combined budget appeals; Externally, engage with entities like Metropolitan Planning Organizations [MPOs] and Foundations).**

2. **Continue to foster the partnership between internal City Departments, such as the Omaha Police Department and the Traffic Division of Public Works to methodically collect, assess, and share critical data. Develop comprehensive guidelines for data gathering and evaluation, refining future project and policy decisions.**

3. **Bolster the connection between those responsible for VZAP implementation and the City Council. Convey the priorities of Vision Zero, clarifying key expected outcomes and how they contribute to the community’s overall safety and quality of life.**

» TOOLBOX OF INFRASTRUCTURE COUNTERMEASURES

The City of Omaha has created a toolbox of infrastructure countermeasures, from engineering and design solutions like road diets to education campaigns that raise awareness about safe road behaviors. With this toolbox, the City of Omaha can tailor its approach to specific road user groups, locations, and conditions, ensuring a holistic and effective strategy towards Vision Zero. Many of these countermeasures are being and have been implemented across Omaha, as highlighted earlier in the "Recent Successes" section.

INTERSECTION COUNTERMEASURES

COUNTERMEASURE	DESCRIPTION	COST	POTENTIAL CRASH REDUCTION
Roundabouts	Roundabouts are the safest intersection control type known and are much safer than signalized intersections. This versatile tool reduces the number of and the severity of crashes due to speed reduction, elimination of angle collisions, and reduced crossing distances for vulnerable road users (VRUs). Roundabouts can be customized by shape, size, and design to fit a variety of traffic conditions, creating a safer intersection among all modes of transportation.	$$$$	80%
System Traffic Signal Improvements	System traffic signal improvements achieve a balance between safety and efficiency by adjusting motorist behaviors through smaller scale tools. These improvements include the adjustments to signal timings, protected left-turn phasing, installation flashing yellow arrows, adding retroreflective backplates to signal heads, and implementing Leading Pedestrian Intervals (LPIs). In particular, LPIs increase pedestrian visibility and reinforce pedestrian right-of-way to improve yielding behavior by motorists.	$$	40%
Curb Extensions/ Bulb Outs	Curb Extension and Bulb-Outs extend sections of sidewalks into the roadway, primarily at intersections and crossings, to decrease VRU crossing distances and enhance visibility and comfort. Curb extensions prove to be effective across various locations, ranging from mid-block crosswalks to signalized intersections. They can be implemented within all-day parking lanes or spacious shoulders, particularly suited for transitioning into lower-speed zones.	$$	30%
Reduced Left-turn Conflict Intersections • **Crossing U-turn (RCUT)** • **Median U-turn (MUT)**	Reduced Left-turn Conflict Intersection reconfigures left-turn only or left-turn and through movements by reducing the number or severity of vehicle-to-vehicle conflicts from cross-streets. By reducing the number of crossing conflict points, the opportunity for right-angle crashes also decreases, resulting in fewer severe injuries or fatalities. This tool is adaptable to diverse settings, from rural high-speed areas to urban multimodal corridors, RCUTs offer a cost-effective alternative to interchanges.	$$$$	55%

SUCCESS STORY: Carmel, IN – Roundabouts

Carmel, Indiana is known as the "Roundabout Capital of the United States". The city has over 140 roundabouts, more than any other city in the country. Roundabouts have been credited with reducing all traffic crashes in Carmel by 40% and injury crashes by 80%.[1]

The decision was made after the mayor at the time (and currently!) visited Europe. He saw how many roundabouts there were and realized that roundabouts were safer than traditional intersections and can improve traffic operations. Roundabouts primarily force drivers to slow down and yield to traffic, which reduces the chance and severity of crashes.[2]

In addition to improving safety, roundabouts also have operational and environmental benefits. They create a continuous flow of traffic, which can help to reduce congestion. They also reduce emissions by eliminating the need for stop-and-go traffic and use less energy because they do not require electricity. The success of Carmel's roundabout program has been a model for other cities around the world.

Here are some additional specific benefits that Carmel has seen from its roundabouts[2]:

- **75% reduction in pedestrian crashes**
- **50% reduction in bicycle crashes**
- **20% reduction in traffic delays**
- $250,000 savings per intersection in construction costs
- $5,000 savings per intersection in electricity costs

Carmel's experience shows that roundabouts can be a safe, efficient, and environmentally friendly way to manage traffic.

Photo credit: Carmel IN, Public Works and Metro

[1] https://www.carmel.in.gov/government/departments-services/engineering/roundabouts
[2] https://eri.iu.edu/erit/case-studies/carmel-indiana-roundabouts.html

ROADWAY COUNTERMEASURES

COUNTERMEASURE	DESCRIPTION	COST	POTENTIAL CRASH REDUCTION
Road Diets	Road diets are a context-sensitive strategy that reduces the number of lanes or the width of lanes, resulting in several safety benefits. The freed-up space can be repurposed for safety infrastructure, such as facilities for pedestrians or cyclists. Additionally, road diets have the potential to reduce the number of potential conflict points, contribute to slower and safer operating speeds for motor vehicles, and even decrease crossing distances by either eliminating a lane or introducing pedestrian median islands.	$$	40%
Traffic Calming	Traffic Calming is a deliberate set of design strategies and measures implemented on roadways to improve the safety of all users by slowing down vehicle speeds. Introducing physical changes to the road (such as speed humps, chicanes, raised crosswalks, and narrowed travel lanes) is a proven strategy to reduce speeds and enhance roadway safety between different users.	$$	30%
One-way to Two-way Conversion	One -way to Two-way Street Conversions generally reduce speeds, reduce conflicts, and manage traffic patterns due to how traffic perceives their surrounding environment. Lower speeds provide improved conditions and access for all modes of transportation, especially vulnerable road users.	$$$	30%
Roadway Lighting	Street lighting enhances safety and accessibility by illuminating key areas and improving visibility. Improved visibility decreases crash risk. This tool is particularly effective at controlled and uncontrolled intersections, along sidewalks, and in areas with high pedestrian volumes like transit stops, commercial zones, schools, and parks.	$$	10%
Raised Medians & Access Management	Medians separate opposing streams of traffic, reducing the number of head-on, cross-median crashes that can be especially dangerous. Raised medians, medians built higher than the road level, offer VRU refuges mid-crossing, limit motor vehicle turns, and mitigate head-on collisions. These types of medians are applicable at intersections, along blocks, and midblock crossings for VRUs, particularly beneficial at intersections where left turns need restriction due to safety concerns like inadequate yielding or high speeds.	$$$$	45%

SUCCESS STORY: Kansas City, MO – Road Diets

Kansas City, Missouri City Council in 2014 passed a road diet resolution to direct Public Works to analyze all street under 20,000 average vehicles per day and 1,000 vehicles per hour for possible lane reductions. Kansas City has put together a candidate list of road diet locations across the city, and continually being reviewed by staff.[3]

Road diets can **reduce crashes by 43%** for all crash types and up to 68% for injury type crashes. Road diets that incorporate pedestrian refuge islands can reduce pedestrian related crashes by up to 46%. Midblock crossing account for the majority of pedestrian and cyclist crashes, road diets create safety for vulnerable road users by reducing the crossing distance and exposure time to traffic.[4]

Some examples of road diets in Kansas City that have been completed because of their Road Diet program include:

- Leeds Trafficway from Stadium Drive to Emanual Cleaver II Boulevard
- E Gregory Boulevard from Oldham Road to Cleveland Avenue
- NE 108th Street from Smalley Avenue to Cookingham Drive
- NE Barry Road from Kenwood Avenue to Highland Avenue
- Grand Boulevard from 5th Street to 20th Street
- N Highland Avenue from Vivion to NE 46th Street

Road diets are a proven way to improve safety and livability in our communities. Kansas City is a success story in implementing these projects.

Image credit: http://urbanangle.net/long-road-grand-boulevard/

[3] https://www.kcmo.gov/city-hall/departments/public-works/road-diets

[4] https://safety.fhwa.dot.gov/road_diets/guidance/info_guide/

PEDESTRIAN & CYCLIST COUNTERMEASURES

COUNTERMEASURE	DESCRIPTION	COST	POTENTIAL CRASH REDUCTION
Sidewalks	Utilizing sidewalks and paved shoulders as safety measures serves to enhance pedestrian and cyclist safety by providing designated spaces for their movement, separate from vehicular traffic. Integrating ADA-compliant features guarantees equitable access and promotes inclusivity, fostering a safer and more accommodating environment for all community members.	$$	65%
High Quality Pedestrian Crossings	This roadway feature prioritizes the safety, accessibility, and convenience of pedestrians of all ages and abilities by providing pedestrians with a secure and easily recognizable path to cross busy streets. These crossings often include clearly marked crosswalks, pedestrian-activated signals or buttons, ample lighting, refuge islands, and well-defined signage. By enhancing visibility and ensuring dedicated time for pedestrians to cross, high-quality pedestrian crossings contribute to reducing the risk of dangerous conflicts with vehicles that could result in a serious or fatal crash.	$	60%
Off-Street Trails	Off -street trails contribute to enhanced safety and accessibility for active transportation and recreation by offering designated paths outside the curb and away from potential conflict with vehicles. These trails are designed to cater to the needs of both bicyclists and pedestrians. These shared-use paths can accommodate two-way traffic and are often situated along railway or utility corridors, as well as public land areas.	$$$	65%
Bicycle Lanes	Bicycle lanes are dedicated facilities on or along roadways that make bicycling safer and more comfortable; they can mitigate or prevent interactions, conflicts, and crashes between bicyclists and motor vehicles. Bicycle lanes can be established through paint striping or separation by vertical elements like posts, curbs, or vegetation.	$$	60%
Protected Bicycle Lanes/ Cycle Tracks	Protected bicycle lanes are integral to Vision Zero implementation as they establish physically separated spaces for pedal cyclists, substantially reducing cyclist-vehicle collisions. With a physical barrier, these lanes enhance safety by preventing risky interactions, thus curbing severe injuries and fatalities.	$$$	70%

SUCCESS STORY: NYSDOT – High Quality Pedestrian Crossings

In 2021, drivers struck and killed 7,485 pedestrians – the most in four decades.[5] FHWA has started to partner and encourage state and local transportation agencies, providing program resources and guidance, to help them implement effective pedestrian safety countermeasures. These programs focus on three key areas: improving visibility at crosswalks, creating safer crossing environments, and encouraging driver awareness of pedestrians.

As part of collaboration with FHWA, in 2016 New York State Department of Transportation (NYSDOT) developed a Pedestrian Safety Action Plan (PSAP). The PSAP directly resulted in systemic countermeasure installation and contributed to a **22% reduction in pedestrian fatalities in the first year!**[6]

Due to the suggestions provided by the PSAP, the NYSDOT is presently in the process of revising their Highway Design Manual. These revisions are aimed at enhancing the planning and design processes for ensuring the safety of all modes of transportation. Additionally, the NYSDOT has included pedestrians in its annual regional work programs. This incorporation mandates that regions examine 20 percent of locations with a history of high-crash incidents each year. Over the course of five years, this approach will result in a comprehensive investigation of all such locations.[6]

Systemic High Quality Pedestrian Crossings are a proven way to improve safety for the most vulnerable users in our communities. New York is a success story in implementing these countermeasures.

[5] *Pedestrian Traffic Fatalities by State: 2021 Preliminary Data | GHSA*

[6] *https://highways.dot.gov/safety/pedestrian-bicyclist/case-studies-fhwa-pedestrian-and-bicycle-focus-states-and-cities*

» ACTION PLAN

The Omaha Vision Zero Action Plan is an ambitious, data-driven, and comprehensive roadmap towards safer streets, responsible mobility, and the ultimate elimination of traffic-related fatalities and severe injuries. As we delve into the final section of this transformative document, we shift our focus from understanding the challenges and setting the stage for change, to formulating tangible strategies that will guide us towards the realization of our Vision Zero goals.

The Action Plan chapter stands as a beacon of Omaha's commitment to doing what is necessary for the successful creation of a new culture that emphasizes safety over other aspects of transportation such as speed, operations, and cost. Within this chapter, we will unveil a set of targeted recommendations spanning four crucial categories based on the Safe Systems Approach:

SAFE SPEEDS **SAFE STREETS** **SAFE USERS** **MEASURING PROGRESS**

These categories collectively encapsulate the multi-faceted approach required to reshape Omaha's transportation landscape into one of safety and reflect the guiding principles outlined at the beginning of this journey. Each recommendation includes a Start Year - when the effort will kick-off, a Responsible Party - the City of Omaha department that will lead the effort, and a Cost - the projected range of outside financial burden the city will have to budget.

With a firm grounding in data, and evidence-based practices, each recommendation in this chapter is carefully tailored to address the unique challenges and opportunities that Omaha presents. **Safe Speeds** will explore measures to curtail excessive speeds, a key contributor to the severity of traffic collisions. **Safe Users** will tackle education and awareness, fostering a culture of shared responsibility among all road participants. **Safe Streets** will underscore the imperative of well-designed infrastructure that accommodates diverse modes of travel. Lastly, **Measuring Progress** will establish a robust framework for tracking advancements and refining strategies over time. Each of these categories is further broken down into Strategy and Policy Recommendations. From immediate interventions that demand urgent attention, to longer-term actions that require strategic planning.

Additionally, as part of our commitment to tangible change, we outline **117 prioritized projects.** Combining the efforts and data shown in the previous chapters, **350+ unique improvements** across Omaha were meticulously assessed and put together into actionable projects. Each project was evaluated for benefit-to-cost ratio based on proposed countermeasures and associated potential crash reduction. These projects, ranked across **five priority levels,** represent the first steps towards realizing the Vision Zero goals.

As we turn the pages of this final chapter, let us keep in mind that our efforts here extend beyond policy and strategy. They reach into the lives of every resident, every family, and every person who travel the streets of Omaha. With Omaha's Vision Zero Action Plan, we take the first collective stride towards a future free from the devastation of traffic-related deaths. The journey ahead will demand collaboration, persistence, and a shared belief in the attainability of our Vision Zero goals. Together, we embark on a path that will redefine Omaha's streets as spaces of security, equity, and shared prosperity.

SAFE SPEEDS » STRATEGY & POLICY

SPEED MANAGEMENT PLAN

The City will conduct a speed management Plan. This plan may include the following elements: evaluate tools and methodologies for speed limit setting, evaluate different measures for reducing speeds on higher classification roadways to establish a tool box for speed reduction techniques that work in Omaha; develop toolbox for enforcement activities and areas relating to speed; develop toolbox of context sensitive design elements that can be incorporated into projects to reduce speeding; conduct public outreach campaign; and evaluate and prioritize areas in the City to target speeding with the goal to reduce KSI crashes.

Additionally, the City Engineer will adopt a comprehensive policy for setting specific street speed limits, which incorporates crash history, pedestrian and bicycle activity, land use context, and possibly uses tools like USLIMITS2 from the FHWA, instead of solely relying on the 85th percentile speed.

START YEAR
Year 1

RESPONSIBLE PARTY
Public Works

COST
$100k - $500k

SPEED FEEDBACK SIGNS

Speed feedback signs dynamically show the driver's speed and the posted speed limits and have been shown to slow overall speeds where deployed. They can also be used in part to educate drivers of the importance in safe speeds. The City will continue deploying speed feedback signs maintained by both OPD and Public Works and expand the program as needed. The decision of where to deploy these signs will be determined through a data-driven process considering locations with high rates of speed related crashes, a high rate of prevailing speeds, a high number of pedestrian and bicycle users, the land use context, and public input.

START YEAR
Year 1

RESPONSIBLE PARTY
Public Works/Police Department

COST
$10k - $100k

ENHANCED SPEED ENFORCEMENT

Speed enforcement is highly effective in slowing speeds and encouraging drivers to obey speed limits. The Omaha Police Department currently conducts speed enforcement, but this enforcement should be expanded. The Traffic Unit dedicated to traffic safety and speed enforcement may require additional officers or funding to conduct this. Alternate enforcement tactics such as police-operated photo radar enforcement and high-visibility speed enforcement should be explored. Speed enforcement locations will be determined through an equitable and data-driven process considering locations with high rates of speed related crashes, a high rate of prevailing speeds, a high number of pedestrian and bicycle users, the land use context, and public input.

START YEAR
Year 2

RESPONSIBLE PARTY
Police Department

COST
>$1M

TRAFFIC CALMING PROGRAM

Traffic calming is an essential tool to reducing traffic speeds on both local residential streets and collector streets. The city should update the Traffic Calming Program guidelines by establishing a project prioritization framework that takes into account crash and speed data analysis. In addition to monitoring the impact on injured persons and speeds before and after implementing the program, it is crucial to consistently track several indicators over multiple years to establish a reliable baseline and minimize statistical fluctuations. These indicators encompass speed, traffic flow, pedestrian and bicyclist volumes, crossing behavior, and travel patterns along streets. Furthermore, site-specific issues and targets, including public perception of safety and increased usage of other transportation modes, should also be considered.

START YEAR
Year 2

RESPONSIBLE PARTY
Public Works

COST
-

SAFE USERS » STRATEGY

COMMUNICATIONS AND OUTREACH SUPPORTING ENFORCEMENT

To effectively promote traffic safety priorities and engage the public, communication campaigns should focus on speed enforcement, red-light running, impairment, and occupant protection. These campaigns should highlight the benefits of the VZAP measures, employ persuasive marketing materials, and utilize carefully crafted messaging. The city should leverage owned media channels such as mailing lists, websites, telephone interactions, public space signage, uniforms, and city fleets to ensure widespread dissemination of the messaging. Additionally, fostering community engagement through regular publication of reports emphasizing achieved outcomes, assessing successful actions, and identifying areas requiring adjustments, this will allow the community to actively contribute to the ongoing success of Vision Zero.

START YEAR
Year 1

RESPONSIBLE PARTY
Public Works/Vision Zero Coordinator

COST
$100k - $500k

LEVERAGE PUBLIC-PRIVATE PARTNERSHIPS

The City of Omaha should leverage public-private partnerships to bolster its Vision Zero initiative, building on its history of private support for public projects. This would involve seeking private sector involvement in forms of funding and expertise, where private entities like major employers, philanthropic foundations, and others who share a vested interest in reducing traffic fatalities could contribute financially or provide specialized advisory and consulting services. Additionally, the city should tap into the private sector for volunteers and marketing support, utilizing private resources where appropriate for public education and outreach campaigns, and collaboratively harnessing their marketing channels to amplify Vision Zero messaging and to enact change.

START YEAR
Year 2

RESPONSIBLE PARTY
Mayor's Office

COST
-

ENHANCED POLICE IMPAIRMENT ENFORCEMENT

Enforcement is highly effective in removing impaired drivers from the roads when paired with effective criminal justice and rehabilitation programs. The Omaha Police Department currently conducts impairment enforcement, but this enforcement should be expanded. The Traffic Unit dedicated to traffic safety and impairment enforcement may require additional officers or funding to conduct this. Alternate enforcement tactics such as high visibility saturation patrols and publicized sobriety checkpoints should be explored. Impairment enforcement locations should be determined through an equitable and 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.

START YEAR
Year 2

RESPONSIBLE PARTY
Police Department

COST
>$1M

SUPPORT TRANSIT USE EXPANSION

Increasing transit use is one of the best ways to achieve Vision Zero. Transportation by bus or streetcar is the safest form of transportation today. To fully support the goals of the VZAP in the City of Omaha, it is essential to make strategic investments in first-mile/last-mile pedestrian infrastructure, to continue to expand the Streetcar system, and to enhance bus operations. By creating these integrated transportation networks, the city can encourage more individuals to choose public transportation as a safe and convenient mode of travel. This approach aligns with the VZAP principles by promoting a safer, more sustainable, and inclusive transportation system throughout Omaha.

START YEAR
Year 3

RESPONSIBLE PARTY
Mayor's Office

COST
>$1M

SAFE USERS » POLICY

POLICE TRAFFIC SAFETY VISION AND VALUES

The Omaha Police Department has a set of Vision and Values statements focused on crime prevention, public service, transparency, and employee growth. Because severe traffic crashes represent such a significant public safety concern, the Omaha Police Department should revise the Vision and Values statements to explicitly include traffic safety as a core component of the responsibilities of the department. All police officers, not just the Traffic Unit, should have the necessary knowledge and expertise to effectively reduce severe traffic crashes.

START YEAR
Year 1

RESPONSIBLE PARTY
Police Department

COST
-

DRIVERS EDUCATION FINANCIAL ASSISTANCE

Enhancing driver's education is pivotal for safer roads. Countries moving towards zero traffic deaths have embraced rigorous courses and testing. However, such education is scarce in Omaha high schools; though available, it's expensive, with the Nebraska National Safety Council chapter offering courses at $400 per student. This cost impedes lower-income families. Omaha should address this inequity by extending financial aid to teens from these households, facilitating access to driver's ed. Promoting this initiative can boost awareness about its significance, fostering better understanding of safe driving practices.

START YEAR
Year 2

RESPONSIBLE PARTY
Mayor's Office

COST
$10k - $100k

CRIMINAL JUSTICE IMPACTS

Many crashes involving impaired drivers stem from prior DUI convictions. Addressing alcoholism and drug addiction through our criminal justice system could notably curtail these incidents. The City of Omaha should form a Vision Zero Impairment Committee, comprising of stakeholders from Douglas County, Omaha Police, the Nebraska Judicial Branch and subject matter experts. Their focus: evaluating enhanced policies like specialized courts and training for law enforcement, probation, and prosecutors. The initiative targets: community support, de-escalation through crisis intervention teams, collaborative partnerships between justice agencies and healthcare/community groups, and sentencing that emphasizes rehab and evidence-based approaches.

START YEAR
Year 3

RESPONSIBLE PARTY
Mayor's Office

COST
-

COMMUNITY MENTAL HEALTH AND SUBSTANCE ABUSE PROGRAMS

In Vision Zero, mental health and substance abuse programs play a crucial role as they address underlying factors that contribute to impaired driving and traffic crashes. The city should provide support by implementing various initiatives, including educational campaigns and outreach efforts to raise awareness about the risks of impaired driving. Additionally, investing in accessible and comprehensive treatment and rehabilitation services, such as counseling, therapy, detoxification, and support groups, can greatly assist individuals in overcoming addiction and managing their mental health effectively. These initiatives can contribute significantly to creating safer roads and preventing impaired driving incidents. These efforts should be paired with criminal justice reform efforts noted separately in this action plan.

START YEAR
Year 3

RESPONSIBLE PARTY
Mayor's Office

COST
>$1M

SAFE STREETS » STRATEGY

SAFE ROUTES TO SCHOOL

The Safe Routes to Schools (SRTS) program is a national framework to improving safety of students walking and biking to school. The program systematically reviews school areas for safety improvements for pedestrians and cyclists and recommends improvements. Federal funding exists for developing SRTS plans. Implementation of SRTS programs has shown 10% - 20% reduction in severe pedestrian and cyclist crashes around schools and has the added benefit of increasing walking and biking to school, thus reducing school vehicle traffic and providing active transportation opportunities for children. The city should strive to have an SRTS plan for every elementary school in the city.

START YEAR
Year 1

RESPONSIBLE PARTY
Planning

COST
$100k - $500k

PEDESTRIAN SAFETY ZONES

Pedestrian Safety Zones are geographic areas where a high concentration of severe crashes involving pedestrians exist or where areas with a high rate of walking where severe pedestrian crashes could occur. These locations should be identified and a plan created to systematically improve pedestrian safety and slow vehicle speeds in the area. Cities that have implemented pedestrian safety zones have seen severe pedestrian crashes reduced by up to 40% in the areas. Strategies for improving pedestrian safety should follow the Safe System approach by seeking to create safer roads, safer users, and safer/slower vehicle speeds through roadway countermeasures, public education, and active traffic enforcement.

START YEAR
Year 1

RESPONSIBLE PARTY
Public Works

COST
$10k - $100k

FATAL CRASH REVIEW COMMISSION

Studying the causes of fatal crashes by multidisciplinary groups can provide insight into systemic changes that could be deployed on Omaha streets or incorporated into future plans. Omaha should convene a commission including law enforcement, first responders, engineers, planners, and policy makers to review fatal crash circumstances and make recommendations on systemic changes within the Safe System framework to incorporate into future safety efforts. Indianapolis recently developed just such a group that has been praised by the NTSB as a potential model for other communities.

START YEAR
Year 1

RESPONSIBLE PARTY
Mayor's Office

COST
-

ROAD SAFETY ASSESSMENT

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. Omaha should include a road safety audit with every capital improvement. Additionally, the city should choose at least 5 locations in the city either on the High Injury Network or Highest Risk Network to perform a Road Safety Audit each year.

START YEAR
Year 2

RESPONSIBLE PARTY
Public Works

COST
$10k - $100k

VISION ZERO CAPACITY BUILDING

To enhance the integration of Vision Zero practices with various city departments, the City should develop a comprehensive training program for all city staff on Vision Zero issues, policies, and countermeasures. This training program will equip staff with the necessary knowledge and tools to effectively incorporate Vision Zero principles into their work. Additionally, the City should establish an internal communications strategy to ensure consistent messaging of the Vision Zero Action Plan (VZAP) and promote its messaging and highlight successful outcomes through the City.

START YEAR
Year 2

RESPONSIBLE PARTY
Public Works

COST
$10k - $100k

SAFE STREETS » POLICY

INTERSECTION CONTROL EVALUATION POLICY

Omaha should have a formal process to determine intersection design for capital projects. Options include stop signs, signals, roundabouts, and reduced conflict intersections. Omaha Public Works will implement an Intersection Control Evaluation (ICE) process. It will assess safety, traffic, pedestrian/bike access, cost, and more, using a benefit-to-cost ratio. ICE reports will guide control selection for all project intersections, with reports publicly accessible in project files.

START YEAR
Year 1

RESPONSIBLE PARTY
Public Works

COST
-

TRAFFIC SAFETY GUIDELINES FOR PRIVATE DEVELOPMENT TRAFFIC IMPACT STUDIES

Driveway Regulations and Guidelines manual establishes a set guideline for the location, number and design of (residential, commercial and industrial) driveways that provide access from public streets and highways to private property. The manual also contains the requirements for traffic impact studies for private development. This guideline should be updated to incorporate safety as a core evaluation criterion for private driveways and traffic impact studies. A crash analysis should be performed in alignment with Vision Zero and Safe System principles and all improvements constructed in the public right of way by private entities should demonstrate a safety benefit using the Highway Safety Manual methodology.

START YEAR
Year 1

RESPONSIBLE PARTY
Public Works

COST
-

COMPLETE STREETS DESIGN GUIDE

Omaha's Complete Streets Design Guide (CSDG) encompasses project design steps from project development, design, to construction. This document was produced prior to the development of the Vision Zero Action Plan. The City should update the CSDG to supplement the strategies to align with the principles, focus areas, and countermeasures outlined in this plan. Incorporation of the principles of this plan strategies in the CSDG can provide the opportunity to require the public and private sectors to comply with the minimum safety standards. CSDG updates should include review of policy related to pedestrian crossing installation.

START YEAR
Year 2

RESPONSIBLE PARTY
Public Works

COST
$100k - $300k

PRIORITIZED CIP PROCESS

Safety has always been part of the approach to developing the Capital Improvement Program (CIP) but has not been formally adopted as a performance criteria. The City of Omaha should prioritize safety in the CIP by formally incorporating the goals and language of the Vision Zero Action Plan (VZAP) into the 2025-2030 CIP goals, specifically aligning with Goal 2 and Goal 6. Omaha should adopt a multifaceted prioritization criterion that includes evaluating infrastructure assets based on safety, mobility, state of good repair, traffic flow, equity, and economic development. This approach would emphasize the development of safe and inclusive infrastructure for all residents.

START YEAR
Year 2

RESPONSIBLE PARTY
Planning

COST
-

MEASURING PROGRESS

VISION ZERO DASHBOARD AND DATA SYSTEM

To effectively track progress towards Vision Zero goals, it is recommended that Omaha expand its current online fatal crash dashboard to incorporate serious injury crashes and relevant Focus Area subdivisions. The dashboard should also monitor implementation status of all Action Plan items and Vision Zero projects. Additionally, developing a comprehensive centralized crash and roadway data system accessible across city departments would strengthen the data-driven approach integral to Vision Zero. This enterprise-based platform aligned with current data governance best practices would serve as a vital repository to facilitate ongoing analysis and targeted safety improvements. Combining an expanded performance dashboard with robust data infrastructure will provide the monitoring, insights and coordination needed to systematically achieve the objective of zero traffic fatalities and severe injuries.

START YEAR
Year 1

RESPONSIBLE PARTY
Public Works

COST
$10k - $100k

INSTITUTIONALIZING A VISION ZERO COMMITTEE

To ensure continued high-level leadership and accountability for the Vision Zero Action Plan over time, the City should formalize an Executive Committee comprised of diverse decision-makers from relevant city departments, outside safety-focused agencies, non-profits, and potentially City Council. This group would be charged with promoting urgency, providing direction and resources, removing roadblocks, and cutting red tape to drive implementation of the plan. The Executive Committee should be institutionalized beyond political transitions to provide long-term oversight and urgency on achieving the goal of zero traffic fatalities and severe injuries.

START YEAR
Year 1

RESPONSIBLE PARTY
Mayor's Office

COST
-

VISION ZERO ANNUAL REPORT

The City of Omaha should develop a comprehensive Vision Zero Annual Report to evaluate progress on the targets outlined in the performance measurement plan. This report will serve as a crucial tool to effectively assess progress, guide decision-making, and identify areas where modifications are needed to achieve the desired outcomes of the VZAP. In addition to evaluating progress, the report should highlight recent successes, best practices, and lessons learned, providing valuable insights to enhance future efforts. By emphasizing transparency and accountability, the Vision Zero Annual Report will support the ongoing commitment to creating a safer and more sustainable transportation system in Omaha.

START YEAR
Year 2

RESPONSIBLE PARTY
Public Works

COST
$10k - $100k

VISION ZERO ACTION PLAN UPDATES

The City of Omaha will update its Vision Zero Action Plan at least every 5 years. Regularly revisiting and revising the plan is crucial for ensuring it remains relevant, incorporates new data and best practices, and drives continuous improvement in road safety. The update process should involve conducting a comprehensive review of progress made on existing plan objectives, analyzing updated crash and transportation data, gathering community input on priority concerns and next steps, and setting revised or new strategies utilizing the safe system approach. Updating the plan on a 5-year cycle will help Omaha sustain momentum and accountability in working towards its goal of zero traffic fatalities and severe injuries. The update process itself can also be an opportunity to renew partnerships, generate public dialogue on traffic safety, and reinforce the city's commitment to Vision Zero.

START YEAR
Year 3

RESPONSIBLE PARTY
Public Works

COST
$100k - $500k

» PRIORITIZED PROJECTS

The Prioritized Projects were formulated by integrating the High Injury Network and High Injury Intersections, and then segmenting them into coherent projects based on their contextual locations. The projects underwent further refinement with data from the High-Risk Network and the Public Input maps. To adjust for potential double counting, an iterative process was employed. Subsequently, proposed countermeasures were linked to each project through a high-level planning analysis. This procedural approach allows us to compute a safety benefit-to-cost ratio (BCR) and prioritize projects with the most significant potential impact. It should be noted, all BCR calculations were based on the latest FHWA guidance.

The projects were classified into five groups based on their benefit-to-cost ratio. Priority 1 projects exhibit an average BCR above 5.0, solely from the perspective of safety enhancements. Projects of lower priority possess a BCR below 1.0, but this doesn't inherently categorize them as ineffective safety endeavors. Such projects demand more extensive resources to induce safety changes and might align well with economic development, rehabilitation, or operational objectives.

This data-driven approach reveals a widespread distribution of projects across Omaha. Each council district is associated with projects and improvements, all of which have a BCR exceeding 1.0. Council District 1, Council District 2, Council District 3, and Council District 4 have the largest number of projects along with higher benefit-to-cost ratios. This deviation arises from the notably elevated rates of traffic-related fatalities on these roads, and the implementation of many cost-effective, high-impact solutions.

The tables presented offer an overview of the proposed projects and strategies aimed at mitigating traffic-related fatalities on Omaha streets. The ensuing pages give a high-level analysis of each priority level. More detail of each project and calculations are included in Appendix C. 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.

IDENTIFIED PRIORITIZED PROJECTS

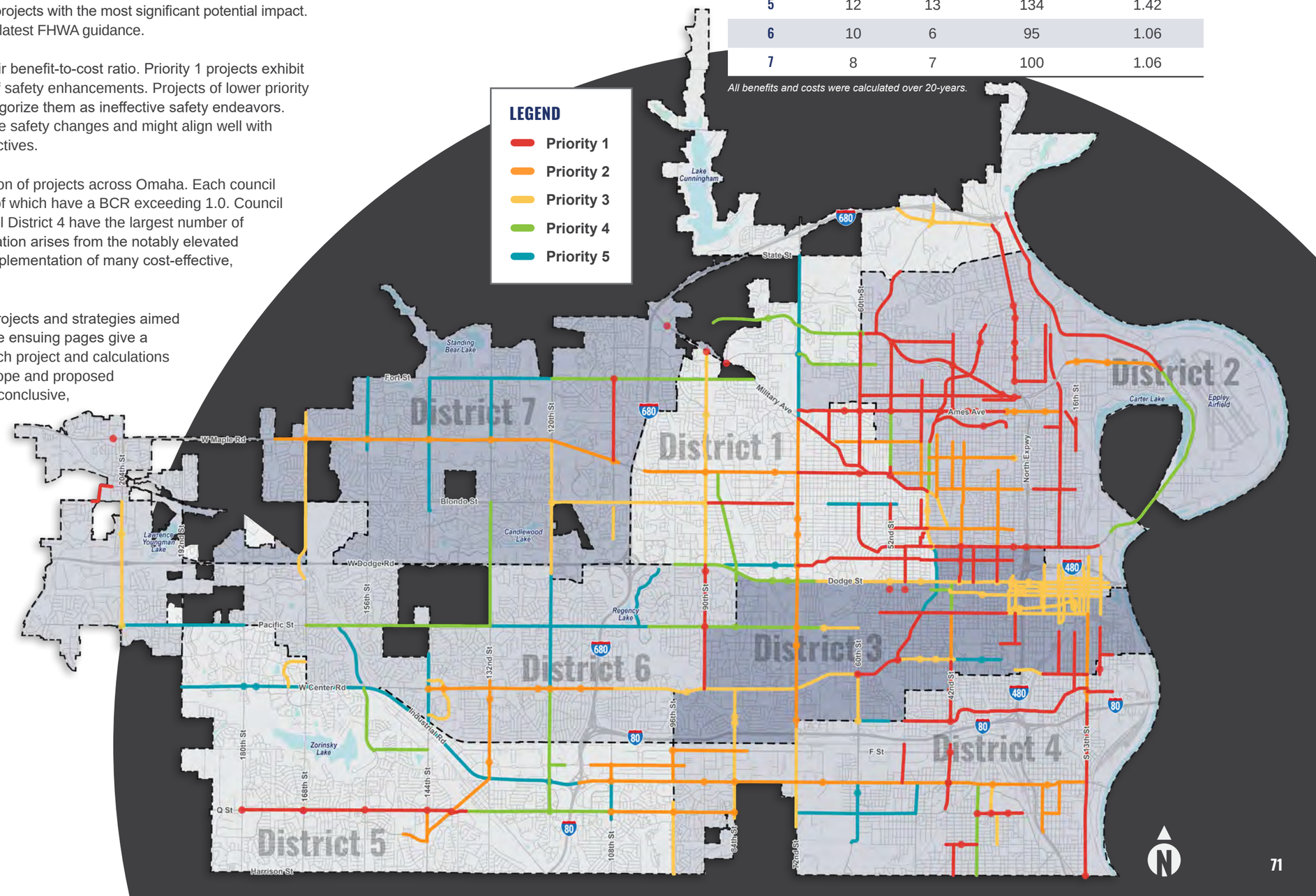
PRIORITY	PROJECT COUNT	LIVES SAVED	SERIOUS INJURIES AVOIDED	BENEFIT-TO-COST RATIO
1	36	63.5	502.1	5.24
2	18	36.4	372.4	2.79
3	24	11.7	270.6	1.34
4	17	8.4	101.4	0.76
5	22	0.9	89.6	0.27
TOTAL	117	121	1338	2.03

All benefits and costs were calculated over 20-years.

PRIORITIZED PROJECTS BY DISTRICT

CITY COUNCIL DISTRICT	PROJECT COUNT	LIVES SAVED	SERIOUS INJURIES AVOIDED	BENEFIT-TO-COST RATIO
1	17	19	219	2.10
2	27	32	309	3.24
3	24	25	276	2.40
4	19	20	204	2.40
5	12	13	134	1.42
6	10	6	95	1.06
7	8	7	100	1.06

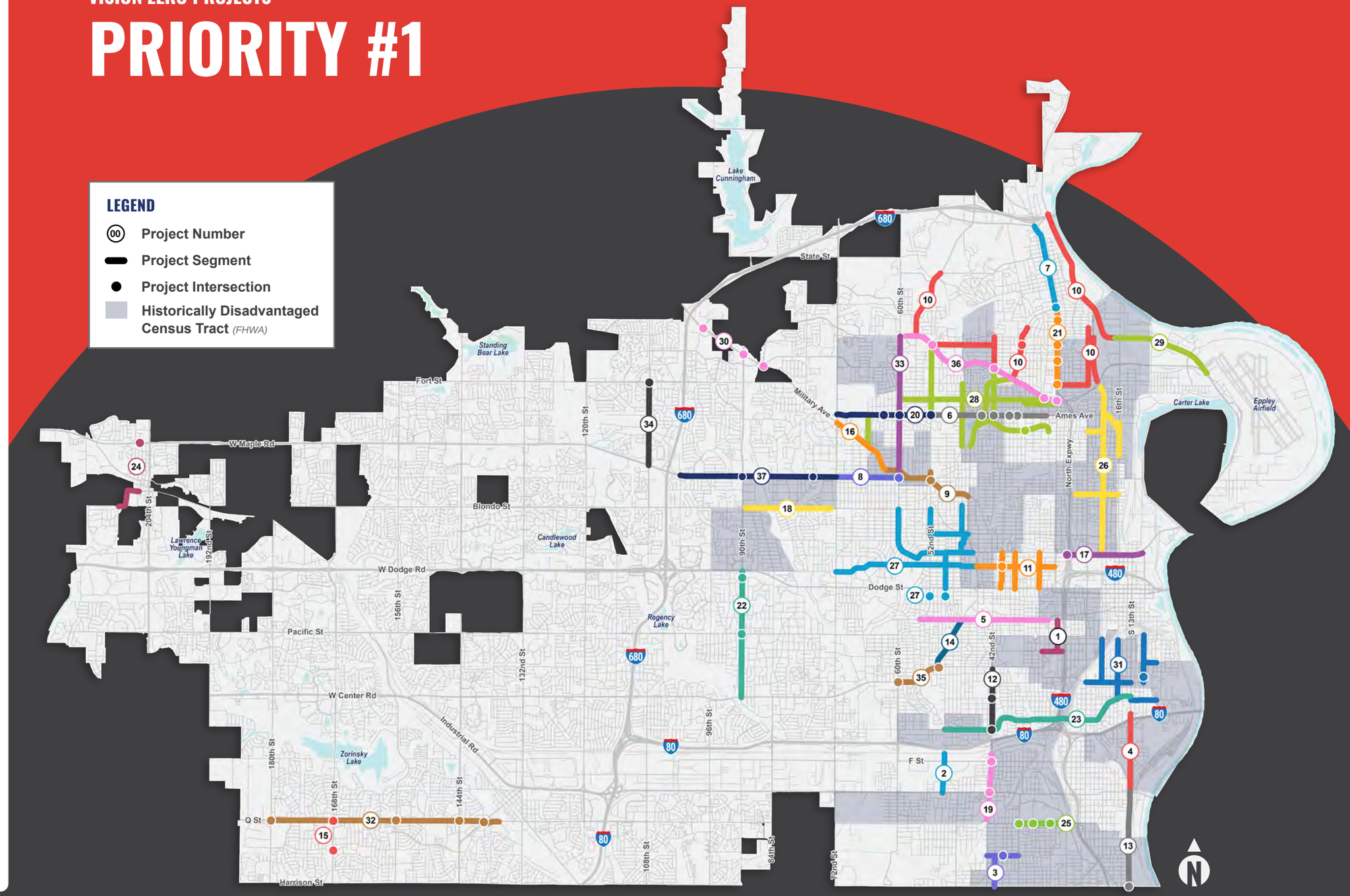
All benefits and costs were calculated over 20-years.



VISION ZERO PROJECTS

PRIORITY #1

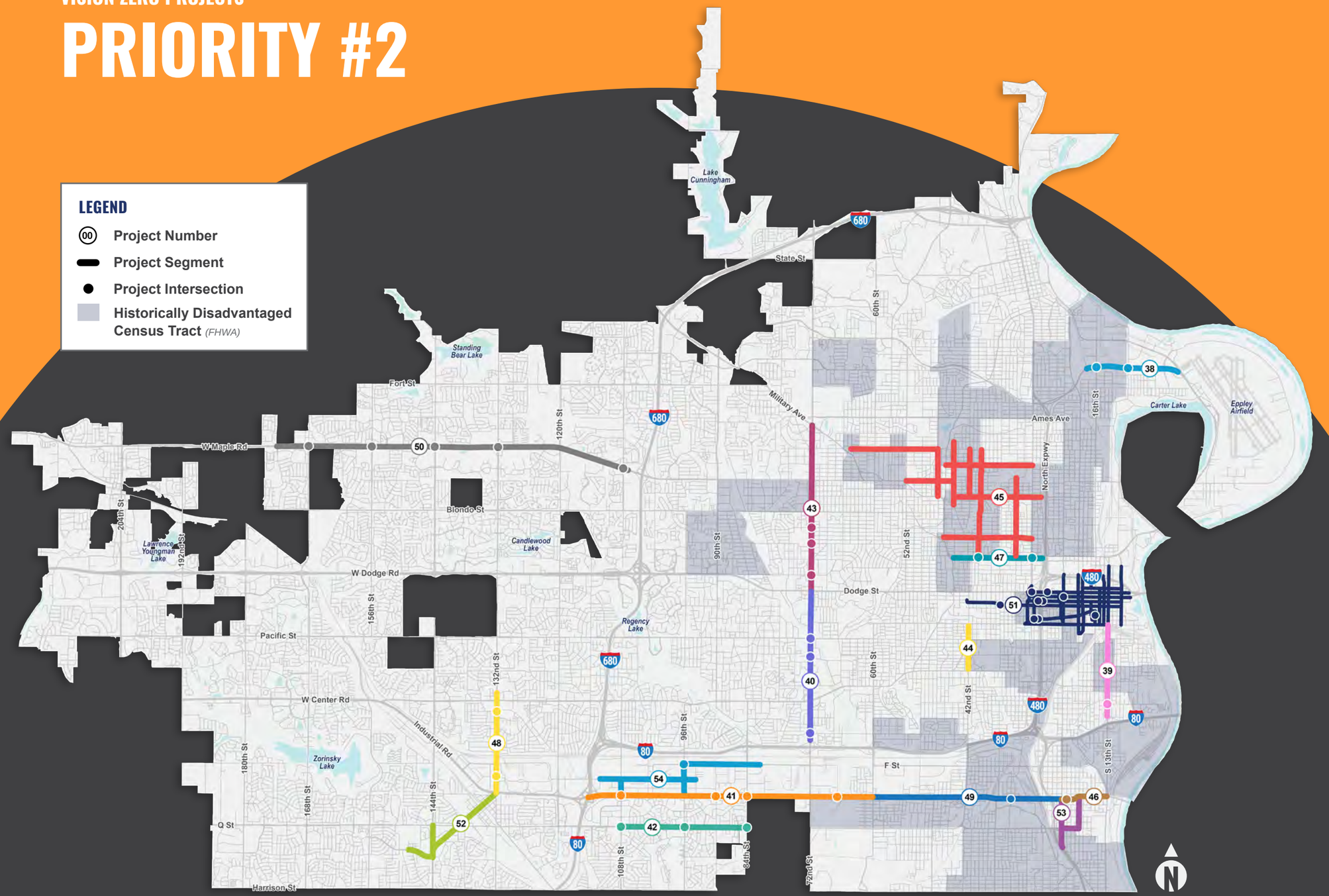
PROJECT		BENEFIT-TO-COST RATIO
1	Hanscom Park Area	23.25
2	S 50th Street #1	10.72
3	Indian Hills South Area	10.48
4	S 13th Street #2	9.32
5	Leavenworth Street	9.23
6	Ames Avenue #2	8.42
7	N 30th Street #1	7.90
8	Maple Street #2	7.83
9	NW Radial Hwy #2	7.78
10	Florence Area	6.90
11	Gifford Park Area	6.87
12	S 42nd Street #2	6.81
13	S 13th Street #1	6.79
14	Saddle Creek South	6.77
15	S 168th Street Ints.	5.95
16	Military Avenue #1	5.69
17	Cuming Street #1	5.63
18	Blondo Street #1	5.59
19	S 42nd Street #3	5.37
20	Ames Avenue #3	5.07
21	N 30th Street #2	5.02
22	S 90th Street	4.89
23	Vinton Street Area	4.75
24	Elkhorn Improvements	4.59
25	Q Street #1	4.32
26	North Downtown Area	4.28
27	Dundee Area	4.06
28	Ames Ave Area	4.02
29	Abbot / Pershing Drive	3.73
30	Blair High Road	3.73
31	Little Italy Area	3.71
32	Q Street #4	3.70
33	N 60th Street	3.67
34	N 108th Street #1	3.59
35	Center Street #3	3.58
36	Sorensen Pkwy #1	3.52
37	Maple Street #1	3.52



VISION ZERO PROJECTS

PRIORITY #2

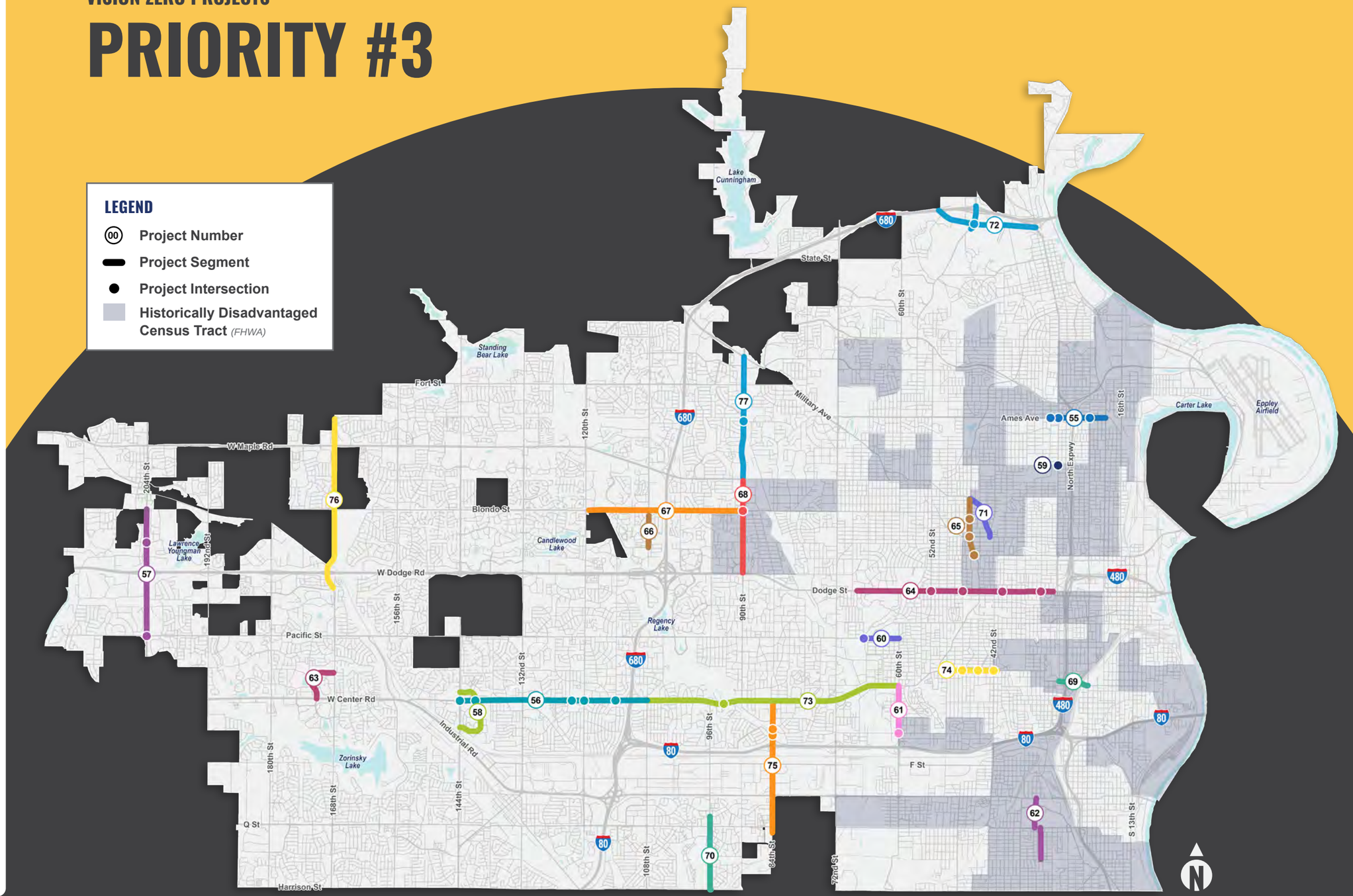
PROJECT		BENEFIT-TO-COST RATIO
38	Arthur C Storz Expy	3.31
39	S 13th Street #3	3.29
40	72nd Street #2	3.21
41	L Street #2	3.10
42	Q Street #2	3.07
43	72nd Street #3	3.07
44	S 42nd Street #1	2.92
45	Adams Park Area	2.77
46	L Street / Missouri Ave	2.65
47	Cuming Street #2	2.50
48	S 132nd Street #1	2.49
49	L Street #1	2.42
50	W Maple Road	2.41
51	Downtown Street Grid	2.41
52	Millard Area	2.34
53	S 24th Street Area	2.23
54	F & I Streets	2.22



VISION ZERO PROJECTS

PRIORITY #3

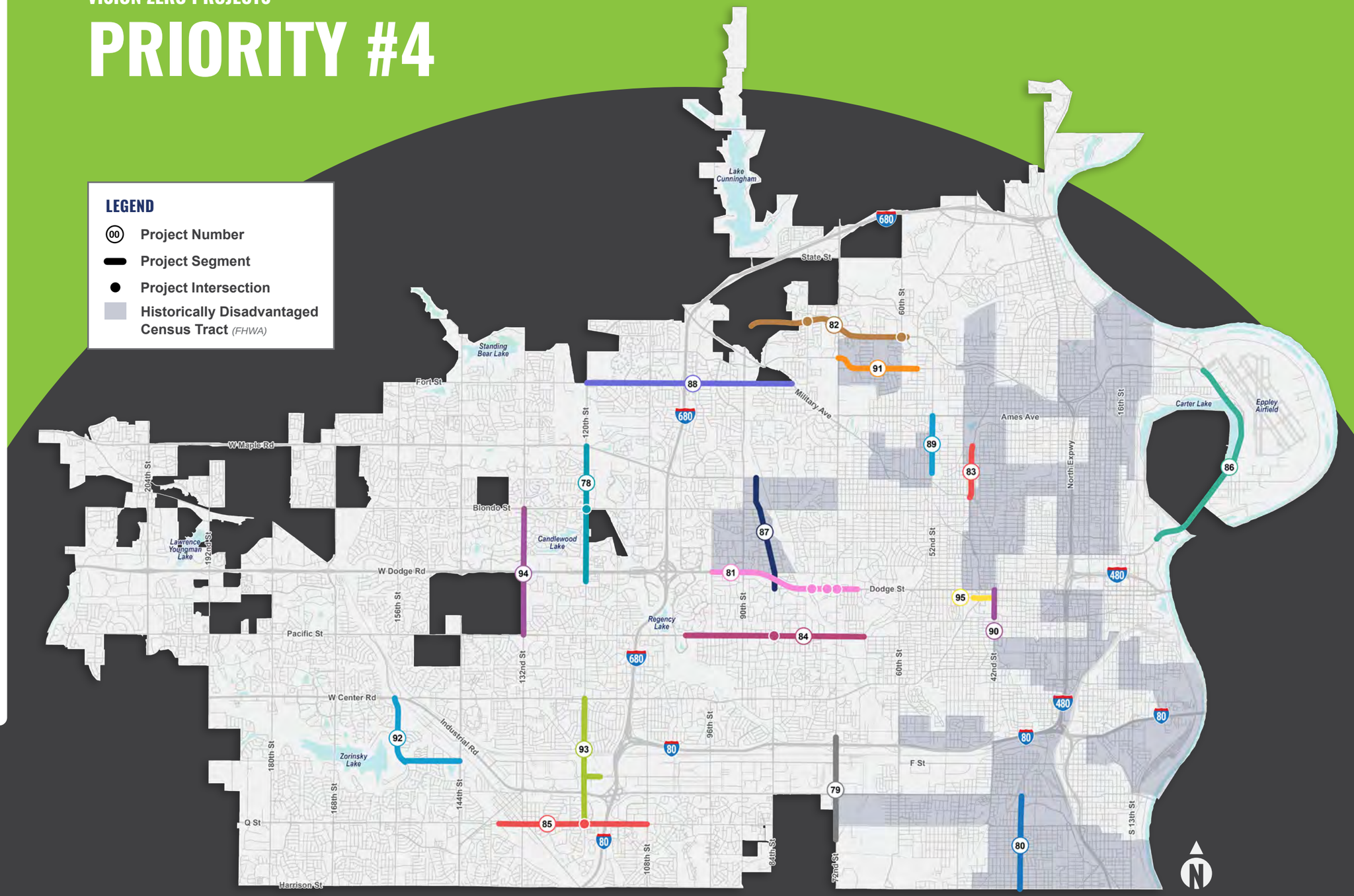
PROJECT		BENEFIT-TO-COST RATIO
55	Ames Avenue #1	2.17
56	W Center Road #2	2.15
57	N 204th Street	2.11
58	Oak View Drive	1.89
59	N 30th Street #3	1.86
60	Pacific Street #1	1.86
61	S 60th Street #1	1.85
62	Southside Terrace Area	1.84
63	S 171st Street	1.67
64	Dodge Street	1.64
65	NW Radial Hwy #1	1.54
66	N 108th Street #2	1.27
67	Blondo Street #2	1.11
68	N 90th Street #1	1.05
69	Ed Creighton / Martha	1.04
70	S 96th Street	0.98
71	Military Avenue #2	0.97
72	McKinley Street	0.96
73	W Center Road #1	0.95
74	Center Street #2	0.94
75	S 84th Street	0.92
76	S 168th Street #2	0.92
77	N 90th Street #2	0.90



VISION ZERO PROJECTS

PRIORITY #4

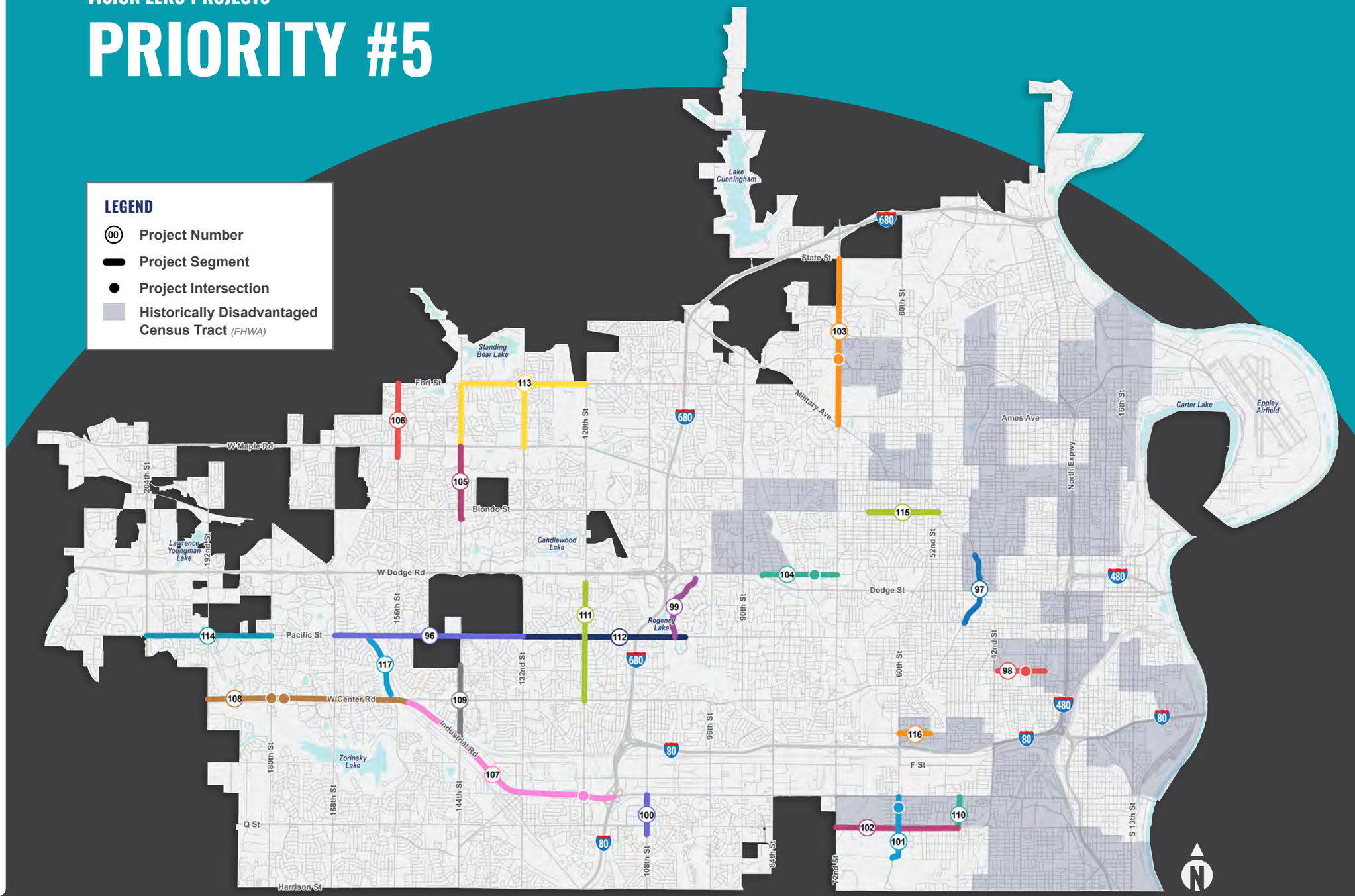
PROJECT		BENEFIT-TO-COST RATIO
78	S 120th Street #1	0.89
79	72nd Street #1	0.88
80	S 36th Street	0.88
81	W Dodge Road	0.83
82	Sorensen Pkwy #2	0.83
83	Fontenelle Blvd	0.82
84	Pacific Street #2	0.82
85	Q Street #3	0.82
86	Abbott Drive	0.78
87	N 85th Street Area	0.74
88	Fort Street	0.74
89	N 52nd Street	0.70
90	UNMC Area	0.70
91	Hartman Avenue	0.65
92	S 156th / F Street	0.64
93	S 120th Street #2	0.61
94	S 132nd Street #2	0.59
95	Farnam Street	0.59



VISION ZERO PROJECTS

PRIORITY #5

PROJECT		BENEFIT-TO-COST RATIO
96	Pacific Street #4	0.50
97	Saddle Creek North	0.48
98	Center Street #1	0.47
99	Regency Pkwy	0.45
100	S 108th Street #2	0.43
101	S 60th Street #2	0.41
102	Q Street #5	0.39
103	72nd Street #4	0.37
104	Cass Street	0.37
105	S 144th Street #1	0.36
106	N 156th Street	0.25
107	L Street #3	0.25
108	W Center Road #3	0.22
109	S 144th Street #2	0.20
110	S 48th Street	0.17
111	S 120th Street #3	0.14
112	Pacific Street #3	0.14
113	Fort / 132nd / 144th	0.13
114	Pacific Street #5	0.11
115	Blondo Street	0.10
116	Grover Street	0.09
117	Bob Boozer Drive	0.09



VISION ZERO OMAHA

ENDING TRAFFIC DEATHS

Stay Engaged with Us

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402-444-5220

VisionZero@cityofomaha.org

@omahapublicwrks

VISION ZERO OMAHA

ENDING TRAFFIC DEATHS

» APPENDICES

VISION ZERO OMAHA

ENDING TRAFFIC DEATHS

APPENDIX A: STAKEHOLDER AND PUBLIC ENGAGEMENT

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ATTACHMENTS

- Vision Zero Omaha Strategic Meeting Items
- Vision Zero Omaha Website Feedback
- Vision Zero Omaha Open House Sign-In Sheets
- Vision Zero Omaha Open House Comment Forms

EXECUTIVE SUMMARY

The City of Omaha, Nebraska, Vision Zero Action Plan (VZAP) aims to maximize the City's potential to reduce the number of fatalities and severe injuries to Zero across the transportation system. In line with this goal, this chapter provides a summary of all engagement activities, public input received, and meeting information. This appendix is structured as follows:

STRATEGIC MEETINGS

Starting in the fall of 2022, the project team began meeting with key stakeholders and groups for discussions revolving around the VZAP's vision and goals. Meeting groups included:

1. Executive Committee (EC)
2. Technical Advisory Committee (TAC)
3. Focus Area Working Groups
4. Omaha Mayor Jean Stothert
5. Omaha City Council

POP-UP EVENTS AND PUBLIC INPUT RECEIVED

As part of the engagement process, the Vision Zero Omaha team participated in a total of 12 pop-up events between January and July 2023. During these events, the team asked the public for feedback on various topics and focus areas, as well as ways to improve road safety in Omaha. All input provided was collected and considered for the VZAP's recommendations. The project team either planned pop-up events or leveraged opportunities to partner with other organizations at previously scheduled events.

WEBSITE FEEDBACK

In order to meet the public where they are, the Vision Zero Omaha team developed a website on a new domain at https://www.OmahaVisionZero.com/ that allowed the public to provide comments, answer poll questions, and pinpoint specific locations with roadway safety concerns. This feedback was used to help influence our VZAP planning efforts. The new site includes the following webpages:

- Home page
- What is Vision Zero page that redirects to https://visionzeronetwork.org/
- Vision Zero Dashboard that is the City of Omaha's Fatal Crash Dashboard
- News page with links to Newsletters and the Media Guide
- Upcoming Events page that shares a list of community events,
- TAC page that shares information about the Technical Advisory Committee membership and meeting schedule with notes and presentations
- FAQs page to provide details on frequently asked questions, and
- Español page that redirects to the mirror Vision Zero Omaha website in Spanish.

During the planning process, the website received 23,429 VIEWS with 336 total comments on the site's Traffic Issues Map, 271 online answers to poll questions, and 131 newsletter sign-ups.

STRATEGIC MEETINGS

EXECUTIVE COMMITTEE (EC)

The Executive Committee (EC) is a group comprised of City of Omaha Department directors, elected official staff (Mayor's Office and City Council), and outside public planning agencies who set the values and vision for the overall project. They engaged in reviewing policy, processes, and project recommendations, but were not an approval body. The EC was facilitated by professional consultants and City staff, who coordinated meetings, communications, and any other outreach for the EC. The EC had a total of four meetings beginning in May 2022 through April 2023.

EC Members

Name	Department
Thomas H. Warren	Office of the Mayor – Chief of Staff
Dan Seder	Omaha Parks Department Asst Director
Eric Englund	Omaha Planning Department Asst Director
Jacquelyn Morrison	Office of the Mayor Deputy Chief of Staff
Kathy Bossman	Omaha Fire Department Chief
Keith L. Station	Office of the Mayor Deputy Chief of Staff – Diversity, Equity & Inclusion
Michael Helgerson	Metropolitan Area Planning Agency Executive Director
Bob Stubbe	Omaha Public Works Director
Steve J. Scarpello	City Council Staff Asst
Lt. Allen Straub	Omaha Police Department Traffic Unit

EC Meeting Dates

1. May 20, 2022
2. September 9, 2022
3. January 10, 2023
4. April 10, 2023

Please see Meeting Attachments as embedded files in Appendix PDF.

TECHNICAL ADVISORY COMMITTEE (TAC)

The Technical Advisory Committee (TAC) is a group comprised of City of Omaha Department staff, partnering agencies, and members of community advocacy groups. The purpose of the TAC is to review data analysis and public input and determine safety focus areas, as well as filter, prioritize, and implement recommendations from specialized Focus Area Working Groups and public engagement into the Vision Zero Omaha Action Plan. The TAC met five times from November 2022 through July 2023.

