STAKEHOLDER INFORMATION SESSION & WORKSHOP

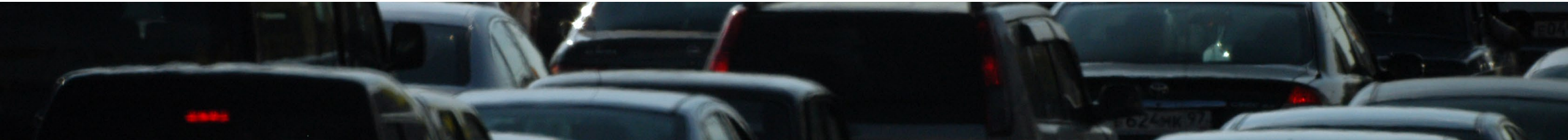
Northwest Illinois SS4A Safety Action Plan

SAFE STREETS FOR ALL

BLACKHAWK HILLS REGIONAL COUNCIL | CARROLL COUNTY | JO DAVIESS COUNTY
LEE COUNTY | OGLE COUNTY | STEPHENSON COUNTY | WHITESIDE COUNTY

TODAY'S AGENDA

- Safety Action Plan Overview & Background
- Purpose of the Safety Action Plan – Why is it valuable?
- Data Collection & Analysis
- Identifying Safety Issues and/or Areas of Concern
- Equity Considerations
- Goal Setting
- Timeline & What to Expect
- How to Reach Us



CONSULTING TEAM

Kaskaskia Engineering Group, LLC

iteris

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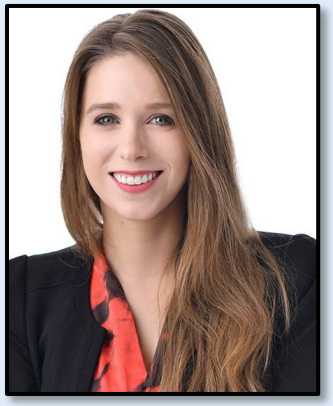
Principal In Charge

Jamy Lyne
Project Manager

Bryan Donze PE, RSP
Senior Engineer



Veronica Richfield PE, PTOE,RSP2I
Deputy Project Manager

Sean Daly, AICP, PTP
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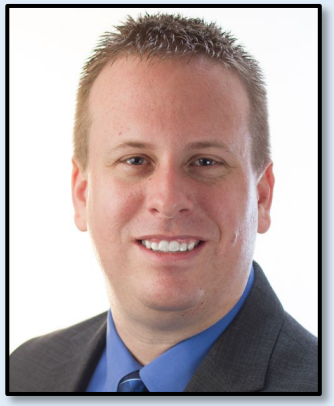

Adam Danczyk PE, PTOE
Senior Engineer

Sarah Wells
Public Involvement

AGENCY INTRODUCTIONS

Stephenson County
Dale Rasmussen

Carroll County
Sara Renkes

Jo Daviess County
Stephen Keefer

Lee County
David Anderson

Ogle County
Jeremy Ciesiel

Whiteside County
Russ Renner

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Blackhawk Hills Regional Council

BHRC
Daniel Payette
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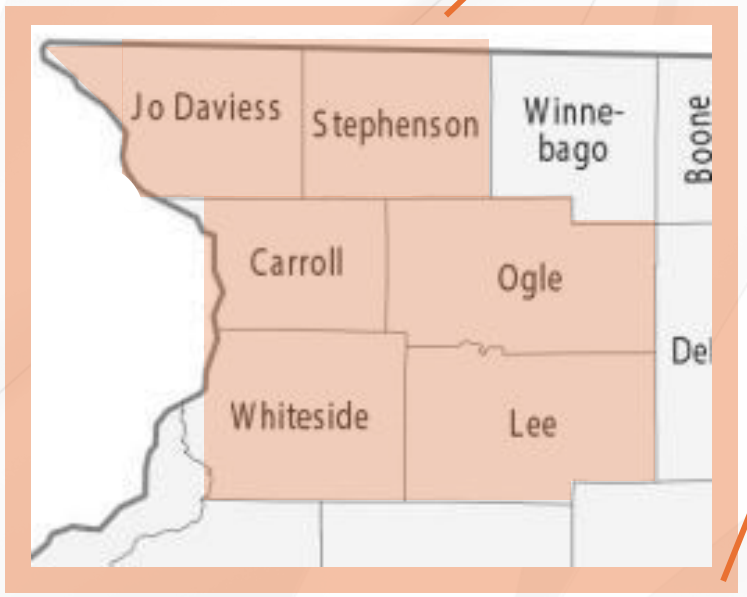
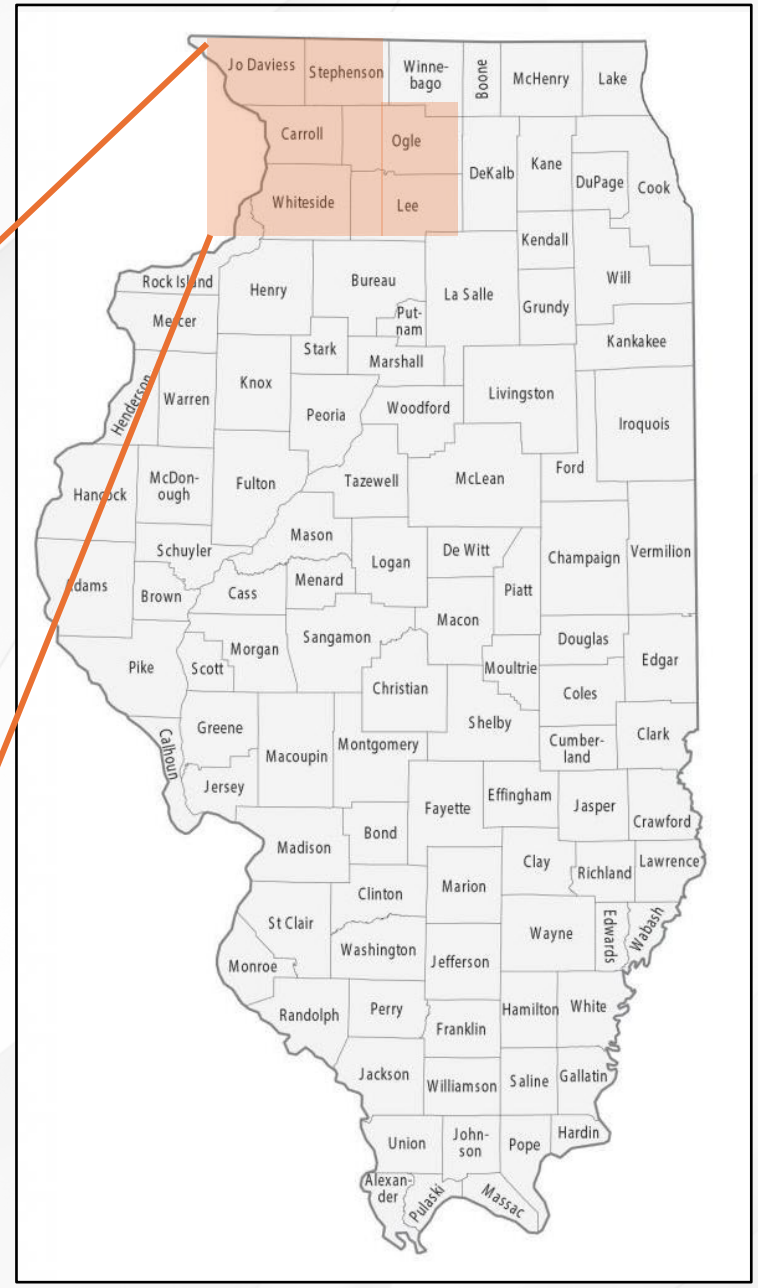