TAC Members

Representative	Organization/Advocacy Groups/Advisory Committees
Pell Duvall	Active Living Advisory Committee
Meaghan Fitzgerald Walls	(Mayor's) Advisory Commission for Citizens with Disabilities
Tom Everson	Keep Kids Alive Driver 25
Eric Koeppe	Nebraska Safety Council
Karen Saxton	UNMC - Nebraska Med Trauma
Katie Pierce	CHI Trauma Center
Chris Wagner	Project Extra Mile
Trilety Wade	Safe Omaha Streets
Benny Foltz	Heartland B-Cycle
Ryan Wishart	Creighton – Sociology, Social Science Data Lab
James Hubbard	Sherwood Foundation
Marcus Mora	South Omaha Business Improvement District (BID)
Brittany Dabestani	Benson BID
Guy Jukes	Old Elkhorn BID
LaVonya Goodwin	North 24th St BID
Holly Barrett	Downtown BID
Matt Oberst	Blackstone BID
Joshua Hannum	N Saddle Creek BID
Daniel Lawse	Verdis Group
Jeff Riesselman	Omaha Public Works Traffic Division

Representative	Organization/Advocacy Groups/Advisory Committees
Nick Gordon	Omaha Public Works Traffic Division
Krista Wassenaar	Omaha Public Works Design Division
Lt. Allen Straub	Omaha Police Traffic Unit
Chief Kathy Bossman	Omaha Fire
Derek Miller	Omaha Planning – Long Range & Mobility
Kevin Carder	Omaha Planning – Long Range & Mobility
Ken Smith	Omaha Parking and Mobility
Trevis Sallis	Omaha Public Schools
Evan Schweitz	Metro Transit
Keith Station	Office of the Mayor
Jeff Sobczyk	Omaha Public Works Vision Zero Coordinator
Jacquelyn Morrison	Office of the Mayor Deputy Chief of Staff
Andy Wessel	Douglas County Department of Health
Carlos Morales	Metropolitan Area Planning Agency

TAC Meeting Dates

1. November 3, 2022
2. December 15, 2022
3. February 9, 2023
4. May 11, 2023
5. July 13, 2023

Please see Meeting Attachments as embedded files in Appendix PDF.

TAC Meeting Photos

FOCUS AREA WORKING GROUPS (FAWGS)

The Focus Area Working Groups (FAWGs) were comprised of existing TAC members and other technical experts. The FAWGs met to discuss identified safety concerns and develop safety countermeasures and overarching strategies to reduce and ultimately eliminate traffic deaths and serious injuries on Omaha streets. Focus Areas were:

- Equity
- Speed
- High Risk Roads
- Intersections
- Pedestrian and Cyclists
- Impairment and Inattention
- Funding Policies and Procedures.

The FAWGs met for two rounds of workshops in January/February 2023 and again in April 2023.

FAWG Members

FAWG Participants/ Members	Organization/Advocacy Groups/Advisory Committees	FAWG(s) Attended
Jim Boerner	Metropolitan Area Planning Agency	Equity, High Risk Arterial Roads
Ryan Wishart	Creighton - Sociology, Social Science Data lab	Equity, Funding Policies and Procedures, Pedestrian and Bicycle
Steve Scarpello	City of Omaha	Equity, Funding Policies and Procedures
Keith Station	Office of the Mayor	Equity
Jacqulyn Morrison	Office of the Mayor	Equity, Funding Policies and Procedures
Lt. Allen Straub	Omaha Police Department	Equity, Intersections, High-Risk Arterial Roads, Impairment
Tom Everson	Keep Kids Alive Driver 25	Equity, Speed
Meaghan Fitzgerald Walls	(Mayor's) Advisory Commission for Citizens with Disabilities	Equity
Carlos Morales	Metropolitan Area Planning Agency	Equity, Intersections, Speed, High-Risk Arterial Roads, Funding Policies and Procedures

FAWG Participants/ Members	Organization/Advocacy Groups/Advisory Committees	FAWG(s) Attended
Benny Foltz	Heartland Bikeshare	Equity, Pedestrian and Bicycle
Trevis Sallas	Omaha Public Schools	Equity
Jeff Babcock	City of Omaha Design	Intersections, Pedestrian and Bicycle
Krista K. Wassenaar	Omaha Public Works Department (Design)	Intersections, Speed, High-Risk Arterial Roads, Funding Policies and Procedures, Pedestrian and Bicycle
Nick Gordon	Omaha Public Works Department (Traffic)	Intersections, Speed, High-Risk Arterial Roads, Funding Policies and Procedures, Pedestrian and Bicycle, Impairment
Trilety Wade	Safe Omaha Streets	Intersections, Speed, Impairment
Kevin Carder	Omaha Planning Department	Intersections, Speed, High-Risk Arterial Roads, Funding Policies and Procedures, Pedestrian and Bicycle
Jeff Riesselman	Omaha Public Works Department (Traffic)	Intersections, Speed, High-Risk Arterial Roads, Funding Policies and Procedures, Pedestrian and Bicycle
Bryan Guy	Omaha Public Works Department (Traffic)	Intersections, High-Risk Arterial Roads, Funding Policies and Procedures, Pedestrian and Bicycle
Brittany Dabestani	Benson Business Improvement District (BID)	Intersections
Katie Pierce	CHI Trauma Center	Intersections, Impairment
Karen Saxton	UNMC - Nebraska Med Trauma	Speed, Pedestrian and Bicycle, Impairment
Bill Kovarik	Nebraska Department of Transportation	Speed, Impairment
Sgt. Jason Menning	Omaha Police Department	Speed, Funding Policies and Procedures

FAWG Participants/ Members	Organization/Advocacy Groups/Advisory Committees	FAWG(s) Attended
Pell Duvall	Active Living Advisory Committee	Speed, Pedestrian and Bicycle
David Nassi	City of Omaha (Design)	High-Risk Arterial Roads
Chief Kathy Bosserman	Omaha Fire Department	High-Risk Arterial Roads
Lindsey Button	Metropolitan Area Planning Agency	Pedestrian and Bicycle, Impairment
Greg McVey	Nebraska Department of Transportation	Pedestrian and Bicycle
Matt Oberst	Blackstone BID	Pedestrian and Bicycle
Eric Koeppe	Nebraska Safety Council	Impairment
Derek Miller	Omaha Planning Department	Impairment
Andrea Frazier	Mothers Against Drunk Driving	Impairment
Chris Wagner	Project Extra Mile	Impairment

FAWG Meeting Dates

1. Round 1: January 30 - 31, February 1 - 2, 2023
2. Round 2: April 3 - 5, 2023

Please see Meeting Attachments as embedded files in Appendix PDF.

POP-UP EVENTS AND PUBLIC INPUT RECEIVED

ROUND 1 POP-UP EVENTS

Six (6) pop-up events were held between January and March 2023 during the initial round of outreach. During each event, the following two questions were asked:

1. What is your level of knowledge about Vision Zero?
2. What are your ideas for ending traffic deaths in Omaha?

Vision Zero Omaha staff engaged with the public during these events, educating them on Vision Zero and listening to their stories and feedback. Events were advertised through partnering agencies, social media, and the Vision Zero Omaha newsletter. Each event had one display board with an overview of Vision Zero guiding principles and the two engagement questions. Post-it notes were available for the public to share their ideas and dot stickers were used to allow the public to gauge their level of knowledge on a scale. Below is an overview of the first six pop-up events.

1. Saddlebrook Community Center

An in-person pop-up event was hosted at the Saddlebrook Community Center (14850 Laurel Ave, Omaha, NE 68116) from 1:00 – 3:30 p.m. on Wednesday, January 25, 2023. The team spoke to an estimated 11 people during the first pop-up event and shared fliers with the conjoining Saddlebrook Public Library to display and distribute. 17 comments were received during the event, and feedback included:

Knowledge Levels

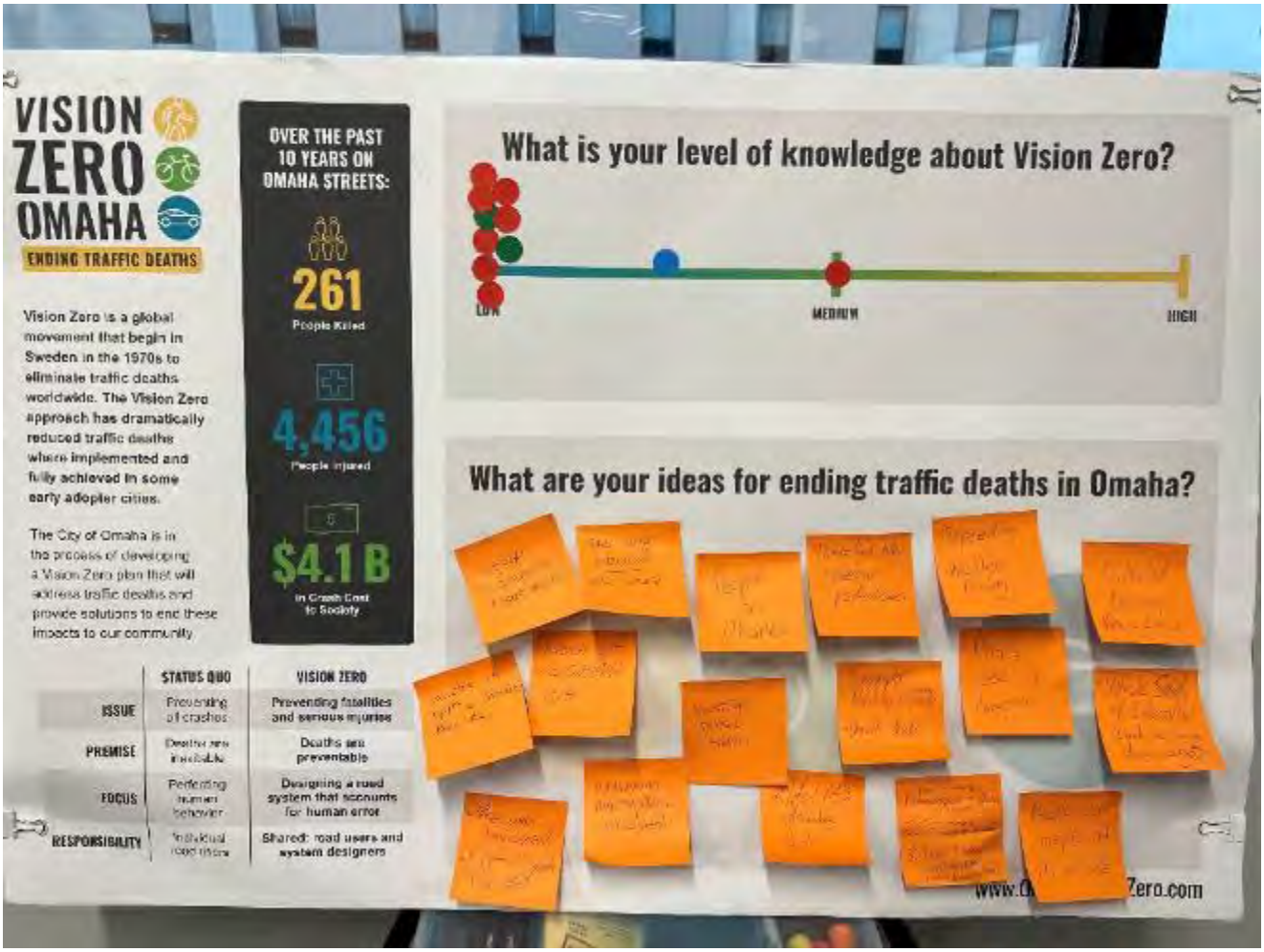
- 9 attendees had a low level of knowledge about Vision Zero
- 1 attendee had a low-medium level of knowledge about Vision Zero
- 1 attendee had a medium level of knowledge about Vision Zero

Ideas for Ending Traffic Deaths

Signage for drivers to respect bikers
Build a Sidewalk on 144th by Standing Bear Lake
More law enforcement
A lot of speeders (100+ MPH)
Safer, larger sidewalks
Bike lanes (add)
Reach out to Omaha World-Herald
Addressing driving while intoxicated
People on phones
Interaction between streetcar and pedestrians
Invest in public transit
Kids (YA) driving fast
Speeding
Reckless driving
Improper parking (center-lane Blackstone)
Drunk pedestrians
Phone use is dangerous
Public service announcements on devices (distracted)
Confr. Zones feels more unsafe
Young drivers are reckless (speed & following laws)
Distracted driving, make a law
Safety with education (such as tying down cargo)
People cut people off, it's not safe

Event Photos – Saddlebrook Community Center

Photo Credit: Trilety Wade, Safe Omaha Streets



2. Florence Community Center

An in-person pop-up event was hosted at the Florence Community Center (2920 Bondesson St., Omaha, NE 68112) from 1:00 – 3:00 p.m. on Wednesday, January 26, 2023. The team spoke to an estimated 20 people during the second pop-up event. 17 comments were received during the event, and feedback included:

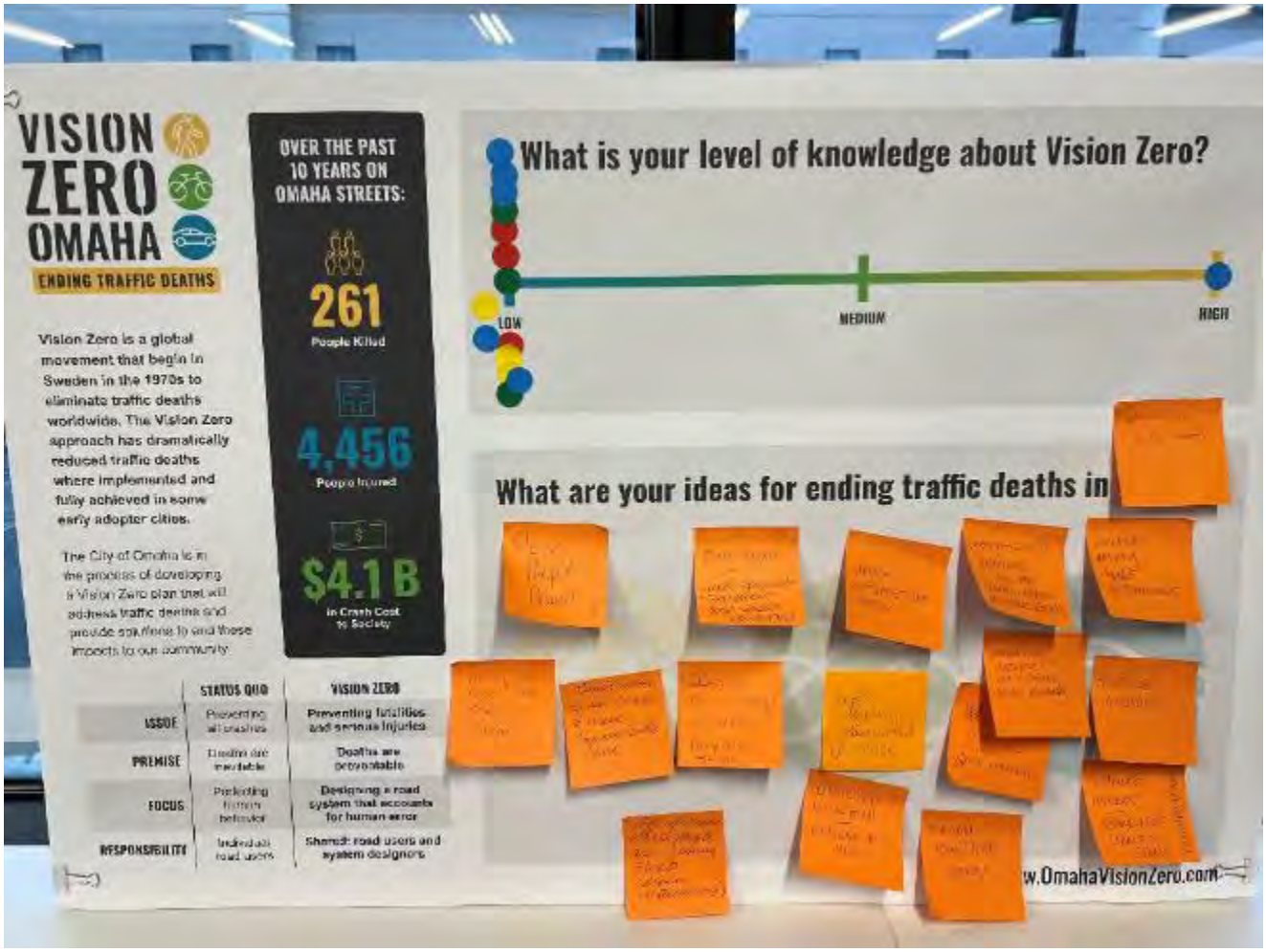
Knowledge Levels

- 14 attendees had a low level of knowledge about Vision Zero
- 1 attendee had a high level of knowledge about Vision Zero

Ideas for Ending Traffic Deaths

Driving like never have driven in snow
Build more bike lanes and leave Harney bike lane
Light up areas where people are crossing streets (main intersections)
Slow people down / slow down! *(multiple votes)* • Lower speed limit • Enforcement • Speed reducing infrastructure
Increase public transportation and promotion, free public transit
Drunk drivers are issue
People driving distracted (i.e., phones)
No safe bike lanes, trails - Midtown to UNO
Potholes are big safety concerns, cause accidents (bike and car) *(multiple votes)*
Distracted driving, not focusing while driving
Pedestrian crossing, snow removal
Running yellow/red lights
Driving in bike lanes
Reckless driving - speed enforcement
Tactical urbanism
Distracted drivers harm others - enforcement (Click It or Ticket)

Event Photos – Florence Community Center



3. State of North Omaha & State of African Americans – Omaha Public Schools TAC Building

An in-person pop-up event was hosted at the State of North Omaha & State4 of African Americans event at the Omaha Public Schools TAC Building (3215 Cuming St., Omaha, NE 68131) from 7:15 a.m. – 1:00 p.m. on Saturday, January 28, 2023. The team spoke to an estimated 30 people during the third pop-up event. Six comments were received during the event, and included:

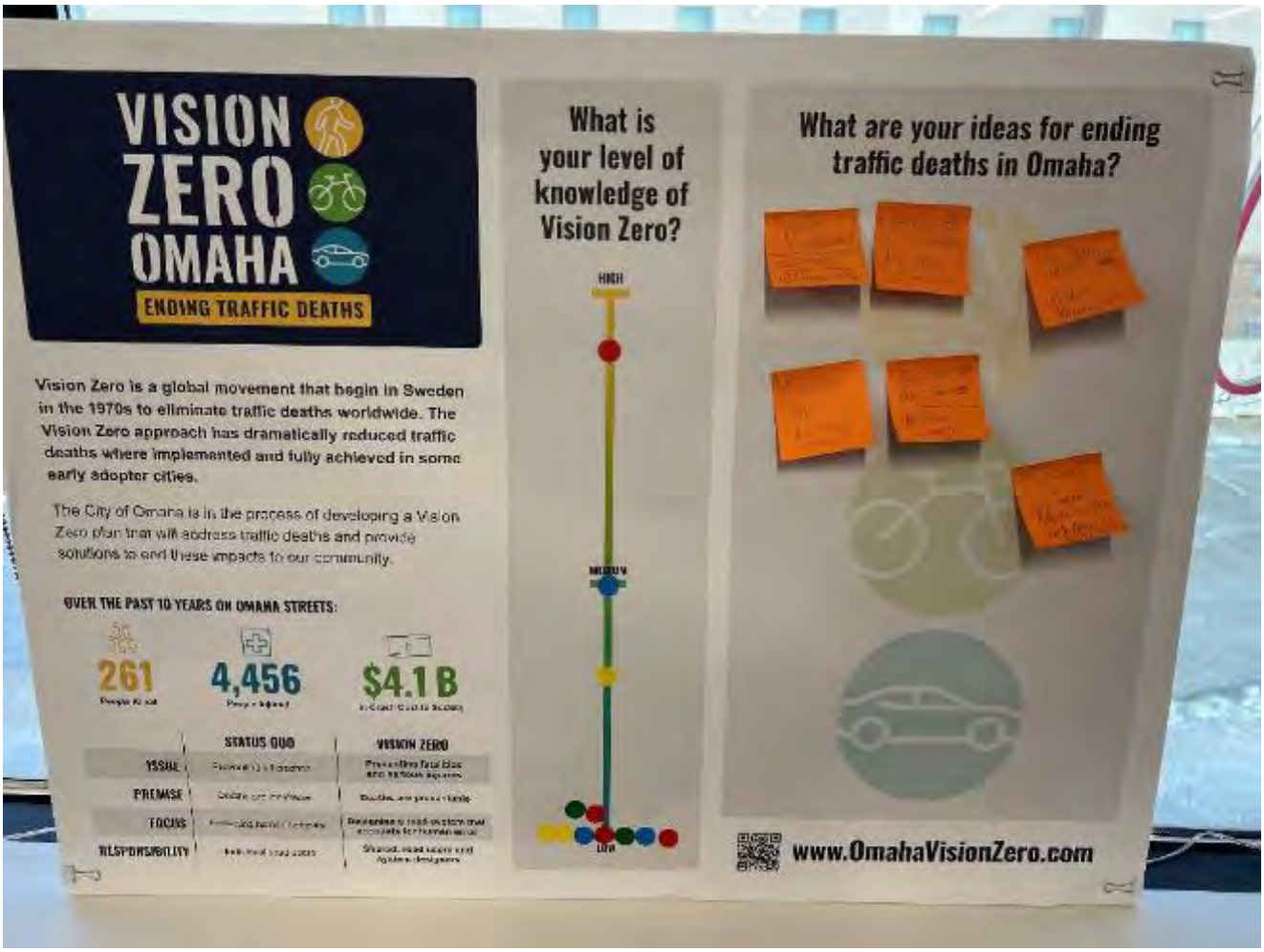
Knowledge Levels

- 9 attendees had a low level of knowledge about Vision Zero
- 1 attendee had a low-medium level of knowledge about Vision Zero
- 1 attendee had a medium level of knowledge about Vision Zero
- 1 attendee had a medium-high level of knowledge about Vision Zero

Ideas for Ending Traffic Deaths

Speeding enforcement
Road diets
Pedestrian focused design
Education
More resources, money $
Seatbelts (multiple votes)
Child safety seats
Ride share investment
Need equitable police presence
Political will
Less teen drivers, address it
Alcohol
Motorcycles
Rear-ends
Need more defensive driving (Smith Defensive Driving Course)

Event Photos – State of North Omaha & State of African Americans



4. Keep Kids Alive Drive 25 Classic Car Fundraiser – Peter Fink's Muscle Car Museum

An in-person pop-up event was hosted at the Keep Kids Alive Drive 25 Classic Car Fundraiser at Peter Fink's Muscle Car Museum (5808 N. 90th St., Omaha, NE 68134) from 6:00 – 8:00 p.m. on Thursday, February 26, 2023. The team spoke to an estimated 40 people during the fourth pop-up event. Eight comments were received during the event, and feedback included:

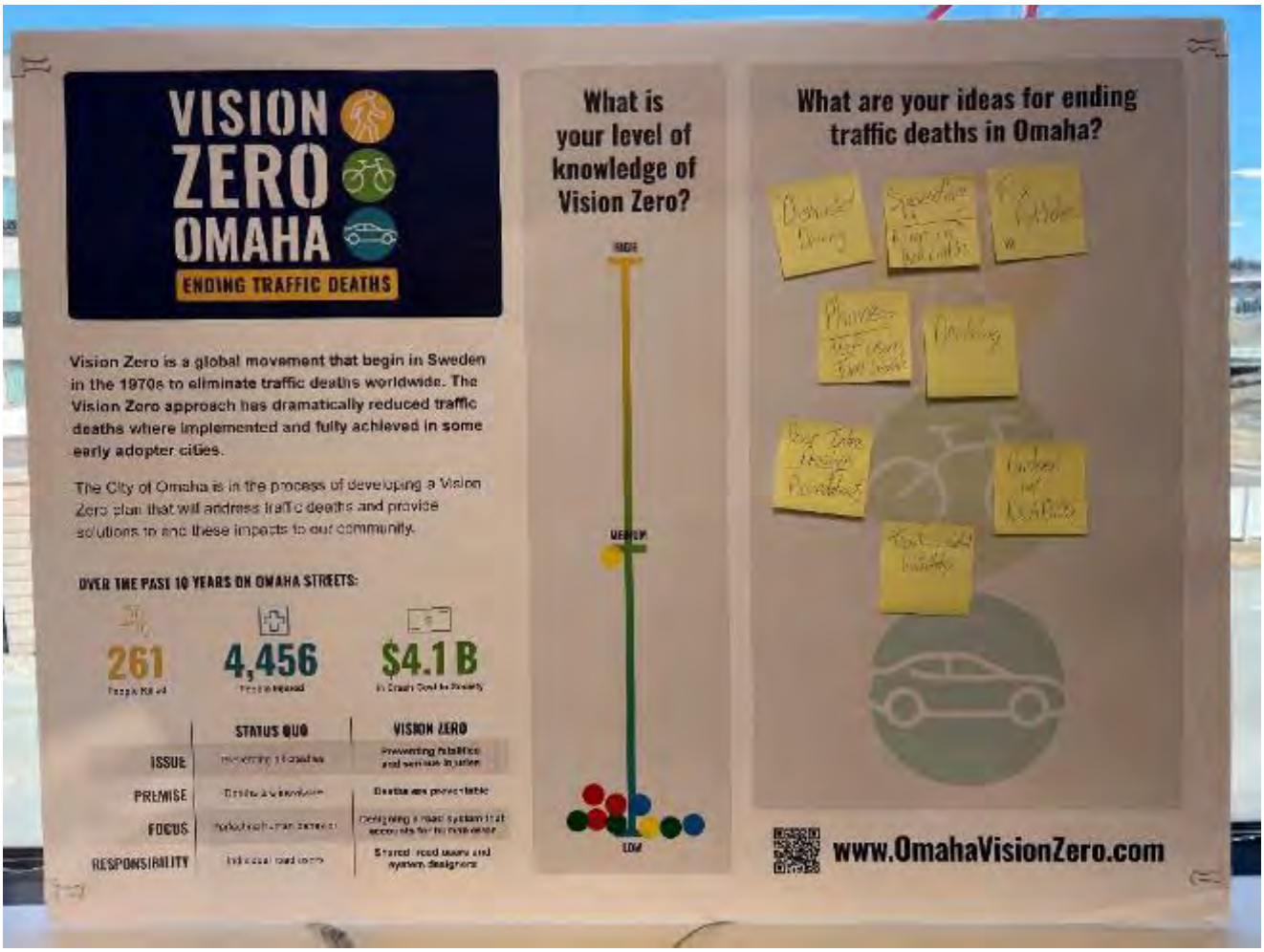
Knowledge Levels

- 9 attendees had a low level of knowledge about Vision Zero
- 1 attendee had a medium level of knowledge about Vision Zero

Ideas for Ending Traffic Deaths

Distracted driving
Speeding *(multiple votes)*
Running red lights *(multiple votes)*
Fix potholes *(multiple votes)*
Phones; not using turn signals
Poor intersection design; roundabouts
Traffic control visibility
Partner with KKAD25
Drinking and driving

Event Photos – Keep Kids Alive Drive 25 Classic Car Fundraiser


VISION ZERO OMAHA
ENDING TRAFFIC DEATHS
Vision Zero is a global movement that begin in Sweden in the 1970s to eliminate traffic deaths worldwide. The Vision Zero approach has dramatically reduced traffic deaths where implemented and fully achieved in some early adopter cities.
The City of Omaha is in the process of developing a Vision Zero plan that will address traffic deaths and provide solutions to end these impacts to our community.
OVER THE PAST 10 YEARS ON OMAHA STREETS:
261
4,456
$4.1 B
STATUS QUO
VISION ZERO
ISSUE
PREMISE
FOCUS
RESPONSIBILITY
What is your level of knowledge of Vision Zero?
HIGH
LOW
What are your ideas for ending traffic deaths in Omaha?
www.OmahaVisionZero.com

5. South Omaha Public Library

An in-person pop-up event was hosted at the South Omaha Public Library (2808 Q. St., Omaha, NE 68107) from 5:00 – 7:00 p.m. on Wednesday, March 8, 2023.Verbal Spanish translation services were provided via a representative from JEO Consulting Group as well as a Spanish translated fact sheet. The team spoke to an estimated 25 people during the fifth pop-up event. 12 comments were received during the event, and feedback included:

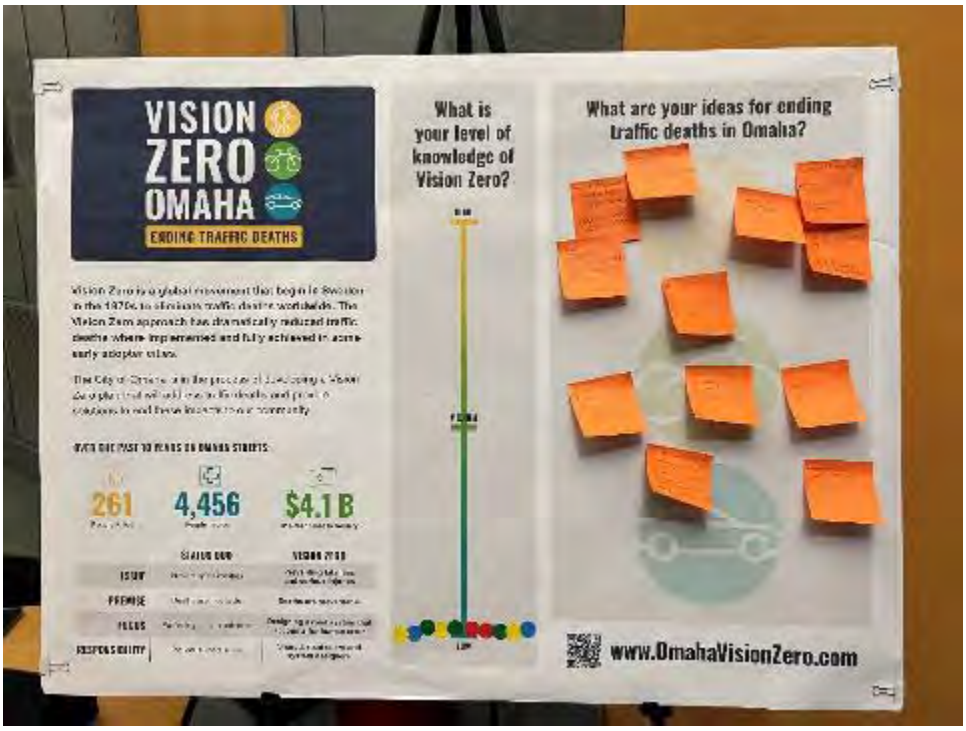
Knowledge Levels

- 10 attendees had a low level of knowledge about Vision Zero

Ideas for Ending Traffic Deaths

People running traffic lights, signal timing; people running speed limits
Driver education - turn signal, headlights, avoiding distractions
Stay off the phone
Distracted driving; proper seatbelt usage with kids; no backseat drivers
Know where you're going before you leave; don't get caught up in road rage
More technology, cameras to address speeders/people not obeying signage
Brake checking; avoiding phone distractions
Better law enforcement - decrease speeders, reckless driving
Better corner banking to decrease icing, hold cars better
Traffic light cycles
Driver education - too much road rage, need to speed, unaware of zipper method, intersection use (how to)
Excessive speeding, driver awareness

Event Photos – South Omaha Public Library



6. Our Lady of Lourdes Fish Fry

An in-person pop-up event was hosted at a fish fry at Our Lady of Lourdes (2110 S. 32nd Ave., Omaha, NE 68105) from 5:00 – 8:00 p.m. on Friday, March 10, 2023.A Spanish translated fact sheet was provided. The team spoke to an estimated 100 people during the sixth pop-up event. 45 comments were received during the event, and feedback included:

Knowledge Levels

- 10 attendees had a low level of knowledge about Vision Zero
- 2 attendees had a low-medium level of knowledge about Vision Zero
- 2 attendees had a medium level of knowledge about Vision Zero
- 2 attendees had a medium-high level of knowledge about Vision Zero

Ideas for Ending Traffic Deaths

Driver's behavior - red light running
Speed bump on Spring St. between 42nd and 50th
Poor driver behavior
Control speeders, people obey traffic laws
More speed bumps; too fast on the interstate; lower speed limits in neighborhoods
Traffic calming! Center line hardening
Bike lane signage and designation
U-turns are unsafe - no median
Cell phones are biggest issue for drivers
Start ticketing people going through pink lights
Red light running, cars turning into peds
High-viz clothing for walkers
Lower the speed limit; More driver testing
Walkability
Distracted driving campaign
Fill potholes; keep your phone down
Protected bike lanes! *(multiple votes)*
Distracted driving
People drive way too fast
Look out for motorcycles
Roundabouts! Bio-swells bump outs
Protected bike lanes; more street closures for people to play
Fix potholes
Better road maintenance - dodging potholes *(multiple votes)*
Traffic control visibility
Want to be heard
Cell phones; distracted driving

Take drivers test more than one time
More speed bumps
More traffic tickets; L Street is a problem
More bike lanes and bike paths *(multiple votes)*
People do not shovel sidewalks; cell phone use
Cars don't stop - get them to follow the law
Lower speed limits
DMV retest every 5 years
Wider sidewalks; transit! *(multiple votes for transit)*
Better bus service, better public transportation
Protected bike lanes! Lots of them!
"Potholes" - will slow drivers down
Roundabouts
More roundabouts - good for peds
Speed limit down on Center between 42nd and 32nd
Stiffer DUI penalties - one and done!
More law enforcement

Event Photos – Our Lady of Lourdes Fish Fry

VISION
ZERO
OMAHA
ENDING TRAFFIC DEATHS
Vision Zero is a global movement that begin in Sweden in the 1970s to eliminate traffic deaths worldwide. The Vision Zero approach has dramatically reduced traffic deaths where implemented and fully achieved in some early adopter cities.
261
4,456
$4.1 B
What is your level of knowledge of Vision Zero?
traffic deaths in Omaha?

ROUND 2 POP-UP EVENTS

Six pop-up events were held between April and July 2023 during the second round of outreach. During each event, the following two questions were asked:

1. How have YOU been impacted by severe and fatal crashes?
2. How can WE do more to make Omaha streets safer for ALL?

Like the first round of pop-up events, Vision Zero Omaha staff engaged with the public during these events, educating them on Vision Zero and listening to their stories and feedback. Events were advertised through partnering agencies, social media, and the Vision Zero Omaha newsletter. Each event had one display board with an overview of the Vision Zero and the two engagement questions. Post-it notes were available for the public to share their ideas and dot stickers were used to allow the public to gauge their level of knowledge on a scale.

Below is an overview of the second round of pop-up events:

7. Earth Day Omaha

An in-person pop-up event was hosted at the Earth Day Omaha event in Elmwood Park (6232 Pacific St., Omaha, NE 68106) from 11:00 a.m. – 6:00 p.m. on Saturday, April 22, 2023.

The team spoke to an estimated 45 people during the first pop-up event of the second round of outreach. 24 comments were received during the event, and feedback included:

Knowledge Levels

- 13 people indicated their lives were not affected by severe and fatal crashes
- 10 people indicated their lives were somewhat affected by severe and fatal crashes
- 5 people indicated their lives were somewhat affected to completely changed by severe and fatal crashes
- 4 people indicated their lives were completely changed by severe and fatal crashes

Ideas for Ending Traffic Deaths

Close Farnam St. to cars in Blackstone; ped only zone
Child seat restraints
More speed feedback when I'm driving
Helmets *(multiple votes)*
Roundabout - more of them!
More speed bumps
I wish we could get people to stop running red light & stop signs
HARDER laws on distracted driving, enforce!!!
More public transit
Sidewalks wider - fix sidewalks
More engaged road users, report issues to city
Make more people places, “open streets"
ETOH reduction
Illegal drug use

More enforcement for red light running
More bike paths in city/separated bike path
People be more neighborly and kind
Seat belts
Bikes don't follow the traffic rules. It's dangerous for them *(multiple votes)*
Improve signal timing to make crossing safer, turning car turn into ped walking
Separate bikes, pedestrians & cars
Make people less comfortable to drive (fast)
Drivers slow down
Rain makes lane markers hard to see

Event Photos – Earth Day Omaha

8. Healthy Kids Day

An in-person pop-up event was hosted at the Healthy Kids Day event in Stinson Park (2285 S. 67th St., Omaha, NE 68106) from 11:00 a.m. – 2:00 p.m. on Sunday, April 23, 2023. The team spoke to an estimated 50 people during the second pop-up event of the second round of outreach. 26 comments were received during the event, and feedback included:

Knowledge Levels

- 9 people indicated their lives were not affected by severe and fatal crashes
- 1 person indicated their life was not affected to somewhat affected by severe and fatal crashes
- 3 people indicated their lives were somewhat affected by severe and fatal crashes
- 2 people indicated their lives were somewhat affected to completely changed by severe and fatal crashes
- 2 people indicated their lives were completely changed by severe and fatal crashes

Ideas for Ending Traffic Deaths

Speed limits on dirt roads
Idea: Alarm that tells people when they are driving crazy
25th-26th and Farnam traffic light
Bike lanes *(multiple votes)*
Improved sidewalks, all over city *(additional vote)*
More scooter
South 70th Plaza
Better public transportation - connect outer municipalities, less transfers/more direct routes
More speed traps
Adding diverging diamond intersection
Speed bump 42 Larimore by Central Park
Awareness to school zones (kids using sidewalks)
Kids have right of way at crosswalks
Fix the potholes *(additional vote)*
Don't have bicyclists on street with drivers
Address distracted driving (people looking at phones)
Add speed bumps 77th Street
Safer roads around schools (Beveridge Middle) - bad turns, 1-way street
No middle lane on Dodge
Roundabouts
Improve quality of roads (i.e., potholes) (additional vote)
Early education on safety (ex. red light, green light)
Bike awareness
Repair the sidewalks, streets. More sidewalks for children.
Reduce speeds on streets
Cars slow down at crosswalks

Event Photos – Healthy Kids Day

9. Cinco de Mayo

An in-person pop-up event was hosted at the Cinco de Mayo event in South Omaha (24th Street) from 10:00 a.m. – 5:00 p.m. on Saturday, May 13, 2023. Verbal Spanish translation services were provided via a representative from JEO Consulting Group as well as a Spanish translated fact sheet. The team spoke to an estimated 40 people during the third pop-up event of the second round of outreach. 23 comments were received during the event, and feedback included:

Knowledge Levels

- 16 people indicated their lives were not affected by severe and fatal crashes
- 3 people indicated their lives were not affected to somewhat affected by severe and fatal crashes
- 1 person indicated their life was somewhat affected by severe and fatal crashes
- 5 people indicated their lives were completely changed by severe and fatal crashes

Ideas for Ending Traffic Deaths

Potholes - more awareness to report, make an app
Requiring adolescents to have an adult with them while driving
Driving too fast
More accidents on the freeway
Prohibiting cell phone use, having fines
Driving slower
Unsafe intersection Dodge & interstate (on-off)
Better sidewalks and crosswalks - "pedestrian-friendly infrastructure"
Street reflectors to help see traffic lines during the rain
Better use of stop signs and speeding signs in neighborhoods
Avoid phone use, drinking
4-way stops
Alcohol awareness
Residential access to trails
More policing
More signs - no drinking and driving
L Street 42nd to River unsafe - three accidents in 3 years, won't take it anymore
Phones - texting while driving/distractions
Less distractions
Amplify voices of people in community with concerns
Avoid alcohol and distractions, phone use
Using blinkers
Patch potholes; speed bumps to slow drivers down

Event Photos – Cinco de Mayo

10. Sheelytown Makers Market

An in-person pop-up event was hosted at the Sheelytown Market (3522 Center St., Omaha, NE 68105) from 10:00 a.m. – 2:00 p.m. on Saturday, May 27, 2023. The team spoke to an estimated 25 people during the fourth pop-up event of the second round of outreach. 23 comments were made during the event, and feedback included:\

Knowledge Levels

- 2 people indicated their lives were not affected by severe and fatal crashes
- 2 people indicated their lives were not affected to somewhat affected by severe and fatal crashes
- 4 people indicated their lives were somewhat affected by severe and fatal crashes
- 4 people indicated their lives were somewhat affected to completely changed by severe and fatal crashes
- 2 people indicated their lives were completely changed by severe and fatal crashes

Ideas for Ending Traffic Deaths

Accessible sidewalks (speak to you)
Better/bigger pedestrian signs at Turner Blvd. and Farnam
Follow traffic laws, don't speed and don't drive so aggressively!
Drivers and pedestrians don't pay attention - distracted driving, ignore crosswalks
Bike lanes (multiple votes)
More stop signs to walking paths (multiple votes)
More pedestrian bridges! (multiple votes)
32nd Ave and Frederick - speeding; [need] speed trap, 4-way stop
Better variety of public transportation
Put down our cellphones (multiple votes)
More stops, expanded public transport (additional vote)
Paved sidewalks thru intersections (continuous sidewalks and bike paths) - more visible
Harsher consequences for drunk drivers and support for addicts
Fewer "stroads"
More east-west biking trails and/or corridors
Drinking and driving is biggest issue
Public transport!
Improve crosswalks - signage, chirpping, longer crossing times (multiple votes)
Designated bike lanes (additional vote)
Better public transport (additional vote); bar taxi service; rules against overserving
More speed enforcement (multiple votes)
Stoplight on S. 38th Street and Leavenworth! So many close calls with traffic and blind spots!
More lights and crosswalks on busy roads

Event Photos – Sheelytown Makers Market

11. Omaha Freedom Festival/Juneteenth

An in-person pop-up event was held at the Omaha Freedom Festival at the Malcom X Event Plaza (3448 Evans St., Omaha, NE 68111) from 12:00-4:00 p.m. on Saturday, June 17, 2023. The team spoke to an estimated 40 people during the fifth pop-up event of the second round of outreach. 30 comments were received at the event, and feedback included:

Knowledge Levels

- 4 people indicated their lives were not affected by severe and fatal crashes
- 4 people indicated their lives were not affected to somewhat affected by severe and fatal crashes
- 5 people indicated their lives were somewhat affected by severe and fatal crashes
- 4 people indicated their lives were somewhat affected to completely changed by severe and fatal crashes
- 4 people indicated their lives were completely changed by severe and fatal crashes

Ideas for Ending Traffic Deaths

People running stop signs
NW Radial/Saddlecreek/Maple to Benson needs to be improved
Better road maintenance
Fix potholes (multiple votes)
Get people to stop texting and driving (multiple votes)
More bike lanes around the city (multiple votes)
Road maintenance for everyone (additional vote)
30th and Titus - hit and run, too narrow lanes
Wear seatbelt
Slow down! (multiple votes)
Improve street lighting
30th and Sorenson to Curtis - no overhead street lights
Reduce construction and clearer lines - more coordination and not so many at one time
Zipper merge education
Improve dangerous driving behavior
More crosswalks at 36th and Bedford - none in area
Vehicles with expired tags/no license
Road diets, slow down
More stop lines at stop signs and stop lights
Better road design/slower speeds
More pedestrian bridges
Better response to accidents
Elderly still driving

Event Photos – Omaha Freedom Festival/Juneteenth

12. Benson Days

An in-person pop-up event was held at Benson Days (Maple Street from 59th to 63rd) from 10:00 a.m. - 4:00 p.m. on Saturday, July 29, 2023. The team spoke to an estimated 40 people during the final pop-up event of the second round of outreach. 36 comments were received at the event, and feedback included:

Knowledge Levels

- 4 people indicated their lives were not affected by severe and fatal crashes
- 9 people indicated their lives were not affected to somewhat affected by severe and fatal crashes
- 3 people indicated their lives were somewhat affected by severe and fatal crashes
- 10 people indicated their lives were somewhat affected to completely changed by severe and fatal crashes
- 3 people indicated their lives were completely changed by severe and fatal crashes

Ideas for Ending Traffic Deaths

"There's more than you in the world."
Ban cell phones while driving.
Improve sidewalk walkability
Respect each other
Mandatory driving classes
More bus services especially in West Omaha
Pedestrian accidents at 61st and Maple
Work with schools and create curriculum to teach good driving habits (no drinking and driving)
Driver lessons should be free
Consistent ramps for sidewalks
Increase pedestrian awareness in driver's ed courses
Address distracted driving
Barricaded bike lanes
Watch out for bikers. Lost many good friends to biker deaths.
Address drinking and driving
Boulevards > Streets
Better access for blind and deaf - pay attention to their needs
Need an interpreter for the deaf in driver's ed classes
The police can pull people over for speeding, running a red light, expired license. More DUI checkpoints. Require state insepctions like other states.
Stop removing traffic signals where people cross. There was a removed signal at 66th and Maple.
No left turn when pedestrians crossing. Add turn arrow at WB Radial at 52nd
Improved bus services - need to clean, not skip stops.
Get rid of blinking yellow left-turn lights and improve signal timing (longer yellow).
Protected bike lanes.
I was hit by a car while crossing the street in midtown.

Put speed bumps in neighborhood (72nd and Maple, Wharton and 70th)
Stop signs aren't optional
Drivers need to stop at crosswalks.
Military heading west before 60th - light at 58th
Add drivers ed classes to schools (multiple comments)
Had a friend who had a motorcycle death
Improve public transportation
Enforce speed limits on 50th Street between Leavenworth and Center Streets
Addressing road rage - don't pay attention to crazy drivers
More bike trails!
Young drivers being more aware.

Event Photos – Benson Days

Between the 12 pop-up events held from January to July 2023, ***more than 450 attendees were engaged and more than 580 comments were received.***

Below is a Word Cloud summarizing themes received from the website and pop-up events through August 2023.

Speed
Car
Street
Stop
More
Traffic
Drive
Turn
Cross
Walk
Lane
People
Pedestrian
Sidewalk
Sign
Light
Driver
Intersection
Run
Red
Time
Down
Go
Up
Null
Need
Between
West
Use
Park
Way
Issue
Mph
Even
Feel
Center
Day
Limit
Bike
Area
Fast
Many
Very
Out
Onto
Through
Slow
Right
School
Vehicle
Crosswalk
Neighborhood
Enforce
Bump
Dodge
Come
Hit
Accident
Over
Live
Make
Take
Police
Excess
Safe
Along
Public
Especially
Trail
Left
Better
Always
Without
Seen
Stretch
Concern
Hill
Danger
Road
Around
Try
One
Post
Signal
Wait
Here
See
Roundabout
Safety
Path
Visible
Regularly
Potholes
During
High
Build
Follow
Work
Put
Travel
Both
Yield
Exit
Bus
Omaha
Bridge
Side
Close
Snow
Hour
Past
Night
Block
Fix
Nice
Due
Long
Blind
Crash
Driveway
Children
Pass
Curb
Pick
Ave
Corner
Saddle
Think
Create
Kid
Phone
Maple
Ramp
Narrow
Elementary
Those
Gets
Difficult
Want
Distracted
Creek
Head
Line
Near
Ped
Witness
Wall
Farnam
Rate
Truck
Blondo
Leavenworth
Jackson
Pacific
Design
Access
Busy
Mile
Horney
Always
Multiple
Zone
Western
Frequent
Cause
Start
Lot
South
East
156th
72nd
24th
13th
45
Elementary

VISION ZERO OMAHA OPEN HOUSE SUMMARY

A public open house was held on August 15, 2023, at the University of Omaha's Barbara Weitz Community Engagement Center (6400 S. University Dr. Rd., Omaha, NE, 68182) from 5:00 to 7:00 p.m. The purpose of the open house was to present the draft Omaha Vision Zero Action Plan recommendations and provide an overview of the planning process, statistics and research learned, implementable safety features to address public and stakeholder concerns, and allow for final public comment and feedback.

A total of 87 members of the public signed into the meeting. Fourteen consultant team members were also in attendance and available for questions and to gather feedback.

The meeting began with a 15-minute live presentation highlighting the history of the Vision Zero global movement and the decision made by Omaha Mayor Jean Stothert for the City of Omaha to adopt its own Vision Zero initiative to eliminate all traffic deaths and serious injuries. The presentation was followed by an open-house style format where participants browsed the multiple display boards and learned about the TAC, EC and FAWG workshop results including values, priorities, and proposed improvements highlighted in the Vision Zero Omaha Action Plan.

Six of the display boards contained the Action Plan's 27 proposed strategy and policy recommendations for three identified areas: Safe Speeds, Safe Users and Safe Streets. Attendees were asked to consider what was most important to them and provide feedback through a dotmocracy/voting activity. Each attendee was given eight green stickers and eight red stickers for a supporting vote and an opposing vote, respectively. Attendees could vote more than once to support or oppose a single strategy or policy but were not required to use all 16 of their votes.

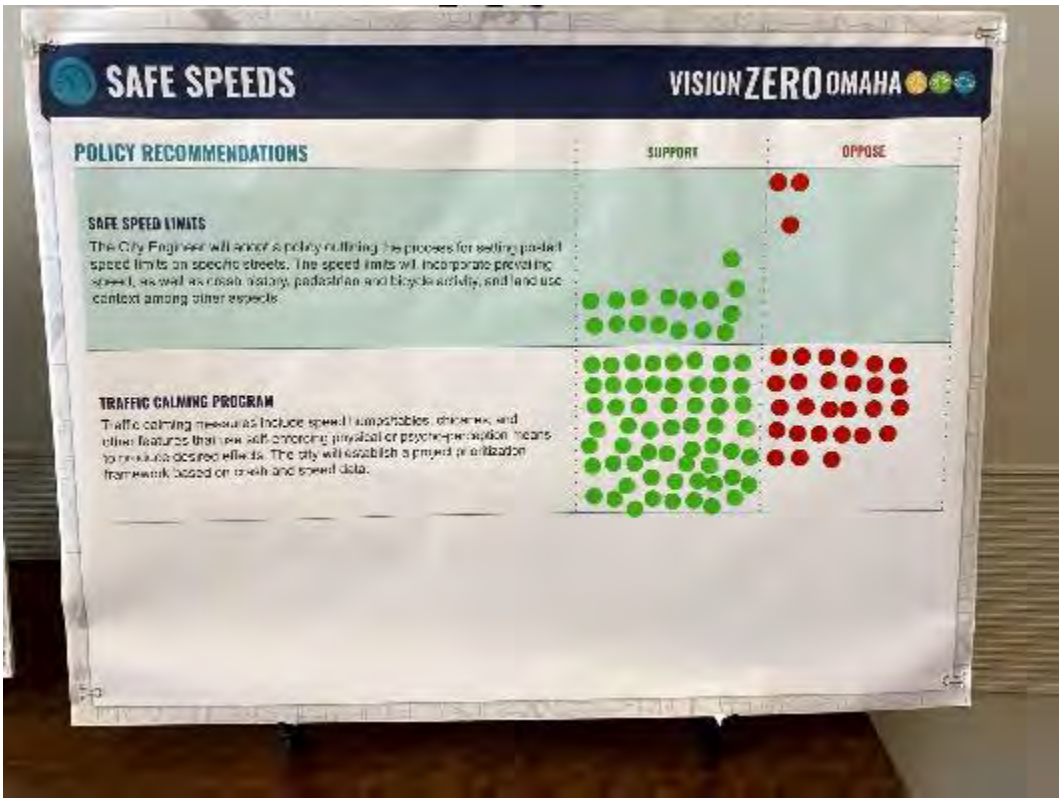
Additionally, the meeting featured two large High-Injury Network Maps that identified high-crash intersections and high-crash roadway segments in the top percentile for crashes. It included data for highways and city streets, as well as for driving, walking, and biking modes. After attendees viewed the High-Injury Network Maps, they were asked to review the Action Plan's suggested safety countermeasures that provided various levels of crash reduction potential. Participants were given gold star stickers to place next to the suggested safety countermeasures they thought would have the most impact, and they also used post-it notes to write any additional suggestions or comments and placed them on the maps. The comments from the notes are listed below under the section "Safety Countermeasures and High-Injury Network Maps Detailed Feedback." Some comments were edited for clarity.

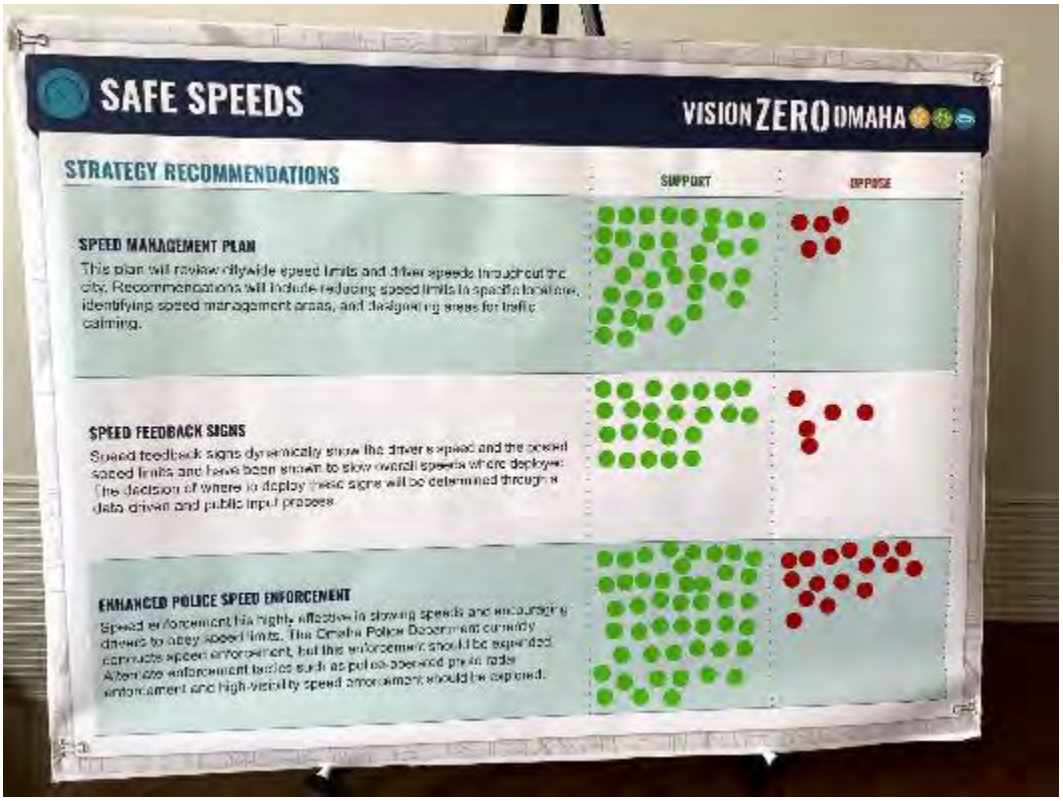
Comment forms were available for attendees to fill out and submit. ***A total of 23 comment forms were submitted at the meeting, with one email submitted after the meeting.*** Online feedback options were also provided for those unable to attend the meeting in person.

Please see Comment Forms and Sign-In Sheets as embedded files in Appendix PDF.

Feedback of each Strategy and Policy recommendation display board and the Safety Countermeasures on the High-Injury Network maps are organized below.

Safe Speeds Display Board Photos





Safe Speeds Strategy and Policy Recommendations Feedback

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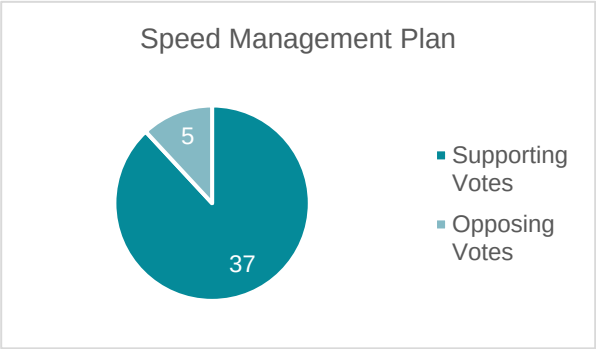

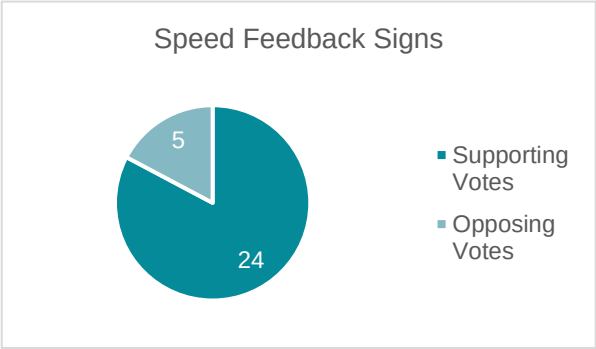

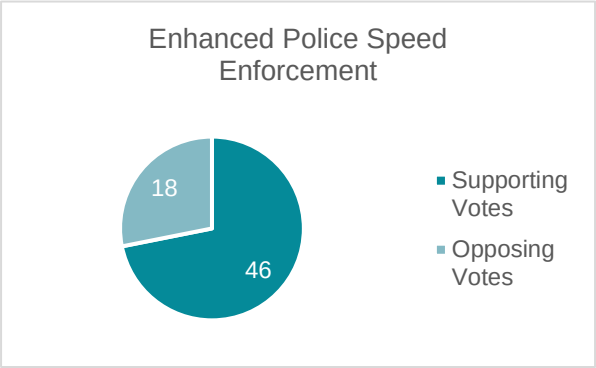

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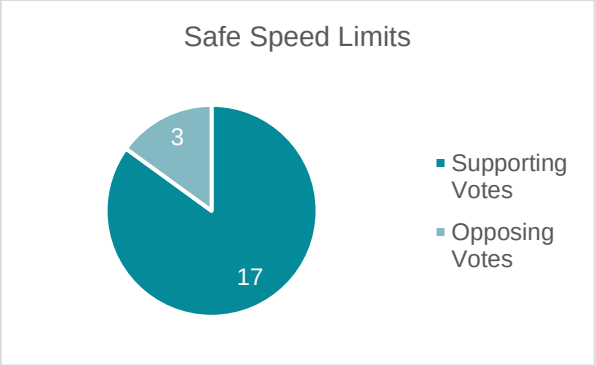
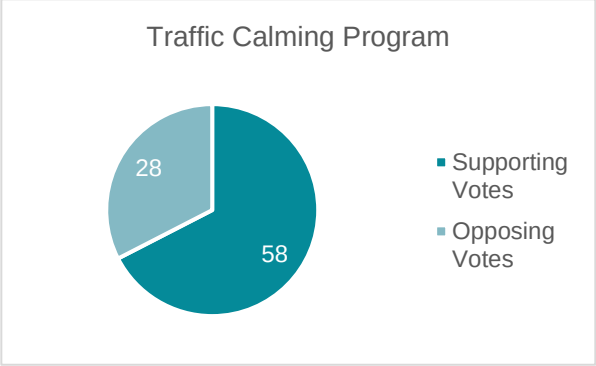
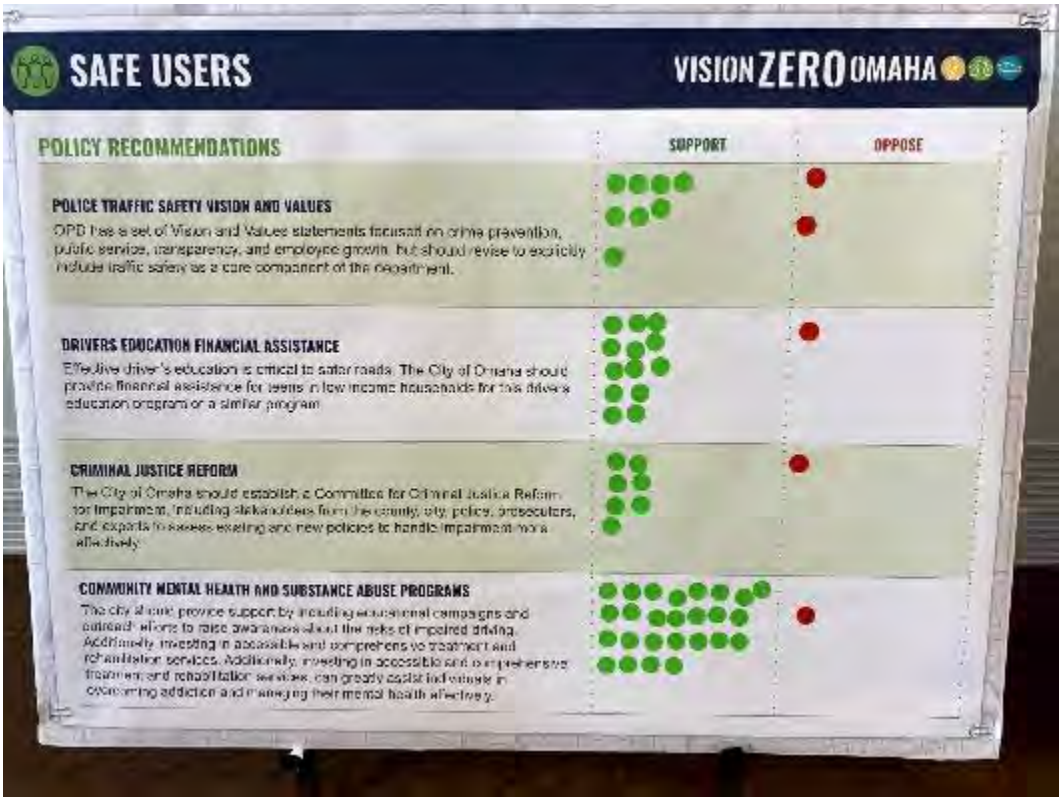
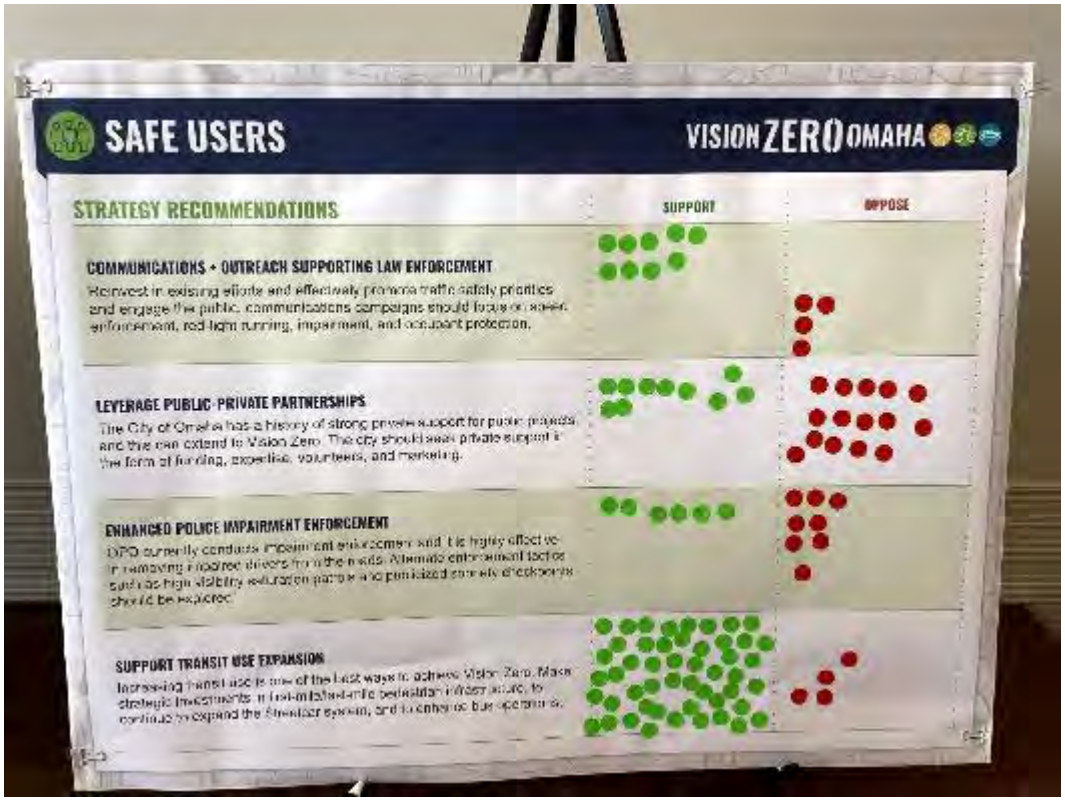




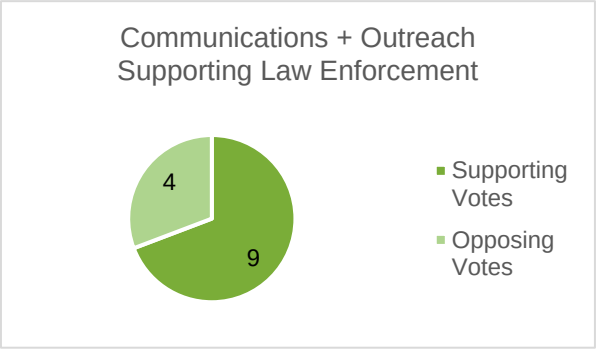
Safe Users Display Board Photos

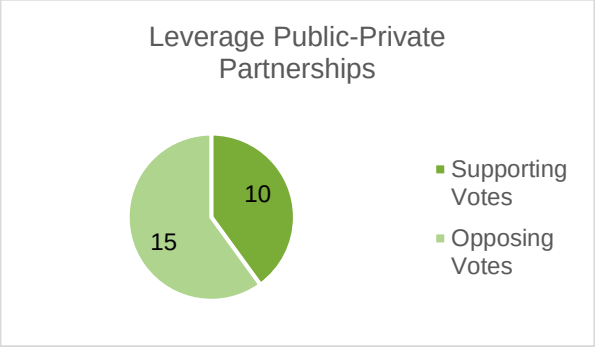


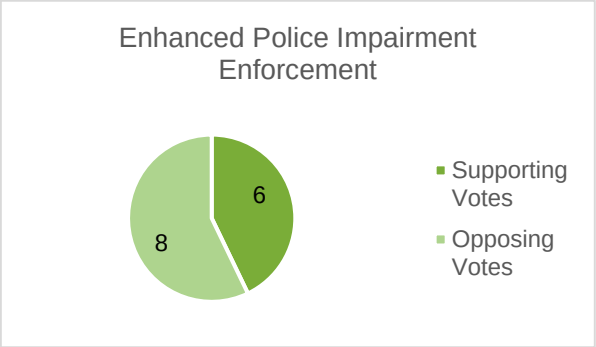


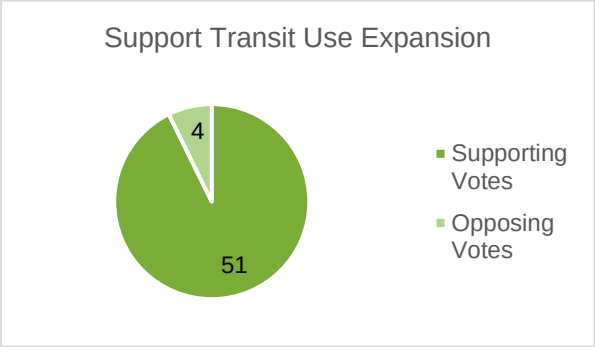
Safe Users Strategy and Policy Recommendations Feedback

Strategies:









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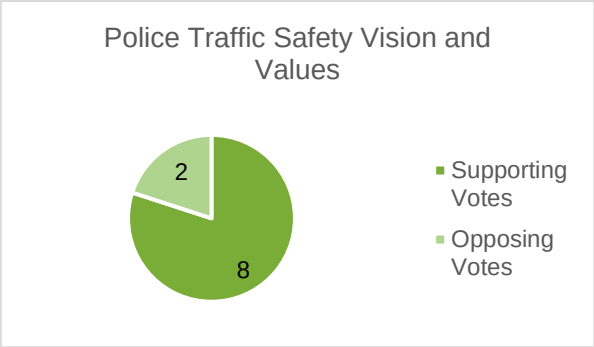
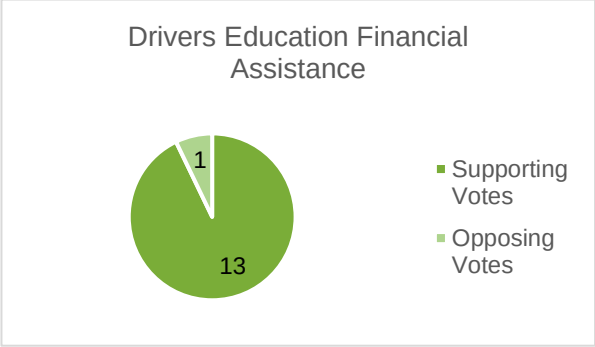
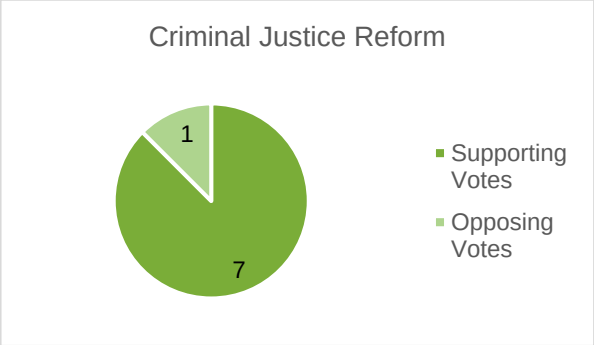
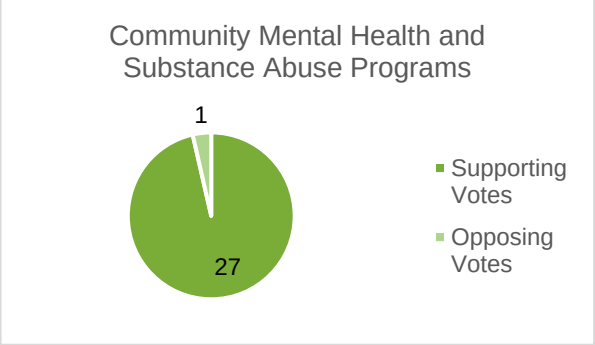
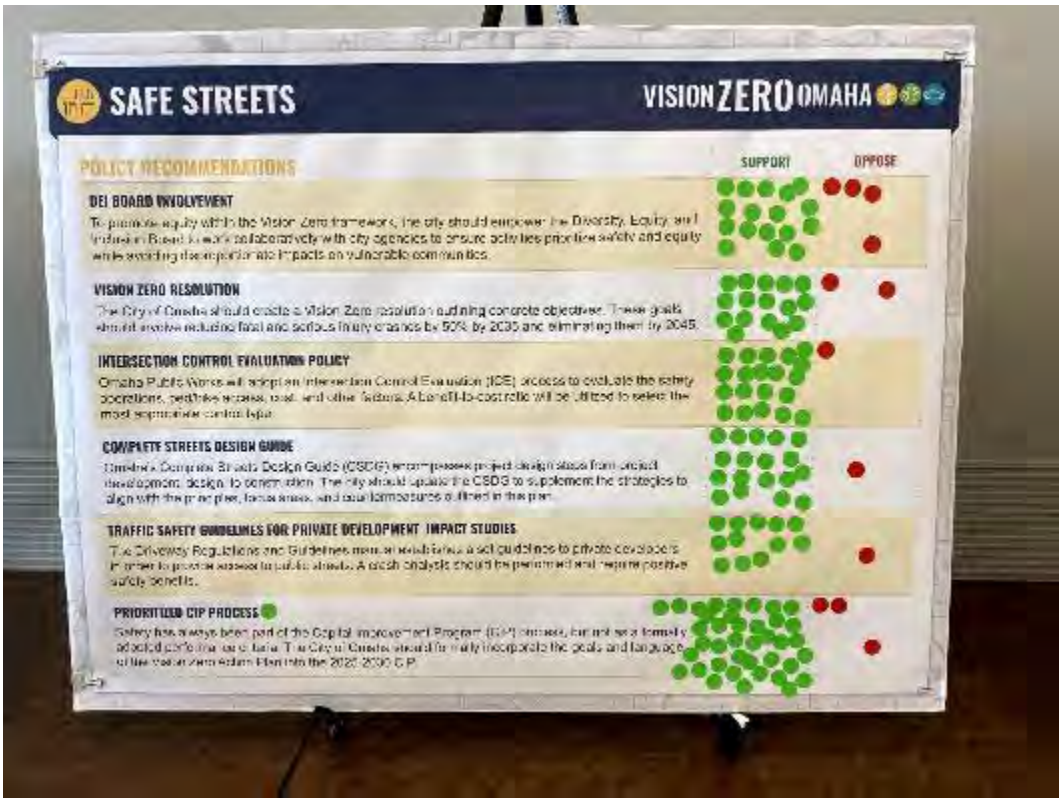








Safe Streets Display Board Photos



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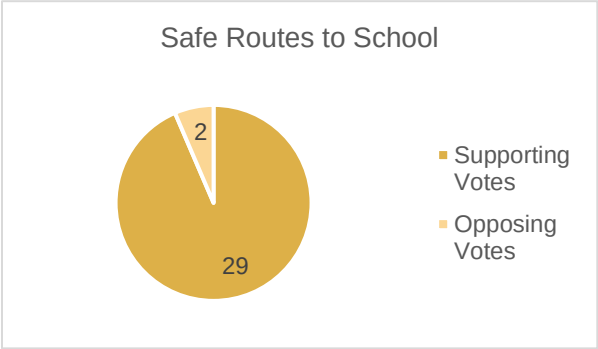
Safe Routes to School
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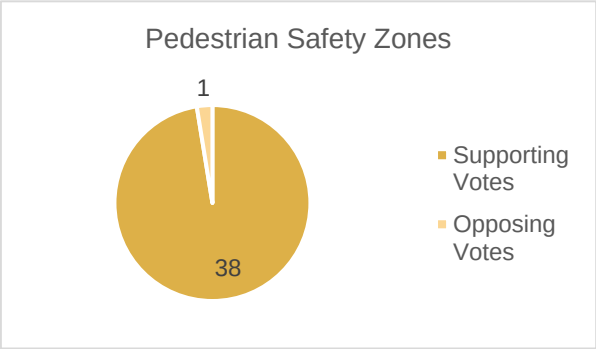
Supporting Votes
Opposing Votes


Pedestrian Safety Zones
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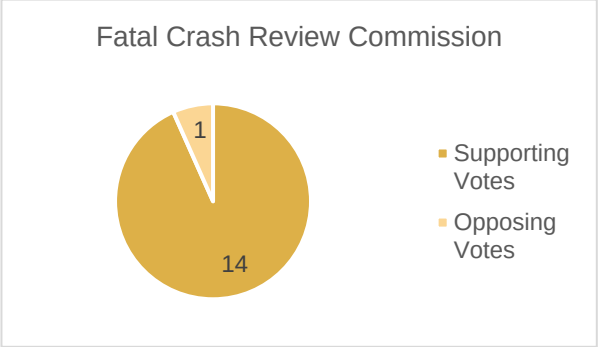
Supporting Votes
Opposing Votes


Fatal Crash Review Commission
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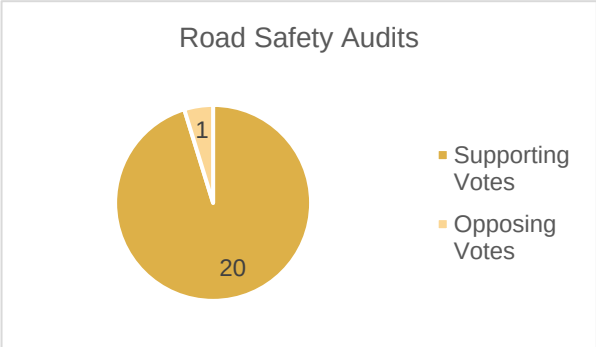
Supporting Votes
Opposing Votes


Road Safety Audits
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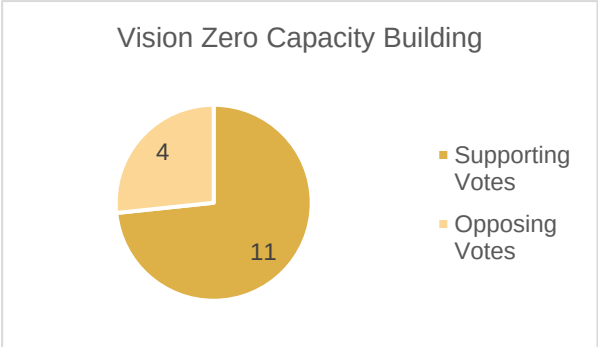
Supporting Votes
Opposing Votes


Vision Zero Capacity Building
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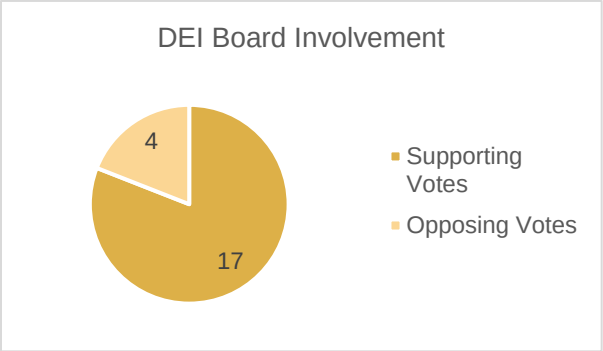
Supporting Votes
Opposing Votes

Policies:


DEI Board Involvement
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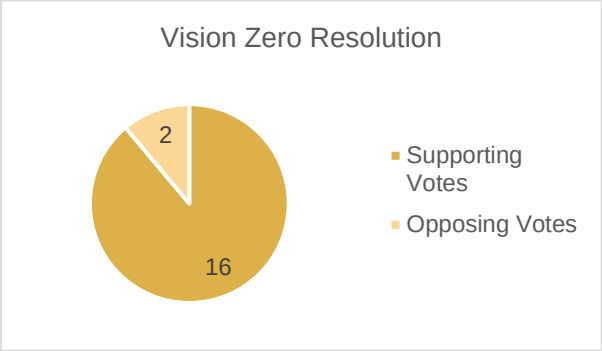
Supporting Votes
Opposing Votes


Vision Zero Resolution
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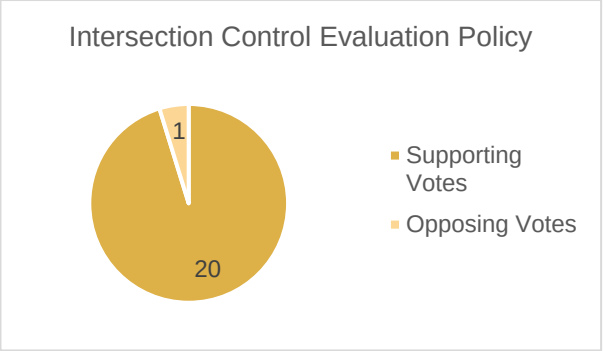
Supporting Votes
Opposing Votes


Intersection Control Evaluation Policy
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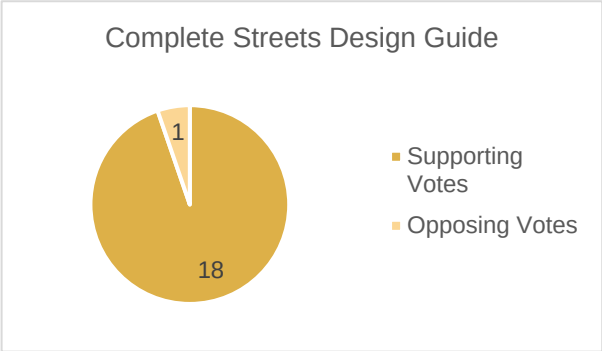
Supporting Votes
Opposing Votes


Complete Streets Design Guide
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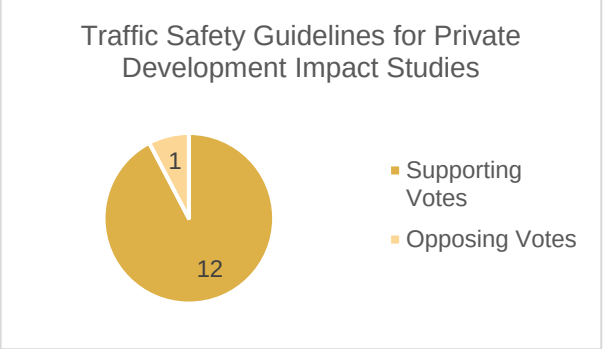
Supporting Votes
Opposing Votes


Traffic Safety Guidelines for Private Development Impact Studies
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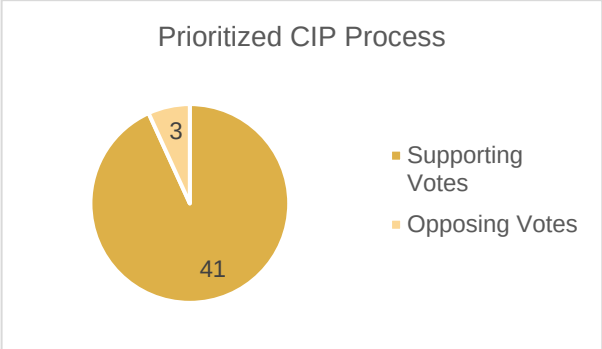
12
Supporting Votes
Opposing Votes


Prioritized CIP Process
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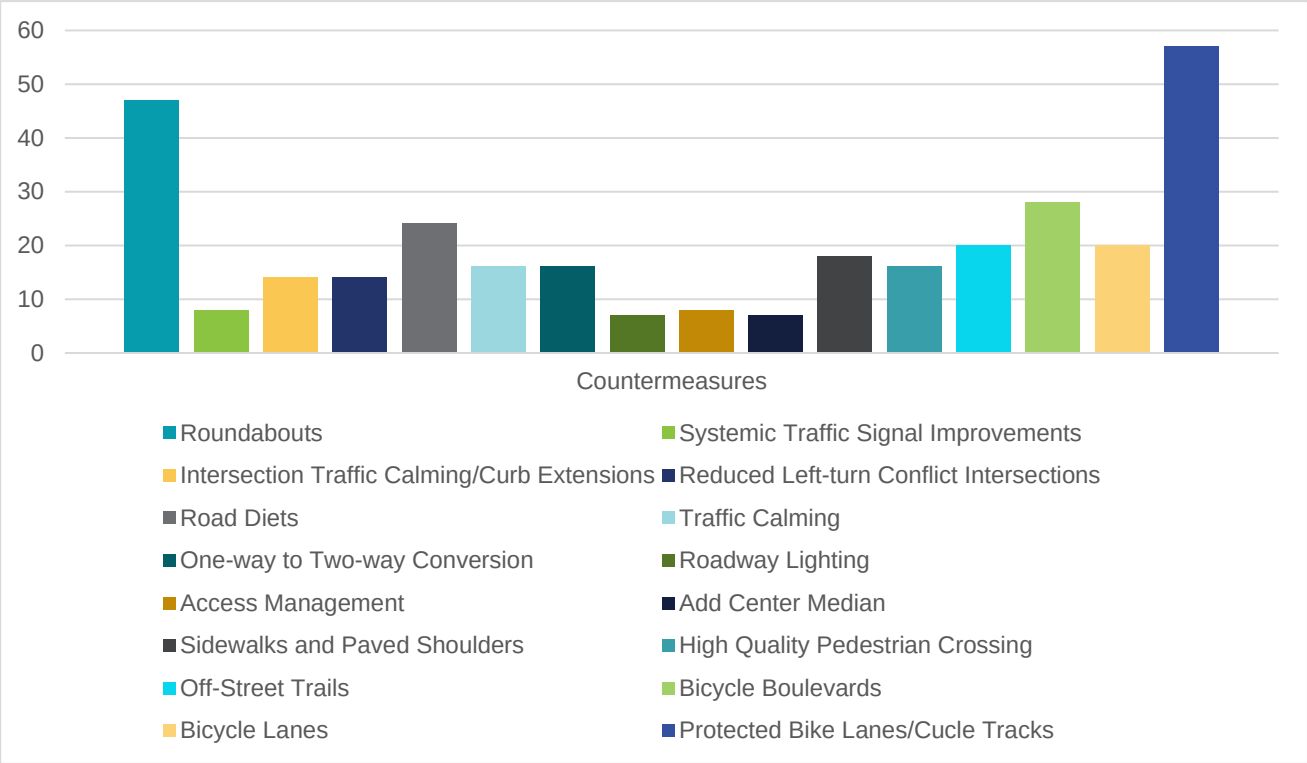
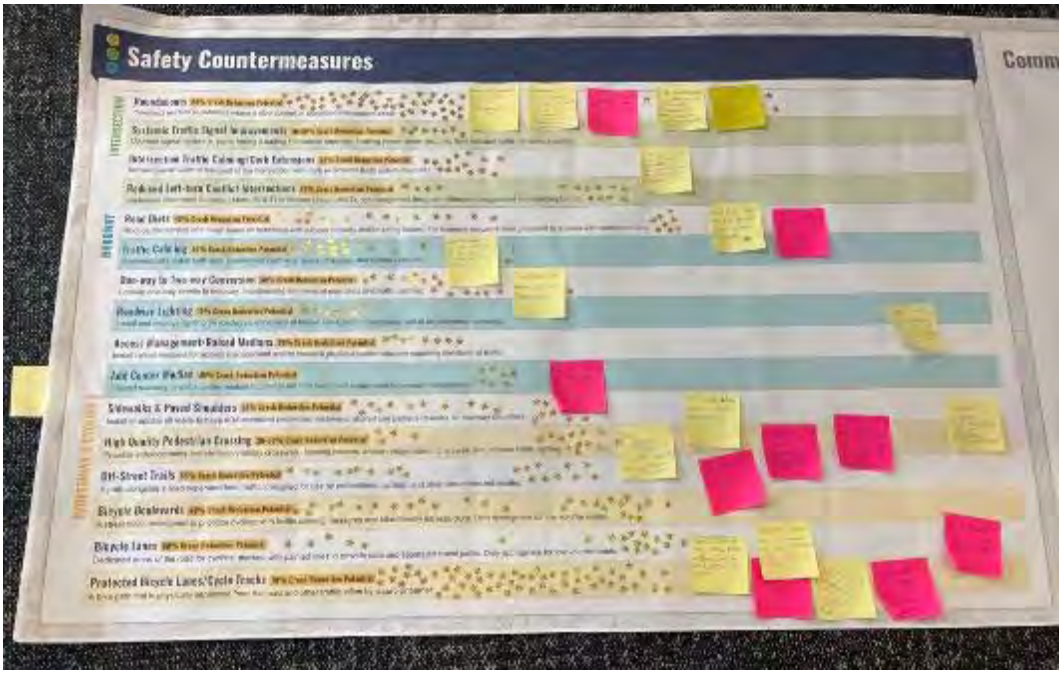
41
Supporting Votes
Opposing Votes

Safety Countermeasures Feedback





Safety Countermeasures and High-Injury Network Maps Detailed Feedback

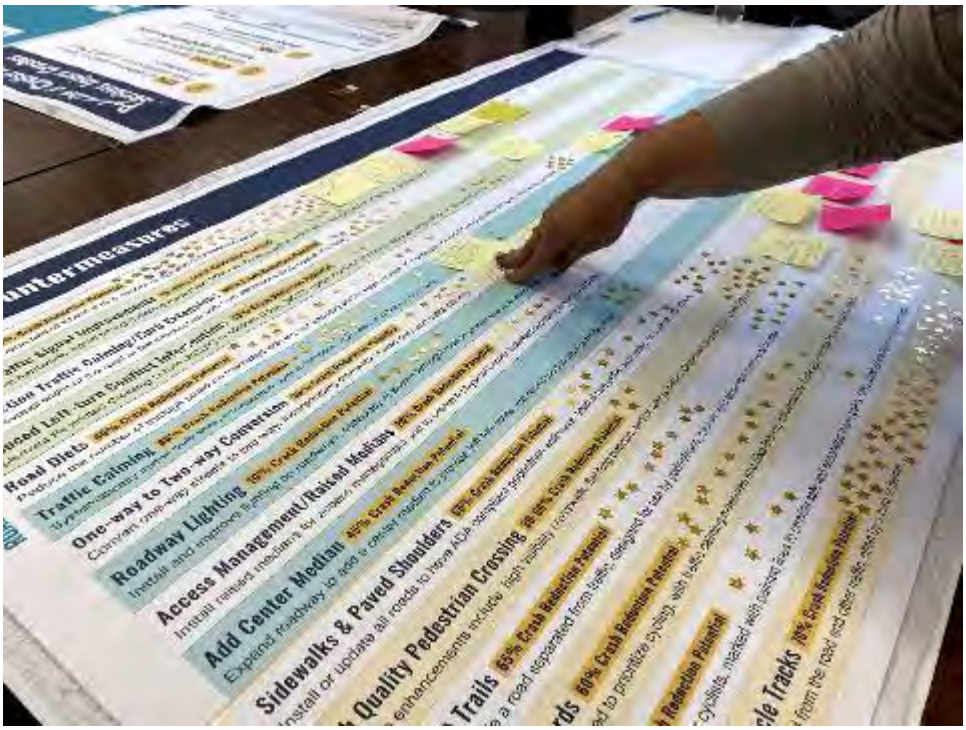
Better signage for motor vehicles to be aware in VRU areas. 72nd/Dodge
The most vulnerable should get priority in the design of city streets
We need an impact analysis/statement for each CIP to see how well it is advancing VZ equity
Q & Millard is very dangerous intersection
More and safer pedestrian crossings in Little Bohemia (South 13th St)
Roundabouts PLEASE at 52nd/Farnam and 50th/Farnam
Please no roundabouts at 50th and 52nd St and Farnam! 80% + in the neighborhood are opposed to them
Better signage at signalized intersections regarding peds and VRU's
Prioritize pedestrian safety in business districts/entertainment areas – Old Market, Little Bohemia, Benson, Blackstone
4 lane undivided streets can be scary
Design roundabouts so they are safe for pedestrians
Roundabouts I am against. Increases accidents! Maybe not serious but it increases. Vision Zero should include their goals without increasing other accidents.
I see roundabouts as causing more traffic accidents
I see roundabouts as an effective way to slow traffic. Frustrated that a few people cancelled the Farnam Street project at 50th and 52nd.
Curb extensions and bump outs are a simple design feature to make walking/crossing the street more comfortable
Roundabouts are one of the best ways to slow traffic withouth impeding it. More roundabouts!
Sight lines! Many intersections require me to be halfway in the intersection before I can tell if it's clear.
Road diets can also provide ways to form protected bike lanes
Less space for cars = more space for people
Need to convert one way streets to two way as to slow vehicle
Fix Farnam between Saddle Creek and Happy Hollow
Please don't take away driving lanes
No Hawk crossings. Continuous sidewalks. No big buttons, pedestrian lead.

No poles (a light, power or cell towers) on sidewalks
Trail networks = meaningful transportation option
Painted crosswalks! Helps highlight pedestrians for drivers.
Develop a regional ADA transition plan or Pedestrian infrastructure plan
Make continuous connections. Connect current lanes already present. i.e. Leavenworth St West of 33rd to lane at 52nd
Painted lines do not make me feel protected when riding a bike
Bike lanes saves lives immediately
Protected bike lanes make my kids feel significantly more comfortable while riding around towns and cities
Protected bike lanes make cycling more accessible for everyone
All of Omaha needs its sight lanes reevaluated

VZAP Open House - Event Photos

BUILD COUNTERMEASURES
Nebraska
Omaha

VISION
ZERO
OMAHA
ENDING TRAFFIC DEATHS
PUBLIC OPEN HOUSE
AUGUST 15, 2023


Countermeasures
Road Diets
Traffic Calming
One-way to Two-way Conversion
Roadway Lighting
Access Management/Raised Medians
Add Center Median
Sidewalks & Paved Shoulders

STAY ENGAGED WITH VISION ZERO
completed forms

VISION ZERO OMAHA

ENDING TRAFFIC DEATHS

Appendix B: Policies and Processes Assessment and Best Practices Review

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EXECUTIVE SUMMARY

The City of Omaha, Nebraska, Vision Zero Action Plan (VZAP) aims to maximize the City's potential to reduce the number of fatalities and severe injuries to zero across the local transportation system (excluding interstates and expressways). In line with this goal, this chapter is dedicated to evaluating the effectiveness of the city's existing guidelines, policies, and procedures. Additionally, it seeks to identify national and international best practices that can be adopted to expedite the implementation of the VZAP. Based on this assessment, a comprehensive set of considerations has been formulated to facilitate the successful execution of the VZAP. These considerations encompass various aspects, including policy adjustments, process improvements, and pilot initiatives.

The appendix is structured as follows:

LANDSCAPE ASSESSMENT OF GUIDELINES, POLICIES AND PROCEDURES

During this process, the consultant team performed a document review and met with internal stakeholders of the City to better understand the guidelines, policies, and procedures currently implemented that may or should have a direct impact on the success of the VZAP, and to identify the key opportunities and challenges for the VZAP implementation.

The assessment examined several topic areas, starting with **cultural change and communications.** While it is clear that safety is recognized as a critical issue by the Mayor's Office, there is a need to embed safety as a measurable goal across City departments. This involves shifting the focus from solely transportation efficiency to prioritizing the safety of individuals, and it is essential to communicate the co-benefits of multimodal transportation strategies to other City departments and emphasize how they can support the implementation of the VZAP by promoting safer streets and efficiencies .

The assessment also examined **policies, regulations, and pilots** that play a crucial role in achieving the goals of the VZAP. Several opportunities were identified, including the need to update the Omaha Master Plan to incorporate the objectives of the VZAP. Furthermore, the Design Division's Project Initiation Form should be revised to integrate Vision Zero strategies right from the beginning of projects and verify alignment across various departments. Another important aspect is the revision of the Complete Streets policy and design guidelines to verify they are fully in line with the VZAP. Additionally, the assessment recognized the value of existing programs such as the Neighborhood Traffic Calming Program and the Signal Removal Policy. These programs serve as valuable assets that can be harnessed to address specific needs and allocate resources efficiently in line with the VZAP objectives.

One major challenge identified was **funding for Vision Zero implementation**. The Capital Improvement Program (CIP) process plays a crucial role in project prioritization and budget allocation and currently safety is not given high priority. However, there is an opportunity to embed it within functional areas such as transportation, public safety, and public facilities. The CIP task force and Priority Committee provide avenues to promote VZAP-aligned projects that receive support from multiple departments. Furthermore, General Obligation (GO) bonds, authorized by voters every four years, offer funding opportunities for transportation improvements that incorporate Vision Zero strategies.

In summary, the landscape assessment underscores the need for cultural change, improved communications, and policy alignment to successfully implement the VZAP in Omaha. It identifies opportunities to prioritize safety, incorporate Vision Zero strategies into existing policies, leverage existing programs, and secure funding through the CIP process and GO bonds.

IDENTIFICATION OF NATIONAL AND INTERNATIONAL BEST PRACTICES

This section highlights the best practices identified for the implementation of VZAP, taking into account the current opportunities and challenges faced by the city of Omaha. The research focuses on various aspects, including cultural change and communications, policies and regulations, reduction in fatalities and severe injuries, performance measurement, funding, pilot projects, speed management, safe routes to schools, and livable streets.

One of the key findings is the importance of strong mayoral endorsement and championing for Vision Zero projects. Effective communication strategies, both internally and externally, are also highlighted, with New York City investing in targeted messaging and leveraging various communication channels to disseminate Vision Zero information. The research also emphasizes the significance of integrating Vision Zero goals into existing policies and regulations. Examples include the Vision Zero Capital Plan in Philadelphia, which prioritizes projects aligned with the safety priorities of the Vision Zero Action Plan, and the data-sharing agreements in San Francisco to create comprehensive datasets for informed decision-making. Furthermore, this section emphasizes the importance of performance measurement to track progress and assess the effectiveness of Vision Zero initiatives. Examples from New York City and Washington D.C. demonstrate the use of performance indicators and benchmarks to evaluate traffic safety improvements.

Funding strategies and approaches are also addressed, such as joint budget requests in Los Angeles, safe and active transportation bonds in Austin, and aligning Vision Zero projects with maintenance activities in Hoboken. Finally, the summary highlights the value of pilot projects in testing and implementing Vision Zero strategies. Examples include the development of a High Injury Network map in Madison, the St. Paul's Avenue Roundabout pilot in Jersey City, and the Vision Zero for Youth Demonstration Project in Philadelphia, which specifically focuses on engaging school-age youth.

International examples highlight the importance of speed management. The experiences around the world show that a comprehensive approach to speed management is necessary utilizing speed limit laws, lowered speed limits, traffic calming infrastructure, and vigorous enforcement of speeding is necessary and leads to slower speeds and reduced crashes. Safe routes to schools and urban design/livable streets both highlight the importance of infrastructure for pedestrians and cyclists and prioritizing their safety over motor vehicle access. Finally, several examples are given of countries that recently made significant progress towards Vision Zero, reducing their fatal crashes by 50% or more over the past ~10 years. This shows that it is realistic for Omaha to achieve similar results. These examples again highlight the need for commitment from the government and a comprehensive approach to lower speeds, enforce traffic laws, and reconstruct roads in a safer configuration.

CONSIDERATIONS

The considerations included in this section are the result of identified opportunities and challenges faced by the city and the best practices research. In terms of **cultural change and communications**, it should be considered that safety be prioritized by the Mayor and the Mayor's Office and permeate throughout all city departments. Safety should be measured and targets and indicators should be defined to demonstrate its priority. The endorsement of the VZAP by the Mayor is crucial, and effective communication should be undertaken to highlight the benefits of the VZAP, both direct and indirect. To ease cultural shift, strategies to discourage reliance on personal vehicles for short-distance travel should be adopted, with a focus on first/last mile connections. Furthermore, internal and external

communications strategies should be developed to verify consistent messaging across departments and to showcase the positive outcomes of the VZAP.

In terms of **policies and regulations**, the considerations include verifying that Vision Zero is integrated into the development of new plans and policies, updating the Omaha Master Plan to align with Vision Zero goals, establishing a comprehensive training program to equip engineers and planners with the necessary skills to integrate Vision Zero practices into the project development and delivery process, revising pedestrian facility standards, evaluating the need for a comprehensive plan for future technologies, assessing the outcomes of crosswalk markings policy, and considering the implementation of additional policies such as lower citywide speed limits and roundabouts. Furthermore, the considerations address the incorporation of Vision Zero principles into the Complete Streets Policy and Design Guide and revisiting driveway regulations.

The section outlines several overarching **funding** considerations, emphasizing the need to establish a permanent funding resource for Vision Zero and incentivize cross-department joint budget requests while prioritizing capital projects. The Capital Improvement Program (CIP) process should prioritize safety by incorporating VZAP goals and implementing project prioritization criteria that align with VZAP strategies. Additionally, the considerations also include **pilot** suggestions for studies for data collection to improve accuracy and identify gaps, as well as a pilot program for roundabouts to evaluate their impact on safety and traffic flow. Finally, strengthening **partnerships** between City departments, key stakeholders, and the Omaha Police Department should consider identifying funding resources, gathering and evaluating data, and supporting Vision Zero implementation in collaboration with the City Council.

Overall, these considerations aim to drive cultural change, improve communications, and establish policies and regulations that align with Vision Zero principles and contribute to the safety and well-being of the residents of the City of Omaha.

LANDSCAPE ASSESSMENT OF CURRENT GUIDELINES, POLICIES AND PROCEDURES

The consultant team met with internal stakeholders at the City to better understand the guidelines, policies, and procedures currently implemented that may or should have a direct impact on the success of the VZAP, and to identify the key opportunities and challenges for the VZAP implementation. The assessment is organized in the following topic areas:

1. Cultural change and communications
2. Policies, regulations, and pilots
3. Funding

CULTURAL CHANGE AND COMMUNICATIONS

- Although the Mayor's office identifies safety as an important issue, there is still a need to embed safety as a measurable goal across City departments, which should be reflected in the project prioritization process and budget allocation.
- There is a need for cultural change in order to prioritize safety over traffic flow (i.e., evolving from 'how to solve the challenge of transporting people from point A to B?', to 'how to solve the challenge of transporting people **safely** from point A to B?'), and to identify how this can be conveyed internally (city staff, i.e. engineers and planners), and externally (Omaha community).
- It is necessary to communicate among City departments the co-benefits of implementing multimodal transportation strategies (e.g., biking and pedestrian paths, focus on safer public transports and hubs), since these can support the implementation of the VZAP by relieving congestion and spurring safer streets in Omaha.
- Conversations around the construction of bike lanes and similar strategies aligned with Vision Zero tend to get politicized. There is a need to better communicate how the implementation of these strategies can improve the safety of everyone in the community (i.e., less life-altering crashes and deaths, safer speeds, less car traffic on the street).

POLICIES, REGULATIONS, AND PILOTS

The policies, regulations, and pilots analyzed below were selected since they are crucial to meeting the VZAP goals.

- The *Omaha Master Plan* has the objective to provide an essential legal basis for land use regulations and to establish specific actions necessary to fulfill the vision of the community. Hence, this plan provides a broad vision for Omaha's future in the Concept Element through a comprehensive set of goals, policies and standards needed to conduct the vision in which there are limited references to safety. Nonetheless, the Plan addresses the issues of increased congestion and dependence on the automobile and mentions the goal of creating a transportation system that incorporates the needs of pedestrians, bicyclists, and transit users while continuing to accommodate the automobile mode. Moreover, the Plan identifies safety as a primary goal and the Omaha Complete Streets Policy is incorporated in the Transportation Element of the Plan.
- The Design Division is pioneering the *Project Initiation Form process*, in which, ahead of publishing an RFP, the Division sends a form to key stakeholders (within the government of the City of Omaha) with the aim of gathering information regarding the needs and outcomes of the

project and creating an RFP that aligns with the desired project goals. This process, if leveraged, gives the opportunity to incorporate Vision Zero strategies from the project beginning and find alignment with different departments goals to avoid initiative duplication.

- The *Complete Streets Design Guide (CSDG)* is in the process of being wrapped up, with a next step to present it to the urban design review board; if approved, it will become part of the urban design review process. The *Complete Streets Design Guide* encompasses project design steps from project development to design to construction. This incorporation of VZAP strategies in the CSDG can provide the opportunity to require the public and private sectors to comply with the minimum VZ standards.
- The *Driveway Regulations and Guidelines* manual establishes a set guidelines for the location, number of, and design of (residential, commercial and industrial) driveways that provide access from public streets and highways to private property. The manual represents an opportunity to incorporate the Complete Streets guidance and Vision Zero strategies in the general requirements list for permit granting for the public and private sector as well as more specific safety strategies for Traffic Impact Study requirements.
- The *Neighborhood Traffic Calming Program*, implemented since the 1990s, has resulted in the implementation of traffic calming strategies, such as the installation of street humps on neighborhood streets. Currently the program implementation is based on requests and the criteria for implementation are challenging to meet, but this program offers the opportunity to be incorporated as a strategy in the VZAP by leveraging data to invest in the areas of most need (use data vs requests to implement actions) and expand implementation.
- The *Signal Removal Policy* has a criteria of five steps to identify which signals should be removed. This initiative also supports the idea of focusing federal funds where signals are needed. Signals are being actively removed in Omaha where they are unwarranted from a traffic volume perspective and have a history of crashes.
- The *Crosswalk Markings Policy* includes a robust scoring system to identify areas where crosswalks should be located, and also how they are designed and maintained. This policy also may be reviewed and leveraged as a strategy in the VZAP.
- The City is currently working with Automotus to create smart loading zones that aim to move delivery services from obstructing parking or bike lanes and giving them access to the curb.
- Automated enforcement is not available in Nebraska due to prosecution for traffic infractions being defined as criminal proceeding by the Nebraska Supreme Court. This means the accused driver should be entitled to a presumption of innocence. The process for automated enforcement programs does not allow for assumption of innocence. Therefore, past efforts to bring red light running and speed enforcement to the area have failed. Background: Nebraska Revised Statute 60-682.

FUNDING

- Funding represents one of the main challenges for Vision Zero implementation. Identifying extra pools of money at the local and federal levels is crucial for the design and implementation of projects.
- The Capital Improvement Program (CIP) process aims to prioritize projects that align with *five functional areas* (transportation, environment, parks and recreation, public safety, and public facilities). The CIP process is crucial for the implementation of VZ since the *six-year program* is adopted as the City's capital budget for the upcoming fiscal year, and a capital expenditure exceeding $20,000 can only be made if it is listed in the CIP and approved by City Council resolution.

- *Key takeaways from the CIP process:*
    - Currently, road safety is not being prioritized during the CIP process, but there is an opportunity to do so by embedding it in the functional areas of transportation, public safety, and public facilities.
    - The CIP task force, formed by representatives of each department and the Mayor's Office, is in charge of reviewing all the projects, balancing expenditures, and preparing a considered CIP. This step represents an opportunity to prioritize projects that are aligned with the VZAP and are requested by more than one department.
    - The Priority Committee (Mayor, Planning Director, Public Works Director, Finance Director, and City Attorney) reviews the proposed CIP and modifies it as needed to match the budget. This part of the process also shows the importance of the Mayor and the Mayor's Office in prioritizing safety since if a project is backed and solicited by more than one department, this may increase its chances of being funded.
- General Obligation (GO) bonds - Omaha's voters authorize GO bonds through a ballot approximately every four years, with the most recent authorization in May 2022 for a budget of $260.3 million. From this total authorization, the most significant amount (80%) goes toward transportation improvements throughout the City. The rest of the bonds are split between Environment (8%), Parks and Recreation (5%), Public Safety (2%), and Public Facilities (5%). This represents an opportunity to prioritize projects that incorporate Vision Zero strategies and that benefit more than one of the five functional areas.

NATIONAL BEST PRACTICES

This research provides national best practices focused on the opportunities and challenges for VZAP implementation identified during the landscape assessment.

CULTURAL CHANGE AND COMMUNICATIONS

Vision Zero Endorsement from the Mayor's Office (New York City, NY)

Often, city priorities for transportation and street usage and design are at odds with state DOT priorities, which typically are the recipients of federal transportation dollars. Strong mayoral endorsement and championing can help use city budget funds towards Vision Zero projects. A great amount of the VZ implementation success in NYC has been associated with the mayor's support. For instance, Mayor de Blasio incorporated Vision Zero in his electoral campaign in 2013 (after being elected, Vision Zero went into effect in 2014), and in his re-election campaign in 2017. After three full years of decreasing fatalities since the inception of New York City's Vision Zero, Mayor de Blasio proposed a commitment of $1.6 billion towards Vision Zero over the next five years. COVID-related revenue decreases caused large budget cuts across the City's budget, including Vision Zero programs. In 2022, current Mayor Adams committed $904 million over five years towards making streets safer.

Communication Strategies for Vision Zero (New York City, NY)

New York City has invested in delivering precise and targeted Vision Zero messaging in order to get the most impact from finite resources. The City has organized its communication strategies in internal (i.e., building a VZ culture within the City departments) and external outreach (e.g., leveraging data to create effective messages for the community).

- For the internal outreach, the VZ task force championed the development of an internal brand book to verify consistent communication of the VZ message across departments. The internal brand book also undergoes regular revisions as VZ evolves. Furthermore, NYCDOT invests resources into promoting the messaging internally through the City intranet, email blasts, and in-person training.
- For the external outreach, the City considers using a full-service ad agency to deliver constant VZ messaging to familiarize residents with the term Vision Zero and what it means. The City also prioritizes being transparent with the public on how the money is being spent, which action items are working, and what things can be improved. Furthermore, the City leverages its owned media (such as: mailing lists, websites, telephone interactions, signage and public space, uniforms, city fleets, etc.) as a tool to convey Vision Zero goals and updates that can be integrated at little or no cost.

Community Conversations, Let's Talk Streets (Madison, WI)

The City is prioritizing to connect with members of the community through the Let's Talk Street engagement series with the aim to learn more about the residents' priorities and how they want the streets to look like. The first round of engagements has focused on identifying the community values, followed by engagements designed to understand what trade-offs the residents are willing to make to create safer streets and prioritize people despite transportation mode. The main purpose of these conversations is to involve the residents in the design of safer streets and to incorporate their needs in the Vision Zero Plan update, the Complete Green Streets, the Traffic Calming, and the Pedestrian/Bicycle Enhancements policies.

POLICIES AND REGULATIONS

Data-Sharing Between Agencies to Develop Comprehensive Datasets for Vision Zero Implementation (San Francisco, CA)

The City of San Francisco formalized data-sharing agreements between agencies, such as the Police and Public Health departments, in order to create more comprehensive datasets that can better inform Vision Zero implementation. The City combines police reports for traffic-related fatalities/injuries with public health data to have holistic understanding of the cause of an incident and to provide information to achieve safer streets. Beyond just data collection, the Public Health department helps to shape VZ design by using the department's commitment to research, evaluation, and equity by analyzing data and assessing the outcomes of the implemented VZ strategies.

Citywide Active Transportation Plan as a Vision Zero Ally (Cleveland, OH)

The City of Cleveland is developing a citywide Mobility/Active Transportation Plan with the aim to improve ADA accessibility, design and implement a bike network, and create a shared mobility program where safety is the priority desired outcome.

Expanding Speed Enforcement Cameras (New York, NY)

New York City has successfully implemented speed enforcement cameras to make quantifiable progress toward Vision Zero. From 2014 to Summer 2018, automated cameras were piloted in 140 school zones, which reduced injuries by 17%, crashes by 15%, and speeding 63% on average. Post-pilot, the City and New York State governments kept the cameras in operation. Moreover, in 2019, the New York City Department of Transportation looked to expand the program by identifying additional camera locations and procuring more cameras, and the City continues to advocate for expanded use of speed enforcement cameras at the State level.

Daylighting and the Leading Pedestrian Interval (Hoboken, NJ)

Since 2018, Hoboken has not had one traffic fatality and has extensively adopted safety measures in the City to decrease the likelihood of serious roadway injuries and deaths. One of Hoboken's key strategies, daylighting, establishes delineators at intersection corners to eliminate vehicles blocking crosswalks and provide visibility between pedestrians and drivers. The City has also adopted the leading pedestrian interval, which gives pedestrians a few seconds to visibly enter crosswalks before drivers receive green signals. The more widespread implementation of these strategies has likely elevated their adoption by residents and their impact on the safety of Hoboken's streets.

PERFORMANCE MEASUREMENT

Vision Zero Year Five Report (New York, NY)

New York City reported its Vision Zero progress after five years, having collected data in years prior for ongoing program evaluation and to inform this update. A guiding Vision Zero document for engineering, enforcement, and education interventions released in 2015, the Borough Pedestrian Safety Action Plans were updated in 2019 to detail how well many implemented projects improved safety and highlight areas that needed attention based on the latest data. The five-year Vision Zero report emphasizes the change in traffic and pedestrian deaths over time as a key performance indicator and assesses this from several angles, including per borough, by transportation mode, and with involvement of vehicles licensed by the Taxi and Limousine Commission. The drop in pedestrian deaths at Priority Intersections, Corridors, and Areas identified in the Action Plans were also assessed in the fifth year, and the report included declines in speeding, crashes, and injuries in school zones where speed enforcement cameras were installed.

Vision Zero Performance Indicators and 2022 Update (Washington, D.C.)

Washington D.C.'s approach to measuring Vision Zero progress considers performance indicators on a couple levels. Seven system-wide indicators and targets intersectional to traffic safety give high-level context as to the success of Vision Zero: traffic-related deaths and severe injuries; vehicle miles traveled per capita; street network density per square mile; mode split for people walking, wheeling, biking, and using transit; population density; poverty rate; and unhoused residents. Additionally, each of D.C.'s Vision Zero strategies and goals are associated with data points that can be measured to evaluate progress. To meaningfully understand the city's measures and establish reference points for comparison, the 2022 Update report incorporates traffic safety and crash statistics from similar cities with Vision Zero policies to serve as benchmarks. In the report, the impact of the COVID-19 pandemic on the city's overall Vision Zero progress and performance indicators is assessed, and D.C.'s change in traffic fatalities and injuries is tracked over time. These measures are overlaid with the race and ethnicity index scores of each D.C. ward to view Vision Zero progress through an equity lens and prioritize transportation investments based on sociodemographic vulnerabilities.

Key Action Timeframes and Performance Metrics (Hoboken, NJ)

Hoboken aims to achieve Vision Zero in five years and oriented its Action Plan around near-term actions and considerations for this timeline. The implementation of several actions is meant to be assessed rapidly while the evaluations of other actions are set for longer time frames where sustained commitment is needed to achieve outcomes. As with most other Vision Zero plans, Hoboken's key performance target is zero traffic-related injuries and deaths, but there are few other numerical targets identified. Each key action, however, is associated with a specific performance metric that can be directly measured, in contrast to a more broadly defined metric with no clear measure. Thus, while numerical targets are often not explicitly noted in the Action Plan, it does provide measurable performance metrics for which data can be collected and eventually used to define targets and benchmarks over time.

FUNDING

Vision Zero Capital Plan (Philadelphia, PA)

The Vision Zero Capital Plan requires each project to include: a) a segment crash summary of the area; b) a potential engineering toolbox which provides a technical description of the location including the number of lanes, signals, transit locations, and route ownership, and also includes Federal Highway Administration (FHWA) proven countermeasures that would improve safety; c) how this project aligns with the safety priorities of the Vision Zero Action Plan; and d) how much the improvements will cost. This is a great example of how projects could be developed to enter the CIP process to prioritize projects that align with Vision Zero goals.

Joint Budget Requests for Vision Zero Projects (Los Angeles, CA)

The process adds a cover sheet to the standard budget request protocols, and extra points are awarded during the project prioritization selection for demonstrating that one agency's project leverages funds to support another. Joint departmental budgeting is not just allowed; it is incentivized. Joint department requests are more favorably reviewed by the budget committee and have resulted in more funding being available for L.A.'s early Vision Zero efforts than would have been likely under the traditional process.

Safe and Active Transportation Bonds (Austin, TX)

Austin City Council approved many mobility bond packages for public vote to fund transportation projects. Most recently, bonds were approved by the public in 2016, 2018, and 2020. The 2020 bonds contained $65 million for funding explicitly for the Vision Zero initiative, in addition to tens of millions more dedicated for sidewalk improvements, bike lane expansion, and other safety-related infrastructure projects.

Alignment of Vision Zero Projects with Maintenance Projects (Hoboken, NJ)

The City of Hoboken plans the construction of Vision Zero projects to coincide with road repaving, with the aim to reduce the burden on taxpayers by minimizing extra costs through completion of multiple projects at once. By coordinating projects in the same location, the potential for recently completed, previous work being damaged or replaced due to another project is lowered.

Prioritizing Investment in the Areas with the Most Need (Denver, CO)

Denver's Vision Zero strategy prioritizes investments in areas where injury and fatal crashes are more prevalent. Furthermore, in these selected areas, the plan aims to "equitably address traffic risk in the city" by prioritizing the implementation of safety improvements in Communities of Concern, which are areas that have a higher population with low income and education levels, high concentrations of seniors, low rates of vehicles ownership, high obesity rates, and high numbers of schools and community centers. Through the development of Denver's Vision Zero Action Plan, it was discovered that Communities of Concern account for 39 percent of all traffic deaths and 47 percent of pedestrian deaths, underscoring the urgent need to address safety challenges within these communities.

Prioritizing Risk to Safety (San Diego, CA)

The City of San Diego prioritizes "risk to safety" in its Capital Improvement Program, which recognizes that community safety is dependent on infrastructure. Informed by the City's mobility and climate action plans, this policy applies seven prioritization factors to projects being considered and includes "legal compliance and risk to health, safety, and environment" as one of these factors. This factor considers how well a project avoids or minimizes safety risks associated with infrastructure and specifically encompasses Vision Zero safety improvements that help eliminate mobility deaths and severe injuries. For four of the six asset categories to which each project is assigned, the safety prioritization factor has the highest or second-highest scoring weight, indicating its importance in selecting infrastructure investments. Additionally, the asset category of Mobility Assets is explicitly defined as assets that support Vision Zero and have an increased focus on equity, which further cements Vision Zero goals into the City's capital improvement decision-making.

Considering Policy and Equity with Safety Prioritization Criteria (Chicago, IL)

The City of Chicago's Five-Year Capital Improvement Program for 2022-2026 evaluates asset classes for project selection based on multifaceted prioritization criteria. "Public health, safety, and general welfare," defined as developing safe infrastructure that is inclusive for all residents, is one of four base criteria used to assess all infrastructure assets. The City's asset class specialists apply individual infrastructure asset selection criteria as well, one of which revolves around prioritizing the advancement of asset policy goals. In particular, projects that connect with and promote safety, mobility, environment, and community are deemed favorable, and Vision Zero and Complete Streets are explicitly mentioned as transportation goals that the Program seeks to progress. In the prioritization, the direct inclusion of both safety and its connection to city policies, including Vision Zero, and equity is a best practice.

PILOTS

High Injury Network Map (Madison, WI)

From 2017 to 2019, the City of Madison partnered with the University of Wisconsin's Traffic Operations and Safety Laboratory to develop a High Injury Network (HIN) methodology used to map roadways where severe and fatal crashes are most likely to be concentrated. City-specific crash data from 2017 to 2019 evaluating 4,500 intersections, and 8,800 non-intersecting segments informed the HIN map. Not only will this resource be updated regularly, but also this project lives on in the Vision Zero Madison Action Plan for 2020-2030, which includes many action items and goals revolving around HIN.

St. Pauls Avenue Roundabout Pilot (Jersey City, NJ)

Cut-through traffic on St. Pauls Avenue posed safety concerns in Jersey City. Following a walk audit and the implementation of speed humps and crosswalks, the City installed a week-long pilot in April 2022 consisting of temporary, small-diameter roundabouts at two intersections. Results of the pilot showed that speed decreased about 10% even though traffic volumes increased. In a follow-up feedback survey, 72% of resident respondents supported making the roundabouts permanent. The Department of Infrastructure hosted a public review and considerations meeting and surveyed residents again regarding final redesign options. This small-scale pilot catalyzed further progress and action on street safety in Jersey City and effectively engaged the community by physically meeting residents in their neighborhood.

Vision Zero for Youth Demonstration Project (Philadelphia, PA)

The City of Philadelphia, along with the Pedestrian and Bicycle Information Center and Toole Design, implemented a two-year Vision Zero for Youth pilot project to examine strategies for and benefits of incorporating school-age youth in Vision Zero efforts. The project involved a youth pedestrian crash analysis, a systemic safety analysis, and an equity analysis, along with learnings for other cities. The resulting report also outlines considerations for adding child-focused strategies to the City's Vision Zero Action Plan update, in which Vision Zero for Youth is now an overarching priority that extends the impact of this pilot.

INTERNATIONAL BEST PRACTICE

The following sections describe international best practices focused on the opportunities and challenges for VZAP implementation identified during the landscape assessment. The section also highlights some recent international VZ successes of countries that quickly reduced fatal and serious injury crashes. These countries could serve as a model and inspiration for Omaha to achieve similar quick success.

SPEED MANAGEMENT

A low speed is the most important factor to enhance road safety in urban areas where crashes involving vulnerable road users occurs most often. A low, appropriate speed can be achieved by speed limits, self enforcing street design, street measures, or a combination of these.

Bogotá, Colombia

https://www.wri.org/outcomes/bogota-reduces-traffic-accidents-inspires-national-speed-limit

Twitter account of the City's Mobility Administration: https://twitter.com/sectormovilidad?lang=es

In Bogotá (7.2 million inhabitants), 500-600 people die in traffic crashes every year. Most of them are vulnerable road users. In 2016, the city of Bogotá started to implement a Speed Management Program. Initially the speed limits were reduced from 60 km/h (37 mph) to 50 km/h (31 mph) in five arterial corridors. The new speed limits surveilled by speed cameras resulted in a reduction in fatalities compared to other corridors in the city. The results were reported weekly to the public, including lives saved since implementation and days accumulated without recording a death. This convinced many of the critics to accept the speed management program.

In 2020, 37 lives were saved for every 10 kilometers of arterial roads with lowered speed limits. In 2022, a city-wide speed limit of 50 km/h (31 mph) was set. The success inspired the National Road Safety Agency to introduce 50 km/h (31 mph) as the speed limit in all Colombian cities.

Brussels, Belgium

30 km/h everywhere (at least almost) (city30.brussels)

Report shows Zone 30 having a positive effect on road safety in Brussels | The Bulletin

In 2021, the city of Brussels (1.2 million inhabitants) introduced 30 km/h (19 mph) as the general speed limit in the city center. The six-month follow-up showed that the reduction from 50 km/h (31 mph) had resulted in a 25% decrease of serious crashes and deaths, and halved noise pollution from traffic. During the first six months four people died and 61 were seriously injured, compared to an average of 6.8 killed and 81 seriously injured in the previous five years. The first three months the number of injured pedestrians and cyclists were reduced compared to the year before. However, after six months the number of injured cyclists increased from an average of 389 to 543, there has been a huge increase in the number of cyclists in the city though.

Edinburgh, Scotland, UK

https://democracy.edinburgh.gov.uk/documents/s52668/Item%207.7%20-%20Draft%20Road%20Safety%20Action%20Plan%20Delivering%20City%20Mobility.pdf

https://www.edinburgh.gov.uk/downloads/file/26155/road-safety-plan-for-edinburgh-to-2020

In 2010, Edinburgh (550,000 inhabitants) launched the road safety plan for 2020 *Working towards zero,* which succeeded the plan for the former decade.

The city's overall target was Work towards Vision Zero and the provision of a modern road network where all users are safe from the risk of being killed or seriously injured. According to the economic situation, the city was eager to ensure value for money and to work with the partners to ensure effective targeting of limited resources.

Objectives

- Data management/analysis – Data to be managed, analyzed, and based on auditable information.
- Healthy/active travel – The development of active travel and healthier living will be encouraged and promoted, especially in areas of social deprivation.
- Network management and development – Develop and maintain a modern and safe road network for the 21st century.
- Partnership working – New partnerships will be formed and existing partnerships developed to ensure efficient delivery.
- Publicity/promotion – New and existing publicity campaigns will be used to encourage the safe and efficient use of the road network.
- Speed management – Vehicle speeds will be managed to reduce the potential for collisions as well as their severity.
- Technology – The use of new and improved technology will contribute towards road safety improvements.
- Tram – Contribute to the safe and efficient running of, and interaction with, the Tram (Streetcar).
- User behavior – Road safety on the road network will be improved through sensible behaviors of road users.

Key Priorities

Edinburgh's key priorities were identified from analysis of casualty data, consultation with the Council's partners and other stakeholders including user groups.

- *Children and young people*
- *Cyclists*
- *Drivers and passengers*
- *Elderly people*
- *Impairment*
- *Infrastructure*
- *Motorcyclists*
- *Pedestrians*
- *Speed*
- *Tram (a new transport mode in the city)*
- *Vehicles*

To implement the plan the city had a Road Safety Plan Board and a Road Safety Steering Group with representatives from the city and various stakeholders.

Among the actions were:

- Implementation of 20 mph zones in residential streets together with traffic calming measures
- Audits and reviews of junctions, pedestrian crossings, effect of measures, etc.
- Research
- Campaigns
- School travel plans.
- Network management to ensure cyclists' needs are accommodated in new road and maintenance schemes.
- Maintenance – Ensure footway clutter is minimised and aligned within design and maintenance s chemes.
- New cars of the partners should have a high Euro NCAP rating

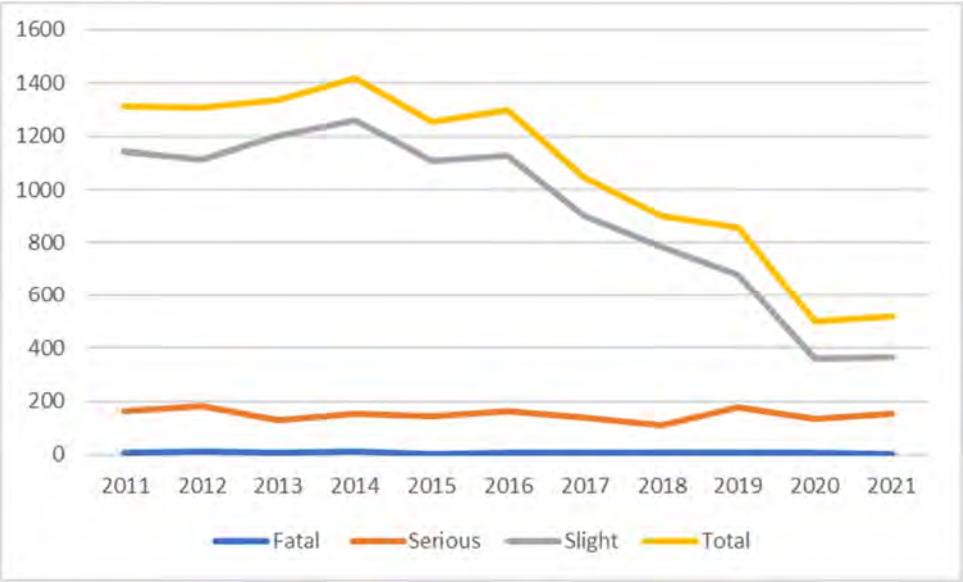


Figure 1 Number of police reported fatalities, seriously injured, and slightly injured in Edinburgh during the period of 2011-2021. In 2019 the police record system changed and a more accurate and consistent definition of severe and slight injured was introduced. In the new system more injuries tend to be classified as serious, why some slight injuries before 2019 in the graph in Figure 2 should have been classified as serious.

Gothenburg, Sweden

During the 1980s and 1990s, the city of Gothenburg (471,00 inhabitants 2002) – the second largest city in Sweden - realized that the risk to be killed or serious injured in Gothenburg was much higher than in Stockholm (755,000 inhabitants in 2002). The city decided to make the streets safer for the inhabitants. Due to national legislation a general low speed regulation was not an option which is why the city had to use other tools. The traffic situation during the years 1990 - 2002 were evaluated by the Swedish National Road and Transport Institute (VTI), mainly by comparison the years 1994 – 1996 and 2000 – 2002 to identify the effects of the large investments and traffic safety improvements at the end of the 1990s.

The evaluation showed that traffic safety in Gothenburg city during the period increased, especially for cyclists and pedestrians, regarding both traffic injuries reported to the police and registered admissions to hospital. The main factor was that more funds than normal were invested to improve the road environment. The segregation of cyclists and pedestrians from vehicular traffic increased and the speed was reduced in mixed environments by using various road engineering measures both minor such as speed humps, but also roundabouts and grade separated intersections.

During the evaluation period, the number of injuries reported to the police decreased by 17.5%; motorists decreased by 5%, cyclists by 61%, and pedestrians by 37%. Among the injuries reported as “others,” there was an increase in the number reported to the police. Among those hospitalized, but not reported by the police, the decreased was 27%; cyclists by 55% and pedestrians by 32%. Nationally the number of police reported injured cyclists decreased by 25%, the motorized road users increased over 20%. Pedestrians had no changes in the reported injuries.

Table 1 Change in the number of police reported injuries (incl fatalities) and the number of people hospitalized because of traffic injuries.

Road user group	Change in the number of reported injuries and fatalities %	
	By the Police	By hospitals
Motorists	-5	-28
Cyclists	-61	-55
Pedestrians	-36	-32
Total	-17	-27

The conclusion was that the effect of the measures explains the improvement in traffic safety. Most of the explained improvement can be ascribed to the measures taken to reduce speed and to segregate vulnerable road users from vehicular traffic.

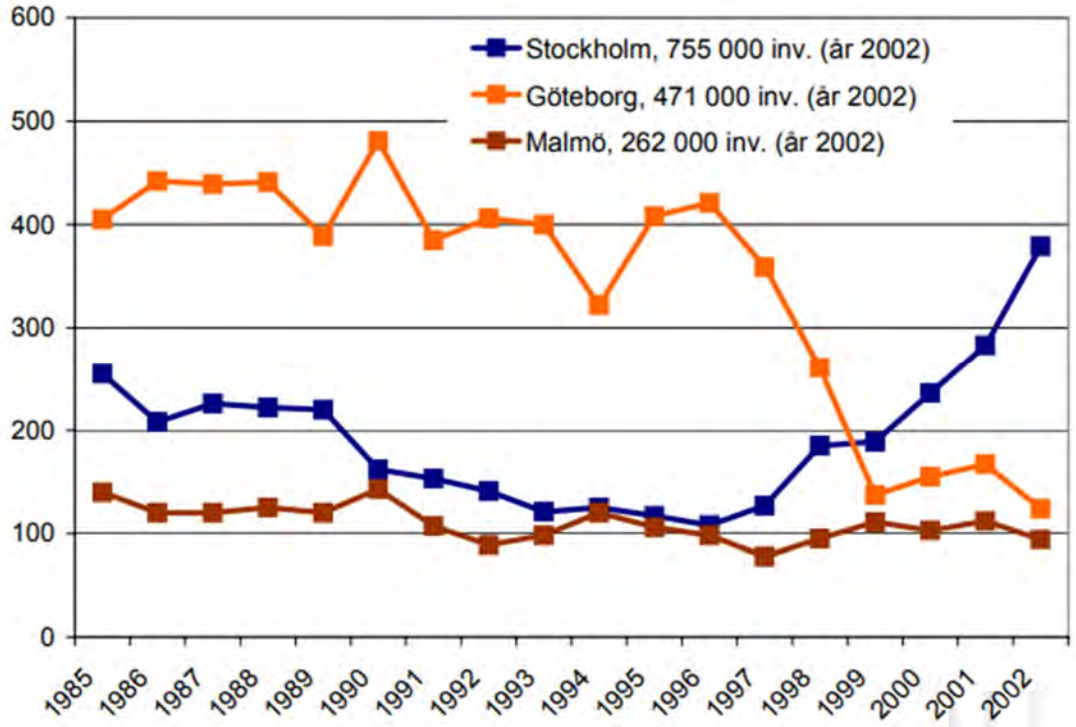


Figure 2 Number of fatalities and severe injuries in Stockholm, Gothenburg and Malmoe.

Helsinki, Finland

https://www.hel.fi/en/urban-environment-and-traffic/urban-planning-and-construction/planning-and-building-goals/sustainable-and-smooth-traffic

Traffic safety has improved significantly in Helsinki (660,000 inhabitants) the last few decades. Serious crashes are rare nowadays. According to the Helsinki's traffic safety development program, updated in 2021, the goal is to continue reducing accidents, particularly those involving children, young adults, pedestrians, and cyclists.