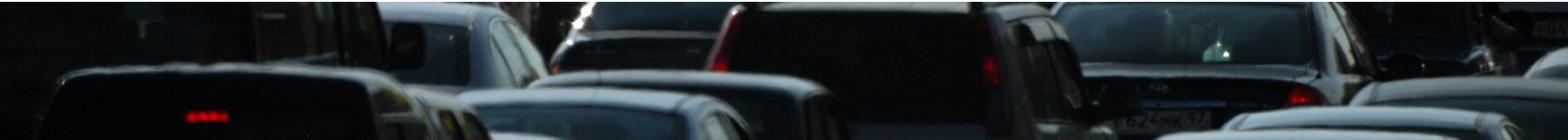
HOW TO REACH US

Project Website & Comment Submission

SCAN ME

Virtual Safety Issue Interactive Map

SCAN ME

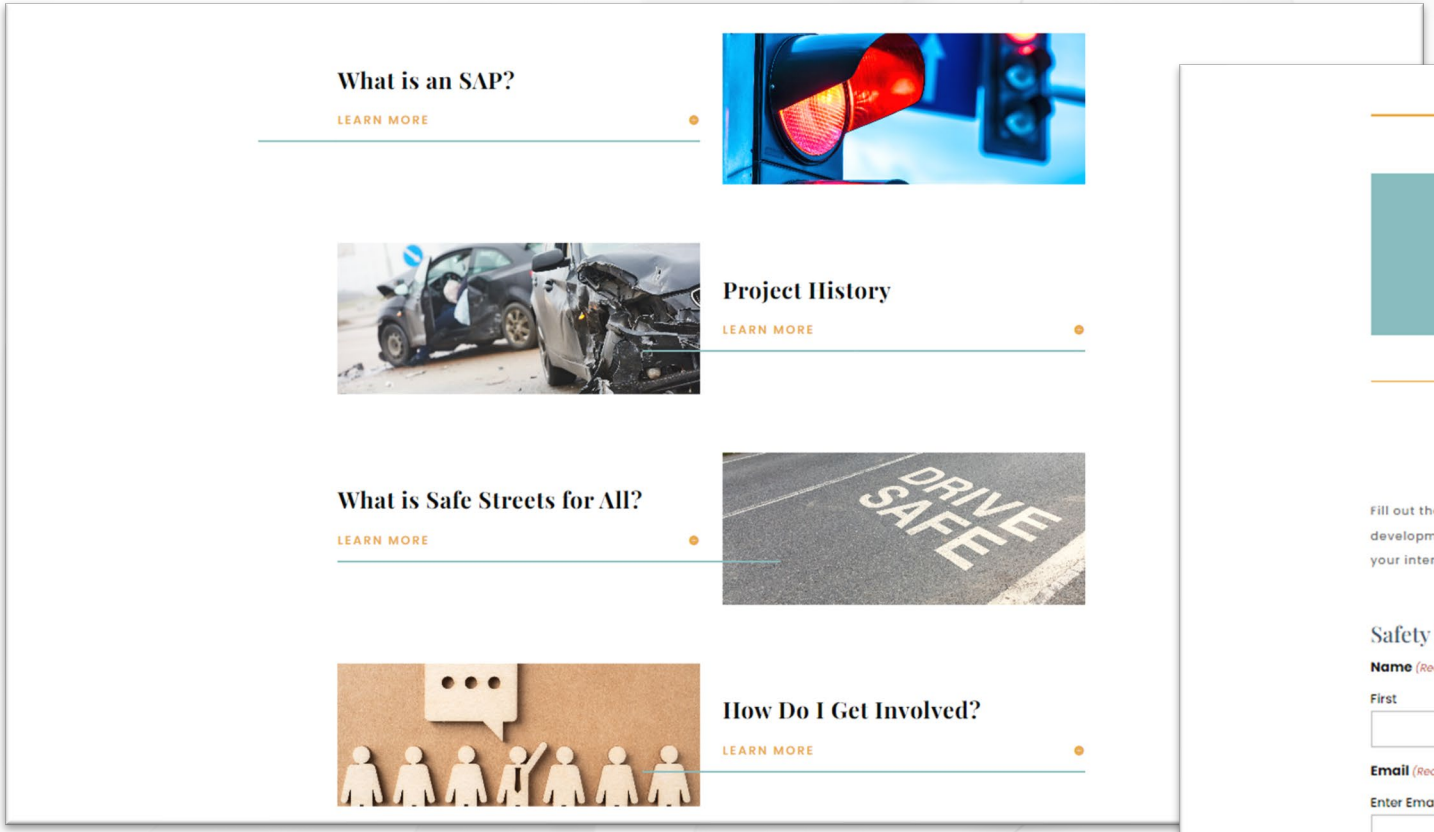


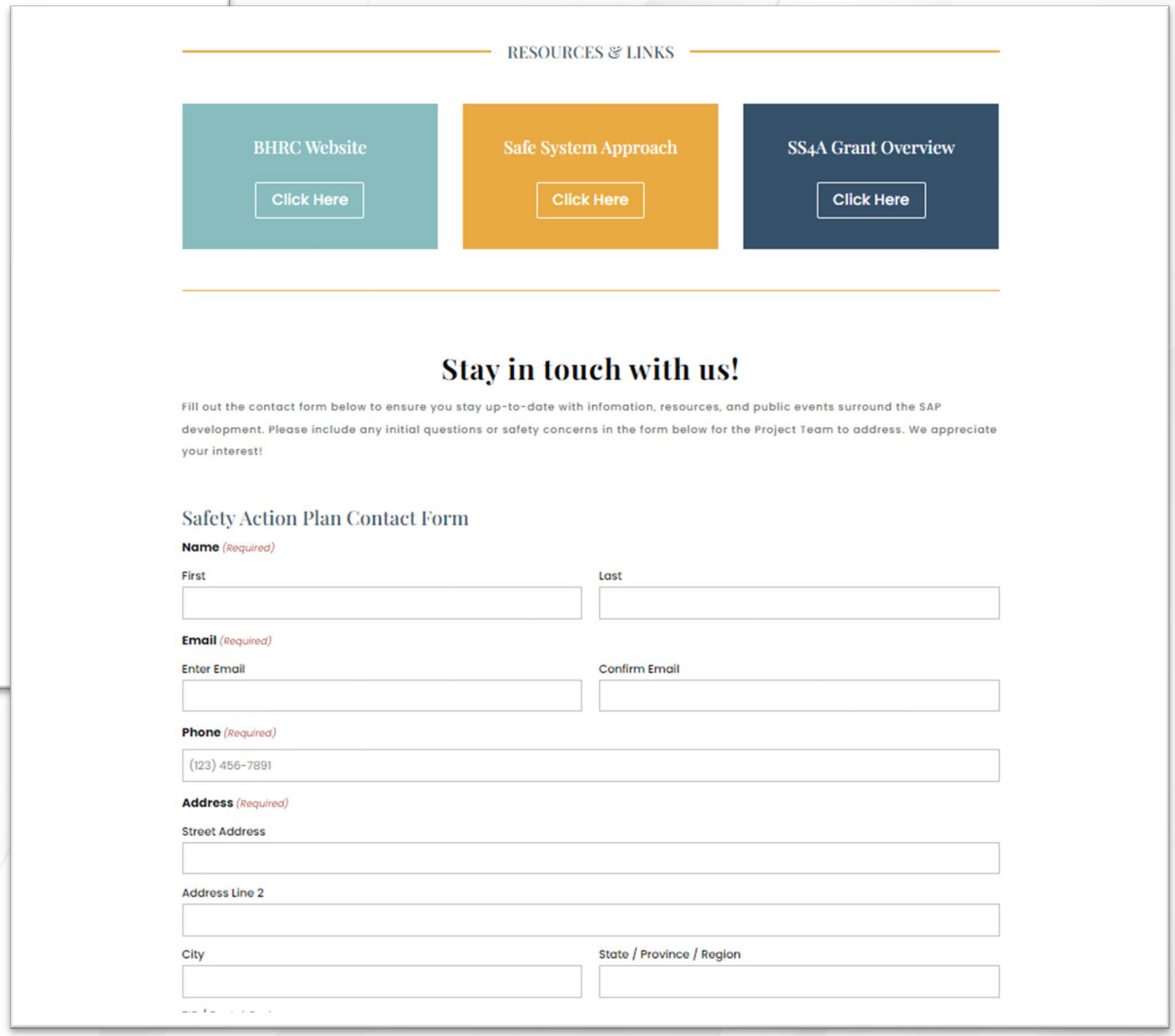
STUDY WEBSITE

Safe Streets are for Everyone

The counties of Carroll, Jo Daviess, Lee, Ogle, Stephenson, and Whiteside, Illinois have partnered with the Blackhawk Hills Regional Council (BHRC) in order to develop a Safe Streets for All Safety Action Plan (SAP) for their region. This plan will serve as a framework to guide future infrastructure design. This page will be updated regularly and will serve as a timely, comprehensive resource for information regarding the development of the SAP. The Project Team will provide valuable information and materials for the public through this website, as well as solicit feedback and comments from residents, business owners, and stakeholders of Northwest Illinois.

The six counties and BHRC have chosen a reputable, well-established engineering firm to manage the development of the SAP. Kaskaskia Engineering Group, LLC (KEG) will be leading all efforts associated with the SAP. KEG specializes in traffic and safety engineering and design and is supported by a multidisciplinary team to provide a comprehensive, well-rounded SAP. They will be the main contact for the project and are able to assist with questions or concerns as the project progresses.

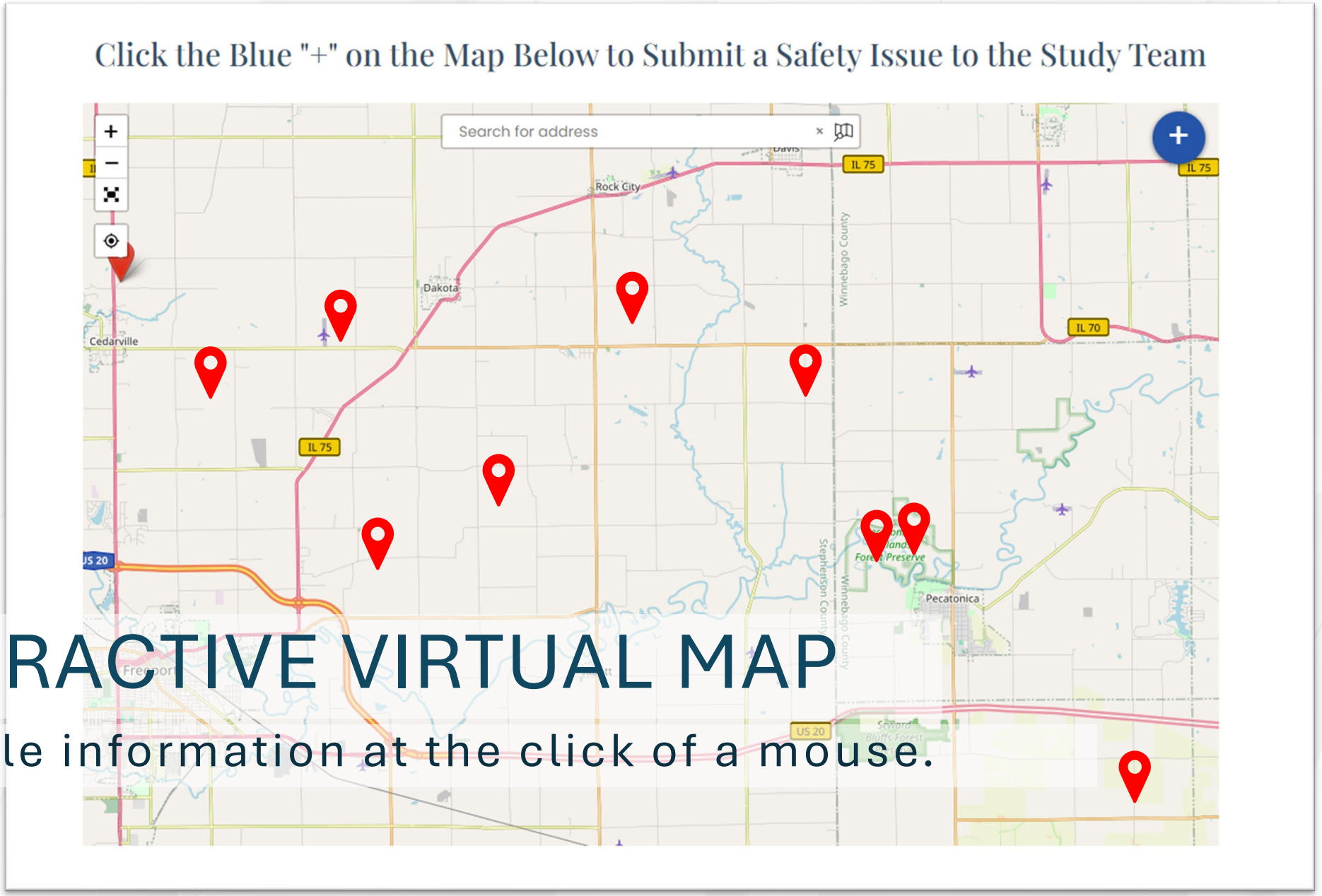




PROJECT WEBSITE

Educational Resources

Submit comments directly to Study Team



INTERACTIVE VIRTUAL MAP

Valuable information at the click of a mouse.

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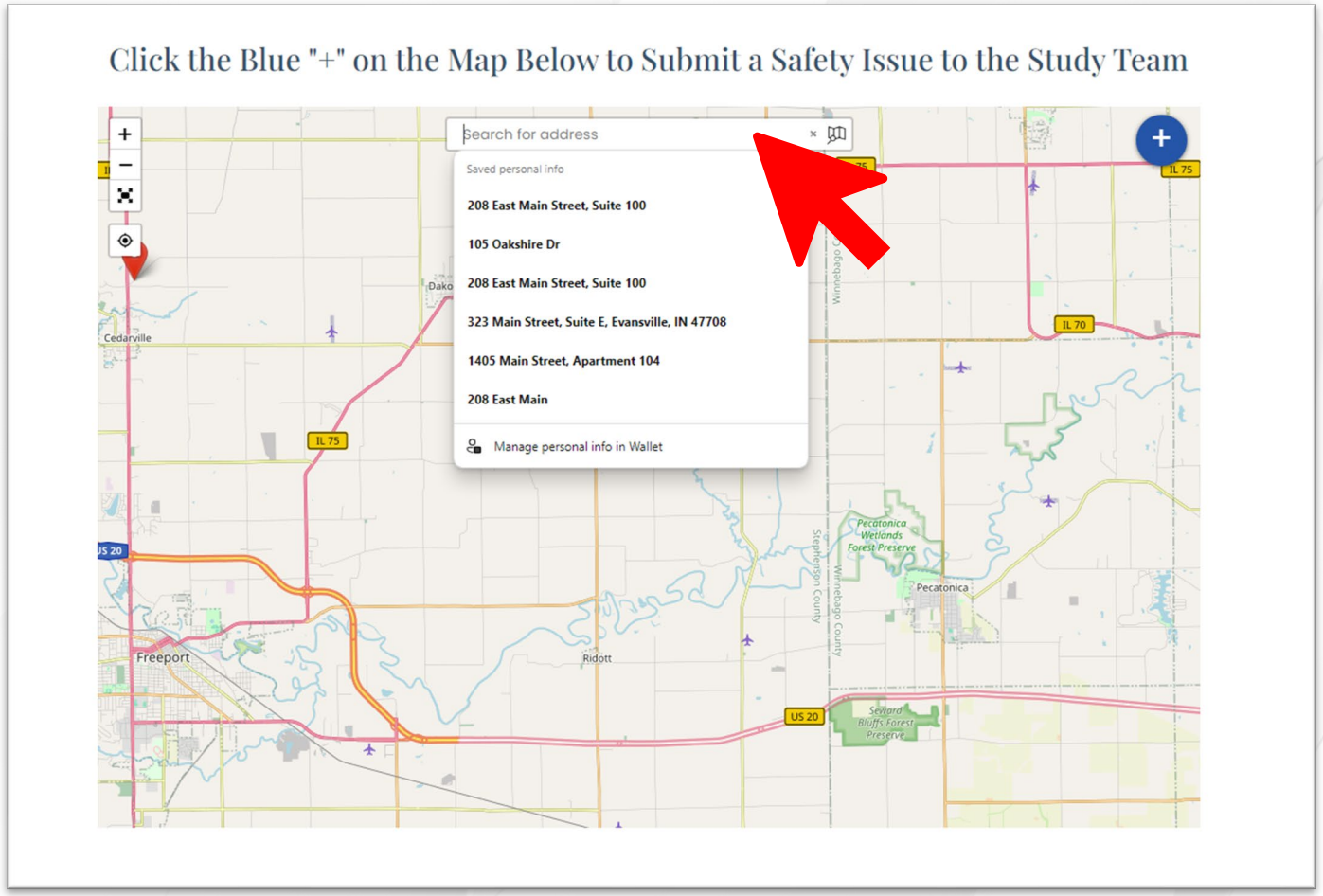


- To search for a specific address, click the box at the top of the map.