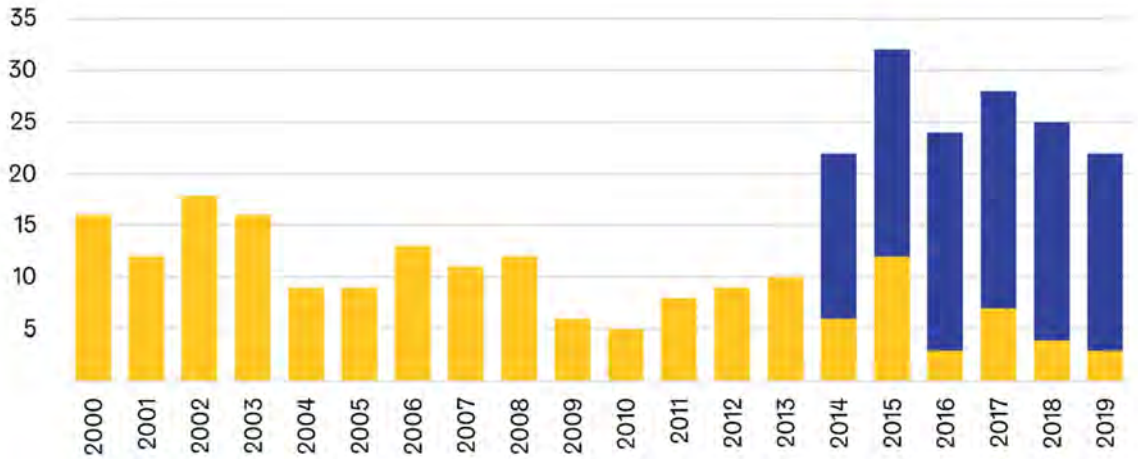


Figure 3 Fatalities (yellow) and serious injuries (blue) in Helsinki

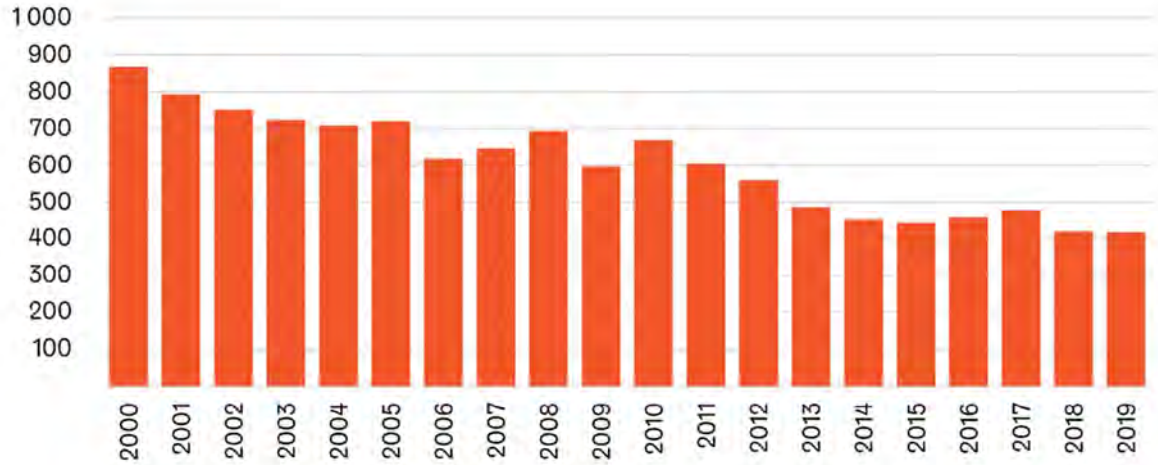


Figure 4 Injuries in road traffic

The speed limits in Helsinki have been changed several times. In 1987, a 40 km/h (25 mph) speed limit was introduced for suburban streets in Helsinki, and the following year a further 40 km/h (25 mph) limit was introduced in the north-eastern city center and Lauttasaari. In 1990, speed limits of 30 km/h (19 mph) were set for some suburban residential streets, and in 1992 the speed limit was reduced to 40 km/h (25 mph) in the inner city, except some main streets. In 2004, the 30 km/h (19 mph) speed limit was extended to streets in the city center and residential areas. In 2010 there was an extensive review of the speed limits in individual streets.

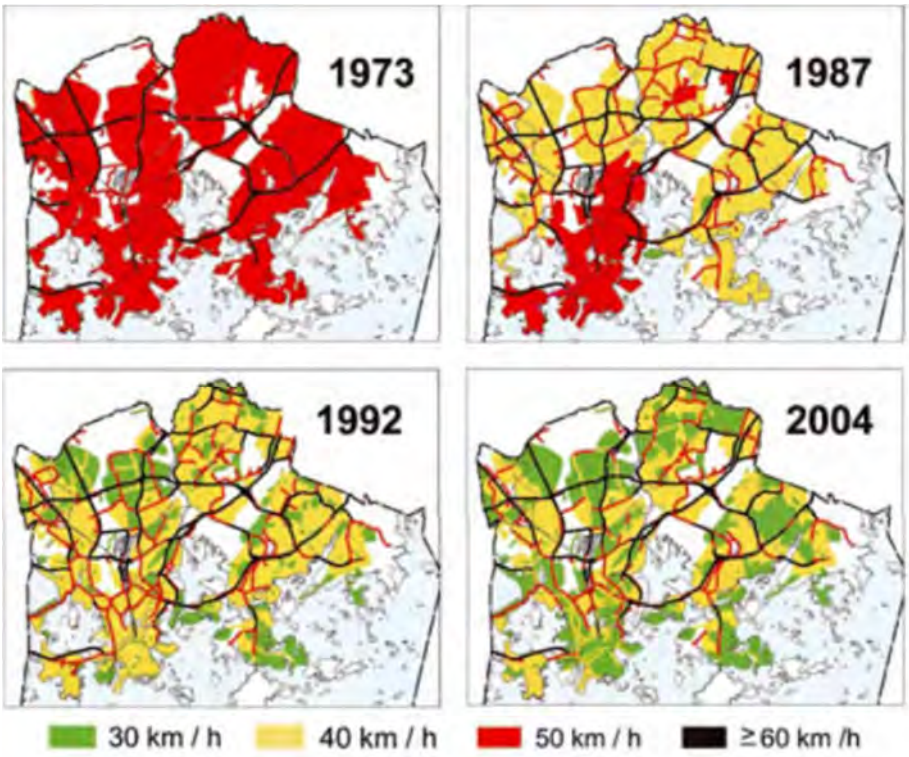


Figure 5 Historic speed limits in Helsinki

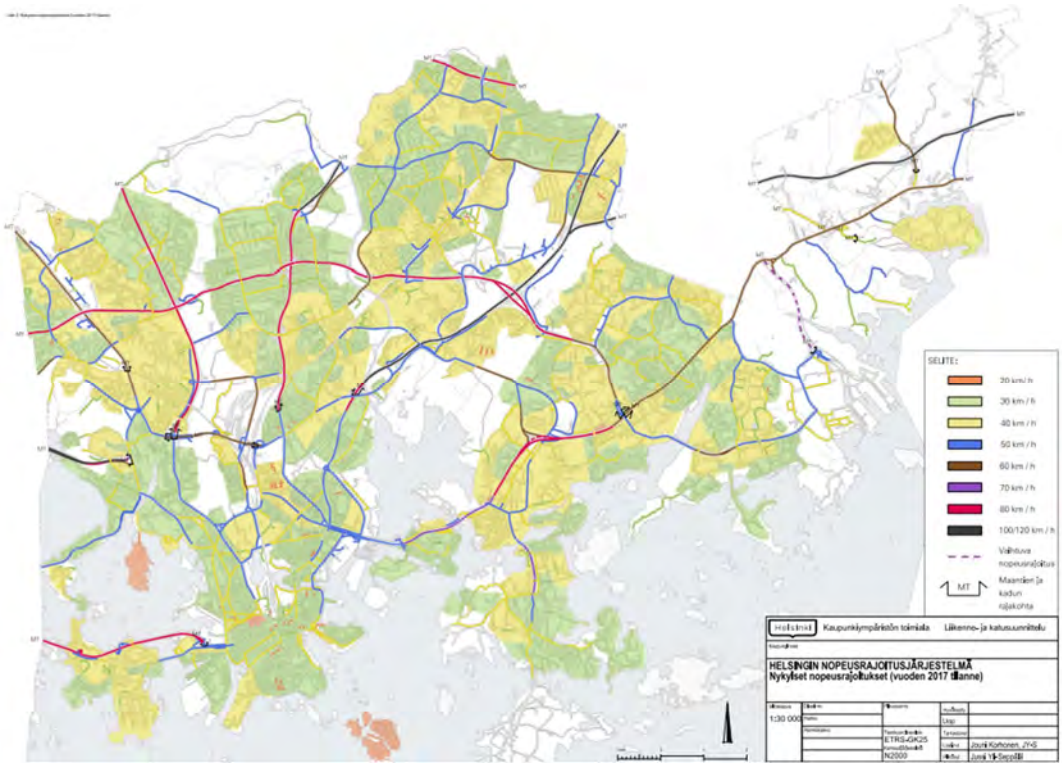


Figure 6 Speed limits in Helsinki 2017.

Speeds are reduced in new housing areas by avoiding straight, excessively wide drive-through streets, in older areas the solutions often include bumps and elevated pedestrian crossings. Helsinki is also improving traffic safety by re-organizing traffic and building safer pedestrian routes and cycle lanes. In the

future, the plan is to mainly have one-way cycling lanes in the city center. This as studies shows an increased risk for cyclists on bi-directional cycle lanes in intersections.

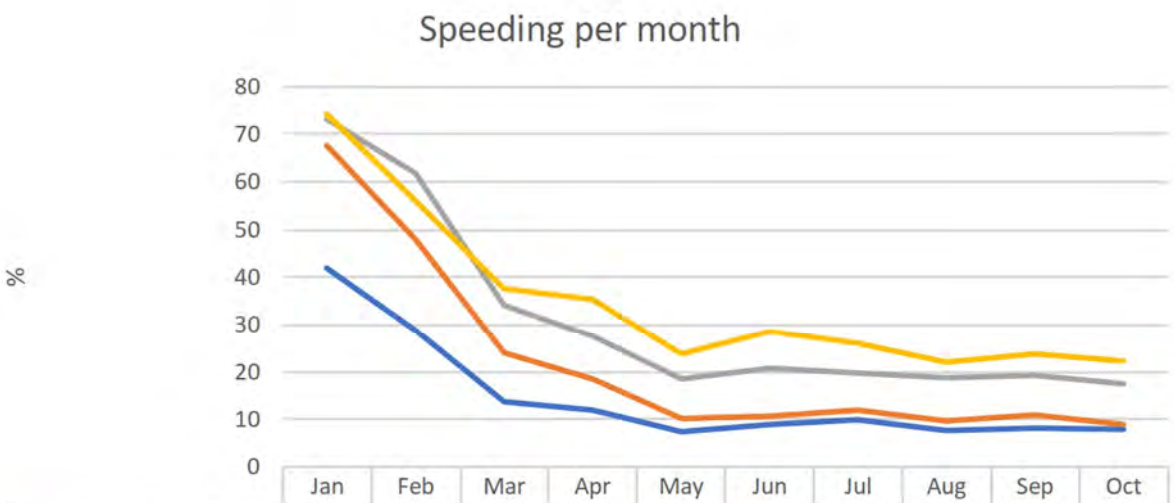
Tools used by the City of Helsinki to improve road safety:

- Speed bumps
- Raised crosswalks
- Raised Junctions
- Roundabouts
    - Dozens of roundabouts have been built in Helsinki since the early 1990s, and they have successfully reduced accidents.
- Narrow roadways and curves
- Crossing islands
- Street markings and speed displays
    - Street markings and speed displays are used as 'reminders' and boost the effects of traffic signs. Often used in areas with soft clay where speed bumps cannot be built due to the vibrations from traffic.
- Traffic signals in intersections
- Signals at pedestrian crossings
- Mixed-use streets
    - Mixed-use streets are for both pedestrians and vehicles, but pedestrians have the right of way. In mixed-use streets the speed limit is 20 km/h (12 mph). A mixed-use street is not simply established with a traffic sign, but the street environment should also be appropriate; it can be narrowed, have raised areas, planters, and benches that control speeds.
- Traffic control
    - In addition to traditional control methods, the police use automatic traffic control equipment.

Curtin University, Perth, Australia

In the streets of Bentley campus of Curtin University in Perth, Australia up to 74% of the car drivers were speeding. The university decided to install active bumps in four streets. Active bumps are smooth and even while the speed limit is kept but become bumps if a speeding car is heading. The effect of the active bumps was evaluated seven months after they were installed.

Location	Speeding after 1 month	Speeding after 7 months
Hayman road exit	29%	8%
Hayman road entry	48%	9%
Hockey right lane	62%	17%
Hockey left lane	56%	22%



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Hayman road exit	42	29	14	12	8	9	10	8	8	8
Hayman road entry	68	48	24	19	10	11	12	10	11	9
Hockey right lane	73	62	34	27	19	21	20	19	19	17
Hockey left lane	74	56	38	35	24	29	26	22	24	22

Source: Edeva - Smart City Solutions

(Similar evaluation in Bergen, Norway Fallem fekk farten ned - Vestland fylkeskommune)

SAFE ROUTES TO SCHOOLS - PROJECTS

Dar Es Salaam, Tanzania

https://www.amend.org/2018/06/08/injuryprevention/

https://icscentre.org/innovationreport/2020/portfolio-item/amend-sarsai/

Amend, a non-profit in Ghana, Mozambique, and Tanzania, uses an evidence-driven package of interventions to prevent traffic injuries and deaths in school areas. The School Area Road Assessments and Improvements (SARSAI) Program includes infrastructure improvements, education, and advocacy. The method was introduced in 2012 at two schools in Dar Es Salaam (6 million inhabitants). The most at-risk schools had been identified by using public data and community reporting. The school areas got footpaths, zebra crossings, bollards, speed humps, etc. The new infrastructure cost USD$25,000 per school area. The children also got behavioral safety education. In the next years, the package was extended to more school areas.

In 2018, a randomized control study including 18 schools was published in the British Medical Journal. As the package showed very good results the schools in the control group were included as well, and the method has been spread in nine African countries since then.

KEY PROGRAMME ACTIVITIES

- Community Engagement
- Data/technology
- Education/behaviour change
- Community infrastructure
- Policy/advocacy
- Research
- Stakeholder co-ordination and network-building

- Technical support

KEY OUTCOME

- Reduced injury rates by 26%
- Cut traffic speeds in school zones by up to 60%
- Scaled to nine capital cities/countries in Africa, covering 48 school areas/70 schools, preventing an estimated 500 injury cases each year.
- Enabled policy change for traffic speed limits in school areas reduced to 30km/hour at national level in Zambia, and city level in Windhoek, Namibia.
- Enabled policy change for traffic speed limits in school areas reduced to 30km/hour at national level in Zambia, and city level in Windhoek, Namibia.

Glasgow, Scotland, UK

https://www.glasgow.gov.uk/article/26206/School-car-free-zones-to-boost-road-safety-for-more-Glasgow-children

After an initial first trial with six schools in 2019 the city of Glasgow (660,000 inhabitants) to introduce car free zones around 21 city primary schools. The schools requested to be included in the scheme were suggested by parents or local elected members.

Initially, the new car free zones were quickly implemented on a temporary basis. The zones prohibit cars and other vehicles from driving up to school gates during morning and afternoon drop-off/pick-up hours weekday during term time. Car drivers not allowed to enter the zone (residents and disabled drivers) can be fined.

The first trial saw a significant reduction in traffic around the schools with 69% fewer vehicles identified outside those schools during the morning drop-off and afternoon pick-up. A positive impact on the perception of road safety and encourage active travel in the wider community was also seen.

Calmer roads around the schools give greater opportunities for children to travel safely to and from school on foot or by bike which enhance health and well-being. The positive response from the society encourages the city to expand the use of school car free zones as much as possible, where interest is expressed.

Councilor Cunningham: "Parents routinely talk to us about road safety and want to know their children will be safe as they come and go from school. The school car free zones are providing the kind of reassurance parents are looking for on road safety and they can also support physical distancing during this unprecedented time."

Skanderborg, Denmark

https://skanderborg.lokalavisen.dk/112/ECE15372605/skoleveje-bliver-lukket-i-en-uge/

https://www.toi.no/getfile.php?mmfileid=35901

The small Danish city Skanderborg (20,000 inhabitants) closed the streets around three schools in the mornings during one week in the fall 2012. The closures were performed with the help from the police and buses and people living in the streets were excluded from the prohibition of car traffic. At the same time, they had a campaign promoting children to walk and bike to school. For those children still traveling by car special drop off zones 100 – 500 meters away were organized. The action combining physical measures and information was seen as a success. The response was positive and there was less traffic in the school areas. The pilot was a start to a more comprehensive work aiming to enhance safe and sustainable travels to the schools in the city.

Figure 7 Closed streets (red barriers) around one of the schools (pink) and possible drop-off zones (green)

URBAN DESIGN AND LIVABLE STREETS

Barcelona, Spain

https://www.citiesforum.org/news/superblock-superilla-barcelona-a-city-redefined/

https://www.barcelona.cat/pla-superilla-barcelona/en

https://www.bloomberg.com/news/articles/2020-11-11/barcelona-s-new-car-free-superblock-will-be-big

https://ajuntament.barcelona.cat/superilles/en/

To get livable neighborhoods with enhanced road safety and good quality of life the city of Barcelona (1.6 million inhabitants) has since 2016 introduced so-called “superblocks”, or “superilla”, a kind of mini neighborhoods surrounded by main streets. Car traffic is allowed in the local streets at a very low speed (10km/h – 6 mph), however, regulations – altering one-way only streets and prohibited right-turns – make no drive-through possible and a driver entering a superblock from a main street will exit further back than he or she entered. This way there is no reason to try cut through a residential block. The superblocks normally are squares with the size of 400 x 400 meters (1/4 mile x 1/4 mile) but can also be smaller or linear. By reducing car traffic and redesigning intersections more space for inhabitants is created which contributes to a greener and healthier city.

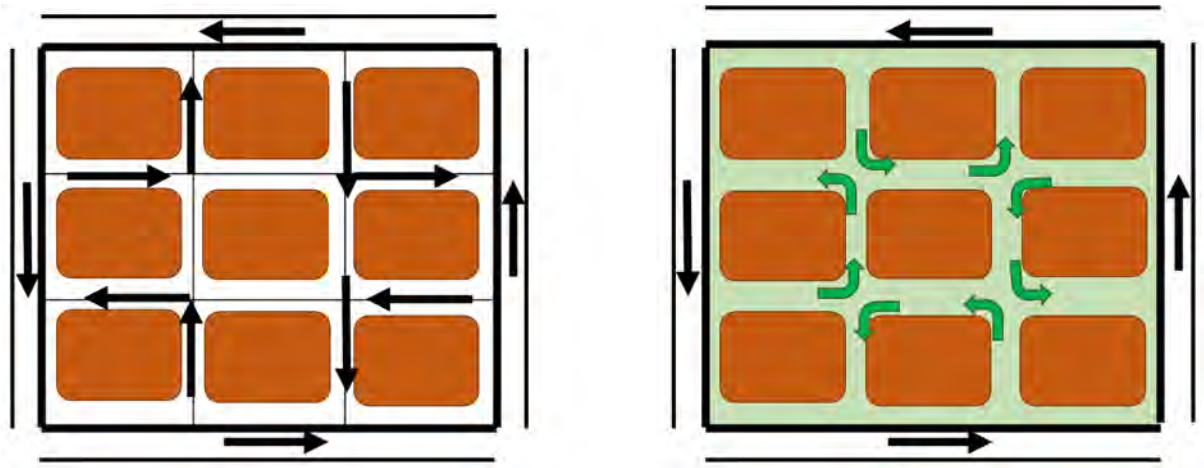


Figure 8 How the superblocks work for car traffic. Former situation to the left where drive through was allowed. The right illustration shows the effects of the traffic regulations – forced left turns and altering one-way – that together with a low-speed limit is the ground for transforming the streets and public space for the people.

Fortaleza, Brazil

https://catalogodeservicos.fortaleza.ce.gov.br/categoria/mobilidade/servico/20

https://globaldesigningcities.org/update/news-fortaleza-achieves-eighth-consecutive-year-of-reduction-in-traffic-deaths/

https://www.itf-oecd.org/sites/default/files/docs/best-practice-urban-road-safety.pdf

Fortaleza (2.7 million inhabitants) was one of the few cities in the world that accomplished the United Nations' target of cutting traffic fatalities by half during the first Decade of Action for road safety. Between 2010 and 2019, road deaths decreased by more than 50%, and are still decreasing. The rate of 14.9 deaths per 100 000 inhabitants in 2010 became 7.4 in 2019.

The good results were enabled by street transformations. Both the bike lane and dedicated bus lane networks were expanded. The dedicated bicycle network increased from 70 km (44 miles) to more than 400 km (250 miles) in ten years. In high-risk areas various traffic calming measures as redesign of pedestrian crossings, better traffic signals, and speed limit reduction on arterial roads were introduced. The city used both interim and permanent to transform the cities. The infrastructure measures were accompanied by enforcement and media campaigns.

Each intervention was first tested on pilot projects, with positive outcomes publicized extensively. A traffic casualty database (open to public) contributes to monitoring progress as well as diagnosing problems. A pilot project on one of the most dangerous arterial roads included a package of infrastructure modifications: narrower lanes, more frequent and new traffic signals, pedestrian crossings, lighting, bike lanes, and bus lanes. The speed limit was reduced from 60 km/h (37 mph) to 50 km/h (31 mph). The redesign of the street nudged drivers towards compliance with the new speed limit. As the pilot resulted in a decrease of crashes between motorized vehicles and pedestrians by 63% four more avenues get similar redesign.

The city won the 2019 Sustainable Transport Award from The Institute for Transportation and Development Policy (ITDP) and the 2020 Vision Zero for Youth Leadership Award from FIA Foundation for its strategy for reducing traffic fatalities.

Pontevedra, Spain

Pontevedra, Spain, wins the first EU urban road safety award – ETSC

The city that pioneered Europe's car-free future – POLITICO (quotes from this article)

Pontevedra (83,000 inhabitants) has reduced road deaths consistently since 1999, when 30,000 sqm (7.5 acres) of the historic core became car free. Cars can still access the center to make drop-offs or pickups, but at a low speed. There have been no road deaths between 2011 and 2018. By the late 1990s, Pontevedra registered an average of 140 road-related accidents with serious injuries each year.

The city used a clear and careful monitoring strategy to identify which policies are effective and which need to be updated, resulting in increased active mobility, such as walking and cycling; in Pontevedra, 80% of children aged 6-12 walk to school by themselves.

"We decided to redesign the city for people instead of cars and we've been reaping the rewards ever since," said Pontevedra's mayor Miguel Anxo Fernández Lores, who came into office with plans for a car-free city more than 20 years ago. "Not only have we not had a single road-related death in over a decade, but air pollution has been reduced by 67 percent and our overall quality of life in the city has dramatically improved," he said. Some 15,000 people have moved to the city since it became car-free, he added. Undoing that type of urban planning is a challenge but Fernández Lores insists that it doesn't have to be an election-losing proposition (he was reelected for the 6th time in 2019). "It looks like designing the city for people can actually be quite good at the electoral level".

"This city was basically a giant warehouse for cars, full of private vehicles that filled our public space, generated noise and emissions, and stopped our citizens — especially children and the elderly — from having true autonomy in the place in which they lived," said Fernández Lores.

It took time to get locals on board, the mayor recalled. "It's normal to fear changes, especially during the first two years of a project, when the transformation is still underway and people can't fully see the final benefits." The local business community in particular was divided over the scheme, with some fearing that blocking access for cars would discourage customers from shopping in the city. "Some people got it immediately: I had a bookseller told me he backed pedestrianization because in all his years in business he had never had a car come into his shop to buy a book". Initial opposition disappeared once local shops saw business increase with pedestrianization.

GEOFENCING AND ISA

ISA is Intelligent Speed Assistance that help drivers to keep the speed limits. This modern technique can replace bumps and other infrastructure items to reduce the speed and/or keep the speed within the speed limits. Drivers often find this convenient as this gives them the possibility to concentrate on the traffic situation instead of the speed limit signs.

Geofencing uses digital maps in the vehicles to support drivers with traffic regulations and restrictions such as speed limits, height or width limits, environmental zones, etc. and can also be used to exclude heavy vehicles from certain areas, such as pedestrian zones to avoid terror attacks, or during certain hours of the day. Geofencing is also used to allow heavy transports to building sites etc. Equipment for ISA and geofencing is provided as standard in trucks and buses from several manufacturers. In Europe there is a large interest among public transport, transport/delivery companies and the industry as a part of the companies' sustainability progress. https://etsc.eu/vehicle-manufacturers-and-safety-experts-call-for-database-of-all-speed-limits-on-the-eu-road-network/

Eskilstuna – Geofenced City Center

The small, Swedish city of Eskilstuna (70,000 inhabitants) is making agreements with companies in the city, delivery companies, other authorities, and stakeholders to introduce geofencing in the city center to ensure a low speed. Studies shows that if a sustainable part of the delivery vehicles keeps an appropriate low speed that will also affect the speed of the rest of the traffic in the city.

Stockholm - Traffic Situation Adaptive Speed Limits

In a pilot in Stockholm distribution vehicles' speed was set dynamically by the number of pedestrians within a geofenced area. Distribution vehicles, delivering groceries to stores and restaurants in the area, took part in the test. The result shows that it is technically possible to create a smart zone for dynamic speed regulation. The drivers of the vehicles tested were mostly positive about the system. Geofenced dynamic speeds have several benefits:

- The appropriate speed can vary depending on the traffic situation (how many pedestrians in the area)
- Retailers and other commercial transport buyers can buy deliveries at an appropriate dynamic speed limit, despite the official speed limits, as a part of their sustainability work.
- The city, the retailers and distribution companies can agree on appropriate speeds in certain areas and/or during certain hours of the day.
- The drivers can focus on other things and thereby get better working conditions.
- The drivers know that no one is expecting them to speed to gain time if late.

https://closer.lindholmen.se/sites/default/files/2022-09/smart-urban-traffic-zones-executive-summary.pdf

RECENT INTERNATIONAL VISION ZERO SUCCESS

https://etsc.eu/

Since the EU set up the target to reduce the number of traffic fatalities for the decade 2011-2020 several countries have performed very good, both among those that already were among the best performing but also several among those who had a real challenge starting at a level high of severe crashes above the EU average.

The European Transport Safety Council is monitoring the progress and since 2007 yearly launch Performance Index Reports (PIN) where they rank countries and gives a PIN-award to a country that have performed especially well to reach the 50% target. Several of these PIN awarded countries were in the beginning among the poorest performers such as Portugal, Greece, Lithuania, Estonia, and Poland.

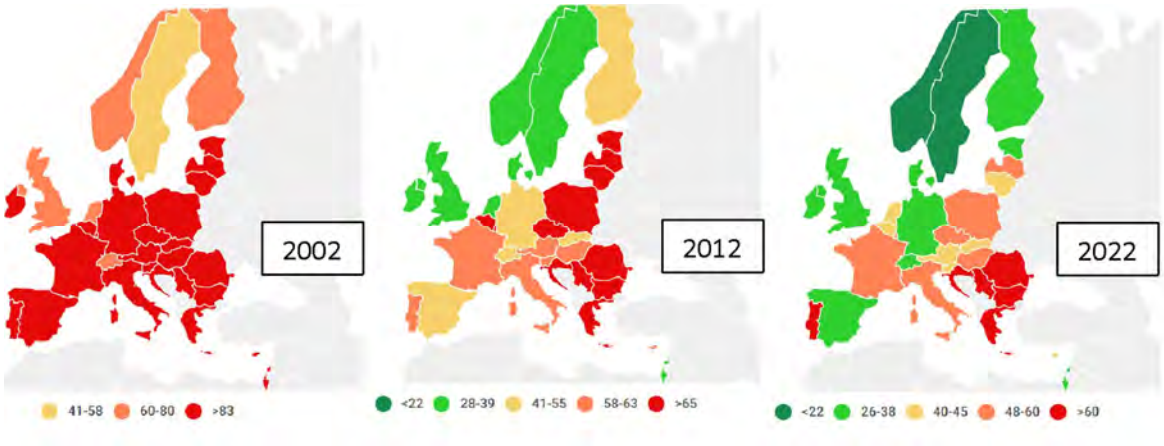


Figure 9 Fatalities in road traffic per million inhabitants in Europe 2002, 2012 and 2022. Observe that the scale is changed to adapt to the development.

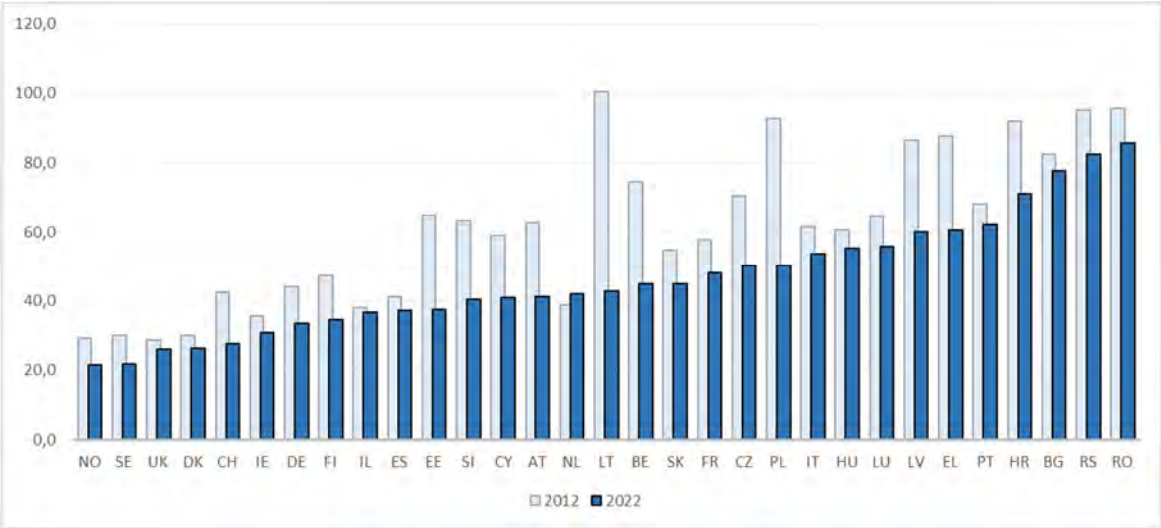


Figure 10 Fatalities in road traffic per million inhabitants for 2022 and 2012 for European countries (except Malta). EU average: 46 (54 in 2012)

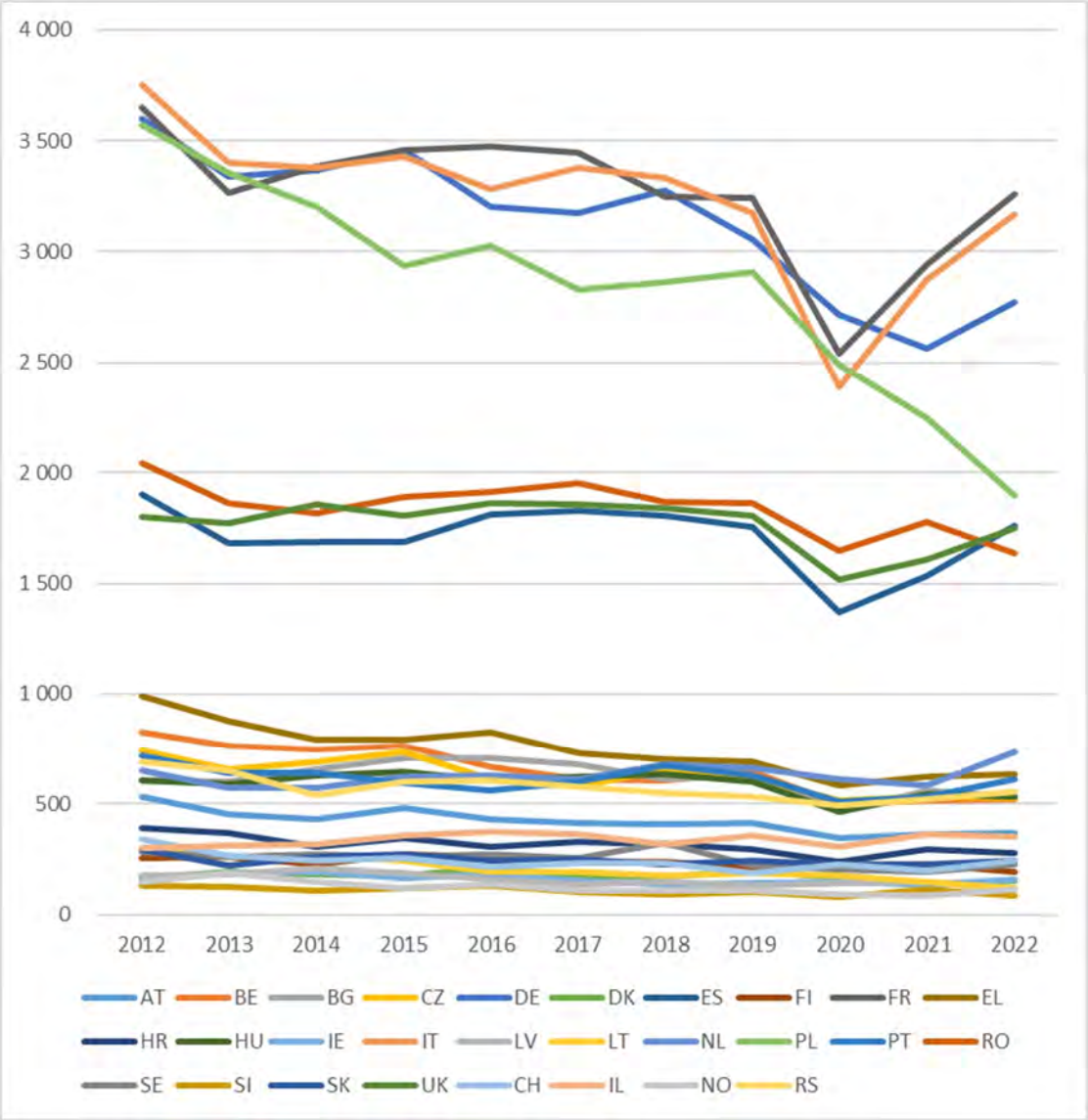


Figure 11 Progress in number of fatalities for most European countries (the smallest are excluded) in the period of 2012-2022: As seen, a percentual change in countries with a large population, like France, Germany, Italy, and Poland, correspond to many lives.

The European Union has set up eight KPIs to support monitoring road safety. Today, a majority of the member states are following or are about to follow the KPIs regarding speed, safety belts, protective equipment, and alcohol while infrastructure and post-crash-care are the KPIs that are the least monitored. Some countries might have other KPIs that they follow.

THE EIGHT EU KPIS ARE:

1. Percentage of vehicles travelling within the speed limit
2. Percentage of vehicle occupants using the safety belt or child restraint system correctly
3. Percentage of riders of powered-two-wheelers and bicycles wearing helmets
4. Percentage of drivers driving within the legal limit for blood alcohol content (BAC)
5. Percentage of drivers not using a handheld mobile device
6. Percentage of new passenger cars with a Euro NCAP safety ranking equal or above a

predefined threshold

7. Percentage of distance driven over roads with a safety rating above an agreed threshold

8. Time elapsed in minutes and seconds between the emergency call following a collision resulting in personal injury and the arrival at the scene of the collision of the emergency services.

Lithuania

Lithuania has been awarded for their progress in road safety twice, in 2011 and 2021, and has today reached a position under the EU average. This proves that even when starting from a bad position it is possible not only to “pick the low-hanging fruits” but also to continue enhancing road safety on a long-term basis.

Especially important, is a joint effort by both state institutions and society. The state distinguishes regular road safety engineering investigations, improvement of unsafe road infrastructure and engineering traffic safety measures on roads and streets as well as active control of road users. It is also important to regularly update the legislation related to traffic safety.

The National Road Traffic Safety Program adopted in 2020 have the vision of zero deaths on Lithuanian roads by 2050. An interim target is to reduce the number of fatalities and serious injuries by at least 50% before 2030, as compared to 2019. That would mean no more than 25 deaths per million inhabitants. Lithuanian cities have made significant progress with the preparation and implementation of sustainable mobility plans. Many municipalities have set clear future goals for mobility and traffic safety, and the state is contributing financially.

For enforcement, Lithuania four years ago started to install time-over-distance cameras on roads. However, the main priority remains safe infrastructure that naturally ensures proper and safe driving speeds.

Poland

Poland, the PIN award winner in 2023 has used a mix of changed legislation, enforcement, education, and infrastructure actions to achieve a sustained reduction in road deaths. First, they decided not to be behind other European countries and set up an ambitious target to make Polish roads safer. Infrastructure actions have been both extensive investigations in the main road network but also new intersections, improving local roads, and the illumination of pedestrian crossings. With the purpose to enhance road safety, road design guidelines are made together with specialists from universities, which also include facilities for pedestrians and cyclists.

Greece

Greece has had several different activities that have shown a positive impact for the road safety.

Road safety management

- A National road safety strategic plan 2011- 2020 guided policy, programs, measures and interventions.
- An Inter-Ministerial Committee on Road Safety was re-established in 2010.

Infrastructure

- Improvement of the main road network. Traffic from unsafe interurban roads has moved to new, safer, motorways.
- The EU Road Infrastructure Safety Management Directive has been in force since 2012.

Enforcement

- Traffic police statistics indicate a steadily increasing number of checks and infractions.
- Safety cameras for speeding infractions are being used more often and more efficiently.

Road user behavior

- In 2007, a lower limit than the default for Blood Alcohol Concentration for professional drivers (heavy goods vehicles, school buses and coaches), novice drivers, motorcyclists and moped riders was introduced.
- In 2008 technical inspection run by private entities was introduced, which has proven very effective.
- In 2018, a new scheme for traffic violations was introduced. The fines are based on the severity of the violations and income. Offenders that commit a high-risk violation three times in five years will lose their license for life.

A new Mobility Law is expected to boost Sustainable Urban Mobility Plans (SUMPs), with several new provisions for traffic and road infrastructure safety upgrades. Most Greek cities have laid out their own Urban Mobility Plans. Slow traffic zones and the protection of pedestrians, cyclists, and motorcyclists are key ingredients in these new urban mobility schemes. Furthermore, benchmarking through Road Safety Key Performance Indicators will trigger competition for safe mobility between cities. Protection of pedestrians and cyclists has not been prioritized in most cities; however, recent legislation foresees a new and supportive legal framework for traffic and infrastructure provisions (also for micro-mobility).

CONSIDERATIONS

CULTURAL CHANGE AND COMMUNICATIONS

Cultural Change:

- Safety should be and continue to be a priority of the Mayor and the Mayor's Office, and it should be permeated from this level to all city departments (e.g., this should be reflected on the project prioritization process and on the budget allocated for Vision Zero projects).
- Safety should be measured to demonstrate that it is a priority, meaning that targets, interim targets, and indicators should be defined.
- The endorsement of the VZAP by the Mayor is crucial, as it serves to publicly support and validate the initiative. In doing so, the Mayor should effectively communicate how the implementation of the VZAP will bring benefits to the city: a) direct benefits: improve safety, public health, increase mobility options, etc.; b) indirect benefits: reduction of healthcare costs, as a catalyst for economic development within the city, fostering growth and prosperity, etc.
- As part of the needed cultural shift, it should be considered to adopt strategies that facilitate short distance multimodal connections to discourage the reliance on personal vehicles for short-distance travel.

Communications:

- Develop an internal communications strategy to ensure a consistent VZAP message across departments. For instance, this could be through the development of an internal brand book building off the work with the VZAP. Furthermore, leverage internal communications channels (e.g. email, newsletters, etc.) to promote VZAP messaging and successful outcomes (e.g. email blasts, training, etc.).
- Create an external communications strategy aimed at showcasing the positive outcomes of the VZAP and shifting the public's perception regarding the impact of prioritizing safety on traffic flow. The strategy should focus on effectively promoting the benefits of the VZAP, while addressing any misconceptions or concerns the public may have about potential disruptions to traffic.
    - *For instance: A smooth flow at a lower speed often gives better traffic flow than accelerations and stops - especially as the latter can cause crashes and traffic closures. The idea that safety and flow contradict each other is probably the largest misconception to fight among both traffic planners and the public.*
- Leverage owned media channels, including mailing lists, websites, telephone interactions, signage in public spaces, uniforms, and city fleets, to effectively convey the messaging of the VZAP. These various channels offer opportunities to reach and engage the public, ensuring consistent and widespread dissemination of the VZAP message.
- Design and implement campaigns to convey Vision Zero goals and outcomes:
    - Targeted advertising campaigns (e.g., communicate the impact and cost of drunk driving at locations where individuals at a high risk for alcoholism may be)
    - Behavioral change campaigns (e.g., incentivize the use of transit/on-demand transportation instead of drunk driving)
- Foster community engagement by regularly publishing transparent reports on VZAP

implementation. These reports should emphasize the outcomes achieved through the VZAP and provide clear assessment of successful actions as well as areas that require adjustments to accomplish the goals of the VZAP. By openly sharing this information, the community is informed, involved, and empowered to actively contribute to the success of Vision Zero.

- Establish a VZAP implementation committee responsible for facilitating regular bimonthly meetings. Through these collaborative sessions, the committee can keep stakeholders informed, gather valuable feedback, and make informed decisions regarding necessary refinements to ensure the success of the VZAP.
- Use the VZAP as a platform to showcase the City's existing accomplishments and effectively communicate upcoming initiatives that align with its principles.
- Highlight the role of multimodal transportation in supporting the implementation of Vision Zero and effectively communicate the diverse transportation options available within the city, such as ORBT and Streetcar.

POLICIES AND REGULATIONS

General Considerations

- Ensure that Vision Zero is incorporated in the update or development of new plans and policies (such as: Complete Streets Policy, Project Initiation Form, Master Plans, Active Mobility Plan , CIP, etc.) to secure its implementation regardless of political cycles.
- Establish alignment between the Omaha Master Plan and the VZAP by considering to update the Concept Element of the plan to incorporate safety goals within the broader vision. Furthermore, the Transportation Element already includes references to safety, highlighting it as a primary goal. However, the document requires modernization, and the updates should specifically integrate the objectives and principles of the VZAP.
- Create a comprehensive training program designed to equip engineers and planners with the necessary skills to integrate Vision Zero practices into the project development and delivery process. This program should encompass proven countermeasures endorsed by the Federal Highway Administration (FHWA) that enhance safety, as well as incorporate complete street design guidelines and other relevant methodologies. By providing this training, engineers and planners will be empowered to effectively implement Vision Zero principles throughout all stages of project development.
- Revise and modernize the standards for **pedestrian facilities** to establish a new norm that prioritizes comfortable and desirable pedestrian environments throughout the City.
- Evaluate the feasibility and necessity of formulating a comprehensive plan to address curb management, infrastructure, and safety policies in anticipation of future technologies, such as autonomous vehicles.
- Evaluate the necessity of developing a comprehensive **Speed Management Plan** and establish a project prioritization framework for the **Neighborhood Traffic Calming Program**, taking into account crash data analysis. In addition to monitoring data on injured persons before and after implementing the program, several indicators need to be tracked consistently, preferably over several years to establish a stable baseline and avoid statistical fluctuations. These indicators include:

- Speed
- Traffic flow
- Pedestrian and bicyclist volumes, crossings, and travel patterns along streets
- Site-specific issues and targets, such as public perception of safety, increased usage of sustainable transportation modes, etc.

- Assess the Vision Zero outcomes resulting from the implementation of the **crosswalk markings policy.** If the evaluation indicates positive results, consider expanding the policy to areas in the city that demonstrate the greatest need, as identified through data analysis.
- Assess the feasibility and need of implementing policies, such as:
  - Leading pedestrian intervals at traffic signals in the city - focused on walking
  - Lower citywide speed - focused on driving
  - Prohibit right turns on red - focused on driving
  - Daylighting to improve pedestrian and driver visibility at intersections
- Automated enforcement in the U.S. has been proven effective in reducing crashes. Studies have shown that it can lead to a reduction of 8% to 49% in overall crashes and 11% to 44% in crashes resulting in serious injuries or fatalities[1].
- Considerations to achieve a better alignment with the VZAP and the City of Omaha Code (Code of Ordinances):
  - In Article I: Sec. 36-7 Investigation of accidents: Clearly define the scope of what constitutes a crash, including crashes involving pedestrians and cyclists. Considering the primary objective of Vision Zero to reduce fatalities and severe injuries, it is essential to gather comprehensive data on all road users. In cases where it may not be possible to collect such data, there should be a provision for estimating the information accurately, acknowledging the limitations of available data. It is worth nothing that experiences from European countries have shown that only a fraction of injured cyclists are reported by the police, underscoring the importance of capturing comprehensive data on vulnerable road users.

Project Initiation Form Process

- Examine ways of incorporating more stakeholders into the *Project Initiation Form* process in order to identify alignment between the needs of different City departments : stakeholders from relevant City departments (e.g., planning, public works, parks, recreation & public property, police, etc.), public agencies such as Metro Transit and private sector stakeholders (i.e., developers).
- Incorporate a component in the Project Initiation Form process in which it should be expressed how the project aligns with the VZAP and identify which departments/divisions should be involved in its design, implementation, and funding.
- Create a *Project Initiation Form* process to collect information regarding the needs and outcomes of the project to create an RFP that aligns with the desired project goals, therefore providing opportunities to include Vision Zero strategies from the beginning of a project and through its development and initialization.

[1] NHTSA, Automated Enforcement

Complete Streets

Complete Streets Policy:

- The Complete Streets Policy is found on pages 76 through 78 in the Transportation Element of the Omaha Master Plan. There are a few key areas where Vizion Zero language can be added to strengthen the policy approach to safety.
    - Page 76; Paragraph 1: Consider aligning the Vision of Complete Streets with the goals and principles of the Omaha VZAP. An additional paragraph explicitly recognizing the alignment between Omaha VZAP and Complete Streets can provide clarity and reinforce the shared objectives of both initiatives.
    - Page 76; Paragraph 8: When establishing performance measures for the annual reporting of Complete Streets, consider incorporating safety elements. Including specific safety metrics in the annual performance measures reporting will enable a comprehensive assessment of the safety outcomes associated with the implementation of Complete Streets, further emphasizing the significance of safety within the policy framework.

Complete Streets Design Guide:

- Verify that the Complete Streets Design Guidance (CSDG) reflects the VZAP goals before it is approved by the urban design review board and adopt it by ordinance.
    - Page 2, Introduction: Explicitly mention the importance of safety and accessible streets for all users to emphasize the CSDG's recognition of safety as a primary issue. Additionally, consider adding a statement that highlights the alignment between the CSDG with the Omaha VZAP, further reinforcing the shared goals and principles.
    - Page 3, Purpose: Include a safety statement in this section to emphasize the significance of safety in the design guidelines.
- Highlight how the Complete Streets Design Guidance is crucial for a successful VZAP implementation and how this is reflected in the following stages of the project development process:
    - Project scoping (public) and design check-in (private): verifying that the project design is aligned with the Complete Streets Guidelines and VZAP strategies
    - Preliminary Platting process: during this stage of the process, challenges, trade-offs, and the need for any exceptions to the CSP should be documented to verify that the exceptions made do not hinder the achievement of the VZAP goals
- Review the roadway design parameter considerations and key terms (e.g., lane width, turn radii) and determine if any state legislation hampers the implementation of the VZAP. Furthermore, consider assessing the feasibility to prohibit largest vehicles in densely populated areas to reduce the lane width to the minimum allowable by state law.
- Part of the project development process requires compiling a number of checklists to ensure a robust, transparent, and comprehensive complete street network. Listed below are some specific considerations for two of the requested checklists:

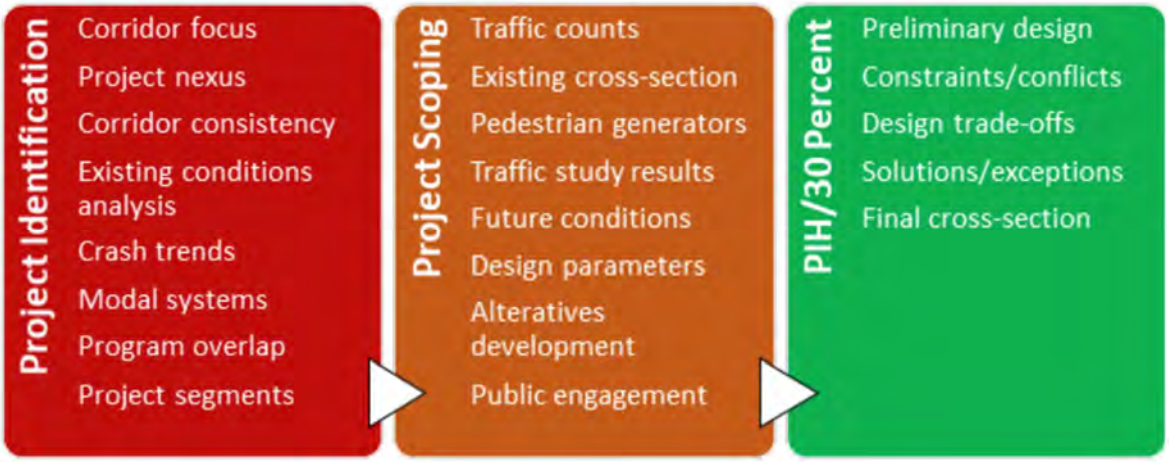


Figure 1: Checklist Process Diagram - Complete Streets Design Guide

Project Identification Checklist:

- Project nexus and existing conditions and project description: incorporate the key takeaways from the Project Initiation Form process in this section since it can inform the needs of the project and expand the number of stakeholders involved in the project development, with the aim of including all necessary departments and stakeholders needs
- Funding types: identifying if there is an opportunity to emit a joint budget request from different departments
- Safety information: redefine the Safety Information fields to align with the VZAP conclusions.

Project Scoping and PIH/30 Percent Design Checklist:

- Verify that the project complies/incorporates VZAP and Safe Systems strategies and design considerations.

Driveway Regulations

- The Guidelines and Regulations for Driveway Location, Design and Construction were revisited in September 2020; however, these should be revisited to incorporate strategies from the VZAP, Safe Systems Approach and guidelines from the Complete Streets Design Guidance (CSDG). Specifically, the permits/general requirements section represents an opportunity to request each project to be aligned with the VZAP and CSDG since a sketch or pilot plan should be submitted with the request. Furthermore, the following additions or modifications are considered:
    - Page 1, Introduction: Update the introduction to include a safety statement, emphasizing the integral role of safety in City Planning and Engineering processes.
    - Page 2, Traffic Impact Study: Include information about the purpose of Traffic Impact Studies, highlighting safety as a key objective. Explicitly mention the inclusion of various mobility modes in the study process and establish a connection to Vision Zero.
    - Page 2, General Requirements, Section C: Revise the section C by incorporating safety and Vision Zero statements. Explicitly name and acknowledge the different mobility modes considered in the guidelines.
    - Page 5, B. Driveway Spacing: Expand the discussion on driveway spacing to include travel modes other than automobiles and include safety considerations to these modes.

- Page 7, E. Right Turn Deceleration Lane: Include a safety node addressing the needs of pedestrians and bicyclists in this section.
- Page 8, G. Minimum Sight Distance: Incorporate the concept of sight distance for drivers, pedestrians, and bicyclists.
- Page 8, I. Restricted Movement Driveway Designs: Include pedestrian and bicycle accommodations in the diagrams illustrating restricted drive movement.
- Page 10, K. Vehicle Storage: Reference pedestrian and bicycle safety in this section, considering their interaction with vehicle storage areas.
- Page 14, IX. Residential On-Street Parking Requirements: Include references to pedestrian and bicycle safety within the context of on-street parking requirements.
- Page A-1, 1. Introduction: Add safety and mobility purposes to the introduction. Consider incorporating Vision Zero and FHWA's Safe Systems Approach language or a paragraph that clarifies the Traffic Impact Study's role in addressing safety and mobility for all travel modes.
- Page A-1, 2. Proposed Development and Access Routes: Highlight sidewalks as integral components of the transportation network in this section.
- Page A-1, 3. Existing Traffic Conditions: Include requirements for a Safety Analysis that covers automobiles, pedestrians, and bicycles. Safety Analysis should follow Highway Safety Manual methodology. This addition may warrant a separate new section.
- Page A-2, 6. Conclusions and Considerations: Incorporate Vision Zero and FHWA Safe System principles into the conclusions and considerations section.
- Page A-3, 1. Purpose of the Impact Report: Suggest moving Section A-2, which explains the purpose of Traffic Impact Studies, before Section A-1. In this revised order, explicitly mention the consideration of all mobility modes in the study. Note that the Traffic Impact Study should be utilized as an input for road safety impact analysis.
- Page A-4, 3. Data Provided by the City of Omaha: Highlight the inclusion of crash data and pedestrian/bicyclist conditions in the study area.

Roundabout Policy

- Consider incorporating roundabouts as a vital element in the transportation infrastructure to enhance safety and operational efficiency. Roundabouts have demonstrated substantial safety and operational benefits compared to other forms of intersection control, with reductions in fatal and injury crashes from 78-82 percent[2]. The application of roundabouts can be a tool to support VZ objectives for the City of Omaha.

Sample Guidance for Roundabout Application:

- Roundabouts should be considered as an intersection control strategy until a thorough evaluation indicates they are not appropriate. The process for selecting a roundabout as the preferred form of traffic involves three steps.
    - **Step 1: Appropriateness:** The initial step involves a "broad brush" determination of whether the site is appropriate for a roundabout. The site-specific conditions are to be investigated to determine whether a roundabout merits further consideration.
    - **Step 2: Operational Feasibility:** Once a roundabout is determined to be a potentially

[2] Roundabouts, Proven Safety Countermeasures - Federal Highway Administration.

appropriate form of traffic control, the second step involves testing to determine if a roundabout can function at an acceptable level of service. A capacity analysis should be performed to determine volume to capacity ratio and basic lane needs. This analysis is based on peak hour volumes appropriate for local conditions. The analysis is conducted for both the Construction Year and Design Year traffic volumes.

    - *Roundabouts are effective for 4-leg intersections with sufficient space. Two 3-leg intersections are an alternative when space is limited or in new planning. Both options have pros and cons, so they should be considered concurrently in new planning scenarios.*

  - **Step 3: Comparative Performance:** Once it is determined a roundabout can function at an acceptable level of service, the last step compares the roundabout performance to other potential forms of traffic control (such as signalization) at the given location. The comparison may include, but should not necessarily be limited to, safety, operational performance, construction cost, life-cycle cost, right-of-way considerations, reserve capacity (the ability to accommodate future traffic growth), pedestrian/bike accommodation, and constructability.

The justification procedure for each roundabout should be documented in a technical memorandum, which outlines the results of the analysis conducted in the three steps. This memorandum will also provide a summary of the reasons for selecting/or not a roundabout as the chosen method of traffic control.

Performance Measurement

The effective measurement of performance is crucial for evaluating progress and guiding decision-making in the VZAP. Drawing from best practices, it is advisable for Omaha's Vision Zero Action Plan to establish a performance measurement plan. By doing so, the City of Omaha can enhance its ability to assess progress, identify areas of improvement, and ultimately strive towards achieving the goal of zero traffic-related injuries and fatalities. Key considerations for the plan should include:

- Establish Key Performance Indicators (KPIs): Define a set of KPIs that provide a comprehensive view of traffic safety and progress towards Vision Zero goals. Consider indicators such as traffic-related deaths and severe injuries, pedestrian and cyclist mode share, speeding incidents, and changes in crash rates.
- Collect and Analyze Data Regularly: Implement a systematic data collection process to track and analyze relevant metrics. Regularly assess traffic safety data, including crash statistics, pedestrian and cyclist volumes, and behavioral factors.
- Incorporate Equity and Demographic Factors: Evaluate Vision Zero progress through an equity lens by overlaying performance indicators with demographic and sociodemographic vulnerability data.
- Set Time-Bound Targets That Reflect Urgency: Establish specific and time-based targets for performance metrics associated with each key action identified in the Vision Zero Action Plan. These targets should be ambitious yet realistic, providing clear benchmarks for progress and allowing for monitoring of achievements over time.
- Benchmark against Similar Cities: Compare performance metrics and outcomes with other cities that have implemented Vision Zero policies. Use these benchmarking data points to assess Omaha's progress, identify areas for improvement, and set targets that align with or exceed best practices observed in comparable cities.

FUNDING

Overarching Funding Considerations

- Assess the possibility of establishing a permanent funding resource for Vision Zero (some cities such as Denver, have established an annual budget for Vision Zero implementation and coordination).
- Incentivize cross-department joint budget requests by prioritizing projects that are requested/supported by more than one department.

Capital Improvement Program (CIP) Process

- Prioritize safety in the CIP process by incorporating the VZAP goals and VZ language in the 2023-2028 Capital Improvement Program goals *(review San Diego's and Chicago best practices under Funding in the National Best Practices section)*:
    - Goal 2: Protect Public Health and Safety
    - Goal 6: Implement City Goals, Policies & Plans
- During the CIP submittal stage (February-March), departments should leverage the Project Initiation Form process to identify how the projects support the VZAP and identify which departments could benefit from the same project and submit a joint budget request.
- The review process done by the CIP task force (April-June) reviews the projects submitted by different departments, balances expenditures and prepares a considered CIP to be reviewed by the Mayor and the Priority Committee. Therefore, it is important to create a project prioritization criteria in which:
    - Safety is a priority for each project (how does each project support the VZAP data driven goals?)
        - With the support of data, prioritize areas of the city that are of most need
        - The project is aligned with VZAP strategies and Complete Streets Design Guidelines
    - Projects that are requested by more than one department should be prioritized
    - Joint budget requests should be prioritized
- Convey to the community how projects are prioritized in the CIP process (needs addressed, location-funds distribution, etc.)

GO Bonds

- Incentivize joint budget requests from the five areas that receive GO Bonds (Transportation Improvements, Environment, Parks and Recreation, Public Safety, and Public Facilities)
- Create a safety priority to apportion bonds just for the VZAP implementation. As mentioned in the National Best Practices section, Austin, Texas authorized the creation of bonds to fund explicitly Vision Zero projects (sidewalk improvements, bike lane expansion, and other safety-related infrastructure projects)

PILOTS

- **Pilot Studies for Data Collection:** To estimate the incompleteness of data from a single source (e.g., hospitals, police departments, insurance companies, etc.), it should be considered to build a partnership between two institutions such as the police department and a hospital to collect data and report the number of injuries during a month or two (preferably in two different seasons) and then compare it. This should help to identify gaps, improve accuracy, identify potential biases of data collection. Furthermore, this pilot can help to test the feasibility of a larger data collection project.

- **Pilot Program for Roundabouts:** To demonstrate the effectiveness of roundabouts, it should be considered that the City of Omaha initiates a pilot program aimed at evaluating their impact on safety and traffic flow. The pilot program should carefully select a limited number of candidate intersections for roundabout implementation and the evaluation process should be comprehensive, gathering data and assessing roundabouts performance across various factors such as safety, traffic operations, pedestrian and bicycle accommodation, and community feedback *(for reference review the St. Paul's Avenue Roundabout Pilot in Jersey City, NJ, highlighted in the National Best Practices section).*

PARTNERSHIPS

- Strengthen partnerships between City departments to identify aligned desired outcomes and prioritize Vision Zero initiatives (i.e., Public Works, Planning, Parking, Police, Fire)
- Build internal and external partnerships with key stakeholders to identify available funds for Vision Zero implementation
    - Internal: identify funding resources that can be leveraged through joint budget requests
    - External: MPOs, Foundations, etc.
- Develop a formal collaboration between the Omaha Police Department and the Traffic Division of Public Works to gather and evaluate key data to better inform future project and policy decisions (i.e., elaborate a conjunct set of guidelines for data collection and evaluation)
- Strengthen partnership between the VZAP implementation committee and the City Council to support Vision Zero implementation conveying the VZAP key expected outcomes and how this can improve the community quality of life.

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CRASH TRENDS

From 2011 to 2020 on streets in Omaha, excluding interstates, freeways, and expressways, there were:

- 250 fatal crashes
    - 261 people killed.
- 2,596 serious injury crashes
    - 4,456 people injured.
- $4.1 billion in cash cost to society

Fatal crashes in Omaha are increasing dramatically. The number of annual fatal crashes in Omaha doubled from 15 to 30 between 2011 and 2020 (Figure 1). During that same timeframe, serious injury crashes have remained constant, only decreasing slightly from 264 to 239 (Figure 2).

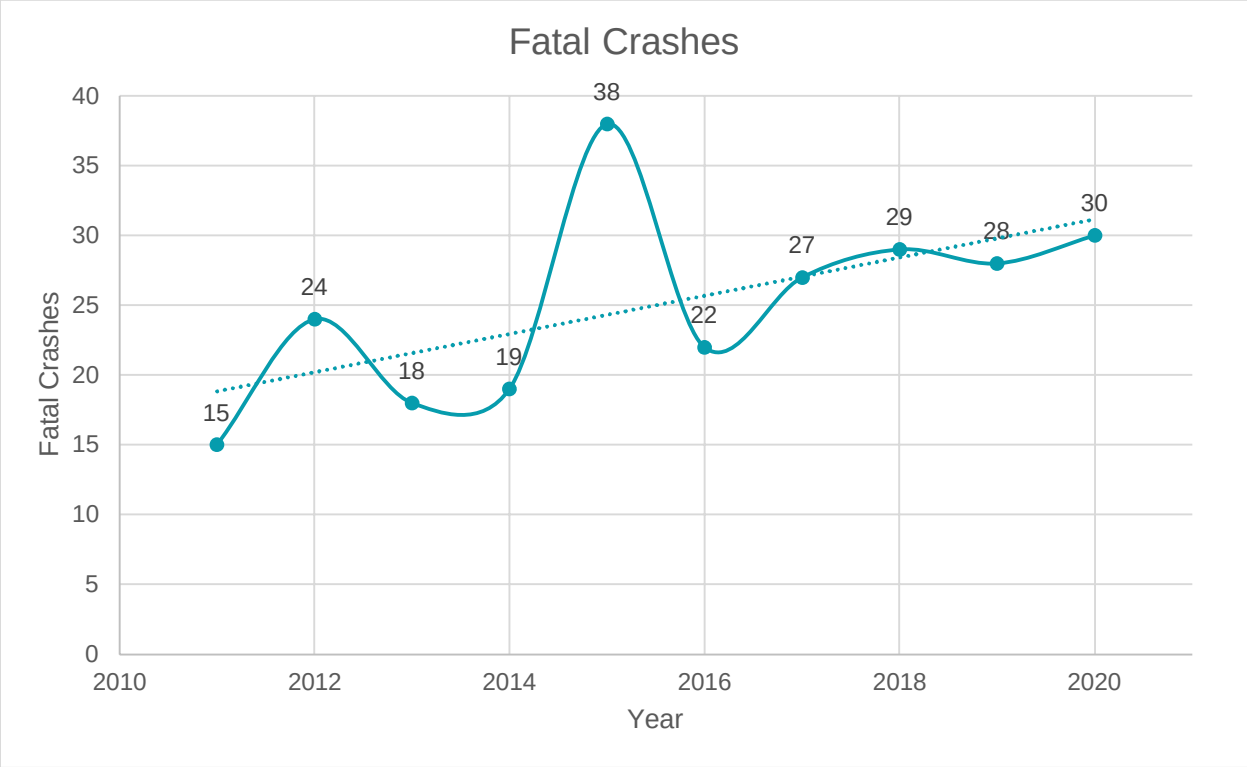

Figure 1: Fatal Crash Trend (2011 – 2020)

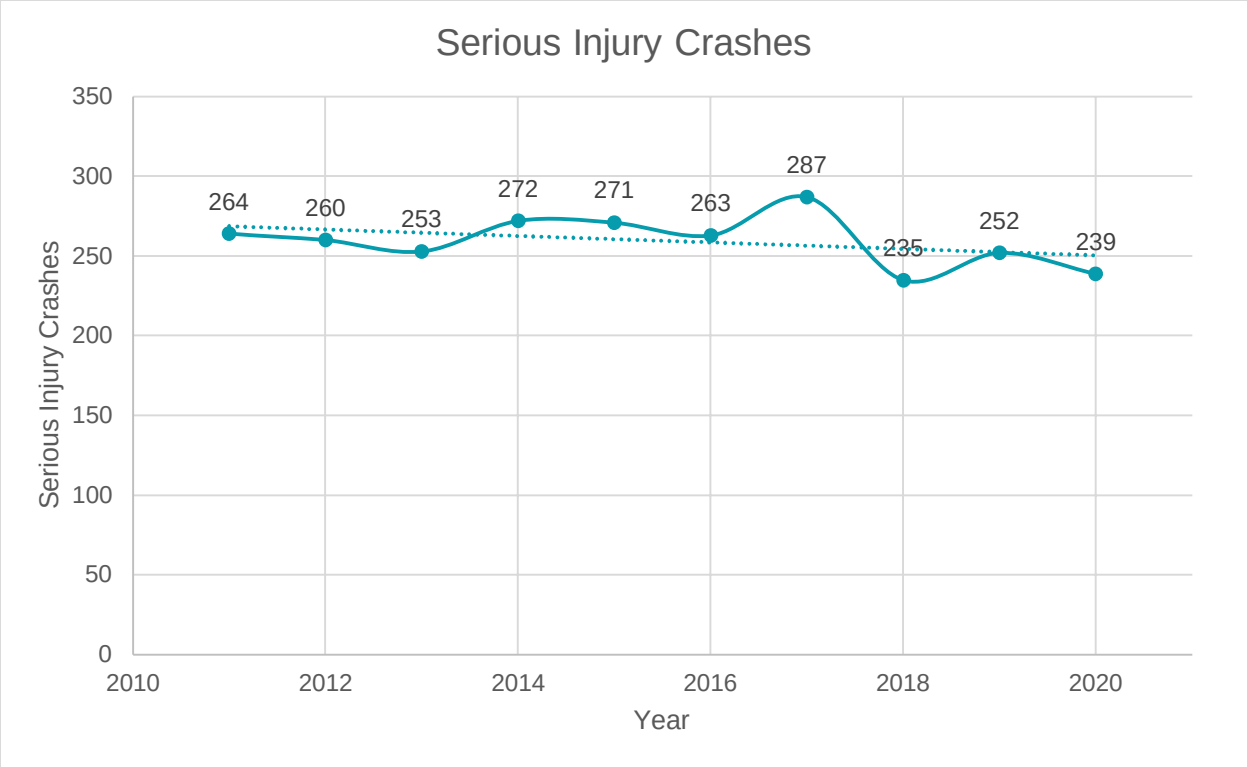

Figure 2: Serious Injury Crash Trend (2011 – 2020)

CRASH LOCATIONS

Both fatal and serious injury crashes are predominantly found on the eastern side of Omaha, clustered in the northeast and southeast areas. These areas tend to have lower socio-economic status and a higher portion of residents from diverse racial backgrounds. The most signification concentration of crashes occur east of 72nd Street. This pattern holds true when considering both the number of centerline miles and per million trips. Moreover, it is noteworthy that the southeast neighborhoods bear the greatest burden of crashes resulting in pedestrian and cyclists Killed or Seriously Injured (KSI). Vision Zero envisions that all modes of transportation be safe and effective; therefore, it is imperative that Omaha builds infrastructure that improves safety and access to all demographics and mode shares.

FATAL AND SERIOUS INJURY CRASH LOCATIONS

The location of the KSI crashes within Omaha are concentrated along the east side of the city, shown in Figure 3. Most crashes occur outside of intersections; however, crashes within intersections have a higher rate of fatal crashes.

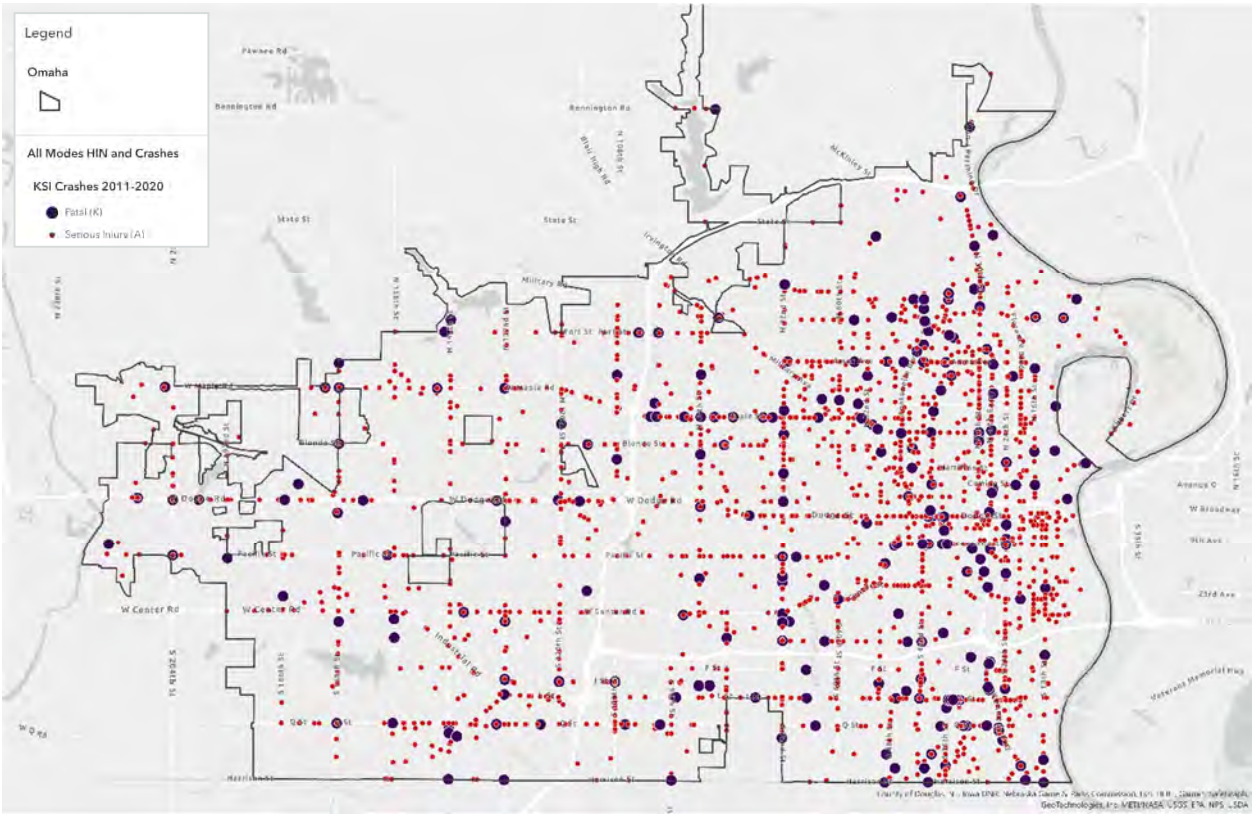

Figure 3: Fatal and Serious Injury Crash Locations in Omaha (2011 – 2020)

SYSTEMIC ANALYSIS

Staff conducted a systemic risk analysis to assess how factors not typically recorded in crash data impact the relative risk of crashes. For this analysis, databases of crash data, roadway data, and demographic data were joined and analyzed together. The analysis compared the relative proportion of crashes with the relative proportion of roadways with a given feature. This was used to create a “Representation Ratio,” for intersections and corridors.

For the entire city the normalized value is 1.0 (i.e., 100% of crashes happen on 100% of roads), therefore any values above 1.0 show places where crashes are over-represented. For example, 40% of the KSI crashes happened in urban areas, but only 28% of our roadway miles are in urban areas. This means the representation ratio is 1.40 and it is 1.40 times more likely for a KSI crash to happen on an urban street compared to average. This is an over-representation and equates to a roadway risk factor based on the road context. On the other hand, 27% of KSI crashes happened in suburban areas of the city, and 41% of our roadway miles are in suburban areas, resulting in a representation ratio of 0.67, which means it’s about 33% less likely for a KSI crash to happen on a suburban area road than average. This is an under-representation and shows that there is a relatively lower risk of KSI crashes occurring in suburban areas.

AREA CONTEXT

Equity Area

The equity area classification, derived from the United States Department of Transportation's (USDOT) Transportation Disadvantaged Census Tracts, serves as a fundamental aspect of the crash data analysis process. It aims to capture and address factors that may not be conventionally captured in crash data but still influence the relative risk of crashes. To achieve this, databases containing crash data, roadway data, and demographic data were integrated and analyzed together. The Representation Ratio was then applied to intersections and corridors to gauge their representation in the crash data and identify potential crashing risk in equity and non- equity areas. Figures 4 and 5 show the Representation Ratio by equity area for all KSI crashes and bicyclist and pedestrian KSI crashes, respectively.

Area Type

The crash data analysis categorizes regions into suburban, urban, urban transition, and suburban transition areas based on their characteristics and development patterns. This classification helps understand crash factors and develop safety strategies. An area map of Omaha is shown later in this Appendix in Figure 28.

The primary method is analyzing the year of construction data, revealing urbanization levels. The specific area types are categorized as urban, urban transition, and suburban based on the density of housing by year built, which was manually defined. This seemed a sufficient proxy based upon expectations, with urban areas occurring closer to the city center and gradually turning to urban transition and suburban as distance increases from the downtown. However, this data alone may overlook complexities.

Manual redefinition of block groups considers factors like density, land use, and road design. It ensures accurate representation of an area's urban or suburban nature, capturing transitions. Overall, classifications rely on construction data, but manual refinement accounts for additional factors and diverse development patterns. Figure 6 through Figure 7 show the Representation Ratio by area type.

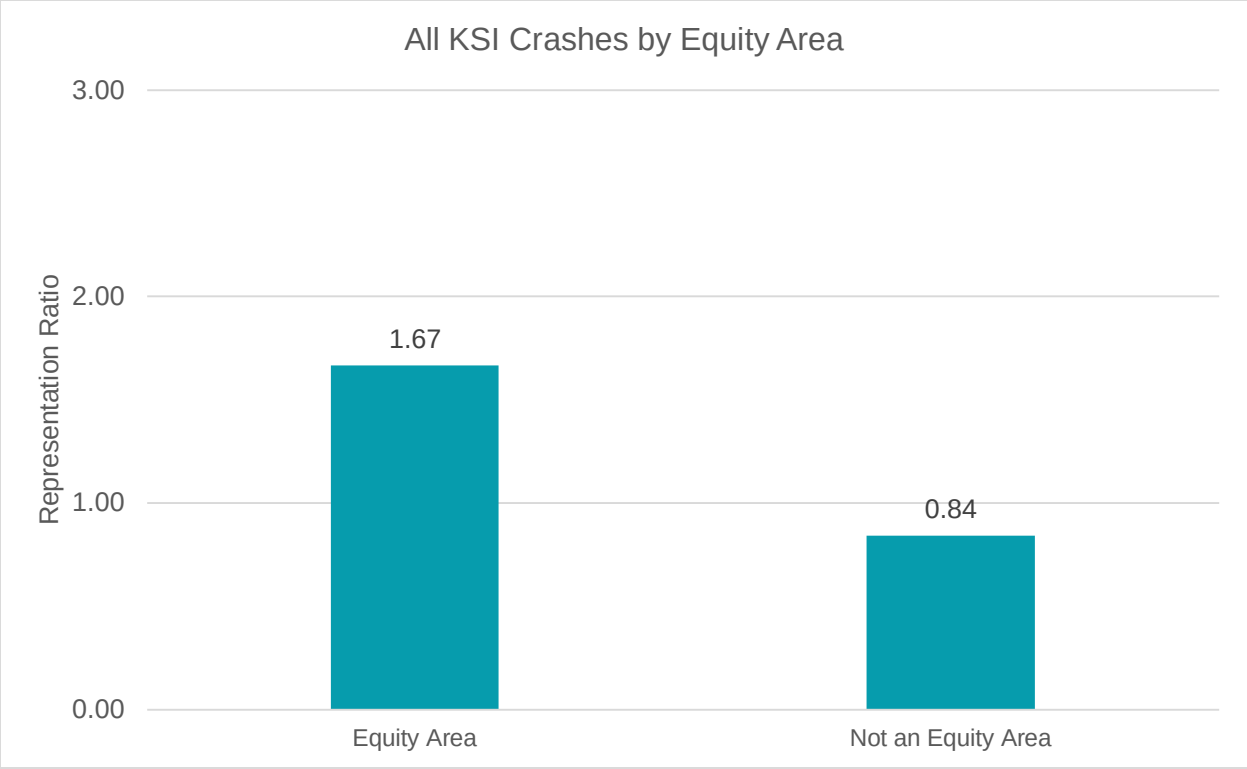

Figure 4: Representation Ratio of All KSI Crashes in Equity and Non-Equity Areas (2015 - 2019)

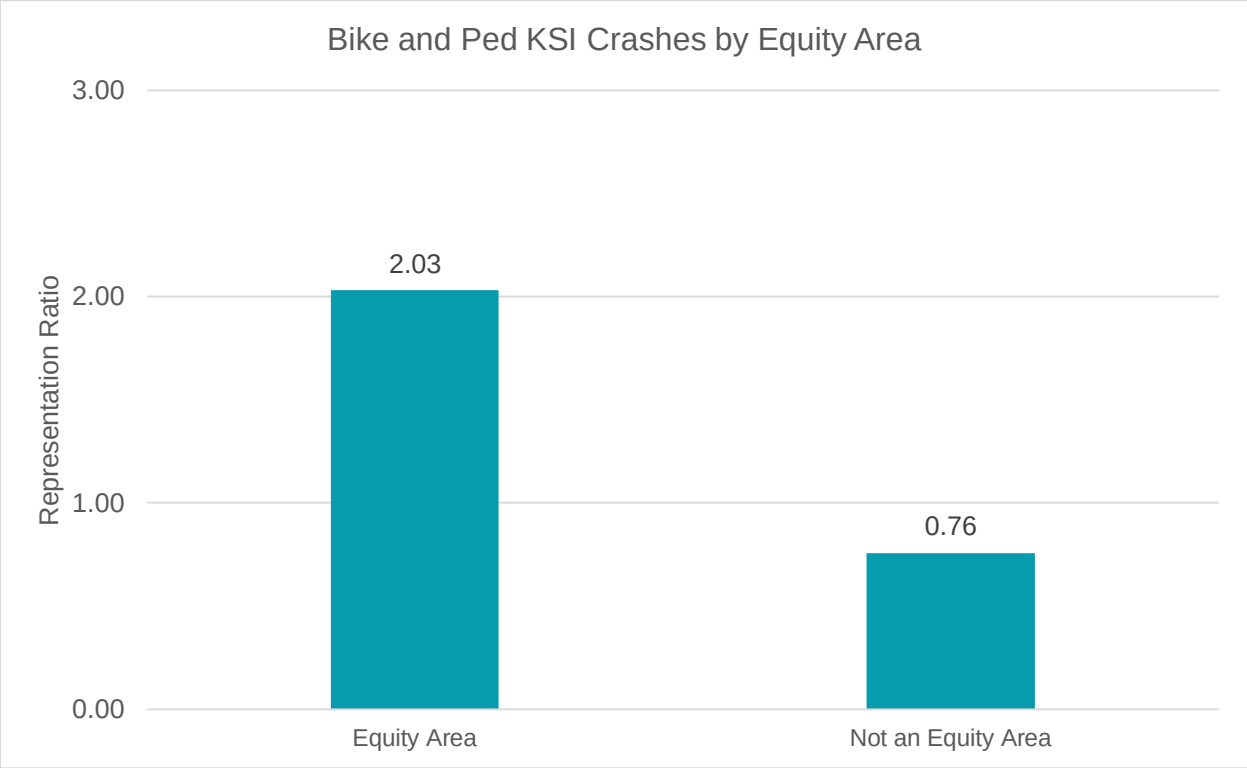

Figure 5: Representation Ratio of Bike and Ped KSI Crashes in Equity and Non-Equity Areas (2015 - 2019)

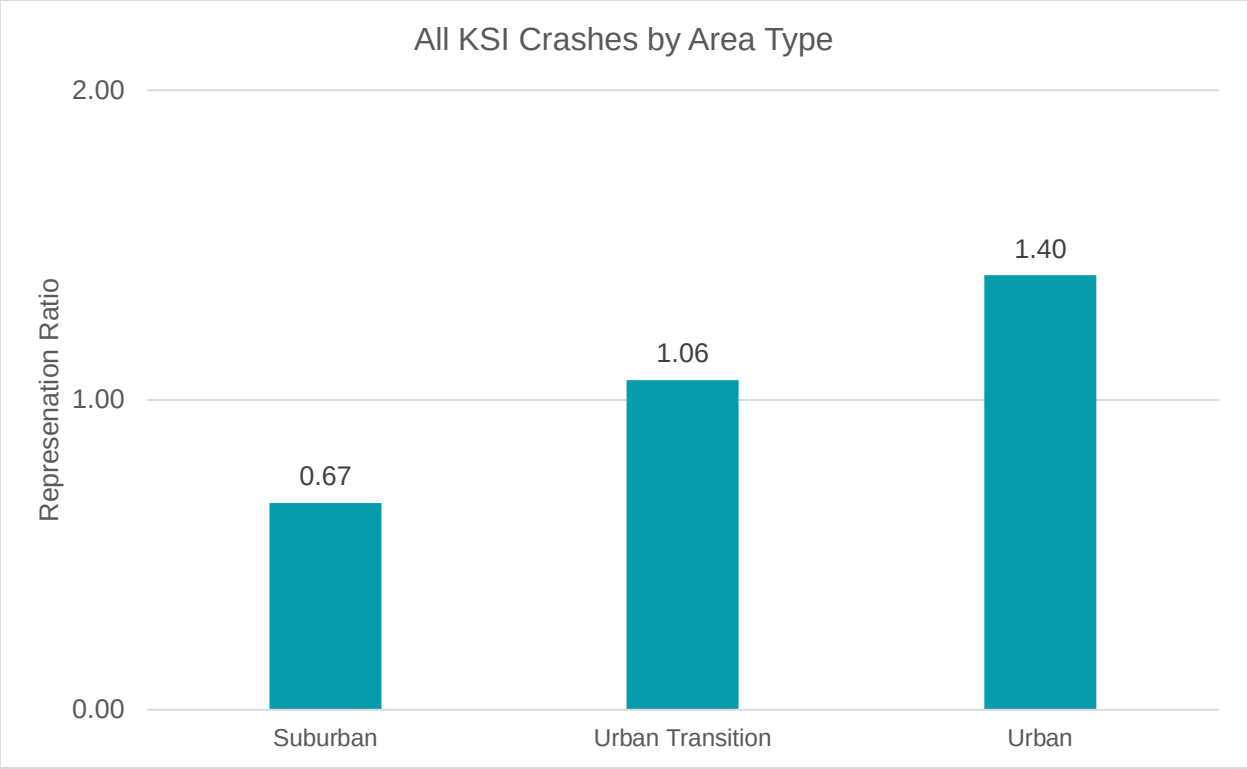

Figure 6: Representation Ratio of All KSI Crashes by Area Type (2015 - 2019)

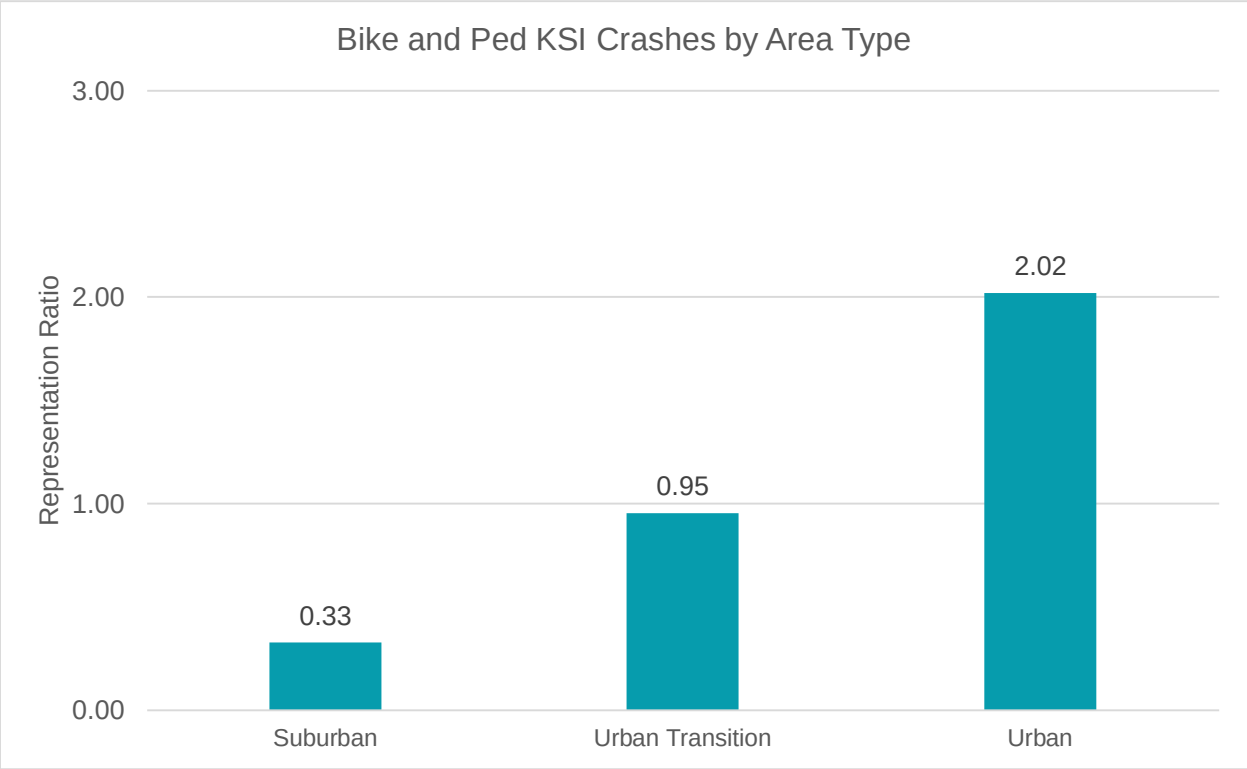

Figure 7: Representation Ratio of Bike and Ped KSI Crashes by Area Type (2015 - 2019)

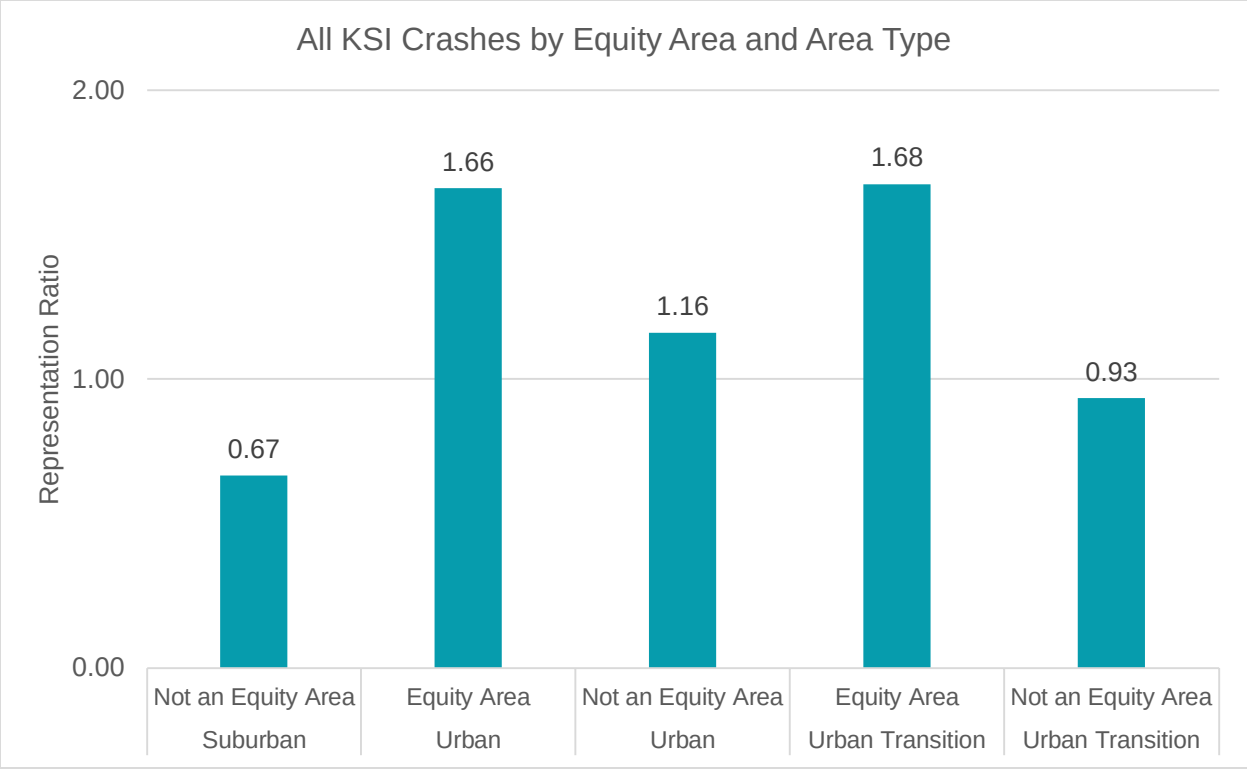

Figure 8: Representation Ratio of All KSI Crashes by Equity Area and Area Type (2015 - 2019)

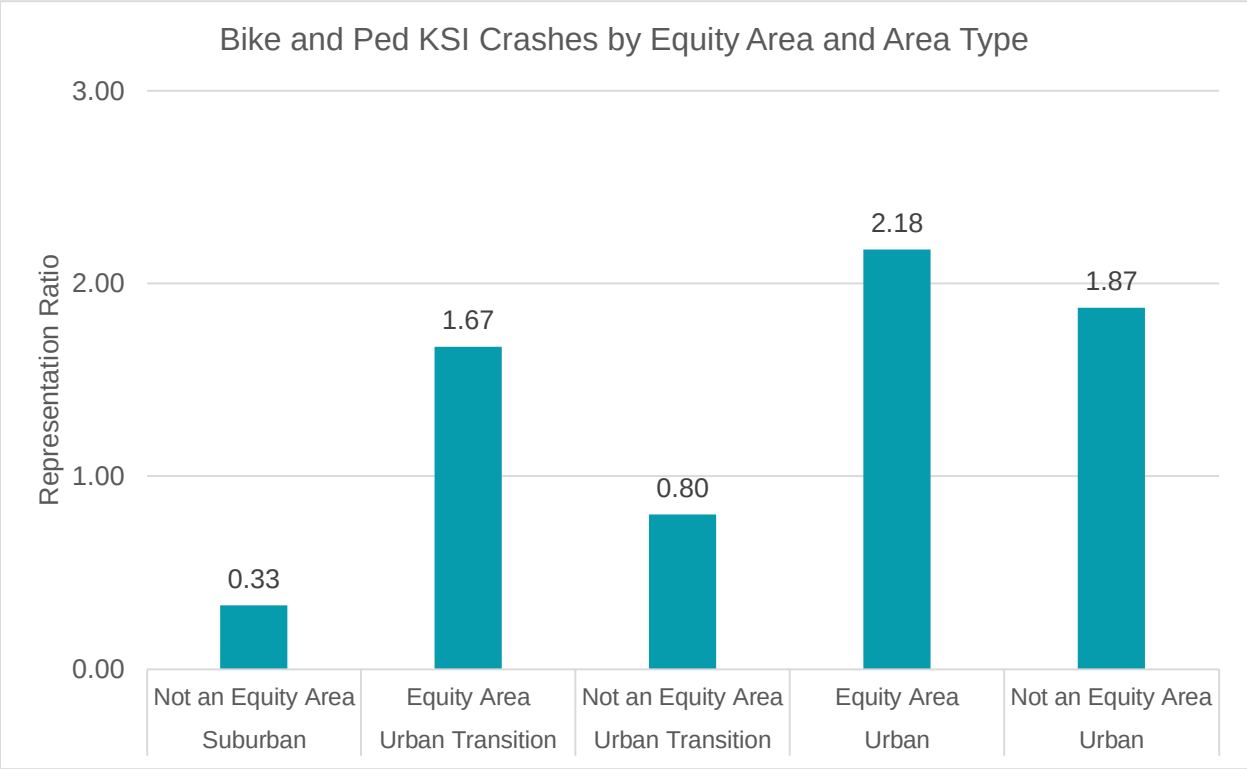

Figure 9: Representation Ratio of Bike and Ped KSI Crashes by Equity Area and Area Type (2015 - 2019)

ROAD TYPE

This section of the report presents a comprehensive analysis of various factors influencing road safety. The section includes charts illustrating the representation ratios of different types of crashes based on road classification, area type, roadway traffic volume, number of through lanes, one-way/two-way streets, median presence on 4-lane roads, truck route designation, intersection control, roadway speed, and road congestion. These ratios provide valuable insights into the correlation between road characteristics and the occurrence of all crashes, as well as crashes involving bicycles and pedestrians. The representation ratio, depicted on the y-axis of the charts (Figure 10 to Figure 27), provides a quantitative measure of the likelihood of crashes occurring on specific types of roads or in certain areas. Values above 1.0 indicate over-representation, highlighting areas with a higher risk of crashes, while values below 1.0 signify under-representation, suggesting relatively lower crash risks. By analyzing these ratios, we can gain valuable insights into the road context and prioritize targeted interventions to improve road safety in areas that are disproportionately affected by crashes.

- Major arterial road classification poses the highest risk for vehicular, pedestrian, and bicyclist fatalities in terms of representation ratio among all KSI crashes.
- Urban major arterial and urban transition major arterial areas have the highest representation ratio in KSI crashes by road classification and area type.
- Roadway traffic volumes between 30K-40K exhibit the highest representation ratio and pose greater danger for vehicular, pedestrian, and bicyclist fatalities.
- The presence of six or more through lanes on roads has the highest representation ratio and is associated with increased risk for vehicular fatalities, while five lanes pose a higher risk for pedestrian and bicyclist fatalities.
- One-way streets demonstrate higher fatality rates for both vehicular and pedestrian/bicyclist crashes compared to two-way streets.
- Minor arterial roads without a median are more dangerous for both vehicular and pedestrian/bicyclist fatalities. Additionally, signalized intersections on four-lane roads have a significant impact on pedestrian and bicyclist fatalities.
- Signalized major arterial intersections are associated with the highest representation ratio in KSI crashes for vehicular, pedestrian, and bicyclist fatalities.
- Roadway speeds of 35mph have the highest representation ratio and pose a greater risk for vehicular fatalities, while five lanes have a higher representation ratio for pedestrian and bicyclist fatalities.

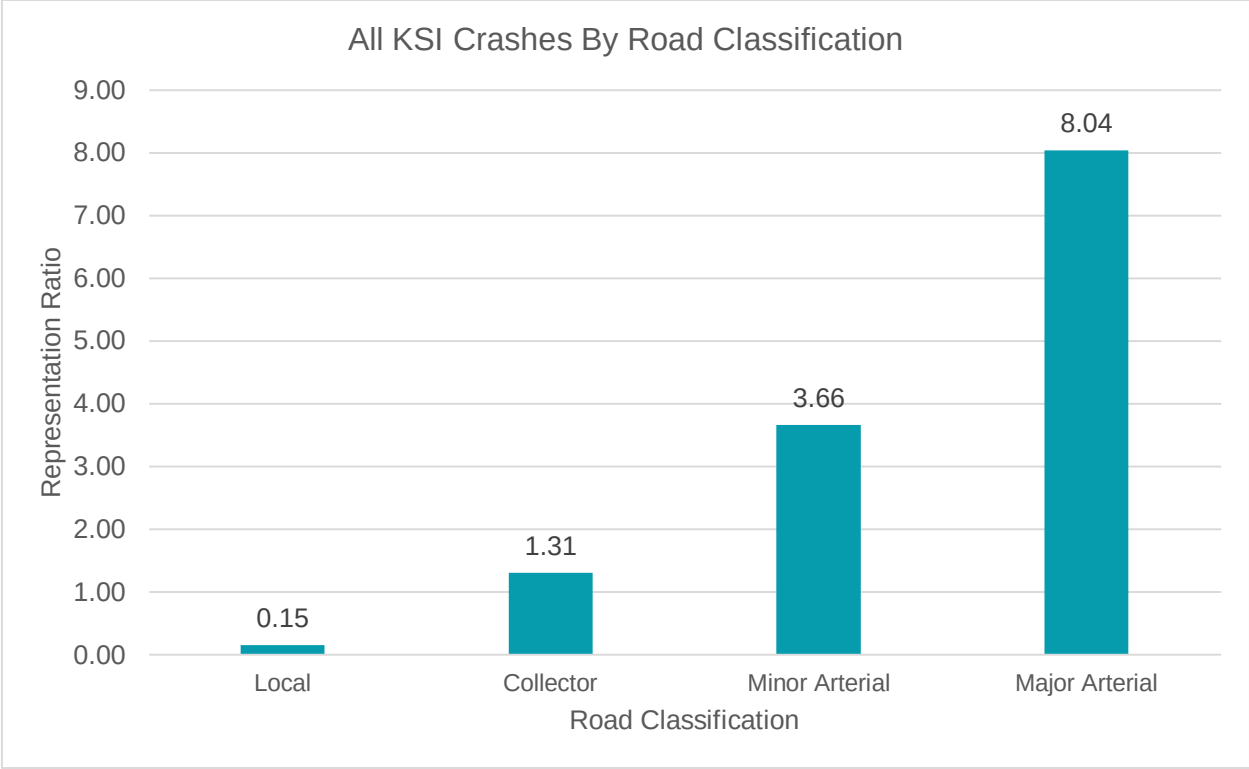

Figure 10: Representation Ratio of All KSI Crashes by Road Classification (2015 - 2019)

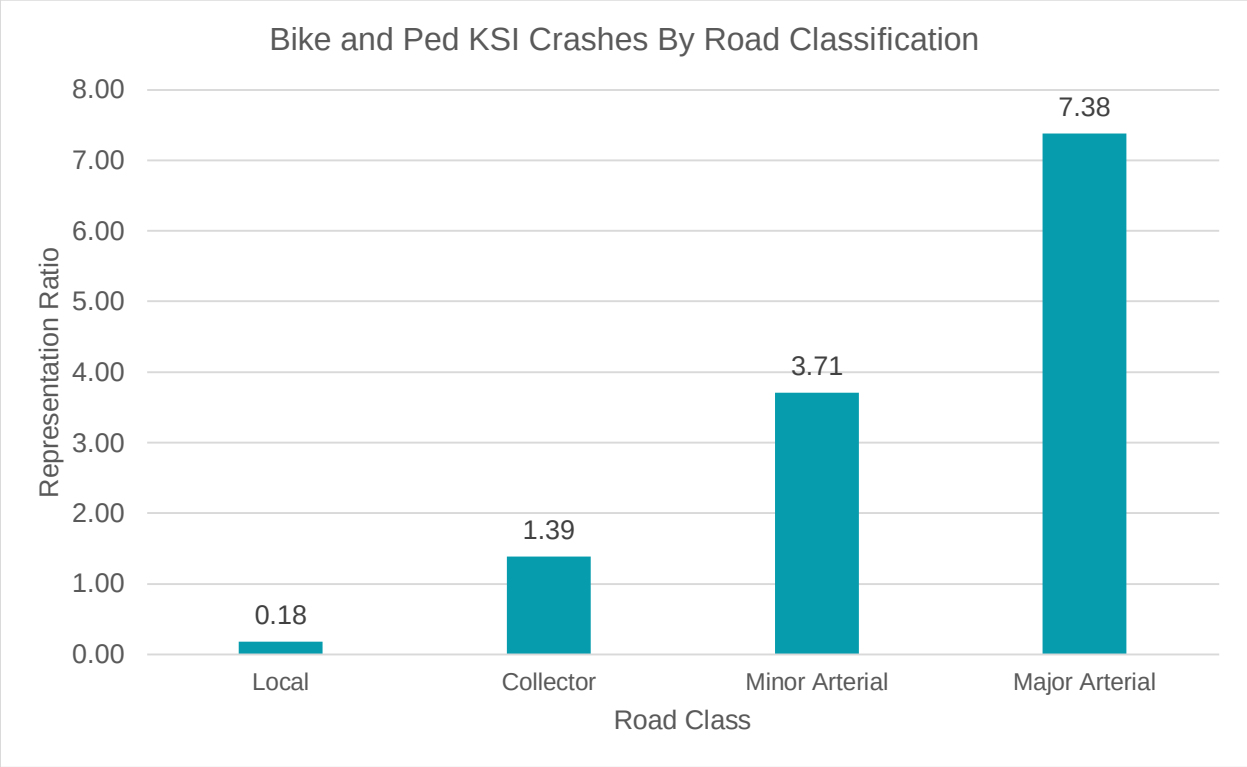

Figure 11: Representation Ratio of Bike and Ped KSI Crashes by Road Classification (2015 - 2019)

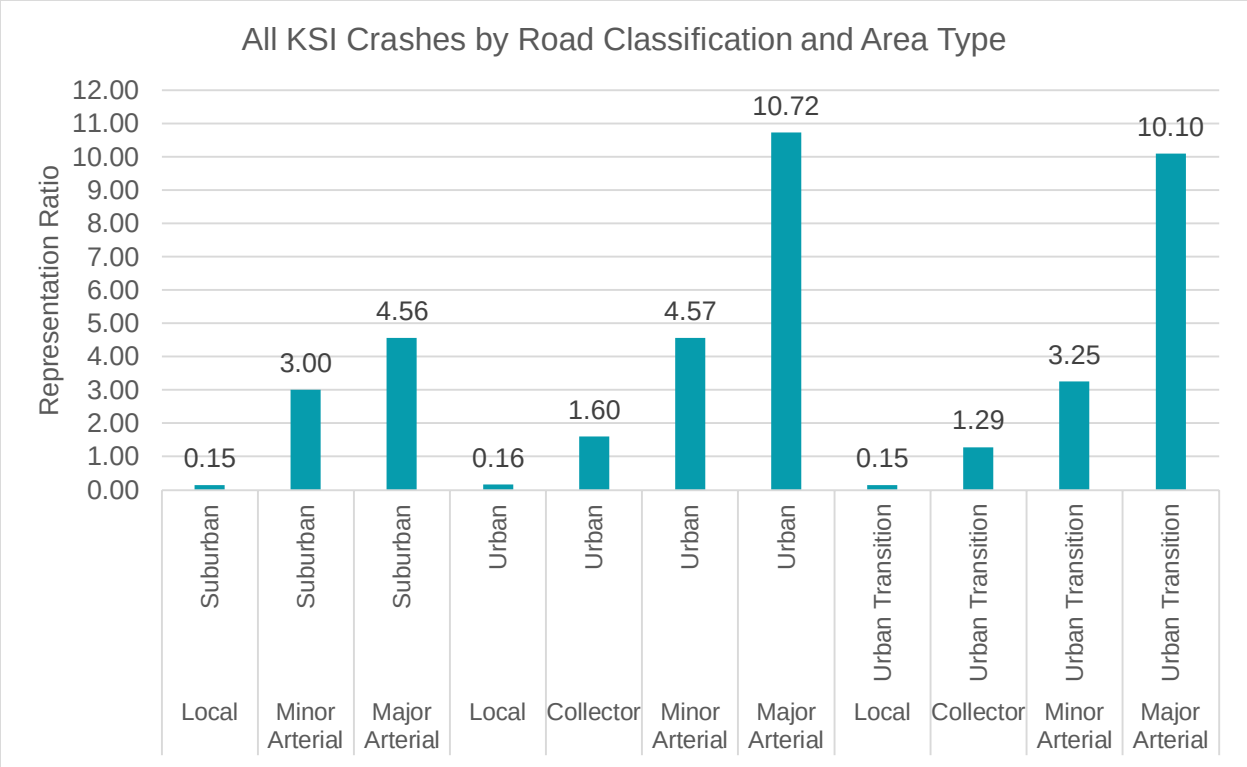

Figure 12: Representation Ratio of All KSI Crashes by Road Classification and Area Type (2015 - 2019)

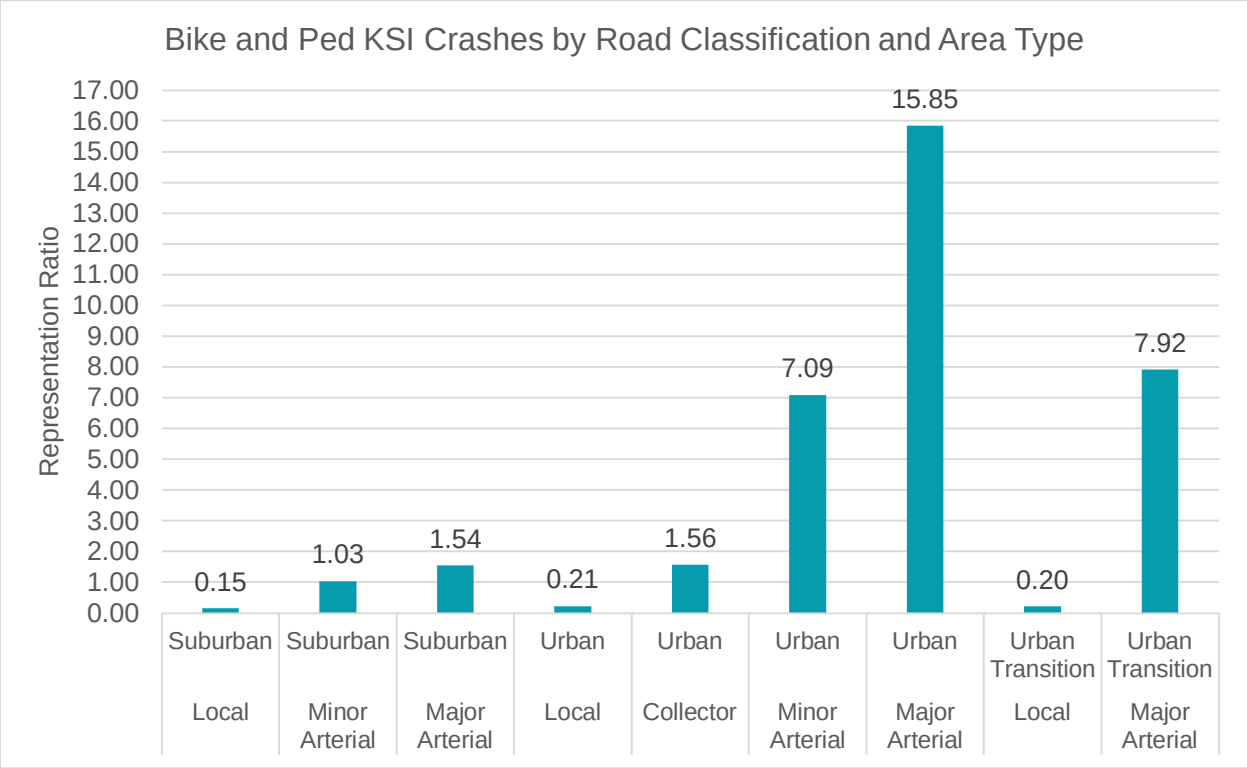

Figure 13: Representation Ratio of Bike and Ped KSI Crashes by Road Classification and Area Type (2015 - 2019)

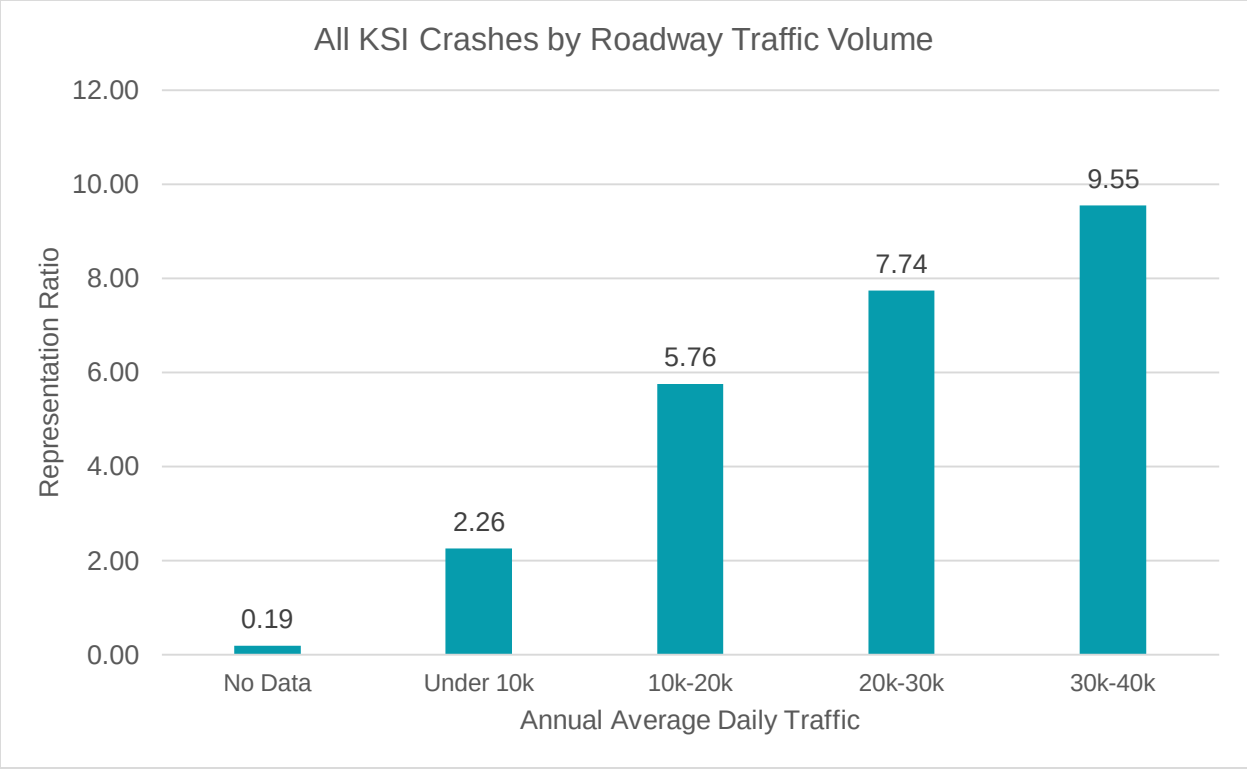

Figure 14: Representation Ratio of All KSI Crashes by Roadway Traffic Volume (2015 - 2019)

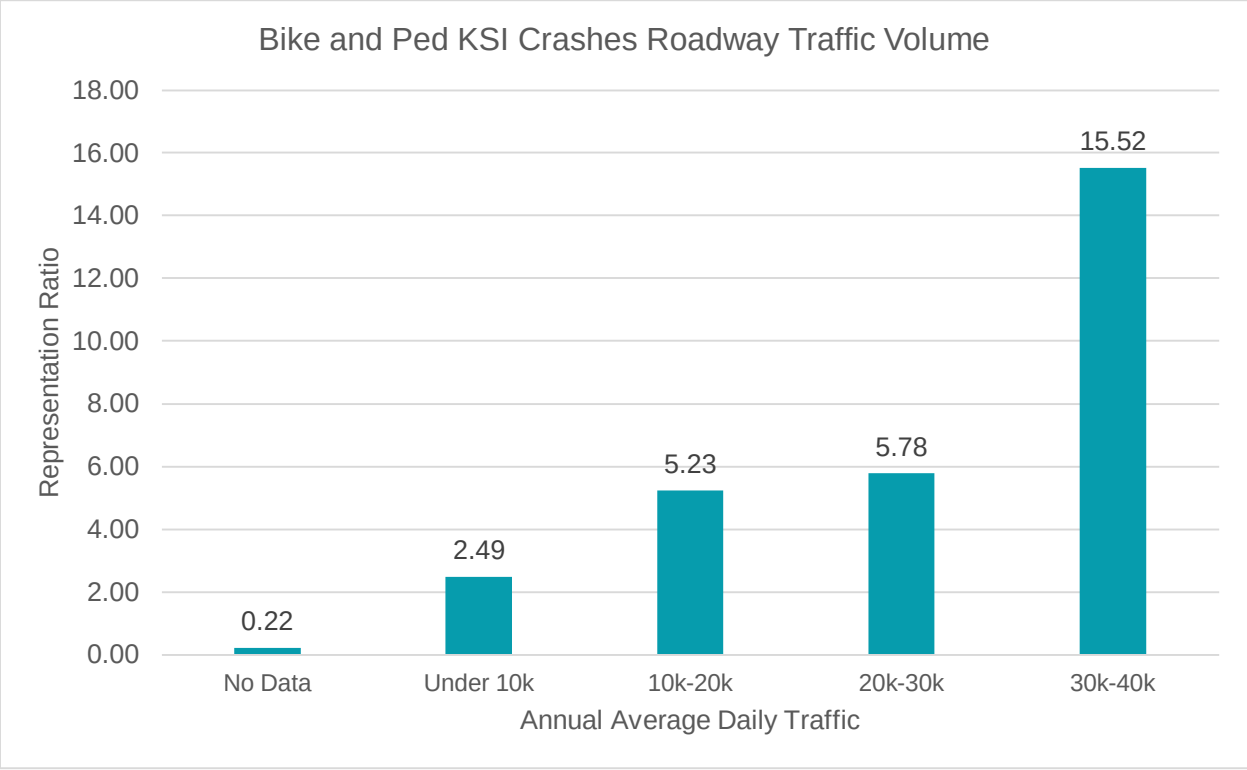

Figure 15: Representation Ratio of Bike and Ped KSI Crashes by Roadway Traffic Volume (2015 - 2019)

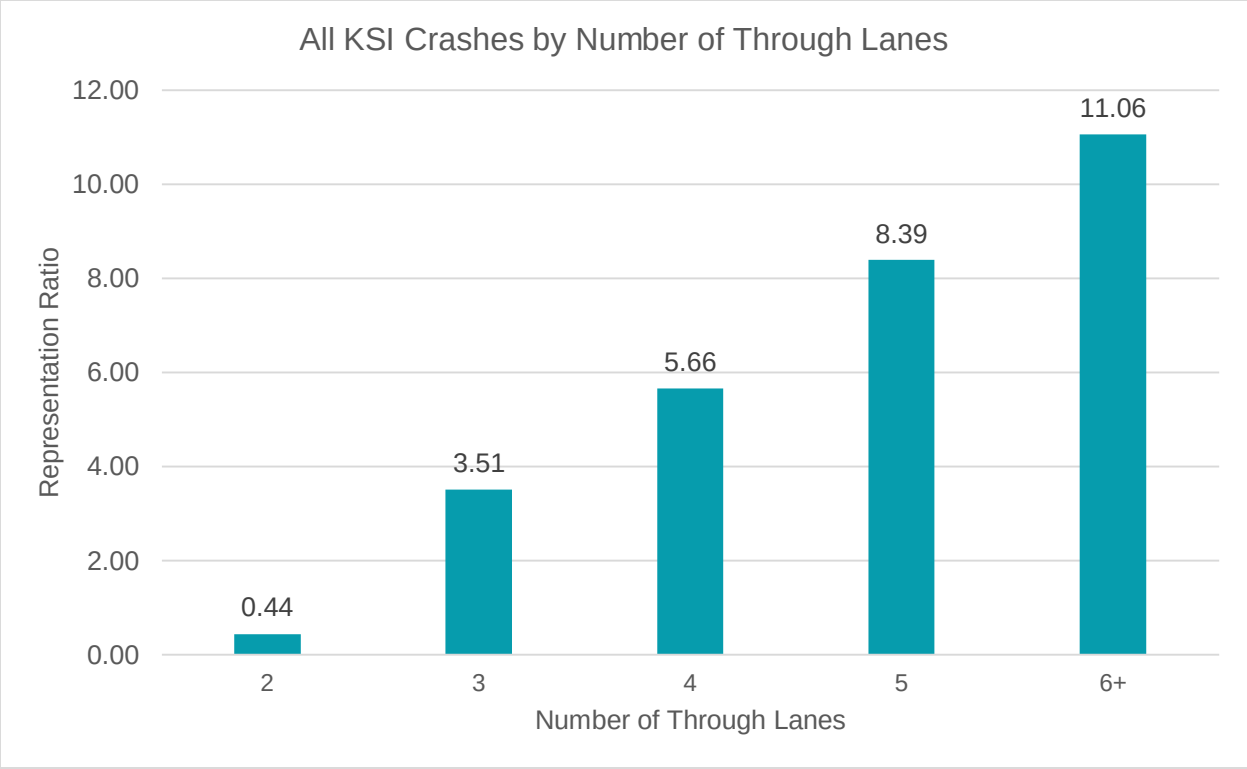

Figure 16: Representation Ratio of All KSI Crashes by Number of Through Lanes (2015 - 2019)

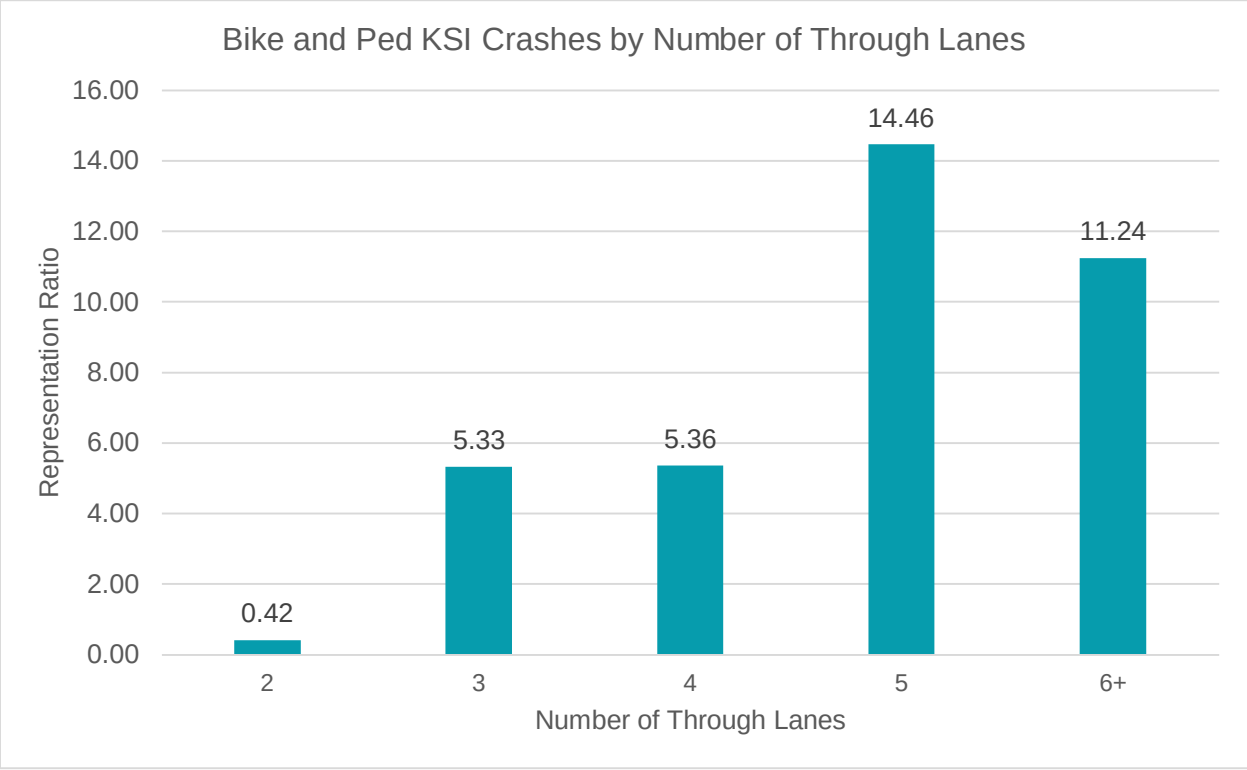

Figure 17: Representation Ratio of Bike and Ped KSI Crashes by Number of Through Lanes (2015 - 2019)

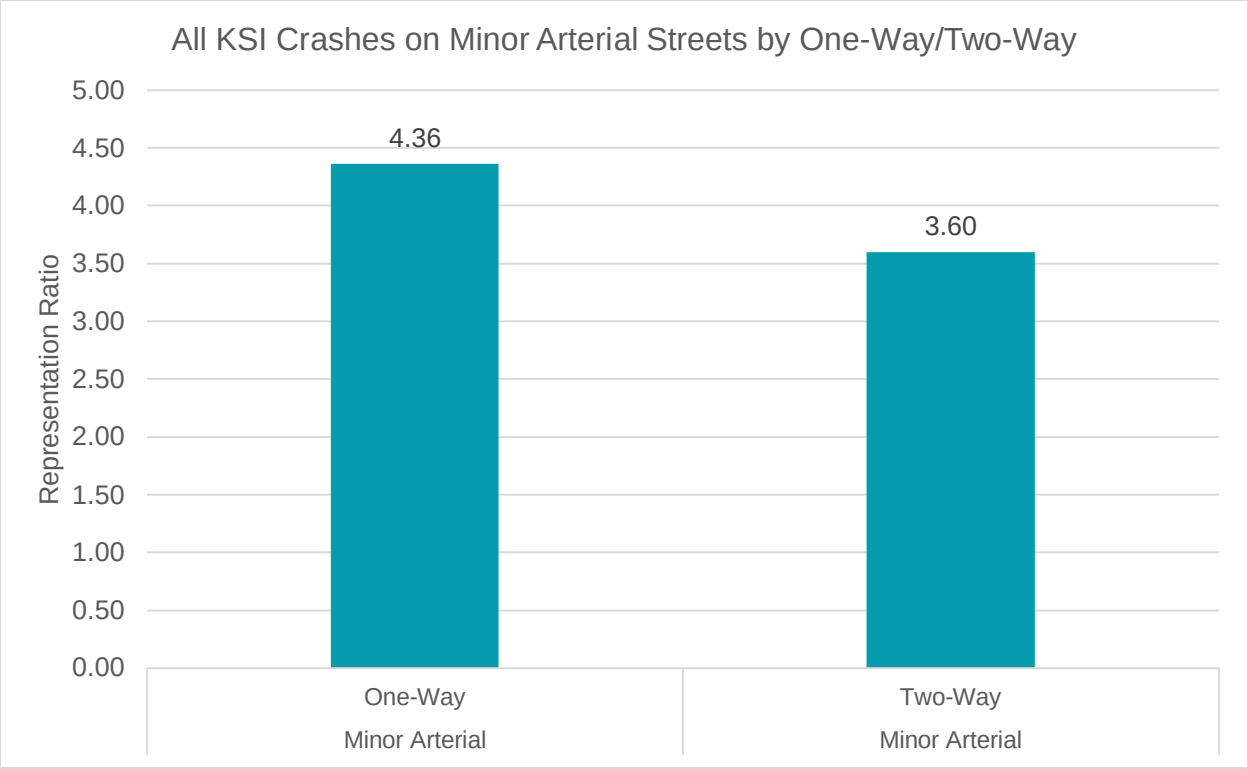

Figure 18: Representation Ratio of All KSI Crashes on Minor Arterial Streets by One-Way/Two-Way (2015 - 2019)

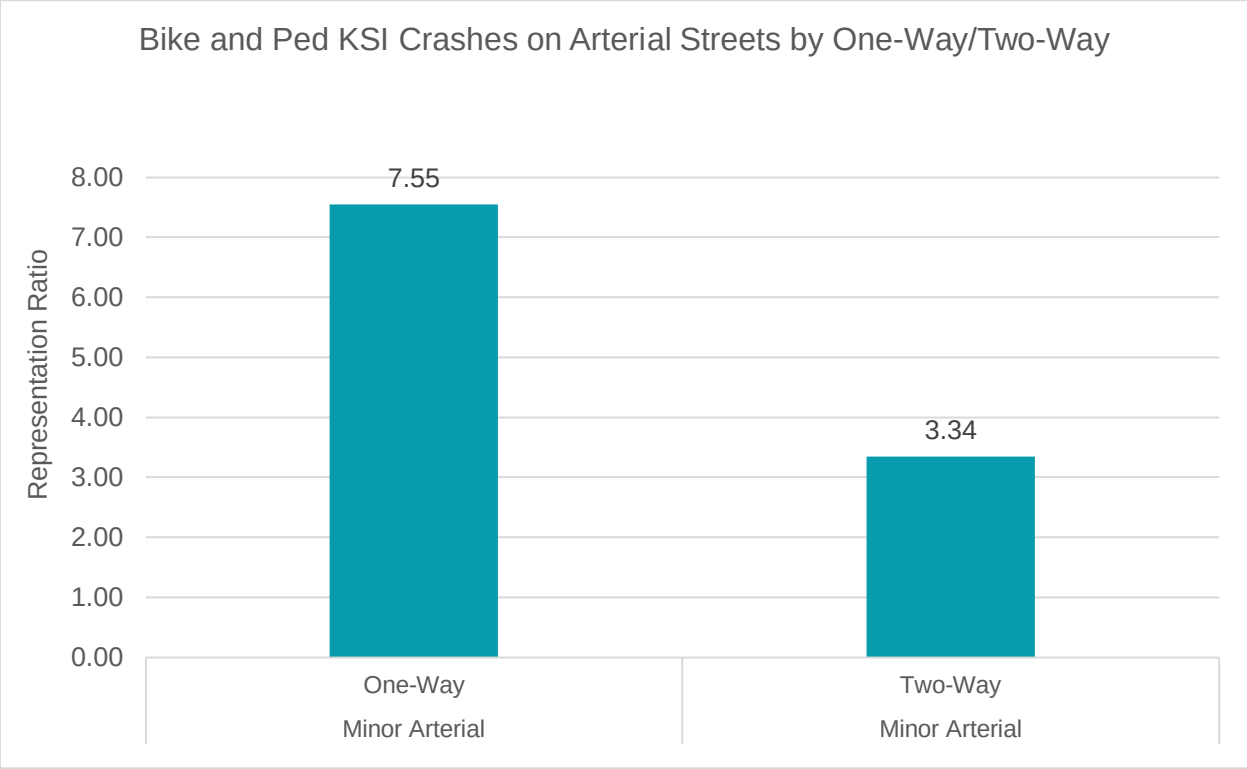

Figure 19: Representation Ratio of Bike and Ped KSI Crashes on Minor Arterial Streets by One-Way/Two-Way (2015 - 2019)

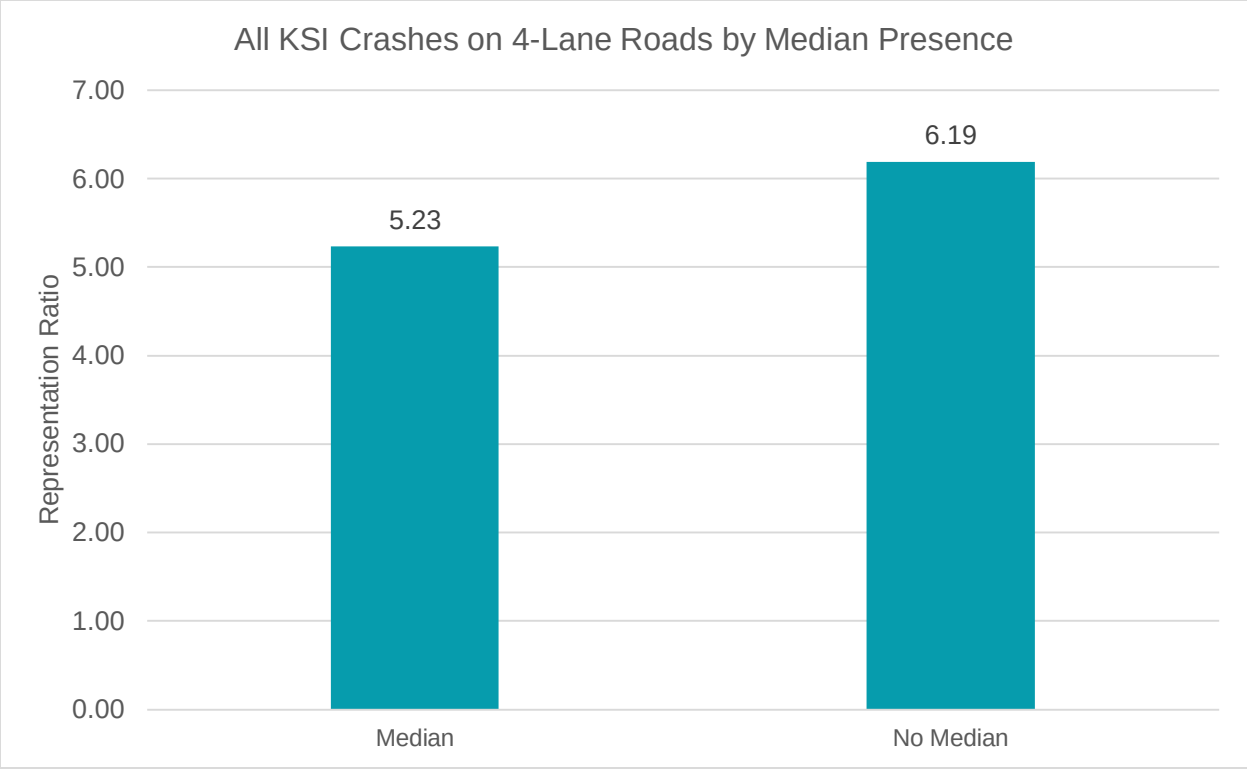

Figure 20: Representation Ratio of All KSI Crashes on 4-Lane Roads by Median Presence (2015 - 2019)

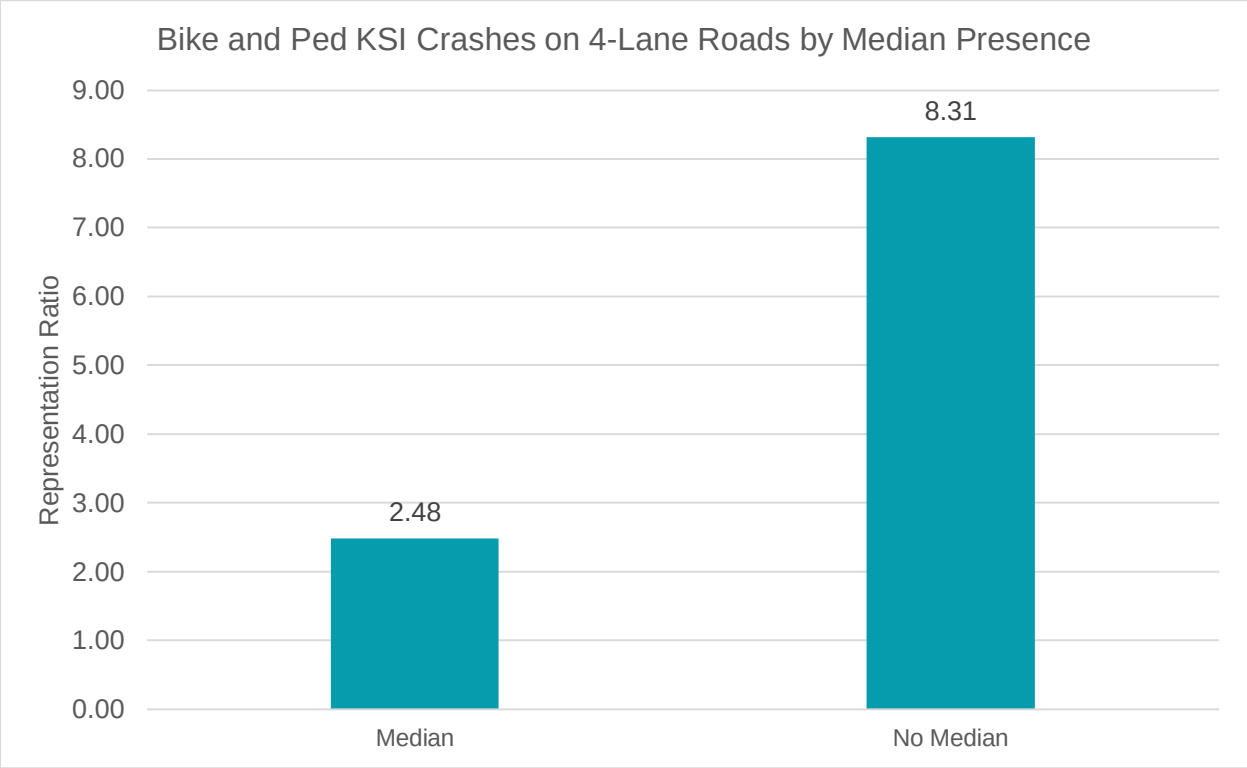

Figure 21: Representation Ratio of Bike and Ped KSI Crashes on 4-Lane Roads by Median Presence (2015 - 2019)