INTERACTIVE VIRTUAL MAP

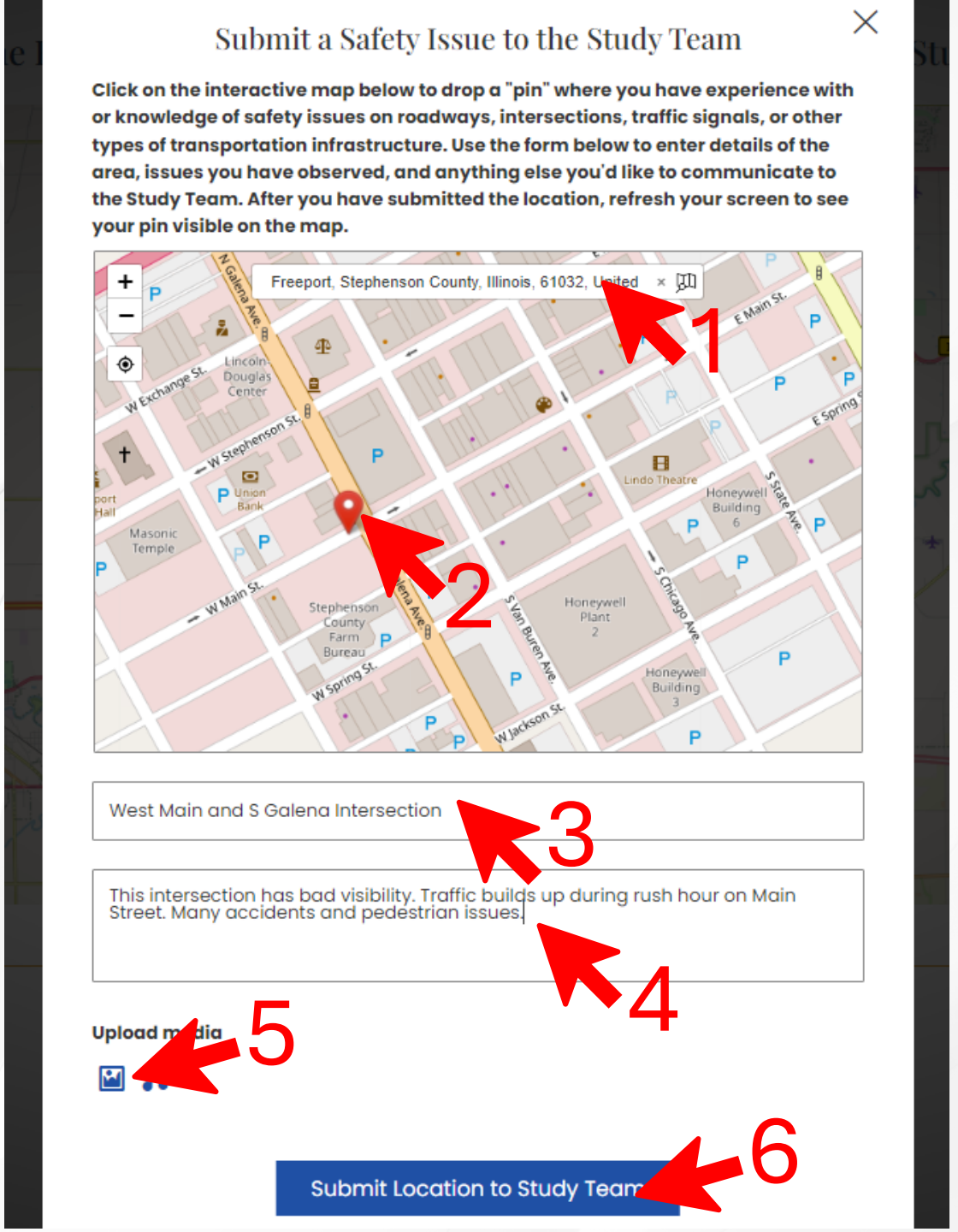
Valuable information at the click of a mouse.

- When you're ready to add a specific location with a transportation safety issue, click the blue circle "Add a Safety Issue".

INTERACTIVE VIRTUAL MAP

Valuable information at the click of a mouse.

1. Search for a specific address to zoom in on the location
2. Click the map to “drop your pin” on the location you wish to submit to the Study Team
3. Give a brief “Title” to the location
4. Describe the issues you see for the Study Team to consider
5. Upload pictures of the infrastructure issue or location
6. Submit location to the Study Team
7. Refresh your screen to see your location populate on the map