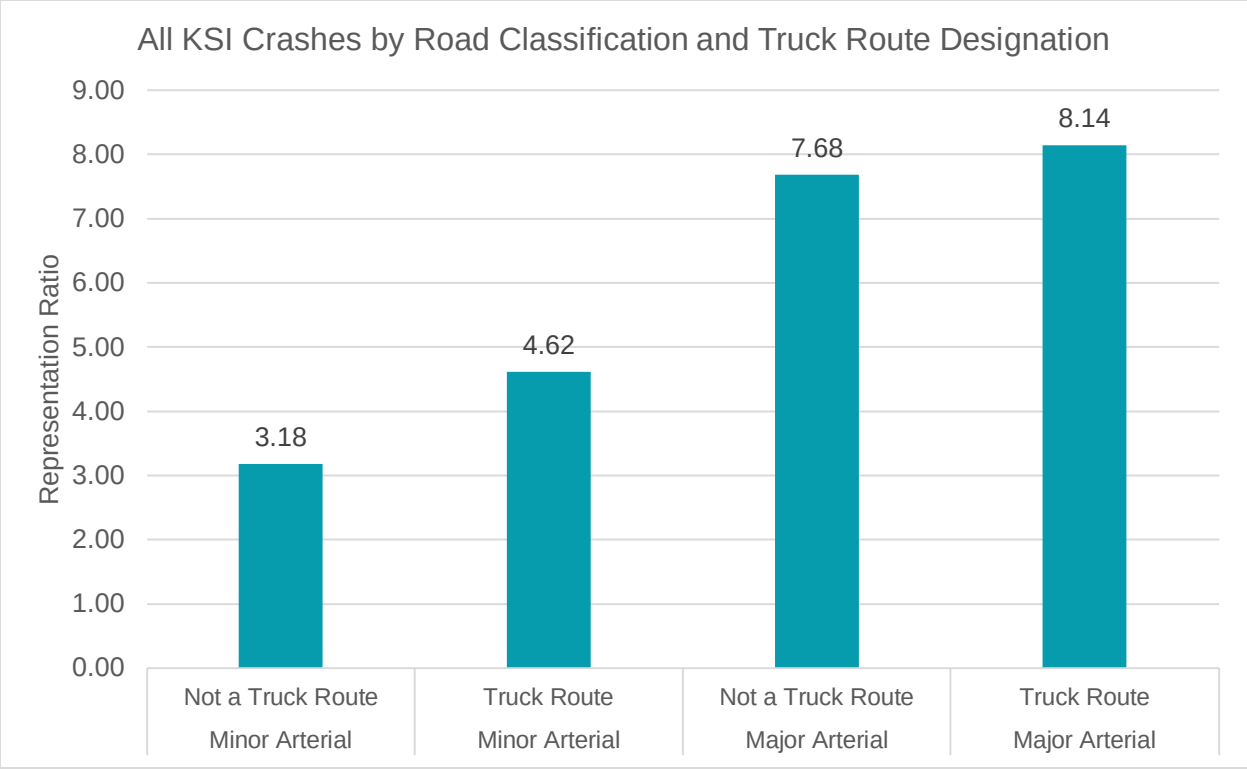

Figure 22: Representation Ratio of All KSI Crashes by Road Classification and Truck Route Designation (2015 - 2019)

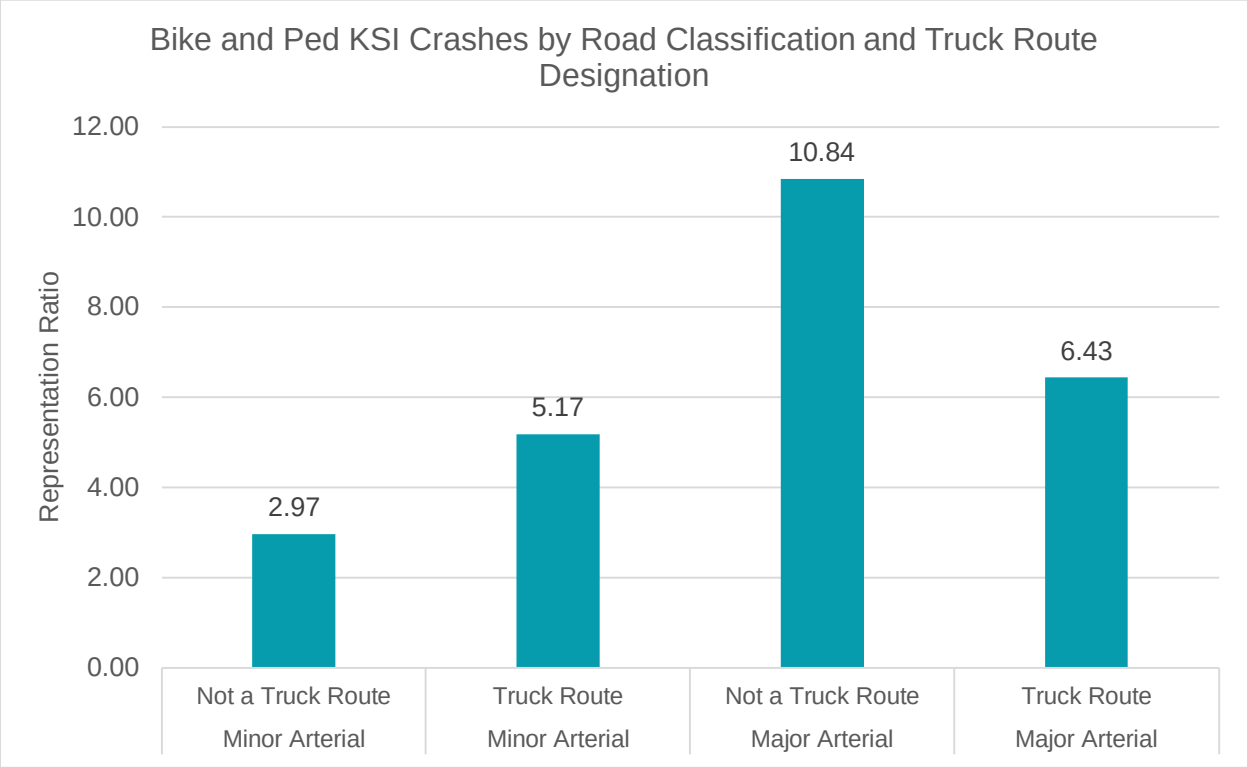

Figure 23: Representation Ratio of Bike and Ped KSI Crashes by Road Classification and Truck Route Designation (2015 - 2019)

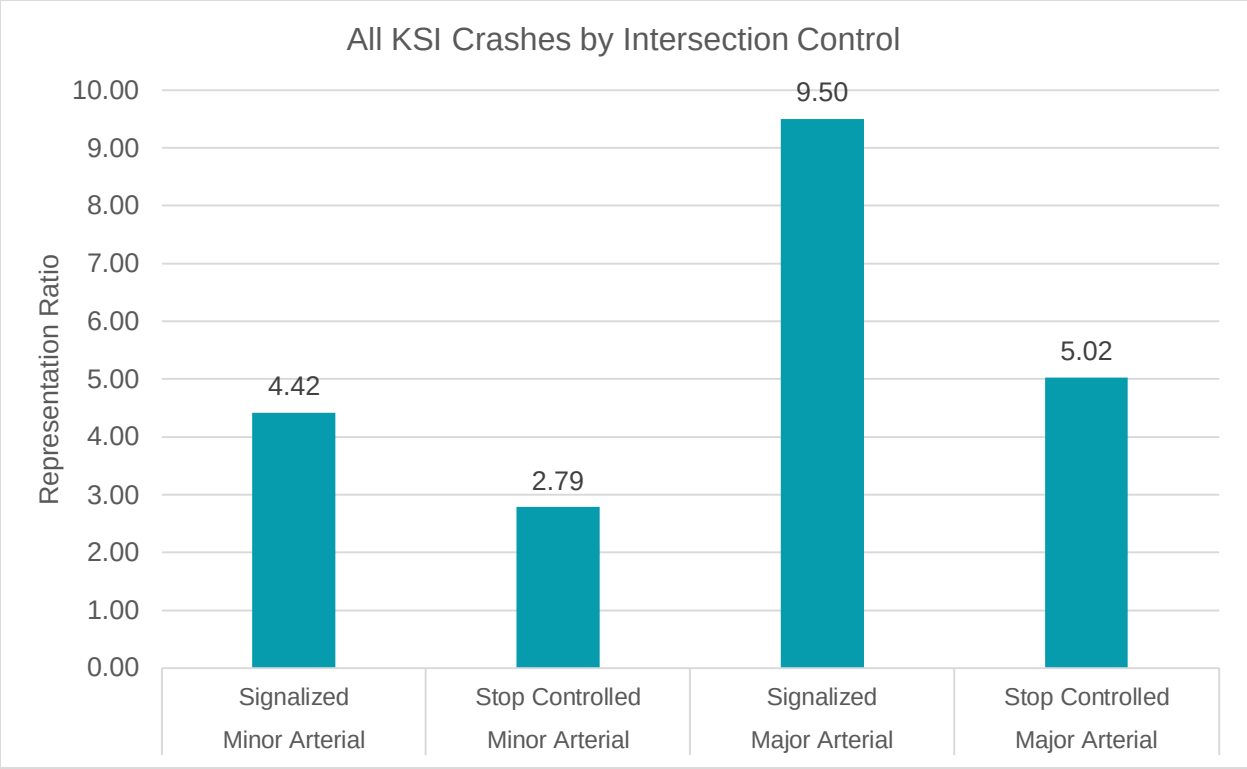

Figure 24: Representation Ratio of All KSI Crashes by Intersection Control (2015 - 2019)

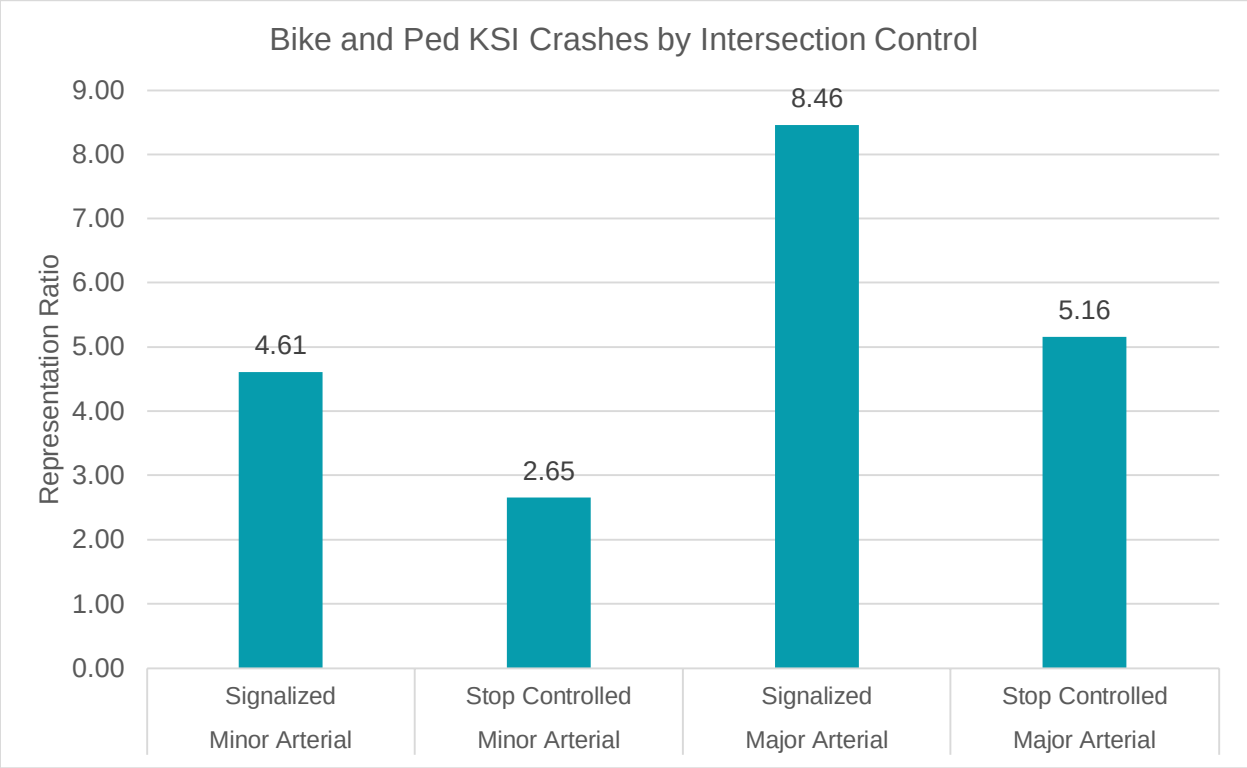

Figure 25: Representation Ratio of Bike and Ped KSI Crashes by Intersection Control (2015 - 2019)

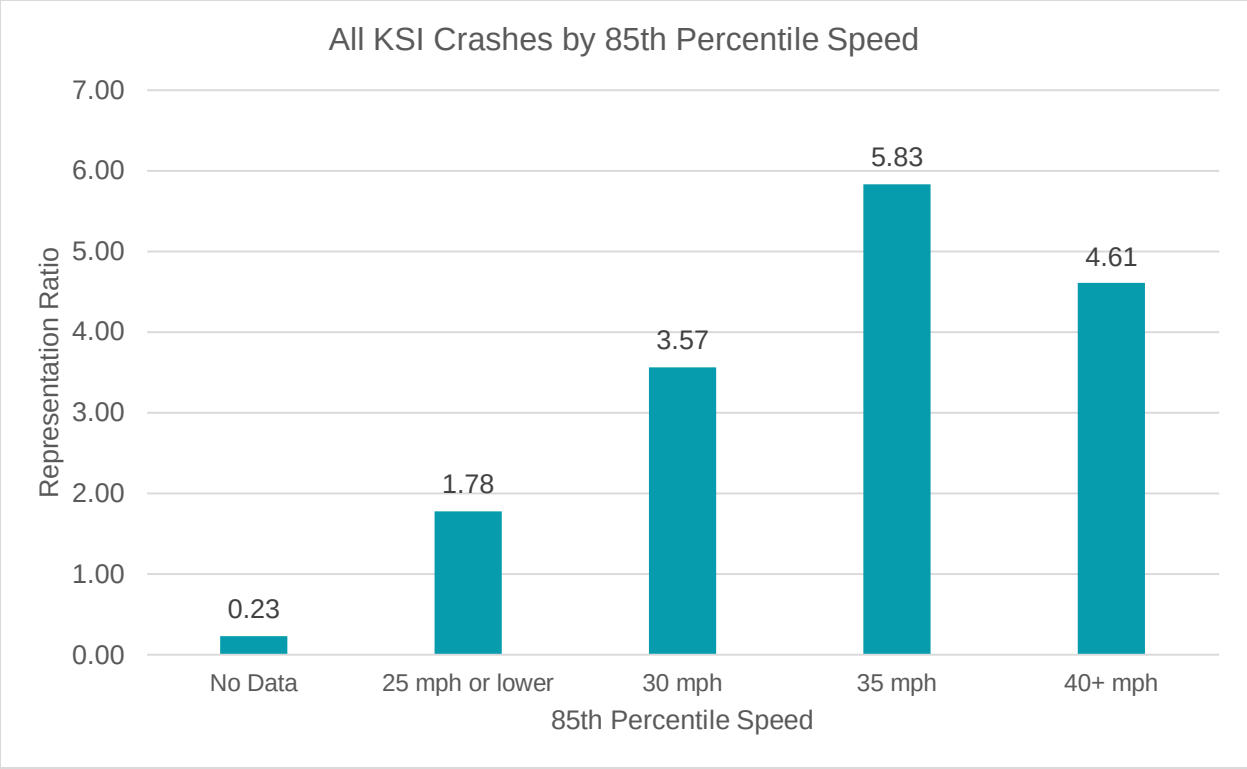

Figure 26: Representation Ratio of All KSI Crashes by Roadway Speed (2015 - 2019)

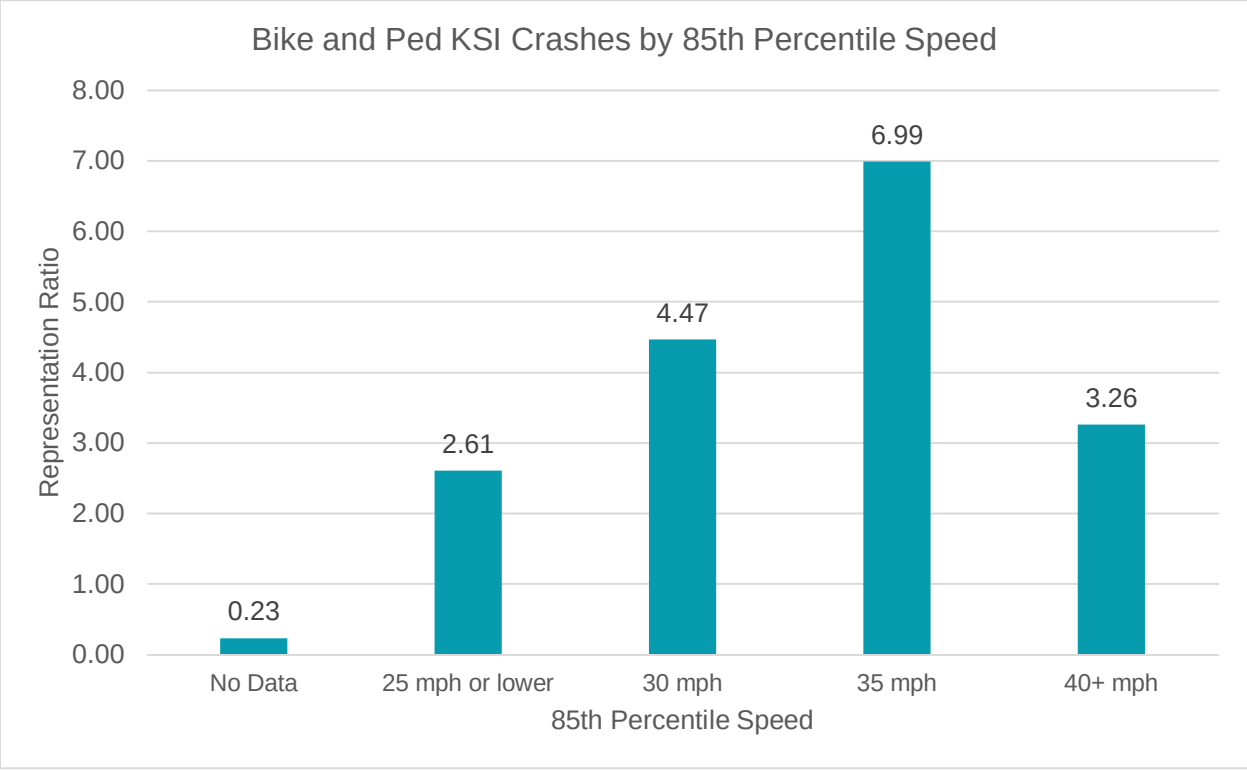

Figure 27: Representation Ratio of Bike and Ped KSI Crashes by 85th Percentile Speed (2015 - 2019)

SYSTEMIC ANALYSIS MAPS

The following maps depict the areas used for the Systemic Analysis elements related to area type, equity, and bicycle/pedestrian exposure. Area Types were defined as suburban, urban transition, and urban based on street grid layout, land use patterns, and construction year of buildings. Equity Areas utilized the United States Department of Transportation defined Transportation Disadvantaged Census Tracts, and transportation usage was obtained from proprietary Replica data.

Area Types

The Area Map of Omaha, shown in Figure 28, visually depicts the dynamic urban transition of the city, showcasing the vibrant urban core and its surrounding suburban areas, revealing the distinct characteristics and boundaries of each. This map is divided based on the area types initially described in the Area Type section of this document.

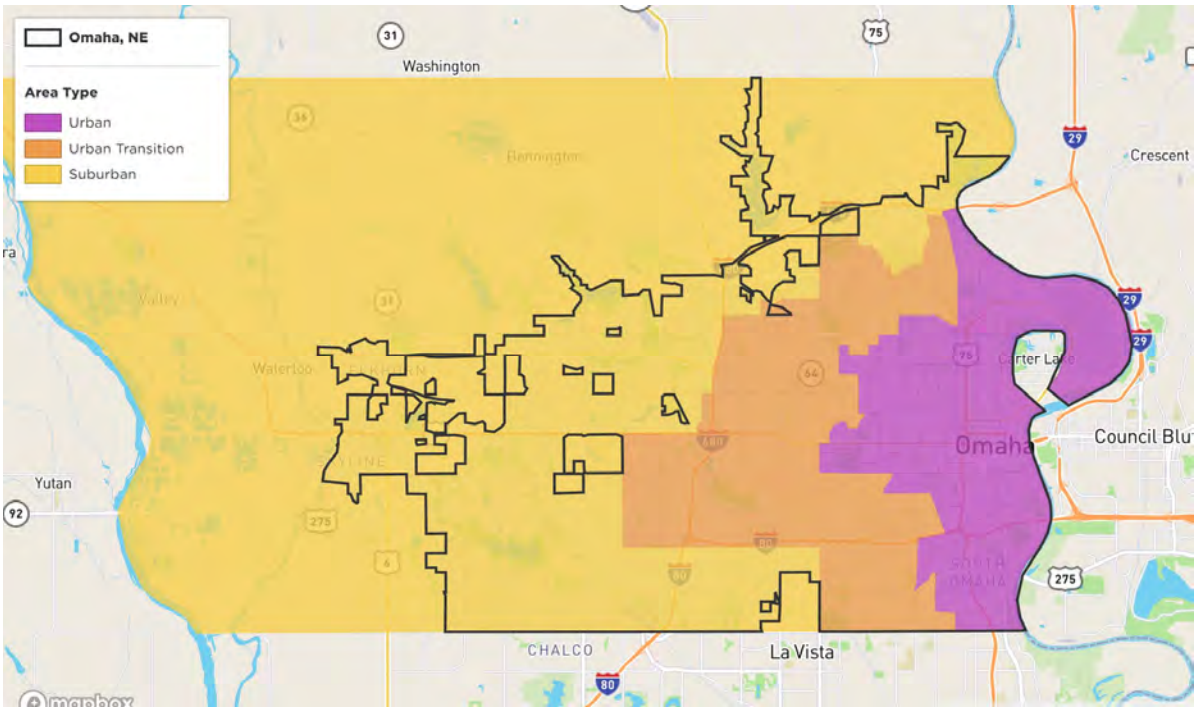

Figure 28: Area Map of Omaha

Equity Areas

The Equity Area Map of Omaha, shown in Figure 29, showcases the diverse neighborhoods and communities that make up Omaha, highlighting the distribution of resources, opportunities, and social factors across the city. Equity Areas are those areas in which the distribution of said resources and opportunities are stunted relative to more affluent areas. Unfortunately, the due to larger systemic racial issues, equity areas also line up with areas where minority populations are higher. The equity areas highlighted in this map were initially described in the Equity Area section of this document.

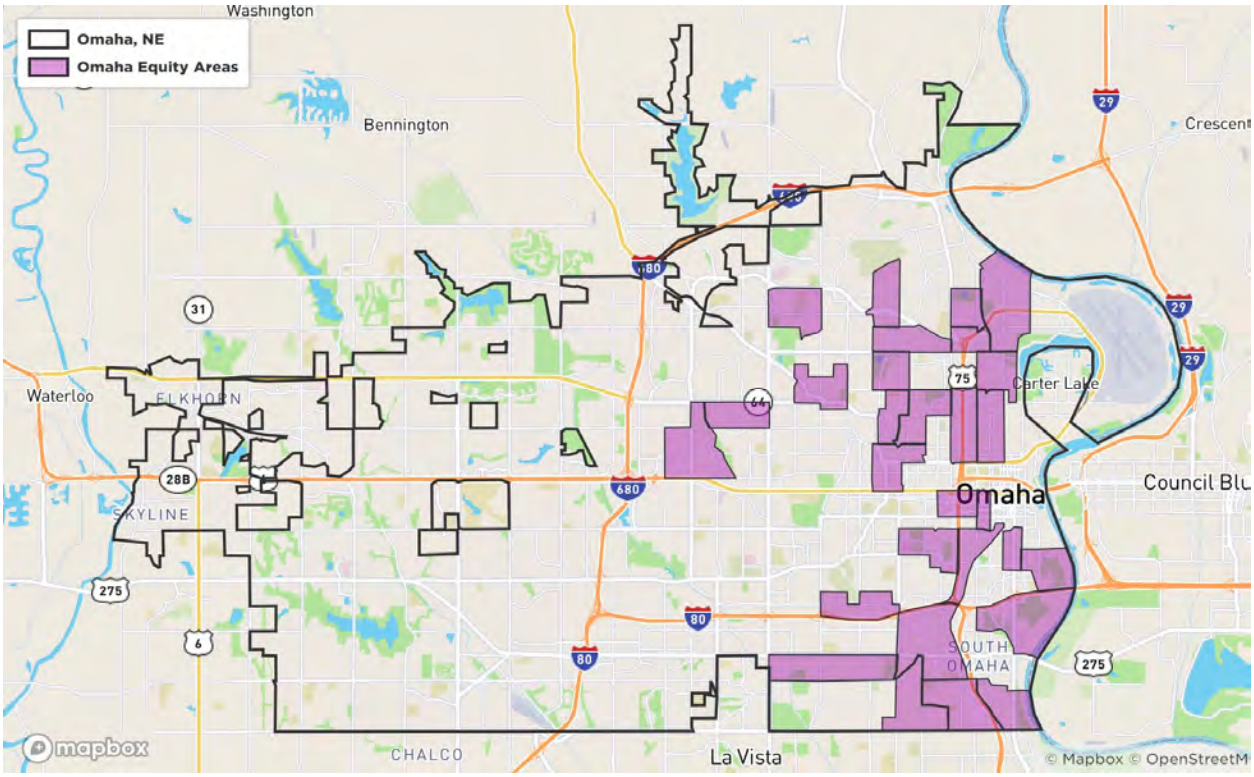

Figure 29: Equity Area Map of Omaha

CRASH STATISTICS

TRANSPORTATION MODES

The "Transportation Modes" section of the report features charts presenting "KSI Crashes by Transportation Mode" and "Percentage of Commute Mode Share." These charts allow for a comprehensive assessment of safety and popularity across different transportation modes. Analysis of the data reveals interesting insights: in Omaha, bicyclists, pedestrians, and motorcyclists are significantly overrepresented at a higher rate, while vehicles are underrepresented with a crash proportion of their mode share.

Based on the crashes by transportation mode (counted by number of victims rather than number of crashes) and the actual mode share data (based upon the Census Bureau's ACS estimates), over and under-representation can be estimated per trip. These are the estimates by mode for Omaha:

- Bicyclists = 10.3x crash proportion to mode share
- Pedestrians = 6.3x crash proportion to mode share
- Motorcyclists = 141x crash proportion to mode share
- Vehicles = 0.78x crash proportion to mode share

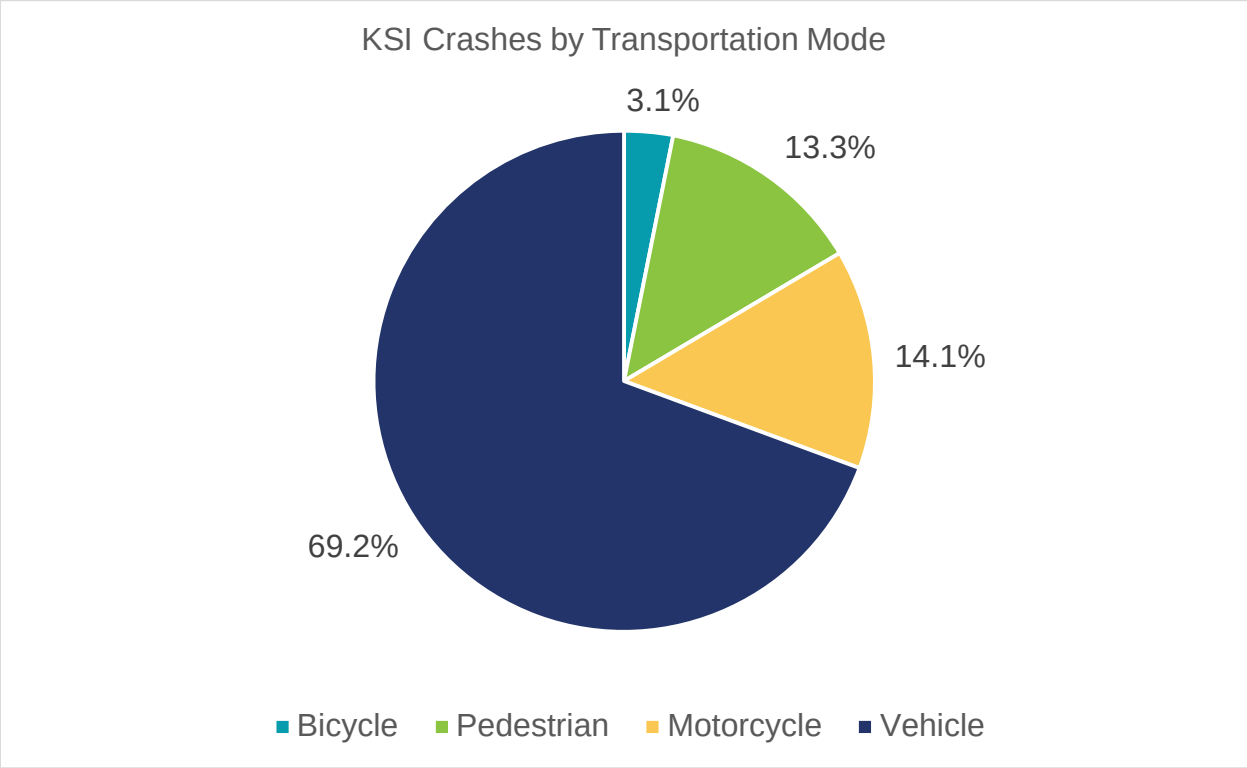

Figure 30: KSI Crashes by Transportation (2015 - 2019)

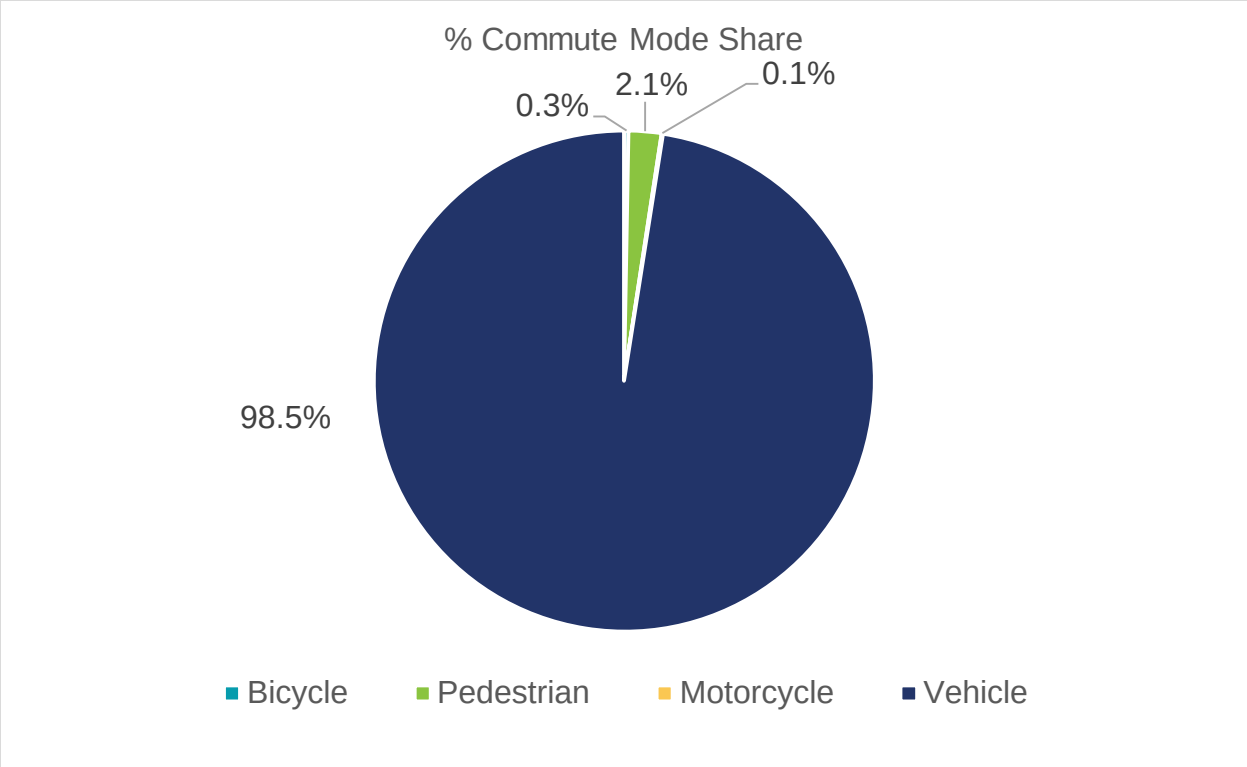

Figure 31: Percentage of Commute Mode Share (2015 - 2019)

USER FACTORS

The section titled "User Factors" presents a series of informative charts related to the demographics of Killed or Seriously Injured (KSI) crashes. Figures Figure 32 through Figure 37 include data on KSI crashes categorized by race, normalized by population, age groups, representation ratio, gender, and the distribution of crashes involving different sexes. These visuals provide a comprehensive understanding of the user factors contributing to KSI crashes and their impact on various demographic groups.

The data presented in the section offers further insights into the demographics of KSI crashes:

- White individuals have the highest number of KSI crashes; when normalized by population, Native Americans have the highest rate of KSI crashes.
- The age group of 20-24 years old experiences the highest number of KSI crashes; when adjusted for population, the 20-24 age group still has the highest rate of KSI crashes.
- Males are more likely to be involved in crashes than females across all modes of transportation.

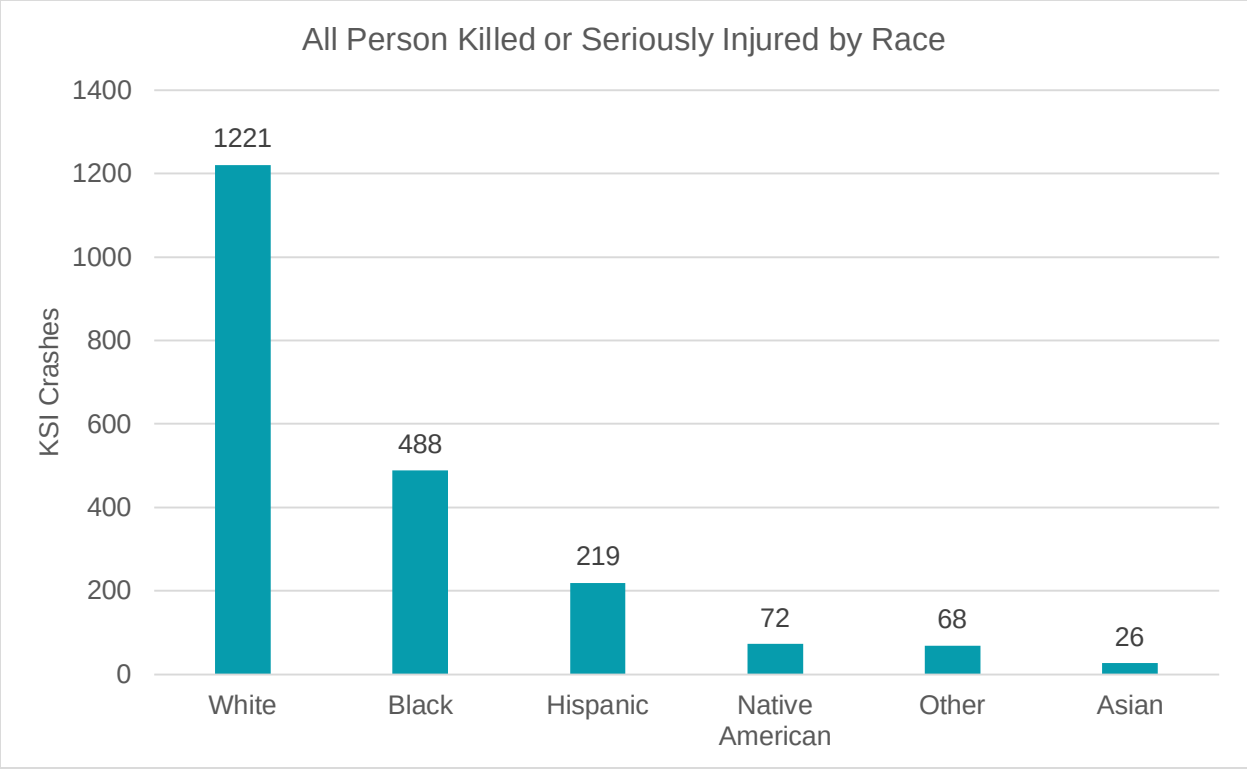

Figure 32: All KSI Crashes by Race (2015 - 2019)

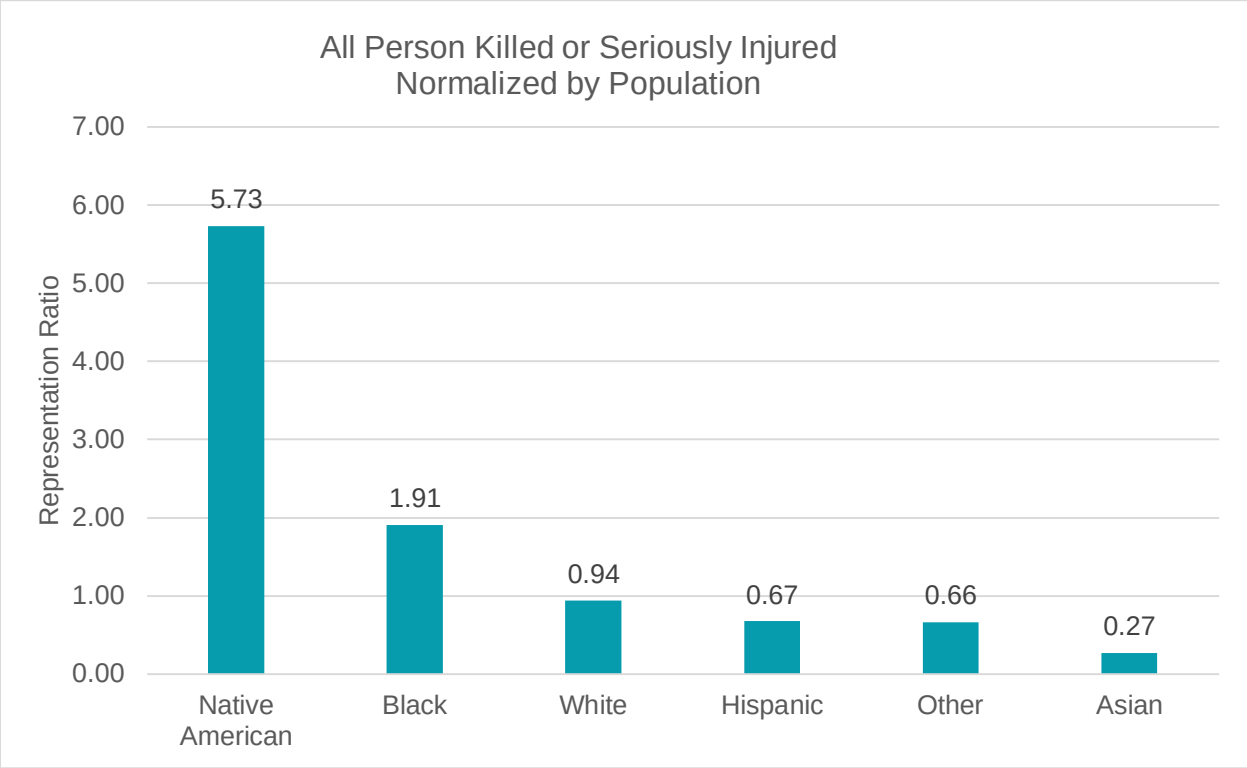

Figure 33: All KSI Crashes by Race Normalized by Population (2015 - 2019)

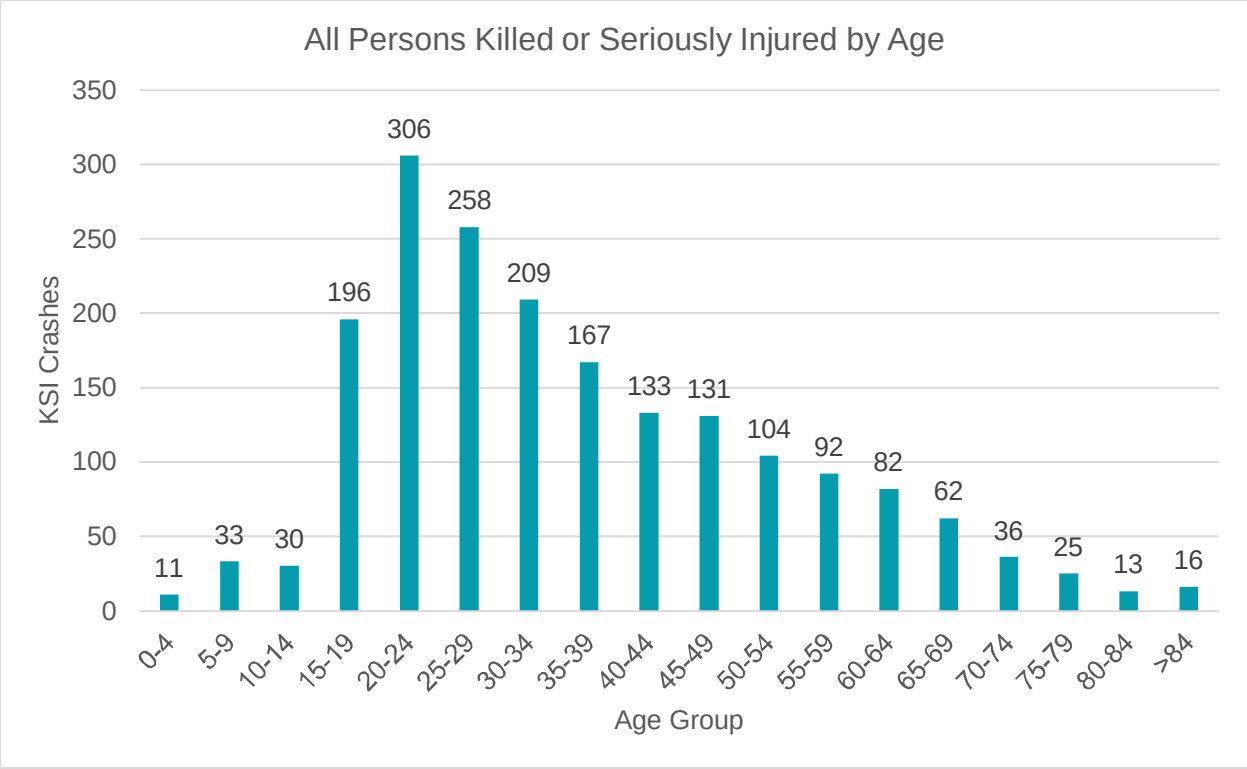

Figure 34: All KSI Crashes by Age (2015 - 2019)

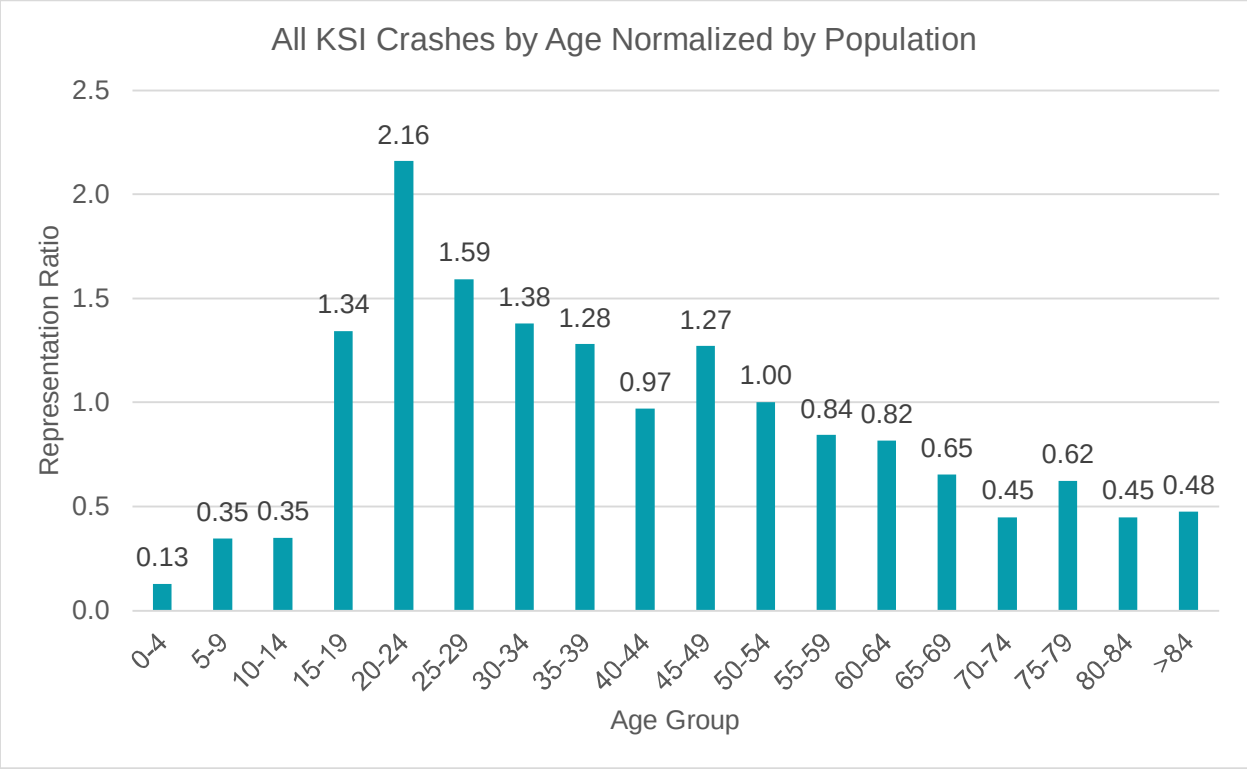

Figure 35: Representation Ratio of All KSI Crashes by Age Normalized by Population (2015 - 2019)

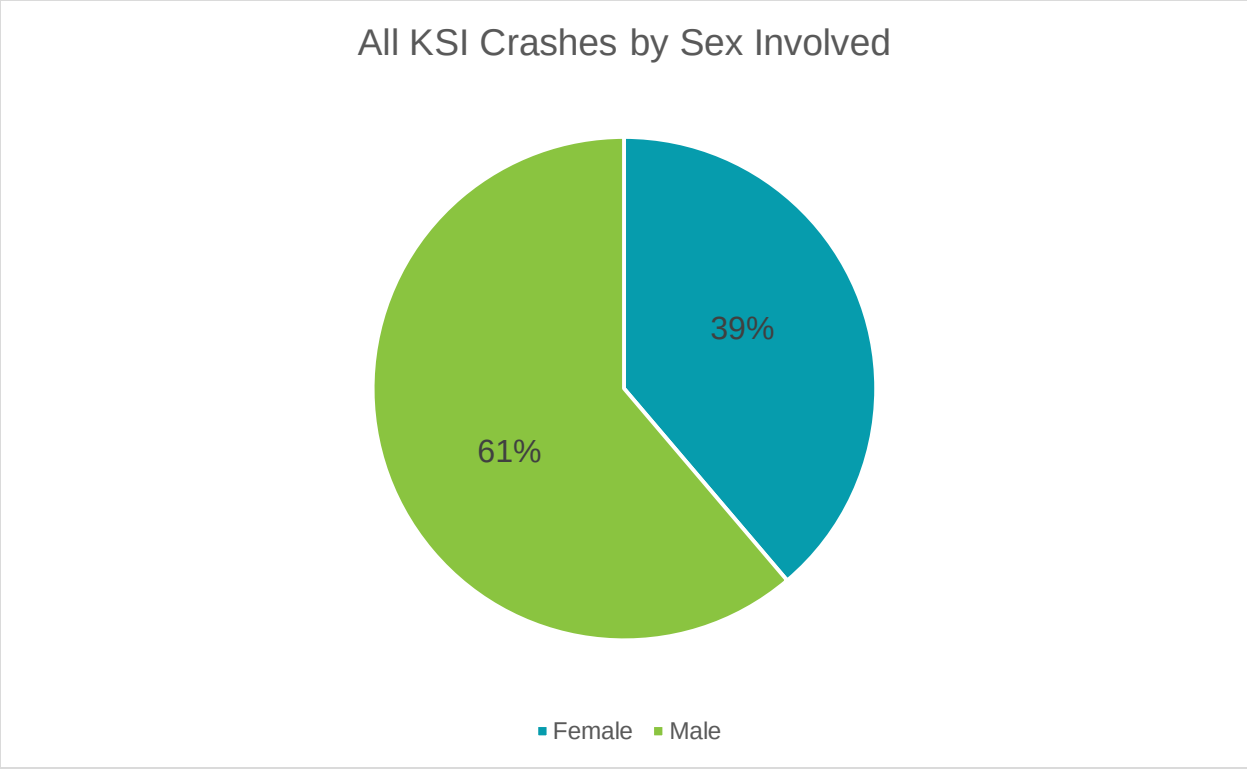

Figure 36: All KSI Crashes by Sex (2015 - 2019)

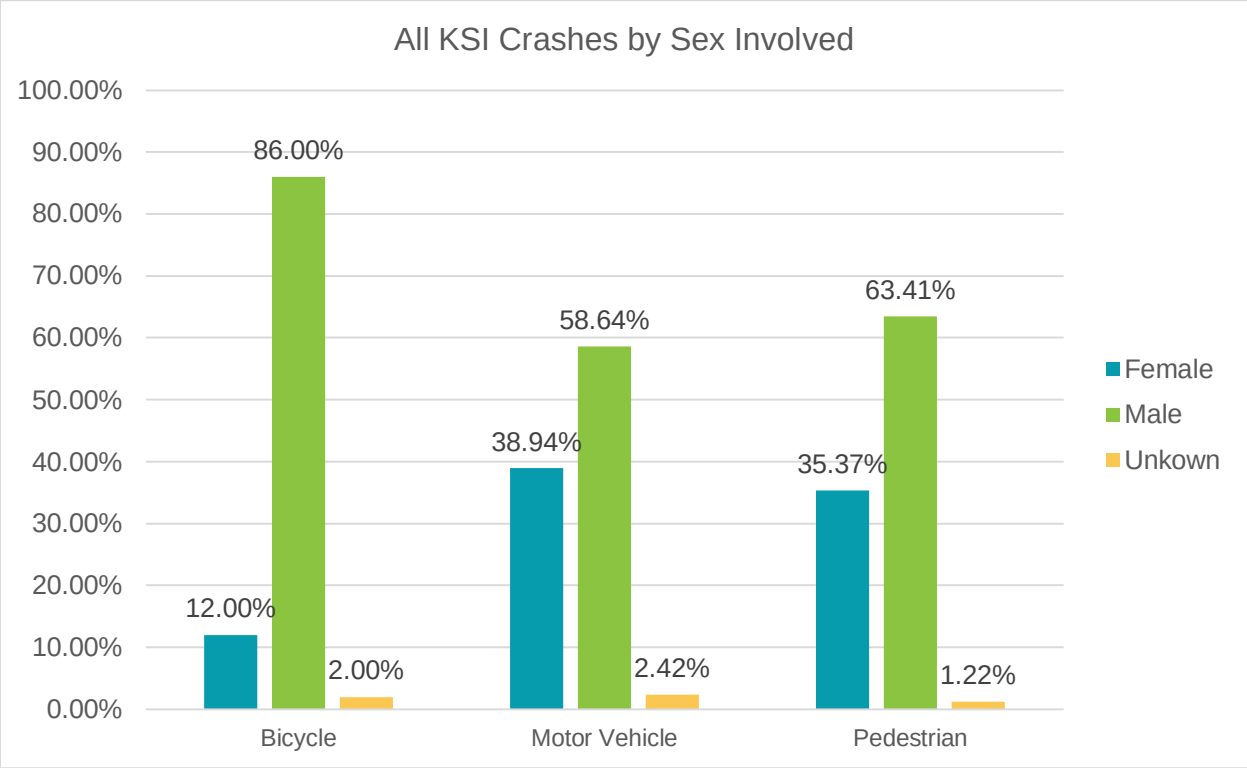

Figure 37: Distribution of All KSI Crashes by Sex Involved (2015 - 2019)

CRASH TYPES

The "Crash Types" section of the report presents a series of charts depicting various types of crashes resulting in KSI incidents. Figure 38 through Figure 42 include data on different crash types such as bicycle (pedal cycle) crashes, collisions with parked motor vehicles, overturns/rollovers, pedestrian incidents, collisions with fixed objects, and crashes involving motor vehicles in transport. Additionally, the section covers KSI crashes involving other vehicle types, KSI crashes categorized by intersection or segment, the location of pedestrians when struck in KSI crashes, and the location of bicyclists in bicycle KSI crashes.

Semi-truck and railroad crashes were analyzed. No data is shown about these crash types because of the low prevalence of them. Semi-trucks were involved in just 0.3% of all KSI crashes and railroads were not involved in any KSI crashes.

From the data, it was gathered that:

- Motor vehicle in transport is the most common type of crash resulting in killed or seriously injured (KSI) incidents.
- Collisions at an angle with other vehicles have the highest percentage among KSI crashes involving other vehicle types.
- Segment-related crashes are more prevalent than intersection-related crashes in the overall category of all KSI crashes by intersection or segment.
- Most pedestrians involved in KSI crashes are struck while in the roadway.
- For bicycle KSI crashes, the most common location for cyclists is also on the roadway.

It should be noted that all categories were defined by the Nebraska DOT and left as they are reported from the police crash reports.

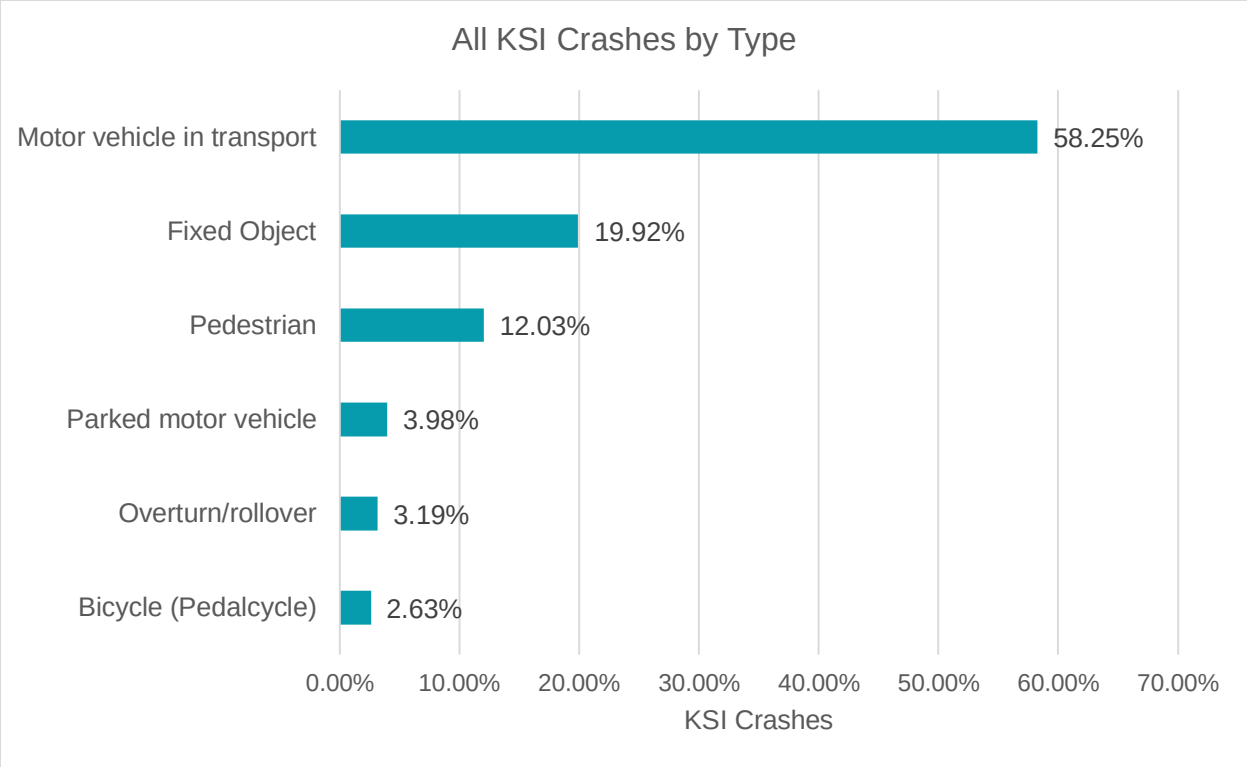

Figure 38: All KSI Crash Types (2015 - 2019)

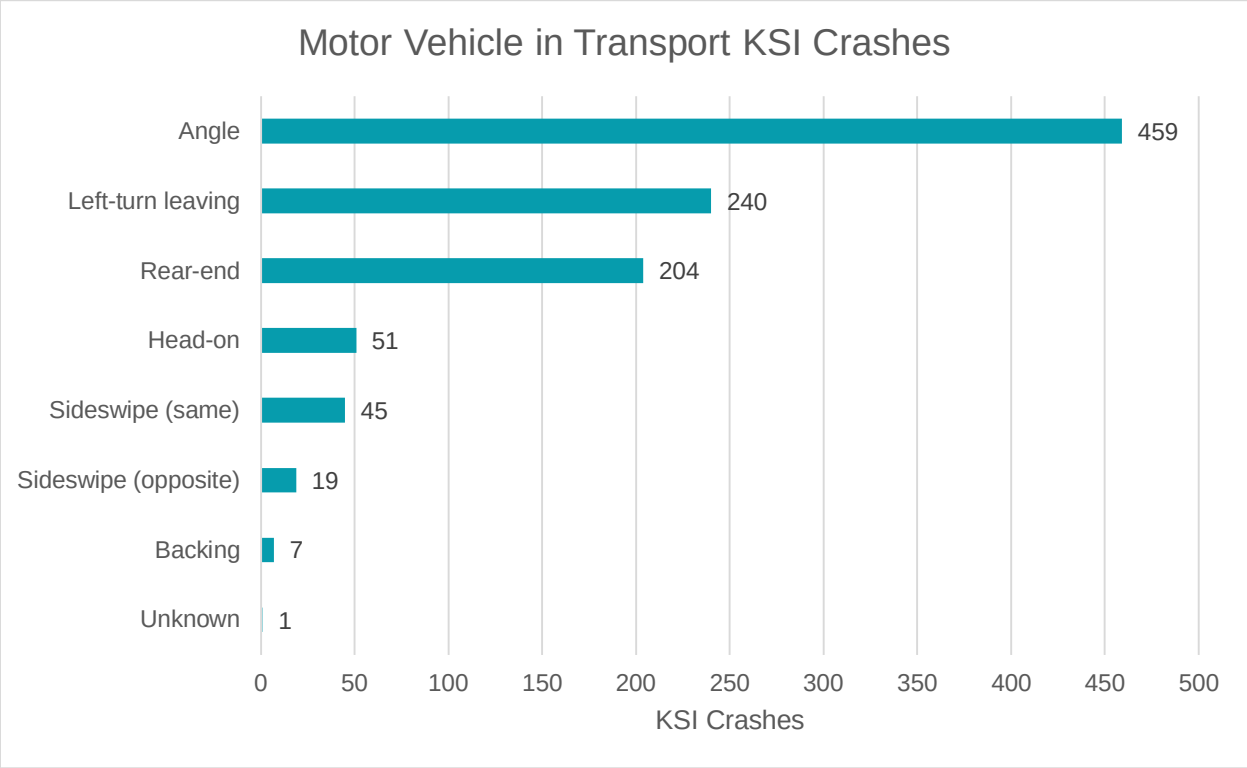

Figure 39: All KSI Crashes with Other Vehicle Types (2015 - 2019)

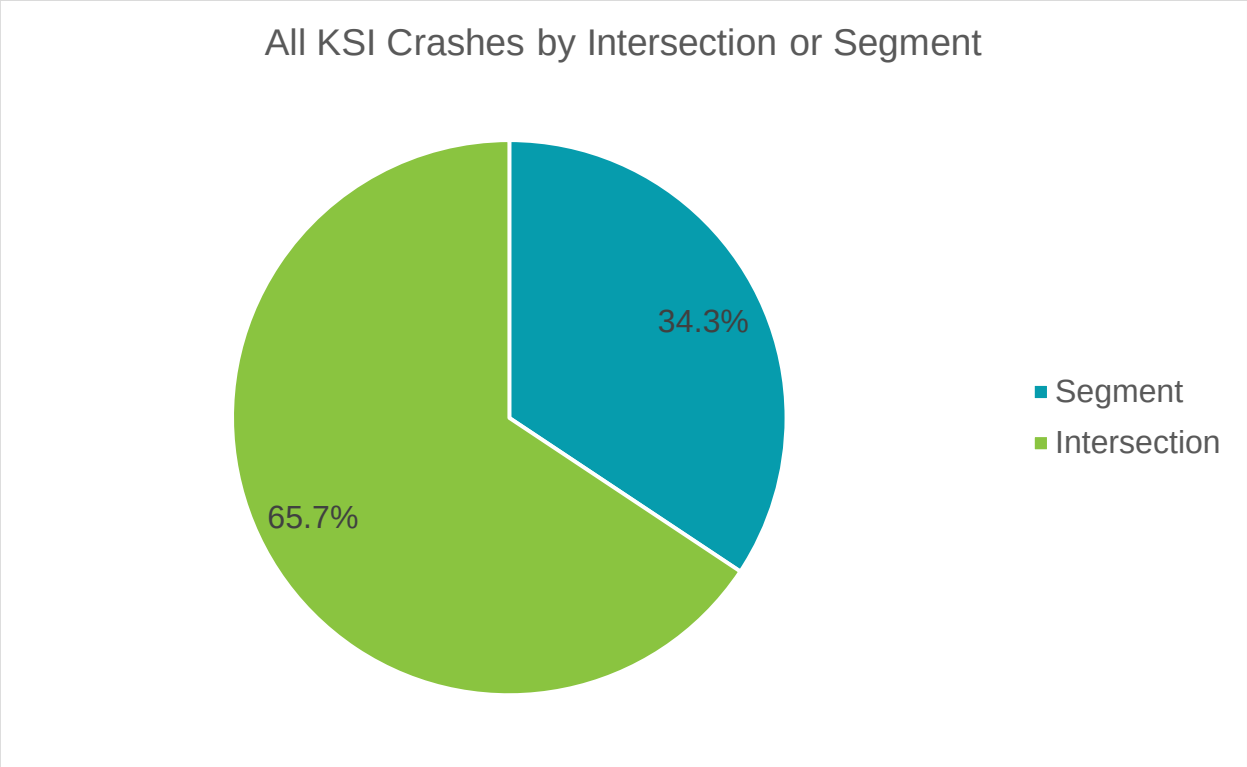

Figure 40: All KSI Crashes by Intersection or Segment (2015 - 2019)

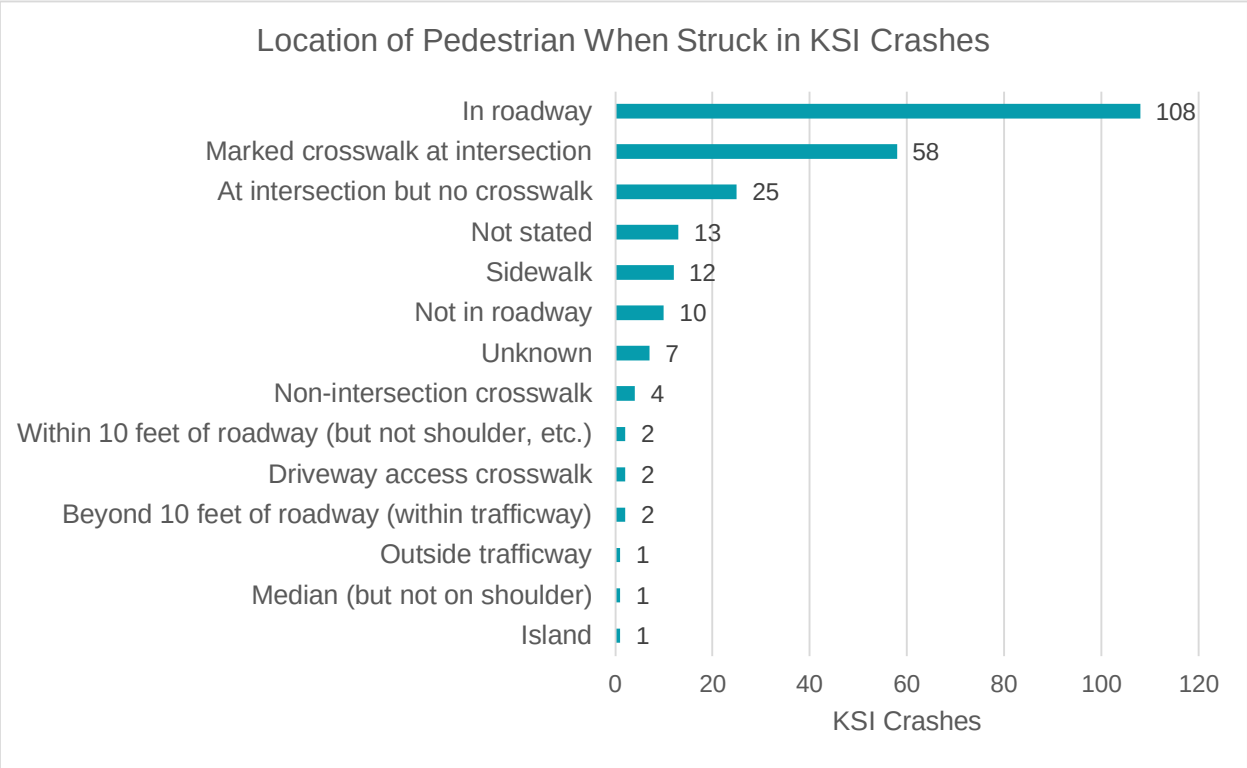

Figure 41: Location of Pedestrian When Struck in KSI Crashes (2015 - 2019)

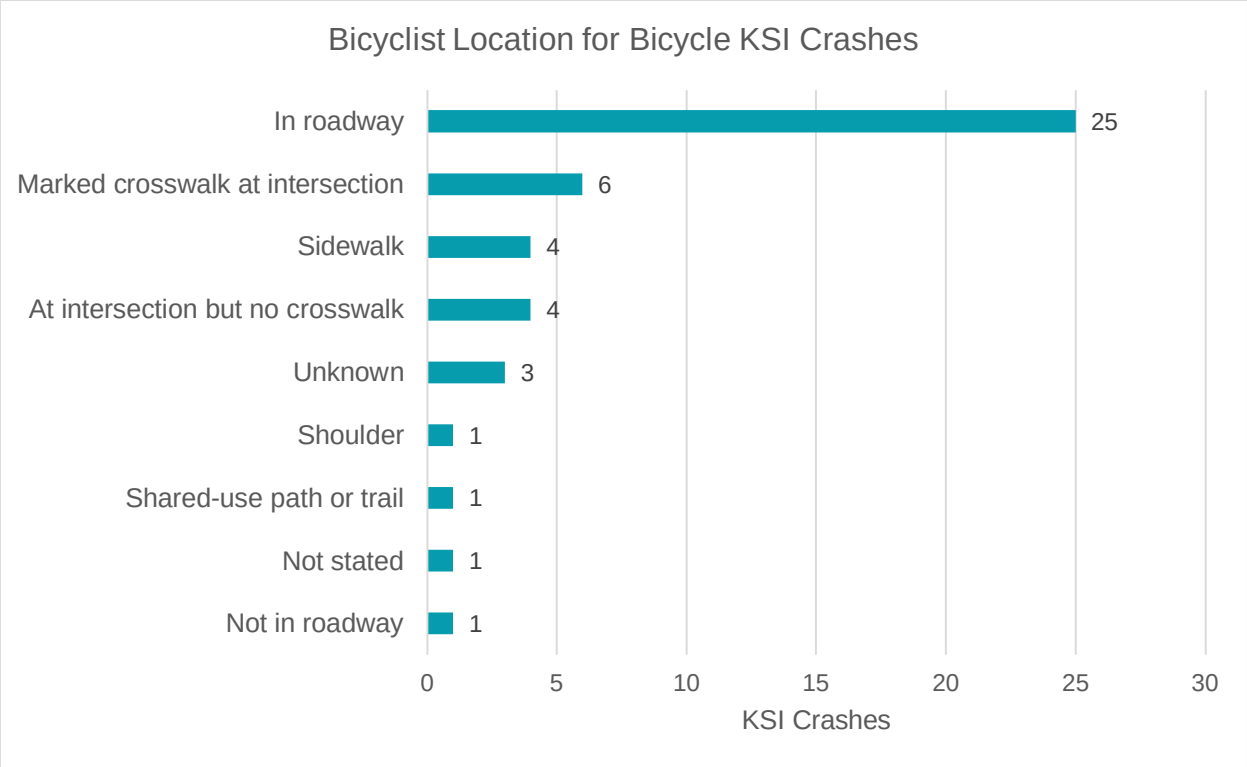

Figure 42: Bicyclist Location for Bicycle KSI Crashes (2015 - 2019)

BEHAVIORAL FACTORS

The section on "Behavioral Factors" in the report examines various aspects of driver, pedestrian, and cyclist behavior in relation to Killed or Seriously Injured (KSI) crashes. The contributing factors are noted by law enforcement responding to the crashes. Figure 43 through Figure 54 within this section provide valuable insights into different contributing behaviors, such as alcohol impairment, seatbelt usage, helmet usage, and the impact of weather, work zones, and lighting conditions on KSI crashes. These charts aim to present a comprehensive overview of the behavioral factors that play a role in these types of accidents.

- Contributing Behavior in All KSI Crashes: Most crashes didn't involve improper driving.
- Contributing Behavior in Pedestrian KSI Crashes: Most common cause was improper crossing by pedestrians.
- Bicyclists KSI Crashes and Contributing Behavior: Most common cause was improper crossing.
- Pedestrian KSI Crashes and Pedestrian Action: Most common cause was improper crossing.
- Alcohol Impairment of Drivers Involved in All KSI Crashes: Most people were not impaired.
- Vehicle Occupant Seatbelt Usage in All KSI Crashes: Most people used seatbelts (data with known seatbelt status).
- Motorcyclist Helmet Usage in KSI Crashes: Most people used helmets.
- All KSI Crashes by Weather: Most common weather condition was clear.
- All KSI Crashes by Work Zone: Majority of crashes didn't occur in work zones.
- All KSI Crashes by Lighting Condition: Most common lighting condition was daylight.

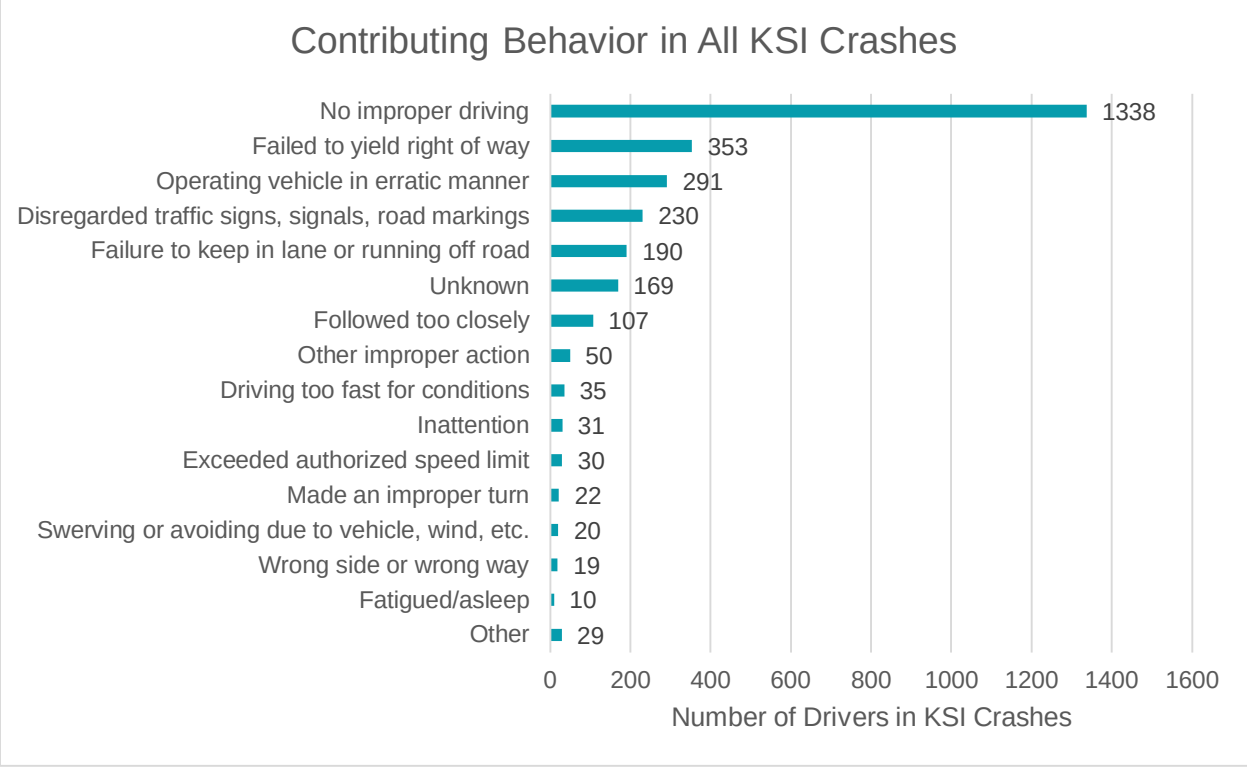

Figure 43: All KSI Crashes and Contributing Behavior (2015 - 2019)

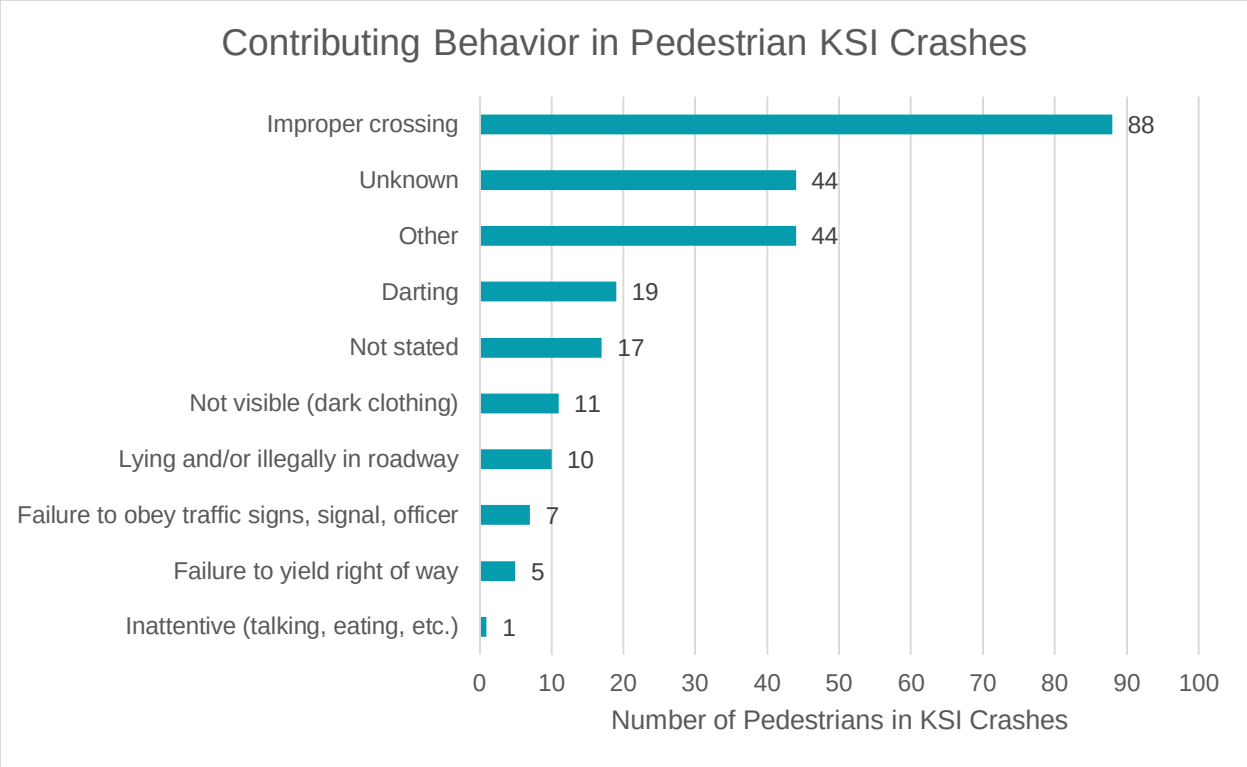

Figure 44: Pedestrian KSI Crashes Contributing Behavior (2015 - 2019)

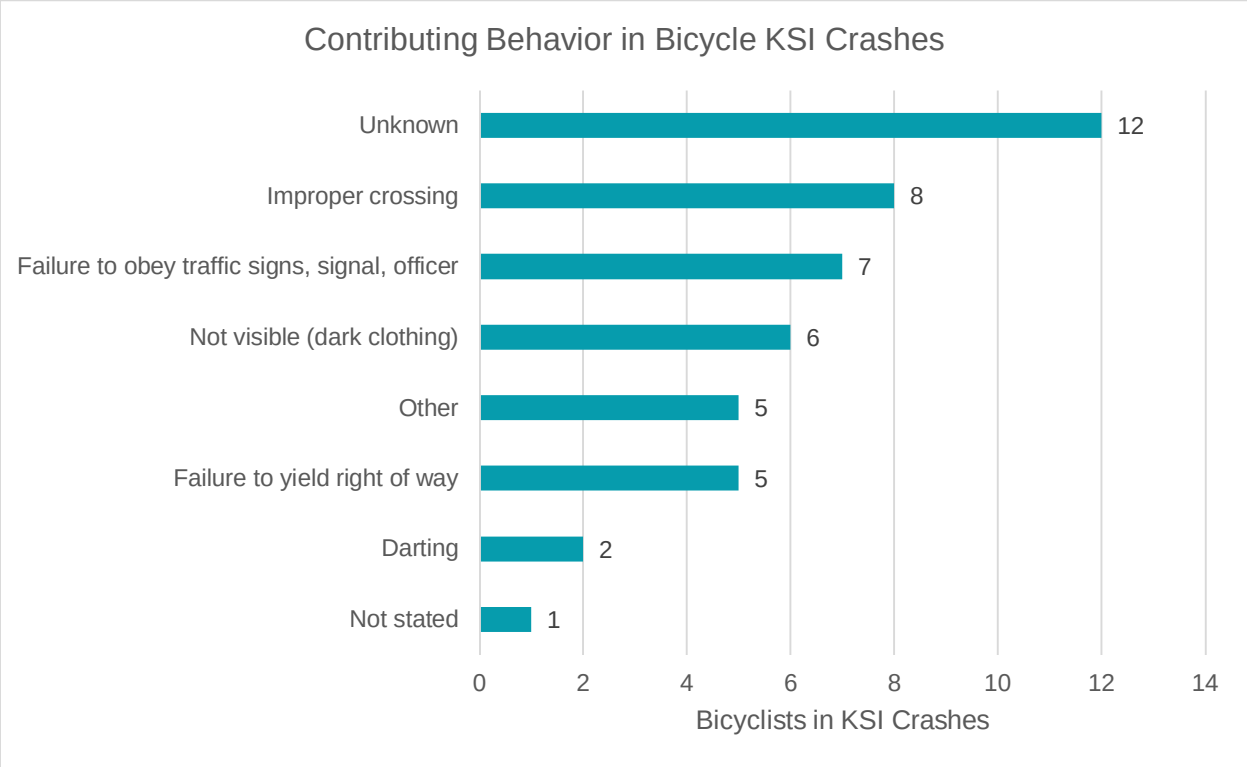

Figure 45: Bicyclists KSI Crashes and Contributing Behavior (2015 - 2019)

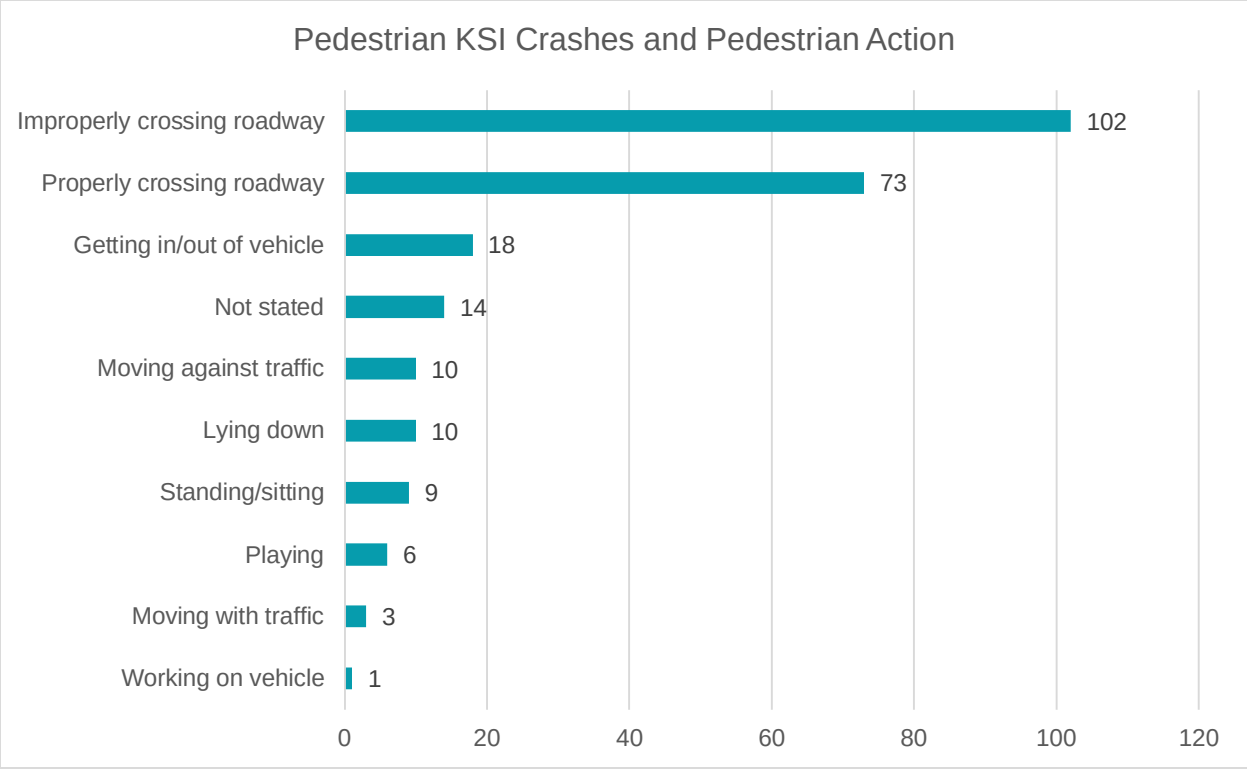

Figure 46: Pedestrian KSI Crashes and Pedestrian Action (2015 - 2019)

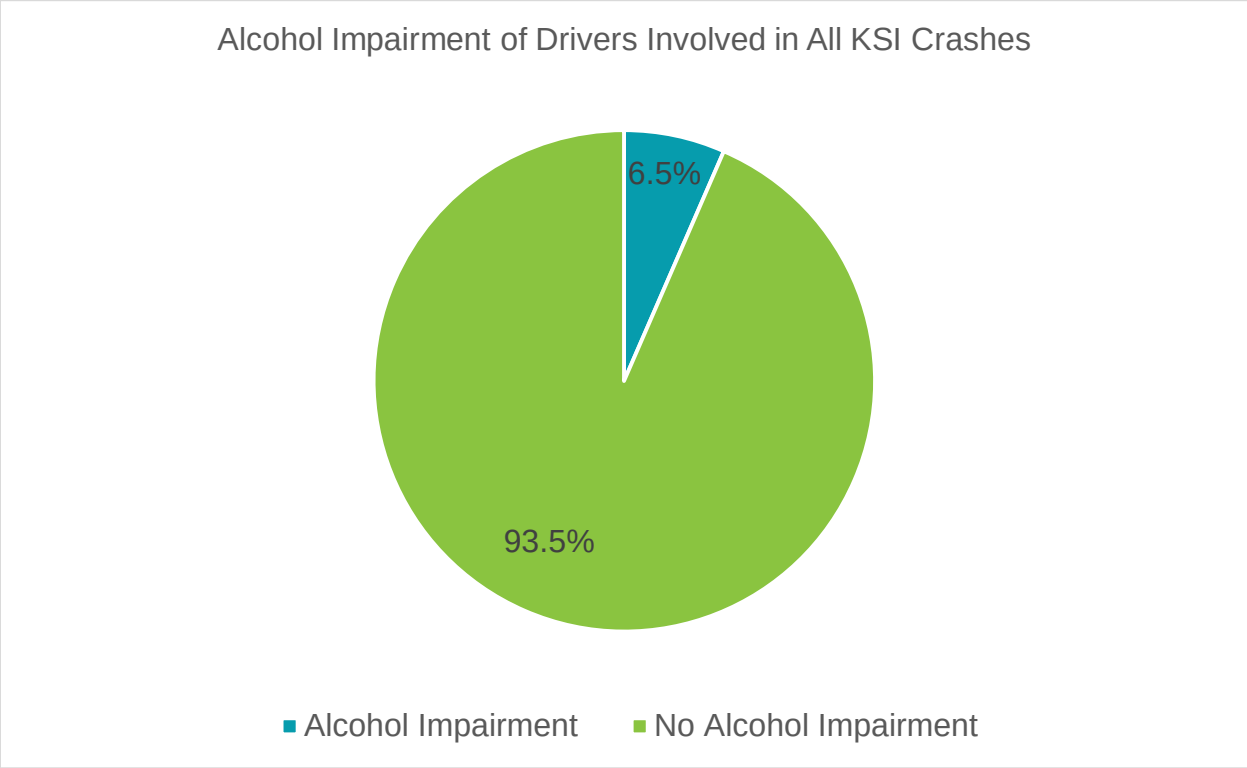

Figure 47: Alcohol Impairment of Drivers Involved in All KSI Crashes (2015 - 2019)

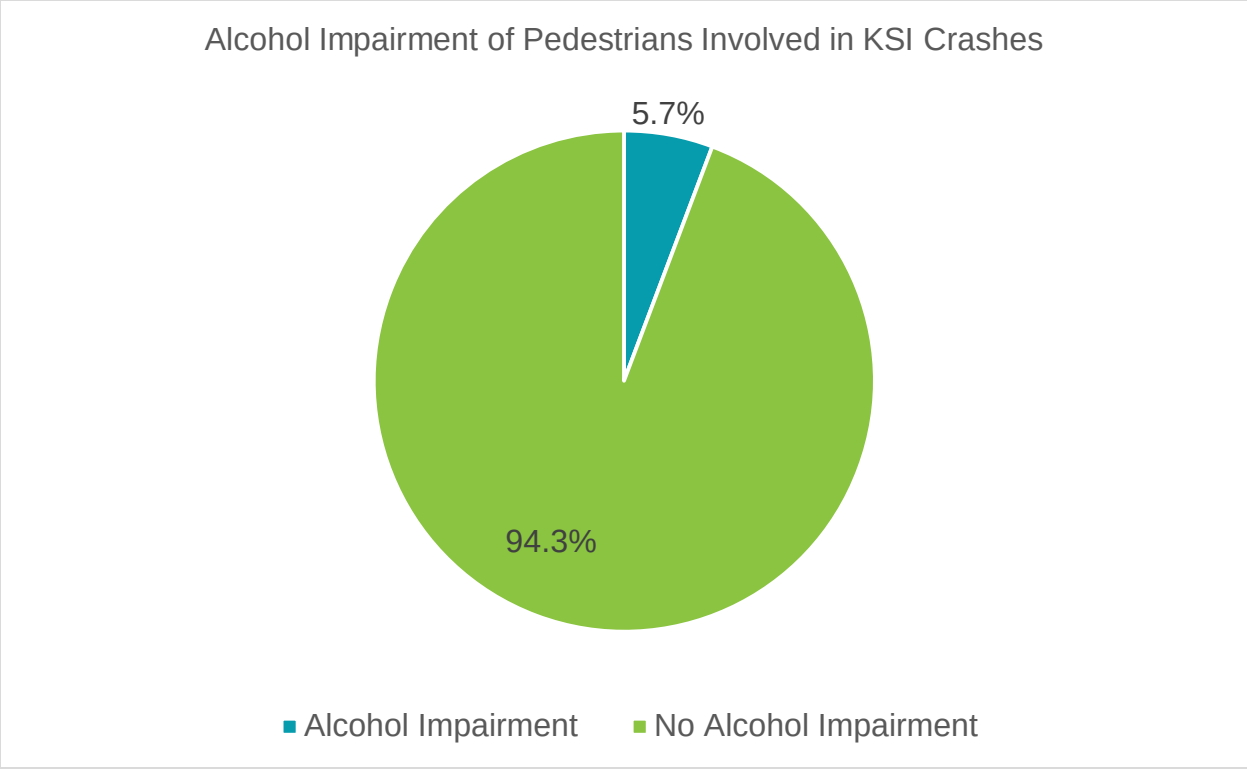

Figure 48: Alcohol Impairment of Pedestrians Involved in KSI Crashes (2015 - 2019)

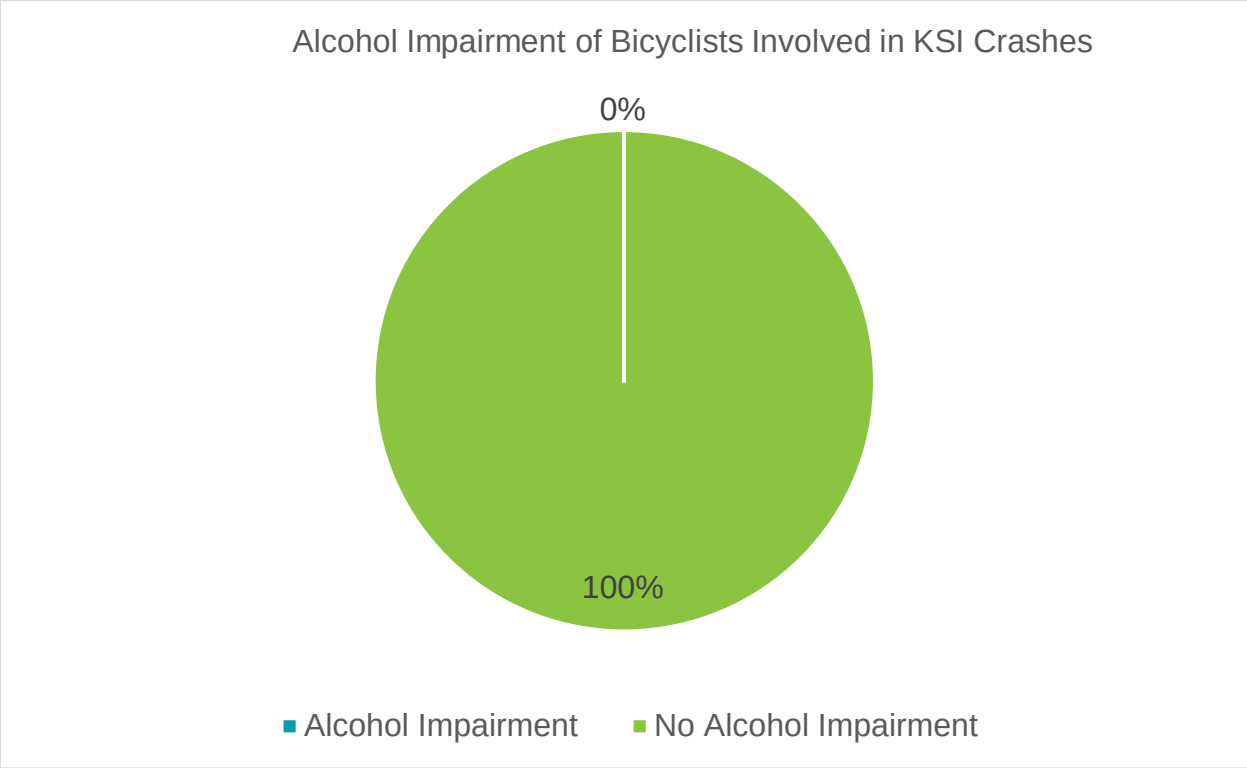

Figure 49: Alcohol Impairment of Bicyclists Involved in KSI Crashes (2015 - 2019)

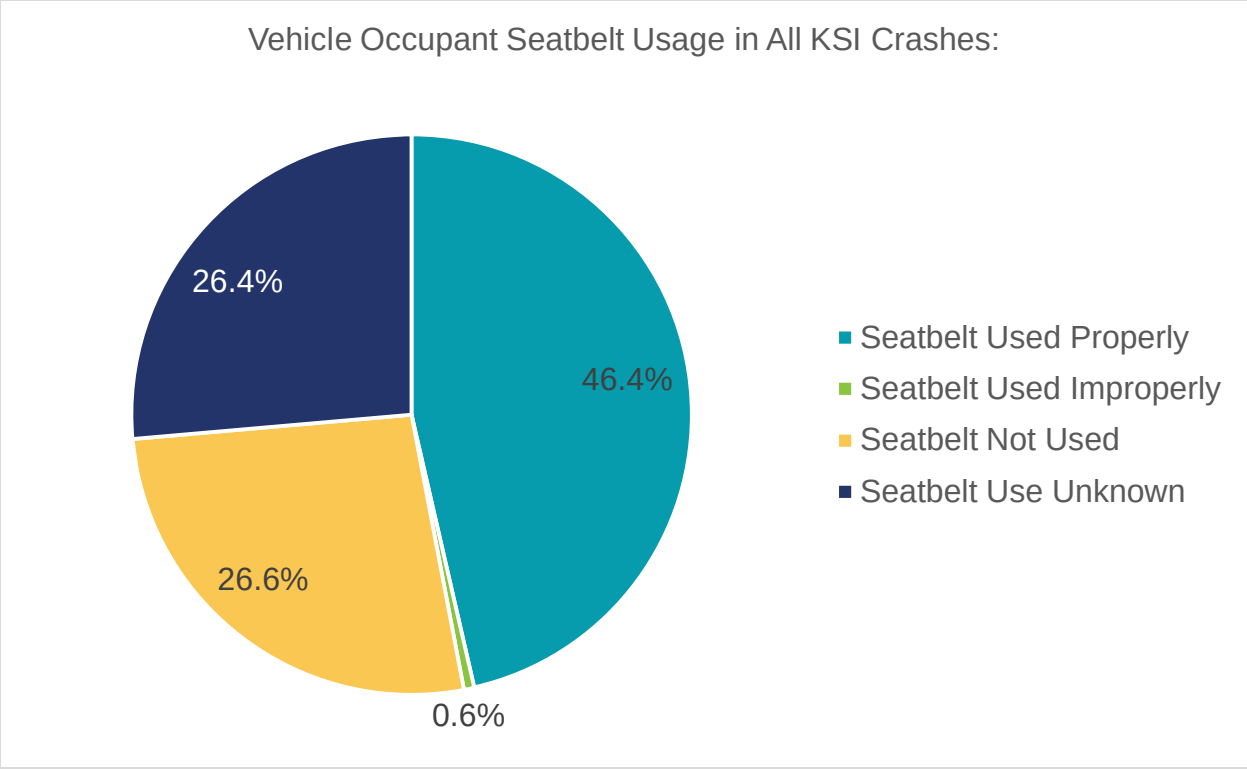

Figure 50: Killed or Seriously Injured Vehicle Occupant Seatbelt Usage (2015 - 2019)

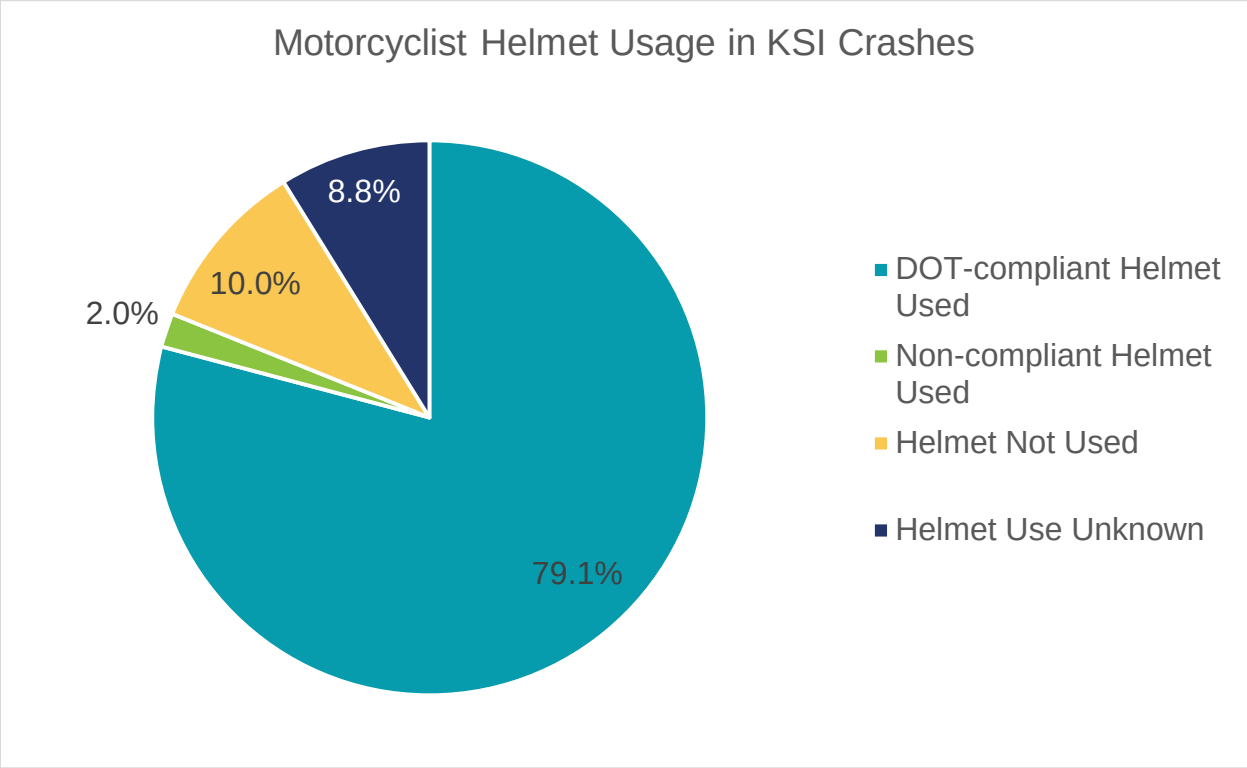

Figure 51: Killed or Seriously Injured Motorcyclist Helmet Usage (2015 - 2019)

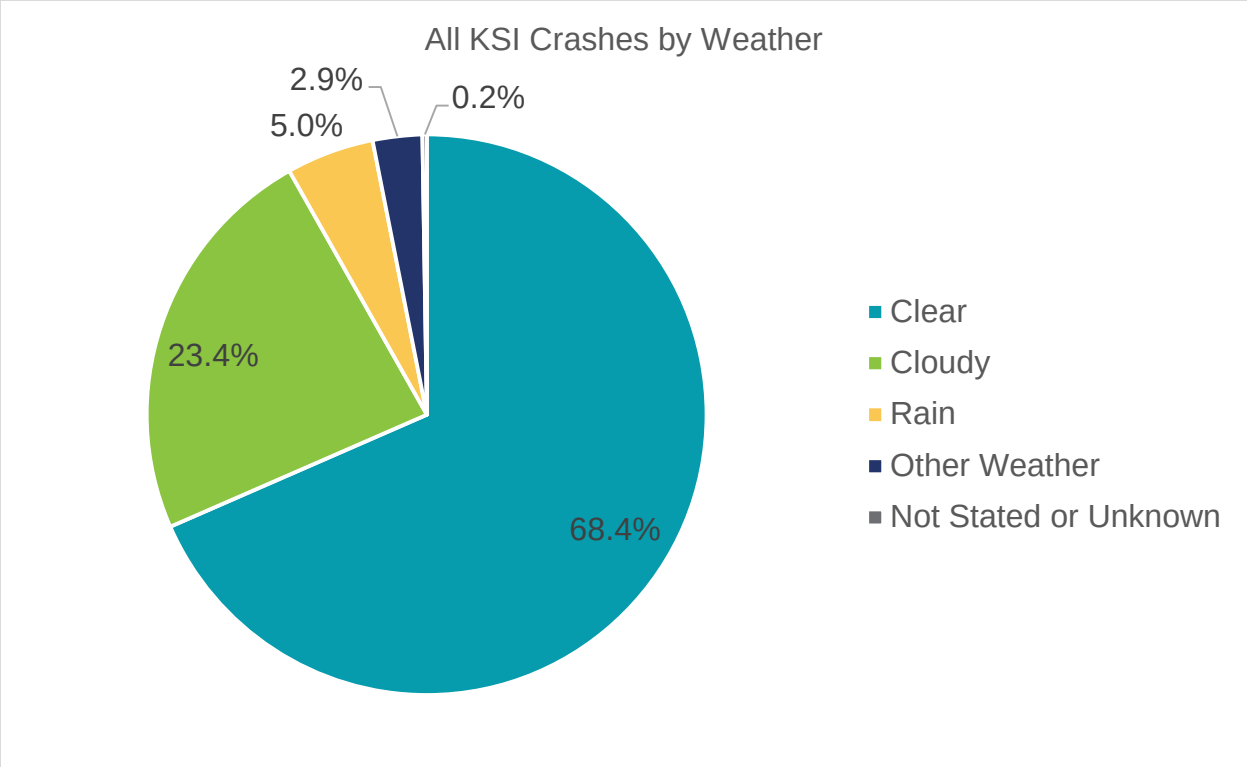

Figure 52: All KSI Crashes by Weather (2015 - 2019)

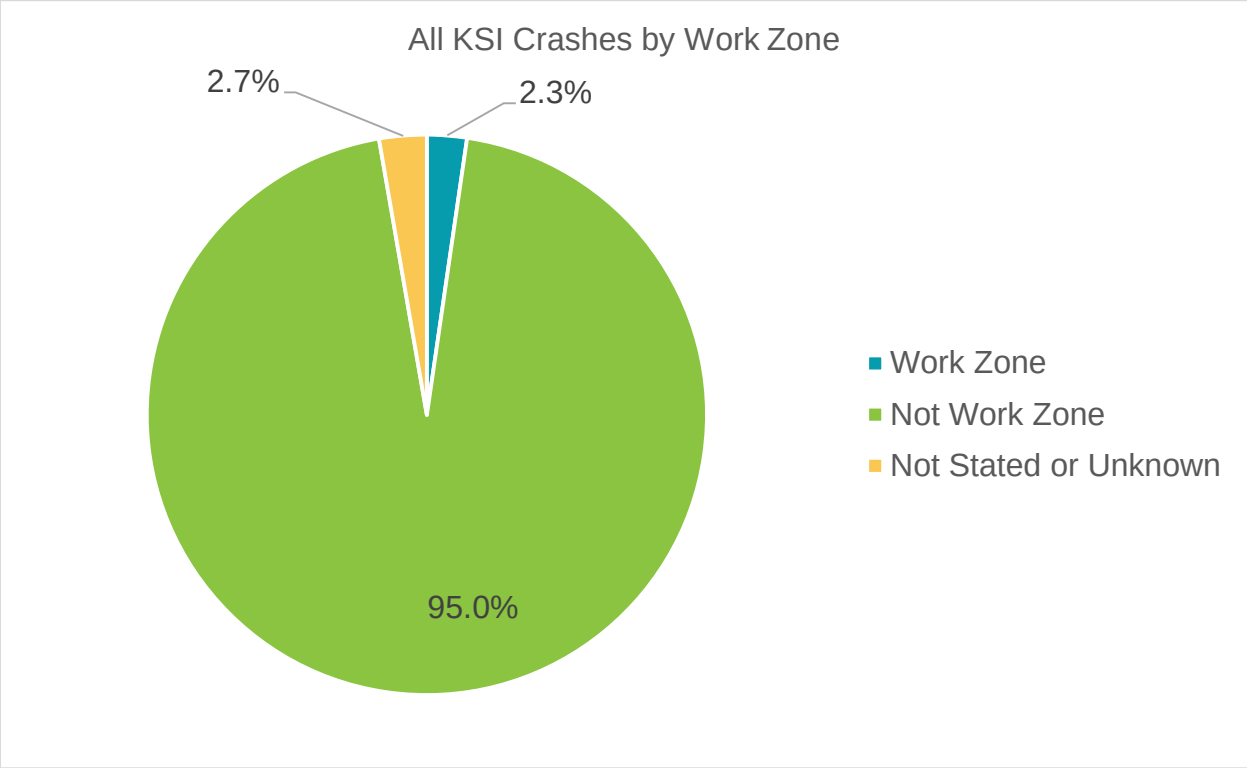

Figure 53: All KSI Crashes by Work Zone (2015 - 2019)

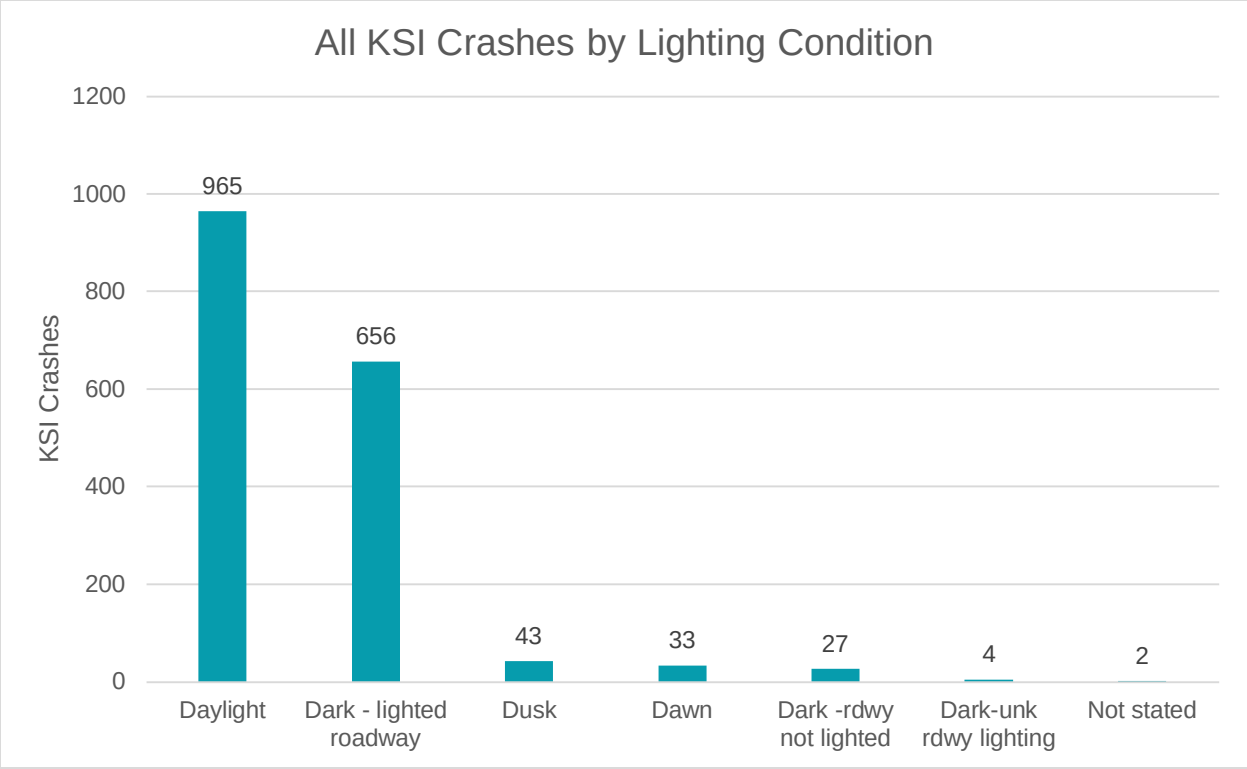

Figure 54: All KSI Crashes by Lighting Condition (2015 - 2019)

TIME OF THE DAY, WEEK, AND YEAR

The "Time of the Day, Week, and Year" section of this report explores the connection between fatal and severe injury crashes (KSI crashes) of all modes of transportation and various time factors. It includes two charts: one comparing KSI crashes by days of the week and hours of the day, and another examining the relationship between KSI crashes, months of the year, and days of the week. Table 1 and Table 2 offer insights into the temporal patterns and potential risk factors associated with KSI crashes.

- KSI crashes show higher percentages on weekdays compared to weekends.
- Fridays have the highest overall percentage at 16.8%, followed by Wednesdays and Sundays at 14.7% each.
- Mondays have the lowest overall percentage of crashes at 12.9%.
- September and June have the highest percentages at 10.8% and 9.7%, respectively.
- There is a minor seasonal variation, with slightly higher percentages during the summer months.
- Peak Hours: The hours with the highest percentages of KSI crashes are 16:00 (7.0%) and 17:00 (6.9%), indicating increased crash risks during late afternoon hours.

Table 1: Killed and Seriously Injured Crashes - Months of the Year vs. Days of the Week (2015 - 2019)

KSI CRASHES - Month of the Year vs. Days of the Week													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Mon	0.8%	1.1%	1.3%	0.9%	1.0%	1.3%	0.6%	1.2%	1.5%	1.2%	1.0%	0.8%	12.9%
Tue	0.5%	0.7%	0.8%	1.1%	0.9%	1.3%	1.6%	1.3%	1.3%	1.2%	1.0%	1.4%	13.1%
Wed	1.2%	0.5%	0.9%	1.3%	1.0%	1.7%	1.5%	1.7%	1.3%	1.4%	1.1%	1.2%	14.7%
Thu	1.0%	1.1%	1.2%	1.0%	1.2%	1.2%	1.5%	1.2%	1.2%	1.4%	1.2%	0.9%	14.0%
Fri	1.3%	1.2%	1.2%	0.8%	1.8%	2.0%	1.4%	1.3%	1.9%	1.3%	1.2%	1.3%	16.8%
Sat	1.2%	1.2%	1.2%	1.6%	1.0%	1.1%	1.0%	0.9%	1.7%	1.2%	1.1%	0.8%	13.8%
Sun	0.8%	0.6%	1.1%	1.3%	1.2%	1.1%	1.6%	1.4%	1.8%	1.3%	1.4%	1.2%	14.7%
Total	6.8%	6.3%	7.6%	7.9%	8.1%	9.7%	9.3%	9.0%	10.8%	9.0%	8.1%	7.6%	

Table 2: Killed and Seriously Injured Crashes - Days of the Week vs. Hours of the Day (2015 - 2019)

KSI CRASHES - Days of the Week vs. Hours of the Day								
	MON	TUE	WED	THU	FRI	SAT	SUN	Total
0	0.5%	0.5%	0.4%	0.4%	0.3%	1.0%	0.8%	3.9%
1	0.3%	0.3%	0.2%	0.2%	0.5%	0.8%	1.2%	3.6%
2	0.3%	0.3%	0.5%	0.5%	0.7%	1.0%	0.8%	4.0%
3	0.1%	0.1%	0.2%	0.2%	0.2%	0.5%	0.7%	1.9%
4	0.1%	0.0%	0.2%	0.2%	0.1%	0.3%	0.5%	1.4%
5	0.3%	0.3%	0.2%	0.1%	0.3%	0.2%	0.3%	1.7%
6	0.5%	0.3%	0.5%	0.7%	0.5%	0.2%	0.3%	3.0%
7	0.6%	0.9%	0.7%	0.5%	0.6%	0.4%	0.1%	3.9%
8	0.5%	0.7%	0.8%	0.3%	0.8%	0.4%	0.2%	3.6%
9	0.3%	0.4%	0.5%	0.5%	0.4%	0.2%	0.2%	2.5%
10	0.5%	0.7%	0.5%	0.3%	0.6%	0.4%	0.4%	3.4%
11	0.7%	0.7%	0.5%	0.6%	0.6%	0.4%	0.3%	3.8%
12	0.5%	0.6%	0.5%	0.8%	0.9%	0.6%	0.3%	4.2%
13	0.5%	0.6%	0.8%	0.7%	1.1%	0.6%	0.3%	4.5%
14	0.7%	0.6%	0.6%	0.9%	0.4%	0.9%	0.7%	4.7%
15	0.8%	0.7%	1.0%	1.0%	1.0%	0.9%	1.0%	6.4%
16	1.1%	1.4%	0.9%	1.0%	1.2%	0.5%	0.8%	7.0%
17	1.4%	0.9%	0.9%	1.3%	1.1%	0.7%	0.7%	6.9%
18	0.9%	0.6%	1.2%	1.1%	1.0%	0.9%	0.7%	6.4%
19	0.6%	0.7%	1.0%	1.0%	0.4%	0.9%	0.9%	5.5%
20	0.6%	0.5%	0.5%	0.4%	0.8%	0.6%	0.7%	4.1%
21	0.6%	0.6%	0.6%	0.5%	1.2%	0.5%	0.5%	4.6%
22	0.4%	0.6%	0.4%	1.2%	0.7%	0.6%	0.6%	4.5%
23	0.4%	0.3%	0.3%	0.6%	0.7%	0.8%	0.4%	3.5%
Unk	0.1%	0.2%	0.1%	0.1%	0.1%	0.2%	0.2%	0.9%
Total	13.3%	13.5%	14.0%	15.1%	16.2%	14.5%	13.6%	

DATA MAPS

One major outcome of the data analysis was the creation of online-accessible GIS maps. These maps provide a visual representation of key information and insights related to the City of Omaha and foster understanding of various aspects of the city's infrastructure, demographics, and urban development. By visualizing data within the context of the city, it is easier to create a better plan. Stakeholders can examine these maps online here to gain valuable insights into the current state of Omaha and its potential areas for improvement. In this section, we present a series of data maps that provide a visual representation of key information and insights related to the City of Omaha. These maps serve as powerful tools for understanding various aspects of the city's infrastructure, demographics, and urban development. By visualizing data within the context of the city, it is easier to create a better plan. By examining the maps presented in this report, stakeholders can gain valuable insights into the current state of Omaha and its potential areas for improvement.

https://wspgeo.maps.arcgis.com/apps/mapviewer/index.html?webmap=a27bf708d78146f69a0c88c535999747

PRIORITIZED PROJECTS

In this section, we present more than 350 unique improvements to the City of Omaha. These improvements, belonging to 117 different projects, were determined from the integrated High Injury Network and High Injury Intersections and ranked across five priority levels. The table below lists these projects in order of highest priority (one) to lowest priority (five); within each priority grouping, the projects are organized from highest project ranking (starting at one) to lowest project ranking. Other important details contained in the table include, but aren't limited to, the name of the project, project details (location, if at an intersection or segment, etc.), project status, and necessary values to do a cost-benefit analysis and determine a benefit to cost ratio.

ID #	Project Name	Council Distr.	Proposed Countermeasure	Location (Major Rd / Intersection)	Beginning (E or S)	End (W or N)	Int/Seg	State Route?	Planned/Complete?	Length (mi)	K (10-yrs)	SI (10-yrs)	CRF (%)	Benefit ($/yr)	Mitigated K (/yr)	Mitigated SI (/yr)	20-year Benefit ($)	Cost ($)	Improv. BCR	Proj. BCR	Priority (1-5)
1-1	Hanscom Park Area	3	Traffic Calming / VRU Improvements	Woolworth Avenue	S 29th Street	S 32nd Avenue	Segment			0.31	2	2	30%	$ 820,000	0.06	0.06	$ 12,200,000	$ 310,000	39.35	23.25	1
1-2	Hanscom Park Area	3	Traffic Calming / VRU Improvements	Park Avenue	Woolworth Avenue	Leavenworth Street	Segment			0.49	1	2	30%	$ 430,000	0.03	0.06	$ 6,400,000	$ 490,000	13.06	23.25	1
2-1	S 50th Street #1	4	Road Diet	S 50th Street	L Street	F Street	Segment			0.62	1	6	40%	$ 670,000	0.04	0.24	$ 9,970,000	$ 930,000	10.72	10.72	1
3-1	Indian Hills South Area	4	Traffic Calming / VRU Improvements	Y Street	S 36th Street	S 42nd Street	Segment			0.50	0	2	30%	$ 40,000	0.00	0.06	$ 600,000	$ 500,000	1.20	10.48	1
3-2	Indian Hills South Area	4	Traffic Calming / VRU Improvements	S 41st Street	Harrison Street	Y Street	Segment			0.50	1	1	30%	$ 410,000	0.03	0.03	$ 6,100,000	$ 500,000	12.20	10.48	1
3-3	Indian Hills South Area	4	Traffic Calming / VRU Improvements	S 39th Street & Y Street			Intersection				1	2	30%	$ 430,000	0.03	0.06	$ 6,400,000	$ 250,000	25.60	10.48	1
4-1	S 13th Street #2	4	Road Diet	S 13th Street	Missouri Avenue	Frederick Street	Segment			1.27	2	6	40%	$ 1,190,000	0.08	0.24	$ 17,700,000	$ 1,900,000	9.32	9.32	1
5-1	Leavenworth Street	3	Road Diet	Leavenworth Street	S 31st Street	S 55th Street	Segment			2.05	3	14	40%	$ 1,910,000	0.12	0.56	$ 28,420,000	$ 3,080,000	9.23	9.23	1
5-2	Leavenworth Street	3	Signal Improvements	S 42nd Street & Leavenworth Street			Intersection		Completed		2	3	25%							9.23	1
5-3	Leavenworth Street	3	Signal Improvements	Saddle Creek Road & Leavenworth Street			Intersection		Planned for Construction		2	7	25%							9.23	1
6-1	Ames Avenue #2	2	Road Diet	Ames Avenue	N 31st Avenue	Fontenelle Blvd	Segment			1.80	2	16	40%	$ 1,440,000	0.08	0.64	$ 21,420,000	$ 2,700,000	7.93	8.42	1
6-2	Ames Avenue #2	2	Traffic Calming / VRU Improvements	N 37th Street & Ames Avenue			Intersection				1	5	30%	$ 480,000	0.03	0.15	$ 7,140,000	$ 250,000	28.56	8.42	1
6-3	Ames Avenue #2	2	Traffic Calming / VRU Improvements	N 39th Street & Ames Avenue			Intersection				0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 250,000	4.16	8.42	1
6-4	Ames Avenue #2	2	Mini-Roundabout	N 42nd Street & Ames Avenue			Intersection				1	7	70%	$ 1,220,000	0.07	0.49	$ 18,150,000	$ 1,000,000	18.15	8.42	1
6-5	Ames Avenue #2	2	Roundabout	Fontenelle Blvd & Ames Avenue			Intersection				0	6	80%	$ 300,000	0.00	0.48	$ 4,460,000	$ 2,000,000	2.23	8.42	1
7-1	N 30th Street #1	2	Road Diet	N 30th Street	Martin Avenue	McKinley Street	Segment	US-75		1.38	3	10	40%	$ 1,810,000	0.12	0.40	$ 26,930,000	$ 2,070,000	13.01	7.90	1
7-2	N 30th Street #1	2	Roundabout	N 30th Street & Martin Avenue			Intersection	US-75			0	7	80%	$ 350,000	0.00	0.56	$ 5,210,000	$ 2,000,000	2.61	7.90	1
8-1	Maple Street #2	1	Traffic Calming / VRU Improvements	Maple Street	N 58th Street	72nd Street	Segment			1.13	1	14	30%	$ 650,000	0.03	0.42	$ 9,670,000	$ 1,130,000	8.56	7.83	1
8-2	Maple Street #2	1	Signal Improvements	N 60th Street & Maple Street			Intersection				0	3	25%	$ 50,000	0.00	0.08	$ 740,000	$ 200,000	3.70	7.83	1
9-1	NW Radial Hwy #2	1	Road Diet	NW Radial Hwy	Fontenelle Blvd	Military Avenue	Segment	NE-L28K		1.48	3	16	40%	$ 1,960,000	0.12	0.64	$ 29,160,000	$ 2,210,000	13.19	7.78	1
9-2	NW Radial Hwy #2	2	Road Diet	N 52nd Street	NW Radial Hwy	Benson HS Drive	Segment			0.14			40%	$ -	0.00	0.00	$ -	$ 210,000		7.78	1
9-3	NW Radial Hwy #2	1	Roundabout	N 52nd Street & NW Radial Hwy			Intersection	NE-L28K			0	7	80%	$ 350,000	0.00	0.56	$ 5,210,000	$ 2,000,000	2.61	7.78	1
10-1	Florence Area	2	Traffic Calming / VRU Improvements	John D Pershing Drive	N 16th Street	I-680	Segment			2.33	1	5	30%	$ 480,000	0.03	0.15	$ 7,140,000	$ 2,330,000	3.06	6.90	1
10-2	Florence Area	2	Traffic Calming / VRU Improvements	Florence Blvd	Arthur C Storz Expy	Redick Avenue	Segment			0.70	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 700,000	1.27	6.90	1
10-3	Florence Area	2	Traffic Calming / VRU Improvements	N 24th Street	Fort Street	Mary Street	Segment			0.91	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 910,000	0.98	6.90	1
10-4	Florence Area	2	Traffic Calming / VRU Improvements	Fontenelle Blvd	Sorensen Pkwy	Newport Avenue	Segment			0.86	2	6	30%	$ 890,000	0.06	0.18	$ 13,240,000	$ 860,000	15.40	6.90	1
10-5	Florence Area	2	Traffic Calming / VRU Improvements	N 42nd Street	Sorensen Pkwy	Redick Avenue	Segment			0.49	2	4	30%	$ 860,000	0.06	0.12	$ 12,790,000	$ 490,000	26.10	6.90	1
10-6	Florence Area	2	Traffic Calming / VRU Improvements	Mormon Bridge Road	Sorensen Pkwy	Young Street	Segment			1.12	1	5	30%	$ 480,000	0.03	0.15	$ 7,140,000	$ 1,120,000	6.38	6.90	1
10-7	Florence Area	2	Traffic Calming / VRU Improvements	Fort Street	N 24th Street	N 30th Street	Segment			0.49	0	2	30%	$ 40,000	0.00	0.06	$ 600,000	$ 490,000	1.22	6.90	1
10-8	Florence Area	2	Traffic Calming / VRU Improvements	Curtis Avenue	N 42nd Street	N 51st Avenue	Segment			0.96	1	6	30%	$ 500,000	0.03	0.18	$ 7,440,000	$ 960,000	7.75	6.90	1
10-9	Florence Area	2	Signal Improvements	Fontenelle Blvd & Curtis Avenue			Intersection				1	3	25%	$ 370,000	0.03	0.08	$ 5,500,000	$ 200,000	27.50	6.90	1
11-1	Gifford Park Area	3	Traffic Calming / VRU Improvements	N 33rd Street	Dodge Street	Cuming Street	Segment			0.56	0	2	30%	$ 40,000	0.00	0.06	$ 600,000	$ 560,000	1.07	6.87	1
11-2	Gifford Park Area	3	Traffic Calming / VRU Improvements	N 38th Street	Dodge Street	Cuming Street	Segment			0.57	1	4	30%	$ 460,000	0.03	0.12	$ 6,840,000	$ 570,000	12.00	6.87	1
11-3	Gifford Park Area	3	Traffic Calming / VRU Improvements	N 40th Street	Dodge Street	Cuming Street	Segment			0.57	1	1	30%	$ 410,000	0.03	0.03	$ 6,100,000	$ 570,000	10.70	6.87	1
11-4	Gifford Park Area	3	Traffic Calming / VRU Improvements	California Street	N 33rd Street	Saddle Creek Road	Segment			1.24	1	5	30%	$ 480,000	0.03	0.15	$ 7,140,000	$ 1,240,000	5.76	6.87	1
11-5	Gifford Park Area	3	Signal Improvements	N 40th Street & California Street			Intersection				0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	6.87	1
12-1	S 42nd Street #2	4	Road Diet	S 42nd Street	Grover Street	Center Street	Segment			0.96	0	9	40%	$ 220,000	0.00	0.36	$ 3,270,000	$ 1,450,000	2.26	6.81	1
12-2	S 42nd Street #2	4	Signal Improvements	S 42nd Street & Bancroft Street			Intersection				0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	6.81	1
12-3	S 42nd Street #2	4	Roundabout	S 42nd Street & Grover Street			Intersection				1	7	80%	$ 1,390,000	0.08	0.56	$ 20,680,000	$ 2,000,000	10.34	6.81	1
13-1	S 13th Street #1	4	Road Diet	S 13th Street	Harrison Street	Missouri Avenue	Segment			1.52	1	6	40%	$ 670,000	0.04	0.24	$ 9,970,000	$ 2,270,000	4.39	6.79	1
13-2	S 13th Street #1	4	Traffic Calming / VRU Improvements	S 13th Street & Harrison Street			Intersection				1	5	30%	$ 480,000	0.03	0.15	$ 7,140,000	$ 250,000	28.56	6.79	1
14-1	Saddle Creek South	3	Road Diet	Saddle Creek Road	Center Street	Leavenworth Street	Segment			0.88	1	3	40%	$ 600,000	0.04	0.12	$ 8,930,000	$ 1,320,000	6.77	6.77	1
15-1	S 168th Street Ints.	5	Traffic Calming / VRU Improvements	S 168th Street & Washington Street			Intersection		Planned for Construction		0	3	30%							5.95	1
15-2	S 168th Street Ints.	5	RSA + Improvements	S 168th Street & Q Street			Intersection				1	3	40%	$ 600,000	0.04	0.12	$ 8,930,000	$ 1,500,000	5.95	5.95	1
16-1	Military Avenue #1	1	Road Diet	Military Avenue	NW Radial Hwy	72nd Street	Segment	NE-L28K		1.08	1	4	40%	$ 620,000	0.04	0.16	$ 9,220,000	$ 1,620,000	5.69	5.69	1
17-1	Cuming Street #1	2	Traffic Calming / VRU Improvements	Cuming Street	N 10th Street	US-75	Segment			1.22	2	4	30%	$ 860,000	0.06	0.12	$ 12,790,000	$ 1,220,000	10.48	5.63	1
17-2	Cuming Street #1	2	Signal Improvements	N 24th Street & Cuming Street			Intersection		Completed		0	4	25%							5.63	1
17-3	Cuming Street #1	3	RSA + Improvements	US-75 NB Exit Ramp & Cuming Street			Intersection	NE-64			0	7	40%	$ 170,000	0.00	0.28	$ 2,530,000	$ 1,500,000	1.69	5.63	1
18-1	Blondo Street #1	1	Road Diet	Blondo Street	72nd Street	N 90th Street	Segment			1.37	1	10	40%	$ 770,000	0.04	0.40	$ 11,460,000	$ 2,050,000	5.59	5.59	1
19-1	S 42nd Street #3	4	Road Diet	S 42nd Street	Q Street	L Street	Segment			0.43	0	1	40%	$ 20,000	0.00	0.04	$ 300,000	$ 650,000	0.46	5.37	1
19-2	S 42nd Street #3	4	Road Diet	S 42nd Street	L Street	D Street	Segment			0.62	1	5	40%	$ 640,000	0.04	0.20	$ 9,520,000	$ 920,000	10.35	5.37	1
19-3	S 42nd Street #3	4	RCUT/MUT	S 42nd Street & L Street			Intersection	US-275			1	3	55%	$ 820,000	0.06	0.17	$ 12,200,000	$ 2,500,000	4.88	5.37	1
19-4	S 42nd Street #3	4	Signal Improvements	S 42nd Street & F Street			Intersection				0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	5.37	1
20-1	Ames Avenue #3	1	Road Diet	Ames Avenue	N 52nd Street	72nd Street	Segment			1.54	2	23	40%	$ 1,610,000	0.08	0.92	$ 23,950,000	$ 2,300,000	10.41	5.07	1
20-2	Ames Avenue #3	2	Roundabout	N 52nd Street & Ames Avenue			Intersection				0	7	80%	$ 350,000	0.00	0.56	$ 5,210,000	$ 2,000,000	2.61	5.07	1
20-3	Ames Avenue #3	1	Roundabout	N 60th Street & Ames Avenue			Intersection				0	4	80%	$ 200,000	0.00	0.32	$ 2,980,000	$ 2,000,000	1.49	5.07	1
20-4	Ames Avenue #3	1	Traffic Calming / VRU Improvements	N 63rd Street & Ames Avenue			Intersection				0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 250,000	4.16	5.07	1
21-1	N 30th Street #2	2	Road Diet	N 30th Street	Fort Street	Martin Avenue	Segment	US-75		1.20	2	6	40%	$ 1,190,000	0.08	0.24	$ 17,700,000	$ 1,800,000	9.83	5.02	1
21-2	N 30th Street #2	2	Roundabout	N 30th Street & Fort Street			Intersection	US-75			0	4	80%	$ 200,000	0.00	0.32	$ 2,980,000	$ 2,000,000	1.49	5.02	1
21-3	N 30th Street #2	2	Signal Improvements	N 30th Street & Laurel Avenue			Intersection	US-75			0	2	25%	$ 30,000	0.00	0.05	$ 450,000	$ 200,000	2.25	5.02	1
21-4	N 30th Street #2	2	Signal Improvements	N 30th Street & Curtis Avenue			Intersection	US-75			0	1	25%	$ 20,000	0.00	0.03	$ 300,000	$ 200,000	1.50	5.02	1
21-5	N 30th Street #2	2	Signal Improvements	N 30th Street & Redick Avenue			Intersection	US-75	Completed		0	2	25%							5.02	1
21-6	N 30th Street #2	2	Traffic Calming / VRU Improvements	N 30th Street & Ida Street			Intersection	US-75			0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 250,000	3.56	5.02	1
22-1	S 90th Street	3	Road Diet	S 90th Street	Center Street	Pacific Street	Segment			1.00	1	3	40%	$ 600,000	0.04	0.12	$ 8,930,000	$ 1,510,000	5.91	4.89	1
22-2	S 90th Street	6	Road Diet	S 90th Street	Pacific Street	W Dodge Road	Segment			1.00	0	4	40%	$ 100,000	0.00	0.16	$ 1,490,000	$ 1,500,000	0.99	4.89	1
22-3	S 90th Street	6	Signal Improvements	S 90th Street & Pacific Street			Intersection				0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	4.89	1
22-4	S 90th Street	6	Signal Improvements	S 90th Street & Indian Hills Drive			Intersection				1	2	25%	$ 360,000	0.03	0.05	$ 5,360,000	$ 200,000	26.80	4.89	1
23-1	Vinton Street Area	4	Traffic Calming / VRU Improvements	Vinton Street / Grover Street	S 13th Street	S 50th Street	Segment			3.26	2	14	30%	$ 1,040,000	0.06	0.42	$ 15,470,000	$ 3,260,000	4.75	4.75	1
23-2	Vinton Street Area	4	Traffic Calming / VRU Improvements	S 24th Street & Vinton Street			Intersection		Completed		0	5	30%							4.75	1
24-1	Elkhorn Improvements	6	Traffic Calming / VRU Improvements	N 209th Street	Blondo Street	Park Road	Segment			0.54	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 540,000	1.65	4.59	1
24-2	Elkhorn Improvements	6	RSA + Improvements	N 206th Street & W Maple Road			Intersection				1	2	40%	$ 570,000	0.04	0.08	$ 8,480,000	$ 1,500,000	5.65	4.59	1
25-1	Q Street #1	4	Road Diet	Q Street	S 27th Street	S 36th Street	Segment			0.74	3	6	40%	$ 1,710,000	0.12	0.24	$ 25,440,000	$ 1,100,000	23.13	4.32	1
25-2	Q Street #1	4	Roundabout	S 30th Street & Q Street			Intersection				0	4	80%	$ 200,000	0.00	0.32	$ 2,980,000	$ 2,000,000	1.49	4.32	1
25-3	Q Street #1	4	Roundabout	S 33rd Street & Q Street			Intersection				0	1	80%	$ 50,000	0.00	0.08	$ 740,000	$ 2,000,000	0.37	4.32	1
25-4	Q Street #1	4	Roundabout	S 36th Street & Q Street			Intersection				0	2	80%	$ 100,000	0.00	0.16	$ 1,490,000	$ 2,000,000	0.75	4.32	1
26-1	North Downtown Area	2	Traffic Calming / VRU Improvements	N 16th Street	Cuming Street	Pinkney Street	Segment		Planned for Construction	1.57	1	5	30%							4.28	1
26-2	North Downtown Area	2	Traffic Calming / VRU Improvements	N 20th Street / Florence Blvd	Cuming Street	Arthur C Storz Expy	Segment			2.65	0	17	30%	$ 320,000	0.00	0.51	$ 4,760,000	$ 2,650,000	1.80	4.28	1
26-3	North Downtown Area	2	Traffic Calming / VRU Improvements	N 24th Street	Clark Street	Larimore Avenue	Segment		Planned for Construction	1.93	0	7	30%							4.28	1
26-4	North Downtown Area	2	Traffic Calming / VRU Improvements	Lake Street	N 16th Street	N 26th Street	Segment			0.68	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 680,000	1.53	4.28	1
26-5	North Downtown Area	2	Traffic Calming / VRU Improvements	Sprague Street	N 20th Street	N 24th Street	Segment			0.25	1	4	30%	$ 460,000	0.03	0.12	$ 6,840,000	$ 250,000	27.36	4.28	1
26-6	North Downtown Area	2	Signal Improvements	N 16th Street & Locust Street			Intersection		Planned for Construction		0	4	25%							4.28	1
26-7	North Downtown Area	2	Traffic Calming / VRU Improvements	N 20th Street & Clark Street			Intersection		Completed		0	5	30%							4.28	1
26-8	North Downtown Area	2	Traffic Calming / VRU Improvements	N 16th Street	Pinkney Street	Ames Avenue	Segment			0.94	1	3	30%	$ 450,000	0.03	0.09	$ 6,690,000	$ 940,000	7.12	4.28	1
27-1	Q Street #4	5	Traffic Calming / VRU Improvements	Q Street	S 136th Street	S 180th Street	Segment			3.65	0	18	30%	$ 340,000	0.00	0.54	$ 5,060,000	$ 3,650,000	1.39	4.18	1
27-2	Q Street #4	5	Roundabout	Millard Avenue & Q Street			Intersection	NE-50			0	5	80%	$ 250,000	0.00	0.40	$ 3,720,000	$ 2,000,000	1.86	4.18	1
27-3	Q Street #4	5	Roundabout	S 144th Street & Q Street			Intersection				0	7	80%	$ 350,000	0.00	0.56	$ 5,210,000	$ 2,000,000	2.61	4.18	1
27-4	Q Street #4	5	Roundabout	S 156th Street & Q Street			Intersection				2	2	80%	$ 2,180,000	0.16	0.16	$ 32,430,000	$ 2,000,000	16.22	4.18	1
27-6	Q Street #4	5	Roundabout	S 180th Street & Q Street			Intersection				0	3	80%	$ 150,000	0.00	0.24	$ 2,230,000	$ 2,000,000	1.12	4.18	1
28-1	Dundee Area	1	Traffic Calming / VRU Improvements	N 48th Street	Cuming Street	Lafayette Avenue	Segment			0.27	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 270,000	3.85	4.06	1