SAP OVERVIEW & BACKGROUND

SAP Goals: Region-Specific & Targeted

Current Problems

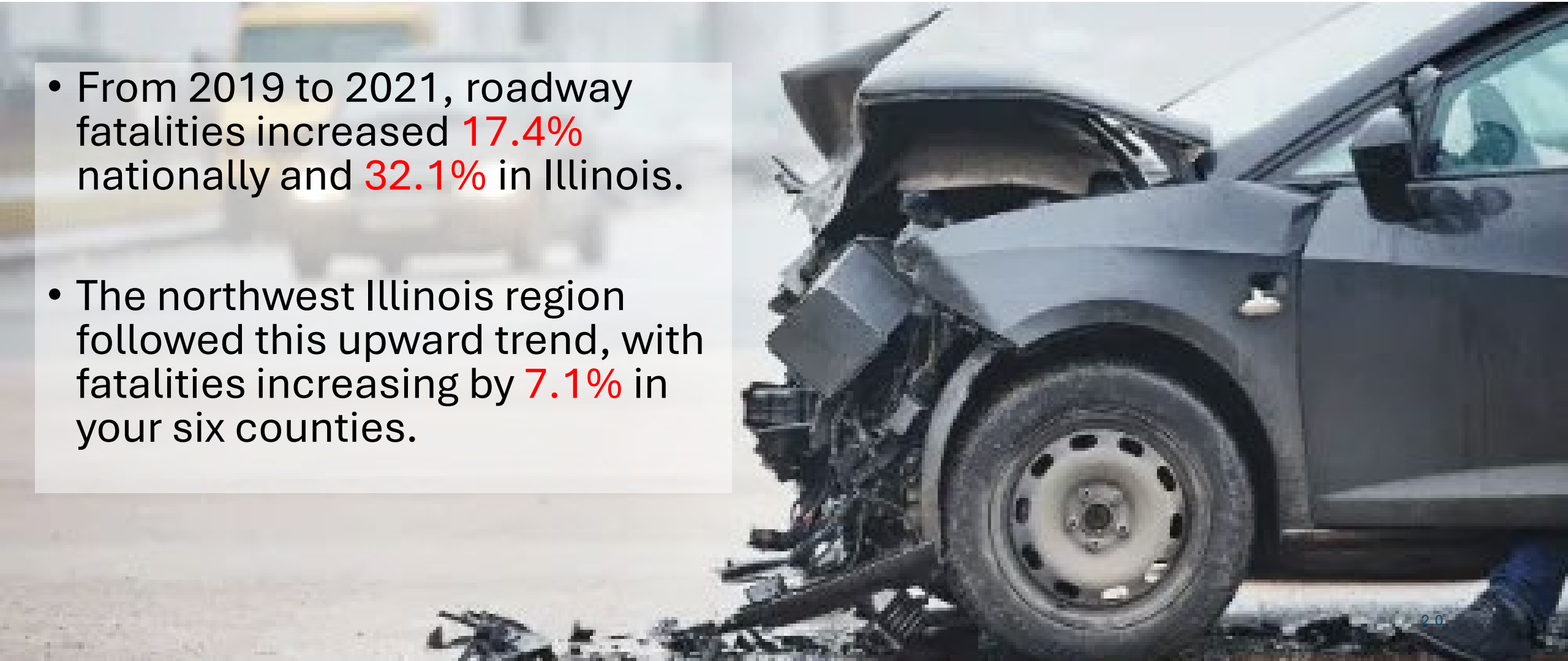
- ✓ Fatalities and injuries on a nationwide rise, including within this region
- ✓ Vast majority of fatalities and injuries are due to fixed-object crashes
- ✓ 22% of population is 65+

Regional Needs

- ✓ Evidence-based countermeasures
- ✓ Programmatic countermeasures
- ✓ Educational outreach
- ✓ Identification of corridors ideal for safety assessments
- ✓ Rural, automated enforcement

SAP OVERVIEW & BACKGROUND

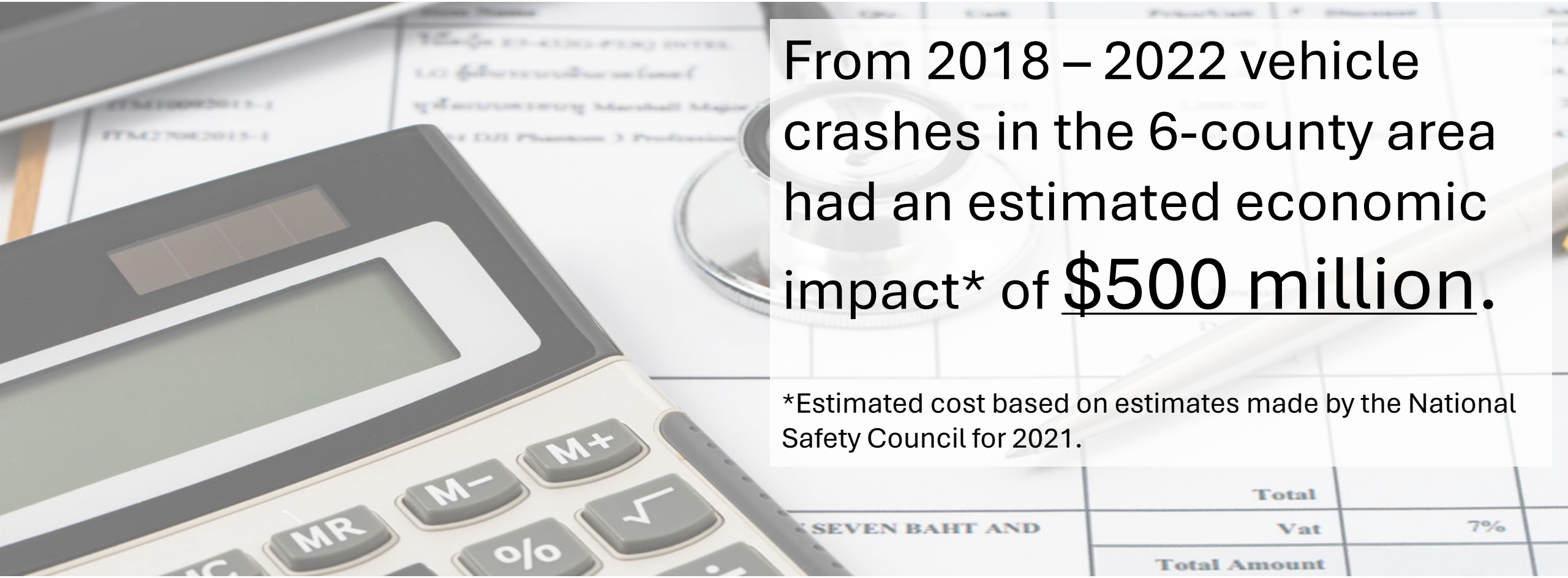
Roadway Fatalities are on the Rise



- From 2019 to 2021, roadway fatalities increased 17.4% nationally and 32.1% in Illinois.
- The northwest Illinois region followed this upward trend, with fatalities increasing by 7.1% in your six counties.

5 YEARS IN SIX COUNTIES

What is the economic impact of vehicle crashes?



From 2018 – 2022 vehicle crashes in the 6-county area had an estimated economic impact* of $500 million.

*Estimated cost based on estimates made by the National Safety Council for 2021.

5 YEARS IN SIX COUNTIES

More than numbers…

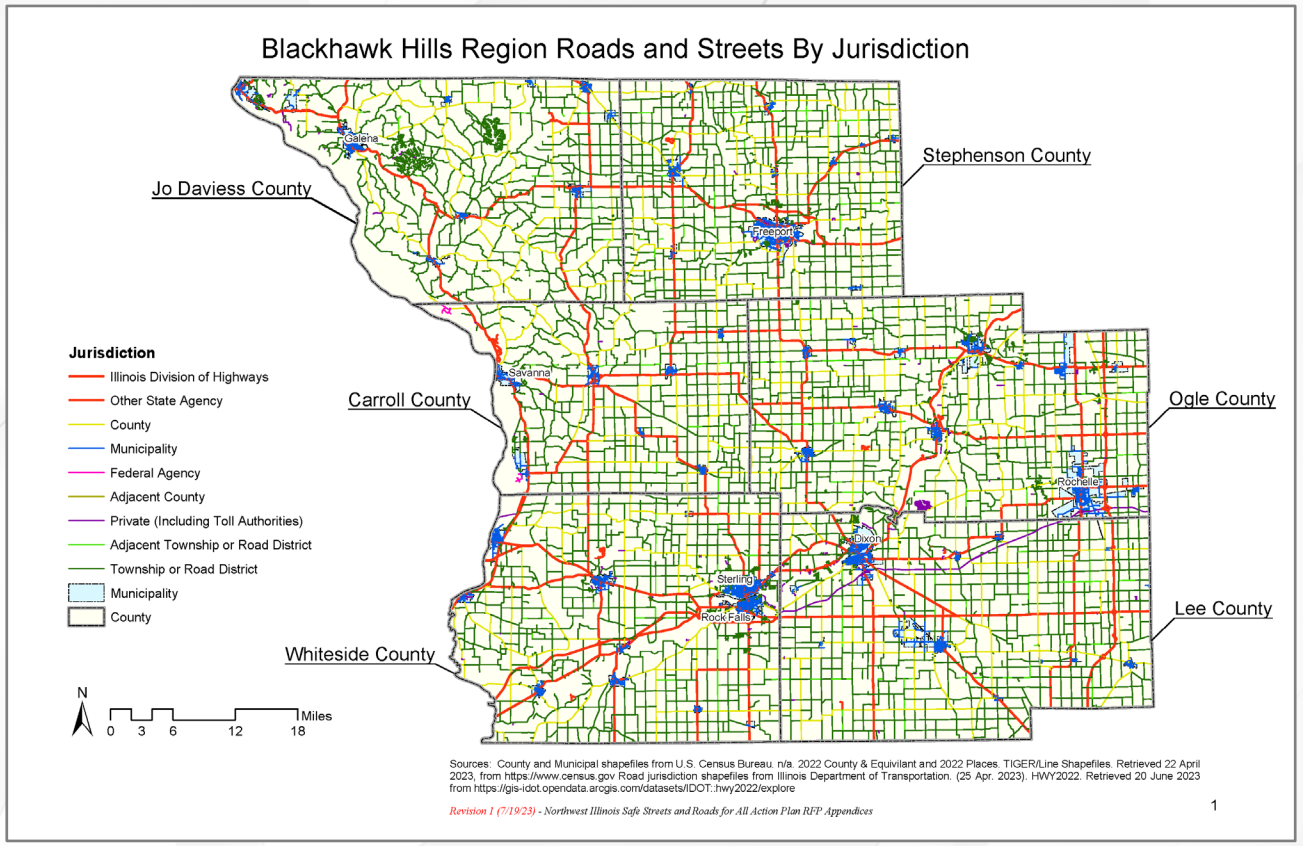
DAMION, DILLON, CHARLES, WILLIAM, DAVID, GOLMAND, TERRANCE, ROBERT, MICHAEL, KEISHON, BETH, MILES, MANUEL, SARAH, BENNIE, GUNNER, OLIVIA, WANITA, AMY, WELDON, ALBERT, MELINDA, LAYCIE, EARL, LUCIOUS, KATRENA, ADAM, ISABELLA, MICHAEL, JEREMIAH, LAINE, JEREMY, JOSHUA, CAROLYN, RONNA, CARY, ALISHA, DANIELLE, BRITTANY, MATTHEW, OLIVER, JORDAN, HANNAH, EDWIN, BRENDA, GREGORY, KARL, KAP, GREGORY, NOAH, ANTHONY, CLARA, JEREMY, DYLAN, JEREMIAH, FIDEL, ALMAMY, PAMELA, SUTTON, RICARDO, BENJAMIN, EMMA, JOHN, LINDA, EMMA, MICHAEL, TIFFANY, NOAH, SCOTT, GEORGE, JOHN, LINDA, RODNEY, WILLIAM, LINDA, THEODORE, GARY, JOSHUA, TIFFANY, JOSHUA, OSCAR, ROBERT, MILO, JIMMY, ERNEST, DONNA, JONAH, LEE, TODD, DANA, RASHAUN, MICHAEL, KAMERON, JEFFREY, ASHTYNN, PHILIP, TIMOTHY, KARLIE, KAPONO, DANNY, NINA, ASHTYNN, LAILA, JURELL, FERNANDA, BERNARD, SYLVIA, ERNEST, SYRUS, ANDREW, PHILIP, ALEXIS, ASHTON, AVERY, ETHAN, CHRISTOPHER, KENNETH, RUTHELYN, ZACHERY, KENNETH, CODY, OSCAR, DOUGLAS, EDGAR, JOSHUA, DOUGLAS, ROBERT, AMBER, DOUGLAS, STEPHEN, WILLIAM, AIDAN, TAYSHA, CHANTEL, DENNIS, MICHELLE, KIMMUEL, TERRI, KANE, ETHAN, TAYSHA, JEROME, TERRI, BARBARA, MICHAEL, JAMES, BROOKE, RICHARD, BARBARA, TIMOTHY, MICHAEL, AIDAN, TODD, JEROME, LAVELL, KYARI, TAYSHA

SAP OVERVIEW & BACKGROUND

SS4A Funding Safety Measures

- These trends in NW Illinois prompted the **BHRC** and the **six counties** to apply for a Safe Streets for All (SS4A) grant in 2023.

- SS4A was established through the Bipartisan Infrastructure Law in 2022 and allocates $5 billion to support initiatives through grants to prevent roadway deaths and serious injuries.



SAP OVERVIEW & BACKGROUND

What is SS4A?

The goal of an SS4A SAP is to develop a holistic, well-defined strategy to prevent roadway fatalities and serious injuries in a community, region, or Tribe. The program supports the goal of zero roadway deaths using the Safety System Approach.