ID #	Project Name	Council Distr.	Proposed Countermeasure	Location (Major Rd / Intersection)	Beginning (E or S)	End (W or N)	Int/Seg	State Route?	Planned/Complete?	Length (mi)	K (10-yrs)	SI (10-yrs)	CRF (%)	Benefit ($/yr)	Mitigated K (/yr)	Mitigated SI (/yr)	20-year Benefit ($)	Cost ($)	Improv. BCR	Proj. BCR	Priority (1-5)
28-2	Dundee Area	1	Traffic Calming / VRU Improvements	N 48th Street	Hamilton Street	Burdette Street	Segment			0.45	0	2	30%	$ 40,000	0.00	0.06	$ 600,000	$ 450,000	1.33	4.06	1
28-3	Dundee Area	1	Traffic Calming / VRU Improvements	N 50th Street	Dodge Street	Cuming Street	Segment			0.57	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 570,000	1.82	4.06	1
28-4	Dundee Area	1	Traffic Calming / VRU Improvements	N 52nd Street	Hamilton Street	Blondo Street	Segment			0.38	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 380,000	2.34	4.06	1
28-5	Dundee Area	1	Traffic Calming / VRU Improvements	Webster Street/N 60th Street	N 56th Street	Blondo Street	Segment			0.95	0	5	30%	$ 90,000	0.00	0.15	$ 1,340,000	$ 950,000	1.41	4.06	1
28-6	Dundee Area	1	Traffic Calming / VRU Improvements	Underwood Avenue	Saddle Creek Road	72nd Street	Segment			2.27	0	8	30%	$ 150,000	0.00	0.24	$ 2,230,000	$ 2,270,000	0.98	4.06	1
28-7	Dundee Area	1	Traffic Calming / VRU Improvements	Cuming Street/N 56th Street	Saddle Creek Road	Webster Street	Segment			0.92	0	2	30%	$ 40,000	0.00	0.06	$ 600,000	$ 920,000	0.65	4.06	1
28-8	Dundee Area	1	Traffic Calming / VRU Improvements	Hamilton Street	NW Radial Hwy	N 52nd Street	Segment			0.60	0	5	30%	$ 90,000	0.00	0.15	$ 1,340,000	$ 600,000	2.23	4.06	1
28-9	Dundee Area	3	Roundabout	S 50th Street & Farnam Street			Intersection				0	2	80%	$ 100,000	0.00	0.16	$ 1,490,000	$ 2,000,000	0.75	4.06	1
28-10	Dundee Area	3	Roundabout	S 52nd Street & Farnam Street			Intersection				2	1	80%	$ 2,130,000	0.16	0.08	$ 31,690,000	$ 2,000,000	15.85	4.06	1
29-1	Ames Ave Area	2	Traffic Calming / VRU Improvements	N 42nd Street	Ames Avenue	Sorensen Pkwy	Segment			0.77	1	3	30%	$ 450,000	0.03	0.09	$ 6,690,000	$ 770,000	8.69	4.02	1
29-2	Ames Ave Area	2	Traffic Calming / VRU Improvements	Fontenelle Blvd	Pratt Street	Sorensen Pkwy	Segment			1.41	2	8	30%	$ 930,000	0.06	0.24	$ 13,840,000	$ 1,410,000	9.82	4.02	1
29-3	Ames Ave Area	2	Traffic Calming / VRU Improvements	N 48th Street	Pratt Street	Fort Street	Segment			0.98	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 980,000	1.06	4.02	1
29-4	Ames Ave Area	2	Traffic Calming / VRU Improvements	N 52nd Street	Pratt Street	Fort Street	Segment			1.07	0	5	30%	$ 90,000	0.00	0.15	$ 1,340,000	$ 1,070,000	1.25	4.02	1
29-5	Ames Ave Area	1	Traffic Calming / VRU Improvements	N 66th Street	NW Radial Hwy	Ames Avenue	Segment			0.50	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 500,000	1.78	4.02	1
29-6	Ames Ave Area	2	Traffic Calming / VRU Improvements	Paxton Blvd	31st Avenue	Fontenelle Blvd	Segment			1.26	0	11	30%	$ 210,000	0.00	0.33	$ 3,120,000	$ 1,260,000	2.48	4.02	1
29-7	Ames Ave Area	2	Traffic Calming / VRU Improvements	Larimore Avenue	N 30th Street	N 36th Street	Segment			0.50	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 500,000	1.78	4.02	1
29-8	Ames Ave Area	2	Traffic Calming / VRU Improvements	Grand Avenue	Sorensen Pkwy	N 60th Street	Segment			2.32	0	7	30%	$ 130,000	0.00	0.21	$ 1,930,000	$ 2,320,000	0.83	4.02	1
29-9	Ames Ave Area	2	Traffic Calming / VRU Improvements	N 36th Street & Paxton Blvd			Intersection				1	3	30%	$ 450,000	0.03	0.09	$ 6,690,000	$ 250,000	26.76	4.02	1
30-1	Abbot / Pershing Drive	2	Road Diet	Abbot Drive	Arthur C Storz Expy	N 16th Street	Segment			1.65	1	4	40%	$ 620,000	0.04	0.16	$ 9,220,000	$ 2,470,000	3.73	3.73	1
31-1	Blair High Road	7	Traffic Calming / VRU Improvements	Blair High Road	72nd Street	N 103rd Street	Segment	NE-L28K	Planned for Construction	3.17	0	20	30%							3.73	1
31-2	Blair High Road	1	RCUT/MUT	Crown Point Avenue & Blair High Road			Intersection	NE-L28K			2	3	55%	$ 1,530,000	0.11	0.17	$ 22,760,000	$ 2,500,000	9.10	3.73	1
31-3	Blair High Road	1	RCUT/MUT	N 90th Street & Blair High Road			Intersection	NE-133			0	4	55%	$ 140,000	0.00	0.22	$ 2,080,000	$ 2,500,000	0.83	3.73	1
31-4	Blair High Road	7	RCUT/MUT	N 99th Street & Blair High Road			Intersection	NE-L28K			0	6	55%	$ 210,000	0.00	0.33	$ 3,120,000	$ 2,500,000	1.25	3.73	1
32-1	Little Italy Area	3	Traffic Calming / VRU Improvements	S 10th Street	Martha Street	Pacific Street	Segment			0.76	0	2	30%	$ 40,000	0.00	0.06	$ 600,000	$ 760,000	0.79	3.71	1
32-2	Little Italy Area	3	Traffic Calming / VRU Improvements	S 16th Street	Vinton Street	Pierce Street	Segment			0.94	0	6	30%	$ 110,000	0.00	0.18	$ 1,640,000	$ 940,000	1.74	3.71	1
32-3	Little Italy Area	3	Traffic Calming / VRU Improvements	S 20th Street	Martha Street	Pierce Street	Segment			0.68	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 680,000	1.53	3.71	1
32-4	Little Italy Area	3	Traffic Calming / VRU Improvements	Hickory Street	S 7th Street	S 10th Street	Segment			0.21	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 210,000	4.24	3.71	1
32-5	Little Italy Area	4	Traffic Calming / VRU Improvements	Martha Street	S 13th Street	S 24th Street	Segment			0.72	1	9	30%	$ 560,000	0.03	0.27	$ 8,330,000	$ 720,000	11.57	3.71	1
32-6	Little Italy Area	4	Traffic Calming / VRU Improvements	Bancroft Street	Riverview Blvd	S 13th Street	Segment			0.41	0	5	30%	$ 90,000	0.00	0.15	$ 1,340,000	$ 410,000	3.27	3.71	1
32-7	Little Italy Area	4	Traffic Calming / VRU Improvements	S 10th Street & Dorcas Street			Intersection				0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 250,000	3.56	3.71	1
33-1	N 60th Street	2	Road Diet	N 60th Street	NW Radial Hwy	Sorensen Pkwy	Segment			2.13	1	11	40%	$ 790,000	0.04	0.44	$ 11,750,000	$ 3,200,000	3.67	3.67	1
34-1	N 108th Street #1	7	Road Diet	N 108th Street	W Maple Road	Fort Street	Segment			1.32	1	8	40%	$ 720,000	0.04	0.32	$ 10,710,000	$ 1,980,000	5.41	3.59	1
34-2	N 108th Street #1	7	Signal Improvements	N 108th Street & Emmet Street			Intersection		Planned for Construction		0	3	25%							3.59	1
34-3	N 108th Street #1	7	RSA + Improvements	N 108th Street & Fort Street			Intersection				0	5	40%	$ 120,000	0.00	0.20	$ 1,790,000	$ 1,500,000	1.19	3.59	1
35-1	Center Street #3	3	Traffic Calming / VRU Improvements	Center Street	S 51st Street	S 60th Street	Segment			0.75	0	12	30%	$ 220,000	0.00	0.36	$ 3,270,000	$ 750,000	4.36	3.58	1
35-2	Center Street #3	3	Roundabout	S 51st Street & Center Street			Intersection				0	2	80%	$ 100,000	0.00	0.16	$ 1,490,000	$ 2,000,000	0.75	3.58	1
35-3	Center Street #3	3	Signal Improvements	S 60th Street & Center Street			Intersection				1	4	25%	$ 390,000	0.03	0.10	$ 5,800,000	$ 200,000	29.00	3.58	1
36-1	Sorensen Pkwy #1	2	RSA + Improvements	Sorensen Pkwy	N 30th Street	N 60th Street	Segment			2.83	3	12	25%	$ 1,160,000	0.08	0.30	$ 17,260,000	$ 14,150,000	1.22	3.52	1
36-2	Sorensen Pkwy #1	2	Signal Improvements	N 30th Street & Sorensen Pkwy			Intersection				0	10	25%	$ 160,000	0.00	0.25	$ 2,380,000	$ 200,000	11.90	3.52	1
36-3	Sorensen Pkwy #1	2	RCUT/MUT	N 32nd Street & Sorensen Pkwy			Intersection				0	4	55%	$ 140,000	0.00	0.22	$ 2,080,000	$ 2,500,000	0.83	3.52	1
36-4	Sorensen Pkwy #1	2	Roundabout	N 42nd Street & Sorensen Pkwy			Intersection				3	4	80%	$ 3,320,000	0.24	0.32	$ 49,390,000	$ 2,000,000	24.70	3.52	1
36-5	Sorensen Pkwy #1	2	Roundabout	N 52nd Street & Sorensen Pkwy			Intersection				0	3	80%	$ 150,000	0.00	0.24	$ 2,230,000	$ 2,000,000	1.12	3.52	1
37-1	Maple Street #1	1	RSA + Improvements	Maple Street	72nd Street	N 102nd Street	Segment			2.48	6	21	25%	$ 2,280,000	0.15	0.53	$ 33,920,000	$ 12,420,000	2.73	3.52	2
37-2	Maple Street #1	1	Traffic Calming / VRU Improvements	N 76th Street & Maple Street			Intersection				1	2	30%	$ 430,000	0.03	0.06	$ 6,400,000	$ 250,000	25.60	3.52	2
37-3	Maple Street #1	1	RSA + Improvements	N 90th Street & Maple Street			Intersection	NE-133			1	5	40%	$ 640,000	0.04	0.20	$ 9,520,000	$ 1,500,000	6.35	3.52	2
38-1	Arthur C Storz Expy	2	RSA + Improvements	Arthur C Storz Expy	Abbott Drive	N 16th Street	Segment			1.46	0	2	25%	$ 30,000	0.00	0.05	$ 450,000	$ 7,300,000	0.06	3.31	2
38-2	Arthur C Storz Expy	2	Roundabout	N 9th Street & Arthur C Storz Expy			Intersection				1	2	80%	$ 1,140,000	0.08	0.16	$ 16,960,000	$ 2,000,000	8.48	3.31	2
38-3	Arthur C Storz Expy	2	Roundabout	N 16th Street & Arthur C Storz Expy			Intersection				1	6	80%	$ 1,340,000	0.08	0.48	$ 19,940,000	$ 2,000,000	9.97	3.31	2
39-1	S 13th Street #3	3	Traffic Calming / VRU Improvements	S 13th Street	Frederick Street	Leavenworth Street	Segment			1.44	1	10	30%	$ 580,000	0.03	0.30	$ 8,630,000	$ 1,440,000	5.99	3.29	2
39-2	S 13th Street #3	4	RSA + Improvements	S 13th Street & Bancroft Street			Intersection				0	3	40%	$ 70,000	0.00	0.12	$ 1,040,000	$ 1,500,000	0.69	3.29	2
40-1	72nd Street #2	3	RSA + Improvements	72nd Street	WB I-80 Ramp	Dodge Street	Segment			2.35	4	13	25%	$ 1,500,000	0.10	0.33	$ 22,320,000	$ 11,750,000	1.90	3.21	2
40-2	72nd Street #2	3	Roundabout	72nd Street & Grover Street			Intersection				1	7	80%	$ 1,390,000	0.08	0.56	$ 20,680,000	$ 2,000,000	10.34	3.21	2
40-3	72nd Street #2	3	RSA + Improvements	72nd Street & Pine Street			Intersection				0	6	40%	$ 150,000	0.00	0.24	$ 2,230,000	$ 1,500,000	1.49	3.21	2
40-4	72nd Street #2	3	RSA + Improvements	72nd Street & Pacific Street			Intersection				1	2	40%	$ 570,000	0.04	0.08	$ 8,480,000	$ 1,500,000	5.65	3.21	2
41-1	L Street #2	4	Traffic Calming / VRU Improvements	L Street	S 60th Street	I-80	Segment	US-275		4.53	2	36	30%	$ 1,450,000	0.06	1.08	$ 21,570,000	$ 4,530,000	4.76	3.10	2
41-2	L Street #2	4	RCUT/MUT	S 67th Street & L Street			Intersection	US-275			1	3	55%	$ 820,000	0.06	0.17	$ 12,200,000	$ 2,500,000	4.88	3.10	2
41-3	L Street #2	4	RSA + Improvements	S 84th Street & L Street			Intersection	US-275			0	7	40%	$ 170,000	0.00	0.28	$ 2,530,000	$ 1,500,000	1.69	3.10	2
41-4	L Street #2	4	RCUT/MUT	S 90th Street & L Street			Intersection	US-275			0	3	55%	$ 100,000	0.00	0.17	$ 1,490,000	$ 2,500,000	0.60	3.10	2
41-5	L Street #2	5	RSA + Improvements	S 108th Street & L Street			Intersection	US-275			0	3	40%	$ 70,000	0.00	0.12	$ 1,040,000	$ 1,500,000	0.69	3.10	2
42-1	Q Street #2	5	Road Diet	Q Street	S 84th Street	S 108th Street	Segment			2.00	2	7	40%	$ 1,210,000	0.08	0.28	$ 18,000,000	$ 3,000,000	6.00	3.07	2
42-2	Q Street #2	4	Roundabout	S 84th Street & Q Street			Intersection				0	5	80%	$ 250,000	0.00	0.40	$ 3,720,000	$ 2,000,000	1.86	3.07	2
42-3	Q Street #2	5	Roundabout	S 90th Street & Q Street			Intersection				0	3	80%	$ 150,000	0.00	0.24	$ 2,230,000	$ 2,000,000	1.12	3.07	2
42-4	Q Street #2	5	Roundabout	S 108th Street & Q Street			Intersection				0	5	80%	$ 250,000	0.00	0.40	$ 3,720,000	$ 2,000,000	1.86	3.07	2
43-1	72nd Street #3	1	RSA + Improvements	72nd Street	Dodge Street	Military Avenue	Segment			2.62	2	22	25%	$ 990,000	0.05	0.55	$ 14,730,000	$ 13,100,000	1.12	3.07	2
43-2	72nd Street #3	1	RSA + Improvements	72nd Street & Cass Street			Intersection				2	2	40%	$ 1,090,000	0.08	0.08	$ 16,220,000	$ 1,500,000	10.81	3.07	2
43-3	72nd Street #3	1	Roundabout	72nd Street & Western Avenue			Intersection				1	6	80%	$ 1,340,000	0.08	0.48	$ 19,940,000	$ 2,000,000	9.97	3.07	2
43-4	72nd Street #3	1	Signal Improvements	72nd Street & Seward Street			Intersection				0	3	25%	$ 50,000	0.00	0.08	$ 740,000	$ 200,000	3.70	3.07	2
43-5	72nd Street #3	1	Signal Improvements	72nd Street & Blondo Street			Intersection		Completed		0	8	25%							3.07	2
44-1	S 42nd Street #1	3	Road Diet	S 42nd Street	Center Street	Leavenworth Street	Segment			0.68	0	8	40%	$ 200,000	0.00	0.32	$ 2,980,000	$ 1,020,000	2.92	2.92	2
45-1	Adams Park Area	2	Traffic Calming / VRU Improvements	N 33rd Street	Cuming Street	Maple Street	Segment			1.23	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 1,230,000	0.85	2.77	2
45-2	Adams Park Area	2	Traffic Calming / VRU Improvements	N 40th Street	Cuming Street	Pratt Street	Segment			1.69	1	10	30%	$ 580,000	0.03	0.30	$ 8,630,000	$ 1,690,000	5.11	2.77	2
45-3	Adams Park Area	2	Traffic Calming / VRU Improvements	N 42nd Street	Lake Street	Pratt Street	Segment			0.75	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 750,000	1.39	2.77	2
45-4	Adams Park Area	2	Traffic Calming / VRU Improvements	N 45th Street	Grant Street	Spaulding Street	Segment			0.99	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 990,000	1.05	2.77	2
45-5	Adams Park Area	2	Traffic Calming / VRU Improvements	N 48th Street	NW Radial Hwy	Pratt Street	Segment			0.75	0	1	30%	$ 20,000	0.00	0.03	$ 300,000	$ 750,000	0.40	2.77	2
45-6	Adams Park Area	2	Traffic Calming / VRU Improvements	Hamilton Street	N 30th Street	NW Radial Hwy	Segment			1.40	1	7	30%	$ 520,000	0.03	0.21	$ 7,740,000	$ 1,400,000	5.53	2.77	2
45-7	Adams Park Area	2	Traffic Calming / VRU Improvements	Lake Street	N 28th Avenue	N 45th Street	Segment			1.39	1	11	30%	$ 600,000	0.03	0.33	$ 8,930,000	$ 1,390,000	6.42	2.77	2
45-8	Adams Park Area	2	Traffic Calming / VRU Improvements	Maple Street	N 45th Street	N 52nd Street	Segment			0.75	0	5	30%	$ 90,000	0.00	0.15	$ 1,340,000	$ 750,000	1.79	2.77	2
45-9	Adams Park Area	2	Traffic Calming / VRU Improvements	Bedford Street	N 30th Street	Fontenelle Blvd	Segment			1.38	0	5	30%	$ 90,000	0.00	0.15	$ 1,340,000	$ 1,380,000	0.97	2.77	2
45-10	Adams Park Area	1	Traffic Calming / VRU Improvements	Pratt Street	N 48th Street	N 66th Street	Segment			1.37	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 1,370,000	0.76	2.77	2
45-11	Adams Park Area	2	Signal Improvements	N 30th Street & Hamilton Street			Intersection		Completed		0	4	25%							2.77	2
46-1	L Street / Missorui Ave	4	Road Diet	L Street	S 13th Street	S 24th Street	Segment	US-275		0.73	0	7	40%	$ 170,000	0.00	0.28	$ 2,530,000	$ 1,090,000	2.32	2.65	2
46-2	L Street / Missorui Ave	4	Signal Improvements	L Street & S 23rd Street			Intersection	US-275			0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	2.65	2
46-3	L Street / Missorui Ave	4	Signal Improvements	L Street & S 24th Street			Intersection	US-275	Completed		0	8	25%							2.65	2
47-1	Cuming Street #2	2	Road Diet	Cuming Street	US-75	Saddle Creek Road	Segment	NE-64		1.41	0	5	40%	$ 120,000	0.00	0.20	$ 1,790,000	$ 2,120,000	0.84	2.50	2
47-2	Cuming Street #2	3	RSA + Improvements	N 30th Street & Cuming Street			Intersection	NE-64			0	3	40%	$ 70,000	0.00	0.12	$ 1,040,000	$ 1,500,000	0.69	2.50	2
47-3	Cuming Street #2	3	RSA + Improvements	N 40th Street & Cuming Street			Intersection	NE-64			1	6	40%	$ 670,000	0.04	0.24	$ 9,970,000	$ 1,500,000	6.65	2.50	2
48-1	S 132nd Street #1	6	RSA + Improvements	S 132nd Street	L Street	Arbor Street	Segment			1.58	0	6	25%	$ 90,000	0.00	0.15	$ 1,340,000	$ 7,900,000	0.17	2.49	2
48-2	S 132nd Street #1	5	Roundabout	S 132nd Street & I Street			Intersection				1	4	80%	$ 1,240,000	0.08	0.32	$ 18,450,000	$ 2,000,000	9.23	2.49	2
48-3	S 132nd Street #1	6	Signal Improvements	S 132nd Street & Kingswood Drive			Intersection				1	2	25%	$ 360,000	0.03	0.05	$ 5,360,000	$ 200,000	26.80	2.49	2

ID #	Project Name	Council Distr.	Proposed Countermeasure	Location (Major Rd / Intersection)	Beginning (E or S)	End (W or N)	Int/Seg	State Route?	Planned/Complete?	Length (mi)	K (10-yrs)	SI (10-yrs)	CRF (%)	Benefit ($/yr)	Mitigated K (/yr)	Mitigated SI (/yr)	20-year Benefit ($)	Cost ($)	Improv. BCR	Proj. BCR	Priority (1-5)
49-1	L Street #1	4	RSA + Improvements	L Street	S 24th Street	S 60th Street	Segment	US-275		3.01	5	31	25%	$ 2,110,000	0.13	0.78	$ 31,390,000	$ 15,030,000	2.09	2.42	2
49-2	L Street #1	4	Signal Improvements	S 33rd Street & L Street			Intersection	US-275			1	3	25%	$ 370,000	0.03	0.08	$ 5,500,000	$ 200,000	27.50	2.42	2
50-1	W Maple Road	7	Traffic Calming / VRU Improvements	W Maple Road	N 108th Street	N HWS Cleveland Blvd	Segment			5.63	1	20	30%	$ 760,000	0.03	0.60	$ 11,310,000	$ 5,630,000	2.01	2.41	2
50-2	W Maple Road	7	RCUT/MUT	N 108th Street & W Maple Road			Intersection				0	10	55%	$ 340,000	0.00	0.55	$ 5,060,000	$ 2,500,000	2.02	2.41	2
50-3	W Maple Road	7	Signal Improvements	N 120th Street & W Maple Road			Intersection		Completed		0	3	25%							2.41	2
50-4	W Maple Road	7	RCUT/MUT	N 132nd Street & W Maple Road			Intersection				1	3	55%	$ 820,000	0.06	0.17	$ 12,200,000	$ 2,500,000	4.88	2.41	2
50-5	W Maple Road	7	RCUT/MUT	N 144th Street & W Maple Road			Intersection				0	4	55%	$ 140,000	0.00	0.22	$ 2,080,000	$ 2,500,000	0.83	2.41	2
50-6	W Maple Road	7	Signal Improvements	N 147th Street & W Maple Road			Intersection		Completed		1	7	25%							2.41	2
50-7	W Maple Road	7	RCUT/MUT	N 156th Street & W Maple Road			Intersection				0	3	55%	$ 100,000	0.00	0.17	$ 1,490,000	$ 2,500,000	0.60	2.41	2
50-8	W Maple Road	7	RCUT/MUT	N 168th Street & W Maple Road			Intersection				1	2	55%	$ 780,000	0.06	0.11	$ 11,600,000	$ 2,500,000	4.64	2.41	2
51-1	Downtown Street Grid	2	Traffic Calming / VRU Improvements	S 10th Street	Leavenworth Street	Mike Fahey Street	Segment			0.93	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 930,000	1.12	2.41	2
51-19	Downtown Street Grid	2	Road Diet	Capitol Avenue	N 10th Street	Florence Blvd	Segment			0.62			40%	$ -	0.00	0.00	$ -	$ 930,000		2.41	2
51-20	Downtown Street Grid	2	Road Diet	S 24th Street	Dodge Street	Cass Street	Segment			0.28	0	1	40%	$ 20,000	0.00	0.04	$ 300,000	$ 420,000	0.71	2.41	2
51-21	Downtown Street Grid	3	Road Diet	S 16th Street	Leavenworth Street	Howard Street	Segment			0.21			40%	$ -	0.00	0.00	$ -	$ 320,000		2.41	2
51-22	Downtown Street Grid	3	Road Diet	S 13th Street	Leavenworth Street	Jackson Street	Segment			0.14	0	2	40%	$ 50,000	0.00	0.08	$ 740,000	$ 210,000	3.52	2.41	2
51-23	Downtown Street Grid	3	Road Diet	Leavenworth Street	S 7th Street	S 13th Street	Segment		Planned for Construction	0.41	0	1	40%							2.41	2
51-24	Downtown Street Grid	3	Signal Improvements	S 16th Street & Jackson Street			Intersection				0	3	25%	$ 50,000	0.00	0.08	$ 740,000	$ 200,000	3.70	2.41	2
51-25	Downtown Street Grid	2	Signal Improvements	S 24th Street & Douglas Street			Intersection	US-6			0	3	25%	$ 50,000	0.00	0.08	$ 740,000	$ 200,000	3.70	2.41	2
51-26	Downtown Street Grid	3	Signal Improvements	S 28th Street & Farnam Street			Intersection				0	5	25%	$ 80,000	0.00	0.13	$ 1,190,000	$ 200,000	5.95	2.41	2
51-27	Downtown Street Grid	3	Signal Improvements	S 29th Street & Farnam Street			Intersection				0	3	25%	$ 50,000	0.00	0.08	$ 740,000	$ 200,000	3.70	2.41	2
51-28	Downtown Street Grid	3	Traffic Calming / VRU Improvements	S 29th Street & St Mary's Avenue			Intersection				0	9	30%	$ 170,000	0.00	0.27	$ 2,530,000	$ 250,000	10.12	2.41	2
51-29	Downtown Street Grid	3	Signal Improvements	Park Avenue & St Mary's Avenue			Intersection				0	3	25%	$ 50,000	0.00	0.08	$ 740,000	$ 200,000	3.70	2.41	2
51-30	Downtown Street Grid	3	RSA + Improvements	N 30th Street & Dodge Street			Intersection	US-6			0	4	40%	$ 100,000	0.00	0.16	$ 1,490,000	$ 1,500,000	0.99	2.41	2
51-31	Downtown Street Grid	3	Signal Improvements	S 36th Street & Harney Street			Intersection				0	3	25%	$ 50,000	0.00	0.08	$ 740,000	$ 200,000	3.70	2.41	2
51-32	Downtown Street Grid	3	RSA + Improvements	S 27th Street & Dodge Street			Intersection	US-6			0	6	40%	$ 150,000	0.00	0.24	$ 2,230,000	$ 1,500,000	1.49	2.41	2
51-2-18	Downtown Street Grid	3	One-way to Two-way	Various			Segment			16.42	4	74	30%	$ 2,940,000	0.12	2.22	$ 43,740,000	$ 16,420,000	2.66	2.41	2
52-1	Millard Area	5	RSA + Improvements	Millard Avenue	L Street	S 144th Street	Segment	NE-50		1.35	2	11	25%	$ 820,000	0.05	0.28	$ 12,200,000	$ 6,740,000	1.81	2.34	2
52-2	Millard Area	5	RSA + Improvements	S 144th Street	Y Street	Q Street	Segment	NE-50		0.51	2	2	25%	$ 680,000	0.05	0.05	$ 10,120,000	$ 2,530,000	4.00	2.34	2
52-3	Millard Area	5	Road Diet	Stony Brook Blvd	S 144th Street	S 148th Plaza	Segment			0.40	0	2	40%	$ 50,000	0.00	0.08	$ 740,000	$ 600,000	1.23	2.34	2
53-1	S 24th Street Area	4	Traffic Calming / VRU Improvements	S 20th Street	Q Street	Missouri Avenue	Segment			0.51	0	2	30%	$ 40,000	0.00	0.06	$ 600,000	$ 510,000	1.18	2.23	2
53-2	S 24th Street Area	4	Traffic Calming / VRU Improvements	S 24th Street	U Street	L Street	Segment			0.76	0	8	30%	$ 150,000	0.00	0.24	$ 2,230,000	$ 760,000	2.93	2.23	2
53-3	S 24th Street Area	4	Traffic Calming / VRU Improvements	Q Street	S 20th Street	S 24th Street	Segment			0.27	0	2	30%	$ 40,000	0.00	0.06	$ 600,000	$ 270,000	2.22	2.23	2
54-1	F & I Streets	4	Road Diet	F Street	S 84th Street	S 96th Street	Segment			1.21	0	4	40%	$ 100,000	0.00	0.16	$ 1,490,000	$ 1,810,000	0.82	2.22	2
54-2	F & I Streets	5	Traffic Calming / VRU Improvements	I Street	S 94th Street	NB I-80 Ramp	Segment			1.52	0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 1,520,000	0.68	2.22	2
54-3	F & I Streets	4	Road Diet	S 96th Street	L Street	F Street	Segment			0.50	0	2	40%	$ 50,000	0.00	0.08	$ 740,000	$ 750,000	0.99	2.22	2
54-4	F & I Streets	5	Road Diet	S 108th Street	L Street	I Street	Segment			0.27	1	3	40%	$ 600,000	0.04	0.12	$ 8,930,000	$ 410,000	21.78	2.22	2
54-5	F & I Streets	5	Roundabout	S 96th Street & F Street			Intersection				0	3	80%	$ 150,000	0.00	0.24	$ 2,230,000	$ 2,000,000	1.12	2.22	2
55-1	Ames Avenue #1	2	Road Diet	Ames Avenue	Florence Blvd	N 31st Avenue	Segment			0.92	0	7	40%	$ 170,000	0.00	0.28	$ 2,530,000	$ 1,370,000	1.85	2.17	3
55-2	Ames Avenue #1	2	Roundabout	N 24th Street & Ames Avenue			Intersection				0	4	80%	$ 200,000	0.00	0.32	$ 2,980,000	$ 2,000,000	1.49	2.17	3
55-3	Ames Avenue #1	2	Roundabout	N 30th Street & Ames Avenue			Intersection				0	6	80%	$ 300,000	0.00	0.48	$ 4,460,000	$ 2,000,000	2.23	2.17	3
55-4	Ames Avenue #1	2	Mini-Roundabout	N 31st Avenue & Ames Avenue			Intersection				0	6	70%	$ 260,000	0.00	0.42	$ 3,870,000	$ 1,000,000	3.87	2.17	3
56-1	W Center Road #2	6	Traffic Calming / VRU Improvements	W Center Road	S 108th Street	S 144th Street	Segment			2.98	0	12	30%	$ 220,000	0.00	0.36	$ 3,270,000	$ 2,980,000	1.10	2.15	3
56-2	W Center Road #2	6	RCUT/MUT	S 114th Street & W Center Road			Intersection				0	5	55%	$ 170,000	0.00	0.28	$ 2,530,000	$ 2,500,000	1.01	2.15	3
56-3	W Center Road #2	6	RCUT/MUT	S 120th Street & W Center Road			Intersection				0	9	55%	$ 310,000	0.00	0.50	$ 4,610,000	$ 2,500,000	1.84	2.15	3
56-4	W Center Road #2	6	RCUT/MUT	S 122nd Street & W Center Road			Intersection				0	3	55%	$ 100,000	0.00	0.17	$ 1,490,000	$ 2,500,000	0.60	2.15	3
56-5	W Center Road #2	6	Roundabout	S 140th Street & W Center Road			Intersection				1	2	80%	$ 1,140,000	0.08	0.16	$ 16,960,000	$ 2,000,000	8.48	2.15	3
56-6	W Center Road #2	6	Roundabout	S 144th Street & W Center Road			Intersection				0	3	80%	$ 150,000	0.00	0.24	$ 2,230,000	$ 2,000,000	1.12	2.15	3
57-1	N 204th Street	6	RSA + Improvements	N 204th Street	Pacific Street	Honeysuckle Drive	Segment	NE-31		2.00	1	5	25%	$ 400,000	0.03	0.13	$ 5,950,000	$ 10,000,000	0.60	2.11	3
57-2	N 204th Street	6	Roundabout	S 204th Street & Pacific Street			Intersection	NE-31			1	5	80%	$ 1,290,000	0.08	0.40	$ 19,190,000	$ 2,000,000	9.60	2.11	3
57-3	N 204th Street	6	Roundabout	N 204th Street & Veterans Drive			Intersection	NE-31			0	6	80%	$ 300,000	0.00	0.48	$ 4,460,000	$ 2,000,000	2.23	2.11	3
58-1	Oak View Drive	6	Road Diet	Oak View Drive	S 144th Street	W Center Road	Segment			0.82	0	5	40%	$ 120,000	0.00	0.20	$ 1,790,000	$ 1,230,000	1.46	1.89	3
58-2	Oak View Drive	6	Road Diet	S 140th Street / Arbor Street	W Center Road	S 144th Street	Segment			0.34	0	4	40%	$ 100,000	0.00	0.16	$ 1,490,000	$ 510,000	2.92	1.89	3
59-1	N 30th Street #3	2	Road Diet	N 30th Street	Lake Street	Sorensen Pkwy	Segment		Completed	1.25	0	15	40%							1.86	3
59-2	N 30th Street #3	2	Roundabout	N 30th Street & Lake Street			Intersection		Completed		1	2	80%							1.86	3
59-3	N 30th Street #3	2	Roundabout	N 30th Street & Bedford Avenue			Intersection				0	5	80%	$ 250,000	0.00	0.40	$ 3,720,000	$ 2,000,000	1.86	1.86	3
60-1	Pacific Street #1	3	Road Diet	Pacific Street	S 60th Street	S 67th Street	Segment			0.56	0	3	40%	$ 70,000	0.00	0.12	$ 1,040,000	$ 840,000	1.24	1.86	3
60-2	Pacific Street #1	3	Signal Improvements	S 67th Street & Pacific Street			Intersection				0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	1.86	3
61-1	S 60th Street #1	3	Traffic Calming / VRU Improvements	S 60th Street	Grover Street	Center Street	Segment			0.75	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 750,000	1.19	1.85	3
61-2	S 60th Street #1	4	RSA + Improvements	S 60th Street & Grover Street			Intersection				0	9	40%	$ 220,000	0.00	0.36	$ 3,270,000	$ 1,500,000	2.18	1.85	3
62-1	Southside Terrace Area	4	Traffic Calming / VRU Improvements	S 32nd Street	Y Street	Q Street	Segment			0.50	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 500,000	1.78	1.84	3
62-2	Southside Terrace Area	4	Traffic Calming / VRU Improvements	S 33rd Street	Q Street	L Street	Segment			0.47	0	3	30%	$ 60,000	0.00	0.09	$ 890,000	$ 470,000	1.89	1.84	3
63-1	S 171st Street	5	Road Diet	S 171st Street	W Center Road	S 168th Street	Segment			0.71	0	5	40%	$ 120,000	0.00	0.20	$ 1,790,000	$ 1,070,000	1.67	1.67	3
64-1	Dodge Street	3	RSA + Improvements	Dodge Street	Turner Blvd	S 68th Street	Segment	US-6		3.11	1	33	25%	$ 840,000	0.03	0.83	$ 12,500,000	$ 15,570,000	0.80	1.64	3
64-2	Dodge Street	3	RSA + Improvements	N 33rd Street & Dodge Street			Intersection	US-6			0	7	40%	$ 170,000	0.00	0.28	$ 2,530,000	$ 1,500,000	1.69	1.64	3
64-3	Dodge Street	3	RSA + Improvements	N 40th Street & Dodge Street			Intersection	US-6			2	4	40%	$ 1,140,000	0.08	0.16	$ 16,960,000	$ 1,500,000	11.31	1.64	3
64-4	Dodge Street	3	RSA + Improvements	N 48th Street & Dodge Street			Intersection	US-6			0	4	40%	$ 100,000	0.00	0.16	$ 1,490,000	$ 1,500,000	0.99	1.64	3
64-5	Dodge Street	3	RSA + Improvements	N 52nd Street & Dodge Street			Intersection	US-6			0	5	40%	$ 120,000	0.00	0.20	$ 1,790,000	$ 1,500,000	1.19	1.64	3
65-1	NW Radial Hwy #1	2	Road Diet	NW Radial Hwy	Cuming Street	Military Avenue	Segment	NE-64		0.90	0	7	40%	$ 170,000	0.00	0.28	$ 2,530,000	$ 1,350,000	1.87	1.54	3
65-2	NW Radial Hwy #1	2	RSA + Improvements	NW Radial Hwy & Cuming Street			Intersection	NE-64			0	6	40%	$ 150,000	0.00	0.24	$ 2,230,000	$ 1,500,000	1.49	1.54	3
65-3	NW Radial Hwy #1	1	RSA + Improvements	NW Radial Hwy & Hamilton Street			Intersection	NE-64			0	10	40%	$ 250,000	0.00	0.40	$ 3,720,000	$ 1,500,000	2.48	1.54	3
65-4	NW Radial Hwy #1	2	RCUT/MUT	NW Radial Hwy & Dacatur Street			Intersection	NE-64			0	4	55%	$ 140,000	0.00	0.22	$ 2,080,000	$ 2,500,000	0.83	1.54	3
66-1	N 108th Street #2	7	Add Center TWLTL	S 120th Street	N Mill Road	Decatur Street	Segment			0.50	1	3	20%	$ 300,000	0.02	0.06	$ 4,460,000	$ 3,520,000	1.27	1.27	3
67-1	Blondo Street #2	7	Road Diet	Blondo Street	N 90th Street	N 120th Street	Segment			2.41	0	11	40%	$ 270,000	0.00	0.44	$ 4,020,000	$ 3,610,000	1.11	1.11	3
67-2	Blondo Street #2	7	Signal Improvements	Papillion Pkwy & Blondo Street			Intersection		Completed		1	4	25%							1.11	3
68-1	N 90th Street #1	1	RSA + Improvements	N 90th Street	W Dodge Street	Maple Street	Segment	NE-133		1.45	1	8	25%	$ 450,000	0.03	0.20	$ 6,690,000	$ 7,270,000	0.92	1.05	3
68-2	N 90th Street #1	1	Signal Improvements	N 90th Street & Blondo Street			Intersection	NE-133			0	5	25%	$ 80,000	0.00	0.13	$ 1,190,000	$ 200,000	5.95	1.05	3
68-3	N 90th Street #1	1	Signal Improvements	N 90th Street & Maple Street			Intersection	NE-133	Completed		0	4	25%							1.05	3
69-1	Ed Creighton / Martha	4	Road Diet	Martha Street	S 24th Street	Park Avenue	Segment			0.47	0	2	40%	$ 50,000	0.00	0.08	$ 740,000	$ 710,000	1.04	1.04	3
70-1	S 96th Street	5	RSA + Improvements	S 96th Street	Harrison Street	Mockingbird Drive	Segment			1.18	1	4	25%	$ 390,000	0.03	0.10	$ 5,800,000	$ 5,900,000	0.98	0.98	3
71-1	Military Avenue #2	2	Add Center TWLTL	Military Avenue	Hamilton Street	NW Radial Hwy	Segment	NE-L28K		0.72	1	6	20%	$ 330,000	0.02	0.12	$ 4,910,000	$ 5,040,000	0.97	0.97	3
72-1	McKinley Street	1	Road Diet	McKinley Street	N 31st Street	N 52nd Avenue	Segment			1.59	0	3	40%	$ 70,000	0.00	0.12	$ 1,040,000	$ 2,390,000	0.44	0.96	3
72-2	McKinley Street	1	Road Diet	Mormon Bridge Road	McKinley Street	I-680 NB Ramp	Segment			0.38	0	2	40%	$ 50,000	0.00	0.08	$ 740,000	$ 570,000	1.30	0.96	3
72-3	McKinley Street	1	Roundabout	Mormon Bridge Road & McKinley Street			Intersection				0	4	80%	$ 200,000	0.00	0.32	$ 2,980,000	$ 2,000,000	1.49	0.96	3
73-1	W Center Road #1	3	RSA + Improvements	W Center Road	S 60th Street	S 108th Street	Segment			4.05	0	18	25%	$ 280,000	0.00	0.45	$ 4,170,000	$ 20,270,000	0.21	0.95	3
73-2	W Center Road #1	3	Roundabout	Towl Park Road & W Center Road			Intersection				1	2	80%	$ 1,140,000	0.08	0.16	$ 16,960,000	$ 2,000,000	8.48	0.95	3
74-1	Center Street #2	3	Road Diet	Center Street	N 42nd Street	S 51st Street	Segment			0.88	0	5	40%	$ 120,000	0.00	0.20	$ 1,790,000	$ 1,320,000	1.36	0.94	3
74-2	Center Street #2	3	Roundabout	S 42nd Street & Center Street			Intersection				0	3	80%	$ 150,000	0.00	0.24	$ 2,230,000	$ 2,000,000	1.12	0.94	3
74-3	Center Street #2	3	Roundabout	S 45th Street & Center Street			Intersection				0	1	80%	$ 50,000	0.00	0.08	$ 740,000	$ 2,000,000	0.37	0.94	3
74-4	Center Street #2	3	Signal Improvements	S 48th Street & Center Street			Intersection				0	2	25%	$ 30,000	0.00	0.05	$ 450,000	$ 200,000	2.25	0.94	3

ID #	Project Name	Council Distr.	Proposed Countermeasure	Location (Major Rd / Intersection)	Beginning (E or S)	End (W or N)	Int/Seg	State Route?	Planned/Complete?	Length (mi)	K (10-yrs)	SI (10-yrs)	CRF (%)	Benefit ($/yr)	Mitigated K (/yr)	Mitigated SI (/yr)	20-year Benefit ($)	Cost ($)	Improv. BCR	Proj. BCR	Priority (1-5)
75-1	S 84th Street	4	RSA + Improvements	S 84th Street	Q Street	W Center Road	Segment	NE-85		2.09	0	16	25%	$ 250,000	0.00	0.40	$ 3,720,000	$ 10,440,000	0.36	0.92	3
75-2	S 84th Street	3	Signal Improvements	S 84th Street & Papillion Pkwy			Intersection				0	3	25%	$ 50,000	0.00	0.08	$ 740,000	$ 200,000	3.70	0.92	3
75-3	S 84th Street	3	Signal Improvements	S 84th Street & Grover Street			Intersection				1	3	25%	$ 370,000	0.03	0.08	$ 5,500,000	$ 200,000	27.50	0.92	3
76-1	S 168th Street #2	7	RSA + Improvements	S 168th Street	Burke Street	Ames Avenue	Segment			2.73	2	12	25%	$ 840,000	0.05	0.30	$ 12,500,000	$ 13,650,000	0.92	0.92	3
76-2	S 168th Street #2	7	Signal Improvements	S 168th Street & Blondo Street			Intersection		Completed		1	2	25%							0.92	3
77-1	N 90th Street #2	1	RSA + Improvements	N 90th Street	Maple Street	Blair High Road	Segment	NE-133		1.91	1	13	25%	$ 530,000	0.03	0.33	$ 7,890,000	$ 9,560,000	0.83	0.90	3
77-2	N 90th Street #2	1	Signal Improvements	N 90th Street & Boyd Street			Intersection	NE-133			0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	0.90	3
78-1	S 120th Street #1	7	RSA + Improvements	S 120th Street	Davenport Street	W Maple Road	Segment			2.14	1	15	25%	$ 560,000	0.03	0.38	$ 8,330,000	$ 10,710,000	0.78	0.89	3
78-2	S 120th Street #1	7	RSA + Improvements	S 120th Street & Blondo Street			Intersection				0	7	40%	$ 170,000	0.00	0.28	$ 2,530,000	$ 1,500,000	1.69	0.89	3
79-1	72nd Street #1	4	RSA + Improvements	72nd Street	Main Street	WB I-80 Ramp	Segment			1.62	1	10	25%	$ 480,000	0.03	0.25	$ 7,140,000	$ 8,120,000	0.88	0.88	4
79-2	72nd Street #1	4	Signal Improvements	72nd Street & Q Street			Intersection		Completed		0	5	25%							0.88	4
80-1	S 36th Street	4	Add Center TWLTL	S 36th Street	Harrison Street	L Street	Segment			1.48	2	7	20%	$ 610,000	0.04	0.14	$ 9,080,000	$ 10,360,000	0.88	0.88	4
81-1	W Dodge Road	3	RSA + Improvements	W Dodge Road	S 66th Street	N 96th Street	Segment	US-6		2.37	1	21	25%	$ 650,000	0.03	0.53	$ 9,670,000	$ 11,830,000	0.82	0.83	4
81-2	W Dodge Road	3	RSA + Improvements	72nd Street & W Dodge Road			Intersection	US-6			0	5	40%	$ 120,000	0.00	0.20	$ 1,790,000	$ 1,500,000	1.19	0.83	4
81-3	W Dodge Road	3	RSA + Improvements	N 74th Street & W Dodge Road			Intersection	US-6			0	3	40%	$ 70,000	0.00	0.12	$ 1,040,000	$ 1,500,000	0.69	0.83	4
81-4	W Dodge Road	3	RSA + Improvements	N 76th Street & W Dodge Road			Intersection	US-6			0	3	40%	$ 70,000	0.00	0.12	$ 1,040,000	$ 1,500,000	0.69	0.83	4
82-1	Sorensen Pkwy #2	1	RSA + Improvements	Sorensen Pkwy	N 60th Street	Ida Street	Segment			2.59	1	14	25%	$ 540,000	0.03	0.35	$ 8,030,000	$ 12,940,000	0.62	0.83	4
82-2	Sorensen Pkwy #2	1	Roundabout	N 60th Street & Sorensen Pkwy			Intersection				0	5	80%	$ 250,000	0.00	0.40	$ 3,720,000	$ 2,000,000	1.86	0.83	4
82-3	Sorensen Pkwy #2	1	Roundabout	N 78th Street & Sorensen Pkwy			Intersection				0	3	80%	$ 150,000	0.00	0.24	$ 2,230,000	$ 2,000,000	1.12	0.83	4
83-1	Fontenelle Blvd	2	Add Center TWLTL	Fontenelle Blvd	NW Radial Hwy	Pratt Street	Segment			0.82	1	5	20%	$ 320,000	0.02	0.10	$ 4,760,000	$ 5,770,000	0.82	0.82	4
84-1	Pacific Street #2	3	Add Median / Access Control	Pacific Street	S 67th Street	S 101st Street	Segment			2.84	1	19	20%	$ 500,000	0.02	0.38	$ 7,440,000	$ 9,930,000	0.75	0.82	4
84-2	Pacific Street #2	3	Signal Improvements	S 84th Street & Pacific Street			Intersection				0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	0.82	4
85-1	Q Street #3	5	RSA + Improvements	Q Street	S 108th Street	S 120th Street	Segment			1.00	0	6	25%	$ 90,000	0.00	0.15	$ 1,340,000	$ 4,980,000	0.27	0.82	4
85-2	Q Street #3	5	Add Center TWLTL	Q Street	S 120th Street	S 136th Street	Segment			1.36	2	8	20%	$ 620,000	0.04	0.16	$ 9,220,000	$ 9,500,000	0.97	0.82	4
85-3	Q Street #3	5	Roundabout	S 120th Street & Q Street			Intersection				0	4	80%	$ 200,000	0.00	0.32	$ 2,980,000	$ 2,000,000	1.49	0.82	4
86-1	Abbott Drive	2	RSA + Improvements	Abbot Drive	Riverfront Drive	Arthur C Storz Expy	Segment			3.46	2	17	25%	$ 910,000	0.05	0.43	$ 13,540,000	$ 17,280,000	0.78	0.78	4
87-1	N 85th Street Area	1	Traffic Calming / VRU Improvements	N 85th Street	Dodge Street	Maple Street	Segment			1.80	0	5	30%	$ 90,000	0.00	0.15	$ 1,340,000	$ 1,800,000	0.74	0.74	4
88-1	Fort Street	7	RSA + Improvements	Fort Street	Blair High Road	N 120th Street	Segment			3.26	2	10	25%	$ 810,000	0.05	0.25	$ 12,050,000	$ 16,300,000	0.74	0.74	4
89-1	N 52nd Street	2	Add Center TWLTL	N 52nd Street	Benson HS Drive	Ames Avenue	Segment			0.90	1	3	20%	$ 300,000	0.02	0.06	$ 4,460,000	$ 6,330,000	0.70	0.70	4
90-1	UNMC Area	3	Traffic Calming / VRU Improvements	S 42nd Street	Leavenworth Street	Dodge Street	Segment			0.43	0	1	30%	$ 20,000	0.00	0.03	$ 300,000	$ 430,000	0.70	0.70	4
91-1	Hartman Avenue	1	Add Center TWLTL	Hartman Avenue	N 56th Street	N 69th Street	Segment			0.97	1	5	20%	$ 320,000	0.02	0.10	$ 4,760,000	$ 6,790,000	0.70	0.65	4
91-2	Hartman Avenue	1	Road Diet	Crown Point Avenue	N 69th Street	72nd Street	Segment			0.35			40%	$ -	0.00	0.00	$ -	$ 530,000		0.65	4
92-1	S 156th / F Street	5	Add Center TWLTL	F Street	S 144th Street	S 156th Street	Segment			0.88	0	4	20%	$ 50,000	0.00	0.08	$ 740,000	$ 6,130,000	0.12	0.64	4
92-2	S 156th / F Street	5	Add Center TWLTL	S 156th Street	F Street	W Center Road	Segment			1.06	2	1	20%	$ 530,000	0.04	0.02	$ 7,890,000	$ 7,440,000	1.06	0.64	4
93-1	S 120th Street #2	5	RSA + Improvements	S 120th Street	Q Street	W Center Road	Segment			1.99	0	6	25%	$ 90,000	0.00	0.15	$ 1,340,000	$ 9,930,000	0.13	0.61	4
93-2	S 120th Street #2	5	RSA + Improvements	I Street	S 116th Street	S 120th Street	Segment			0.25	1	3	25%	$ 370,000	0.03	0.08	$ 5,500,000	$ 1,270,000	4.33	0.61	4
94-1	S 132nd Street #2	6	Add Median / Access Control	S 132nd Street	Pacific Street	Walsh Drive	Segment			0.82	1	3	20%	$ 300,000	0.02	0.06	$ 4,460,000	$ 2,870,000	1.55	0.59	4
94-2	S 132nd Street #2	7	RSA + Improvements	S 132nd Street	Walsh Drive	Blondo Street	Segment			1.18	0	3	25%	$ 50,000	0.00	0.08	$ 740,000	$ 5,890,000	0.13	0.59	4
95-1	Farnam Street	3	Road Diet	Farnam Street	S 42nd Street	S 46th Street	Segment			0.34	0	1	40%	$ 20,000	0.00	0.04	$ 300,000	$ 510,000	0.59	0.59	4
96-1	Pacific Street #4	6	RSA + Improvements	Pacific Street	S 132nd Street	S 168th Street	Segment			2.99	1	11	25%	$ 500,000	0.03	0.28	$ 7,440,000	$ 14,930,000	0.50	0.50	5
97-1	Saddle Creek North	3	RSA + Improvements	Saddle Creek Road	Leavenworth Street	Cuming Street	Segment			1.17	0	12	25%	$ 190,000	0.00	0.30	$ 2,830,000	$ 5,870,000	0.48	0.48	5
98-1	Center Street #1	3	Road Diet	Center Street	N 32 Avenue	N 42nd Street	Segment			0.75	0	2	40%	$ 50,000	0.00	0.08	$ 740,000	$ 1,120,000	0.66	0.47	5
98-2	Center Street #1	3	Roundabout	S 36th Street & Center Street			Intersection				0	1	80%	$ 50,000	0.00	0.08	$ 740,000	$ 2,000,000	0.37	0.47	5
99-1	Regency Pkwy	6	Road Diet	Regency Pkwy	Pacific Street	W Dodge Road	Segment			1.09	0	2	40%	$ 50,000	0.00	0.08	$ 740,000	$ 1,640,000	0.45	0.45	5
100-1	S 108th Street #2	5	RSA + Improvements	S 108th Street	V Street	L Street	Segment			0.62	0	6	25%	$ 90,000	0.00	0.15	$ 1,340,000	$ 3,120,000	0.43	0.43	5
101-1	S 60th Street #2	4	Road Diet	S 60th Street	Q Street	L Street	Segment			0.50	0	1	40%	$ 20,000	0.00	0.04	$ 300,000	$ 750,000	0.40	0.41	5
101-2	S 60th Street #2	4	Traffic Calming / VRU Improvements	S 60th Street & N Street			Intersection				0	4	30%	$ 70,000	0.00	0.12	$ 1,040,000	$ 250,000	4.16	0.41	5
101-3	S 60th Street #2	4	Add Center TWLTL	S 60th Street	Y Street	Q Street	Segment			0.54	0	3	20%	$ 40,000	0.00	0.06	$ 600,000	$ 3,760,000	0.16	0.41	5
102-1	Q Street #5	4	Add Center TWLTL	Q Street	S 48th Street	72nd Street	Segment			1.94	1	8	20%	$ 360,000	0.02	0.16	$ 5,360,000	$ 13,580,000	0.39	0.39	5
103-1	72nd Street #4	1	RSA + Improvements	72nd Street	Military Avenue	State Street	Segment			2.62	0	5	25%	$ 80,000	0.00	0.13	$ 1,190,000	$ 13,120,000	0.09	0.37	5
103-2	72nd Street #4	1	Roundabout	72nd Street & Crown Point Avenue			Intersection				0	6	80%	$ 300,000	0.00	0.48	$ 4,460,000	$ 2,000,000	2.23	0.37	5
104-1	Cass Street	1	Add Median / Access Control	Cass Street	72nd Street	W Dodge Road	Segment			1.20	0	4	20%	$ 50,000	0.00	0.08	$ 740,000	$ 4,190,000	0.18	0.37	5
104-2	Cass Street	1	Signal Improvements	N 76th Street & Cass Street			Intersection				0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	0.37	5
105-1	S 144th Street #1	7	RSA + Improvements	N 144th Street	Franklin Street	W Maple Road	Segment			1.16	0	9	25%	$ 140,000	0.00	0.23	$ 2,080,000	$ 5,810,000	0.36	0.36	5
106-1	N 156th Street	7	Add Median / Access Control	N 156th Street	Emmet Street	Fort Street	Segment			1.17	0	6	20%	$ 70,000	0.00	0.12	$ 1,040,000	$ 4,080,000	0.25	0.25	5
107-1	L Street #3	5	RSA + Improvements	L Street / Industrial Road	I-80	W Center Road	Segment	US-275		3.80	0	17	25%	$ 260,000	0.00	0.43	$ 3,870,000	$ 19,020,000	0.20	0.25	5
107-2	L Street #3	5	RCUT/MUT	S 120th Street & L Street			Intersection	US-275			0	3	55%	$ 100,000	0.00	0.17	$ 1,490,000	$ 2,500,000	0.60	0.25	5
108-1	W Center Road #3	5	RSA + Improvements	W Center Road	Industrial Road	S 192nd Street	Segment	US-275		3.20	0	7	25%	$ 110,000	0.00	0.18	$ 1,640,000	$ 15,980,000	0.10	0.22	5
108-2	W Center Road #3	5	RCUT/MUT	S 177th Street & W Center Road			Intersection	US-275			0	3	55%	$ 100,000	0.00	0.17	$ 1,490,000	$ 2,500,000	0.60	0.22	5
108-3	W Center Road #3	5	Signal Improvements	S 180th Street & W Center Road			Intersection	US-275			0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 200,000	4.45	0.22	5
108-4	W Center Road #3	5	Signal Improvements	S 192nd Street & W Center Road			Intersection	US-275	Planned for Construction		0	5	25%							0.22	5
109-1	S 144th Street #2	6	RSA + Improvements	S 144th Street	Industrial Road	Applied Pkwy	Segment			1.18	0	5	25%	$ 80,000	0.00	0.13	$ 1,190,000	$ 5,900,000	0.20	0.20	5
110-1	S 48th Street	4	Add Center TWLTL	S 48th Street	Harrison Street	Q Street	Segment		Planned for Construction	1.00	0	3	20%							0.17	5
110-2	S 48th Street	4	Add Center TWLTL	S 48th Street	Q Street	L Street	Segment			0.50	0	3	20%	$ 40,000	0.00	0.06	$ 600,000	$ 3,500,000	0.17	0.17	5
111-1	S 120th Street #3	6	RSA + Improvements	S 120th Street	Center Street	Pacific Street	Segment			1.01	0	2	25%	$ 30,000	0.00	0.05	$ 450,000	$ 5,040,000	0.09	0.14	5
111-2	S 120th Street #3	6	RSA + Improvements	S 120th Street	Pacific Street	Davenport Street	Segment			0.86	0	4	25%	$ 60,000	0.00	0.10	$ 890,000	$ 4,290,000	0.21	0.14	5
112-1	Pacific Street #3	6	RSA + Improvements	Pacific Street	S 101st Street	S 132nd Street	Segment			2.58	0	8	25%	$ 120,000	0.00	0.20	$ 1,790,000	$ 12,890,000	0.14	0.14	5
113-1	Fort / 132nd / 144th	7	Add Median / Access Control	Fort Street	N 120th Street	N 144th Street	Segment			1.99	0	4	20%	$ 50,000	0.00	0.08	$ 740,000	$ 6,960,000	0.11	0.13	5
113-2	Fort / 132nd / 144th	7	Add Median / Access Control	N 132nd Street	W Maple Road	Fort Street	Segment			1.00	0	4	20%	$ 50,000	0.00	0.08	$ 740,000	$ 3,500,000	0.21	0.13	5
113-3	Fort / 132nd / 144th	7	Add Median / Access Control	N 144th Street	W Maple Road	Fort Street	Segment			0.99	0	2	20%	$ 20,000	0.00	0.04	$ 300,000	$ 3,470,000	0.09	0.13	5
114-1	Pacific Street #5	6	Add Median / Access Control	Pacific Street	S 168th Street	S 180th Street	Segment		Planned for Construction	1.01	0	2	20%							0.11	5
114-2	Pacific Street #5	6	Add Median / Access Control	Pacific Street	S 180th Street	S 204th Street	Segment			1.98	0	4	20%	$ 50,000	0.00	0.08	$ 740,000	$ 6,930,000	0.11	0.11	5
115-1	Blondo Street	1	Add Center TWLTL	Blondo Street	N 51st Street	N 66th Street	Segment			1.11	0	4	20%	$ 50,000	0.00	0.08	$ 740,000	$ 7,760,000	0.10	0.10	5
116-1	Grover Street	4	Road Diet	Grover Street	S 50th Street	S 52nd Street	Segment		Completed	0.25	0	1	40%							0.09	5
116-2	Grover Street	4	Add Center TWLTL	Grover Street	S 52nd Street	S 60th Street	Segment			0.50	0	2	20%	$ 20,000	0.00	0.04	$ 300,000	$ 3,480,000	0.09	0.09	5
117-1	Bob Boozer Drive	6	Add Median / Access Control	Bob Boozer Drive	W Center Road	Pacific Street	Segment			1.00	0	2	20%	$ 20,000	0.00	0.04	$ 300,000	$ 3,510,000	0.09	0.09	5
Total/Avg.	117									263.34	180	2006	38%	$ 120,100,000	6.045	66.80	$ 1,786,740,000	$ 878,640,000		2.03	