Safe System Principles:

- Death and Serious Injuries are Unacceptable
- Humans Make Mistakes
- Humans Are Vulnerable
- Responsibility is Shared
- Safety is Proactive
- Redundancy is Crucial

SAP OVERVIEW & BACKGROUND

Safe System Elements

SAFER PEOPLE

SAFER VEHICLES

SAFER SPEEDS

SAFER ROADS

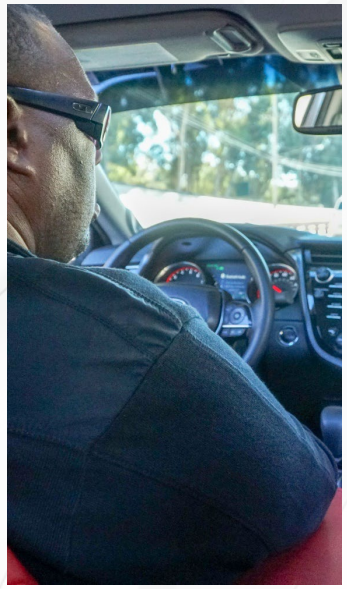
POST-CRASH CARE

SAP OVERVIEW & BACKGROUND

Safer People

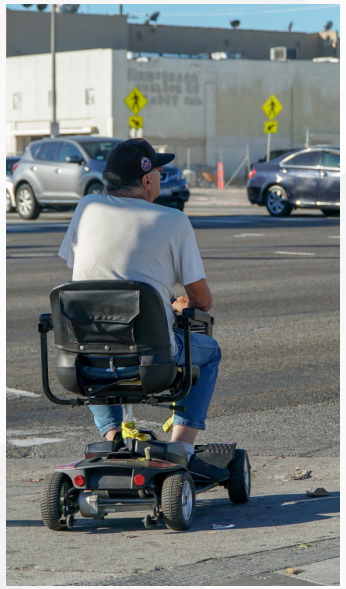
Walk

Bike



Drive

Transit

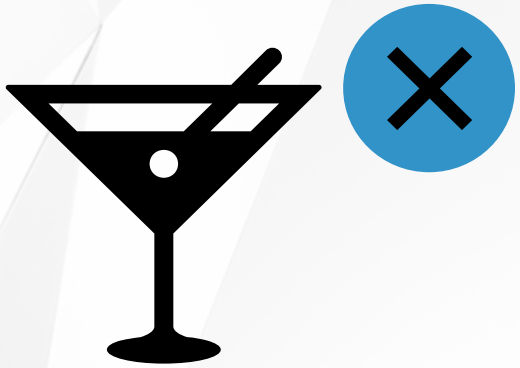


Other

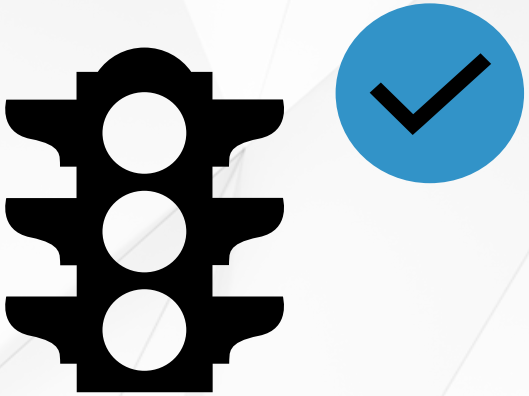
Content Source: FHWA; Source for all images: Fehr & Peers

SAP OVERVIEW & BACKGROUND

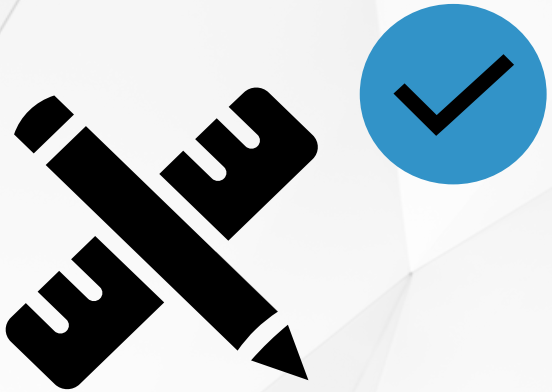
Safer People



Not distracted or impaired



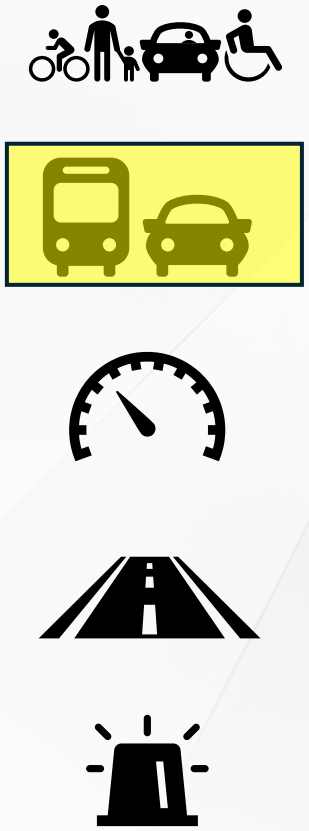
Follow rules



Act within the limits of the road design

SAP OVERVIEW & BACKGROUND

Safer Vehicles



Active safety

Measures to reduce the chance of a crash occurring

- Lane departure warning
- Autonomous emergency braking

Passive safety

Protective systems for when crashes do occur

- Seatbelts and airbags
- Crash-absorbing vehicle crumple zones

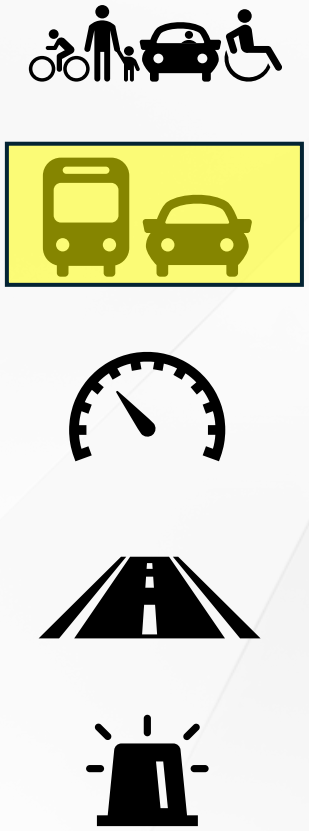
Other road user safety

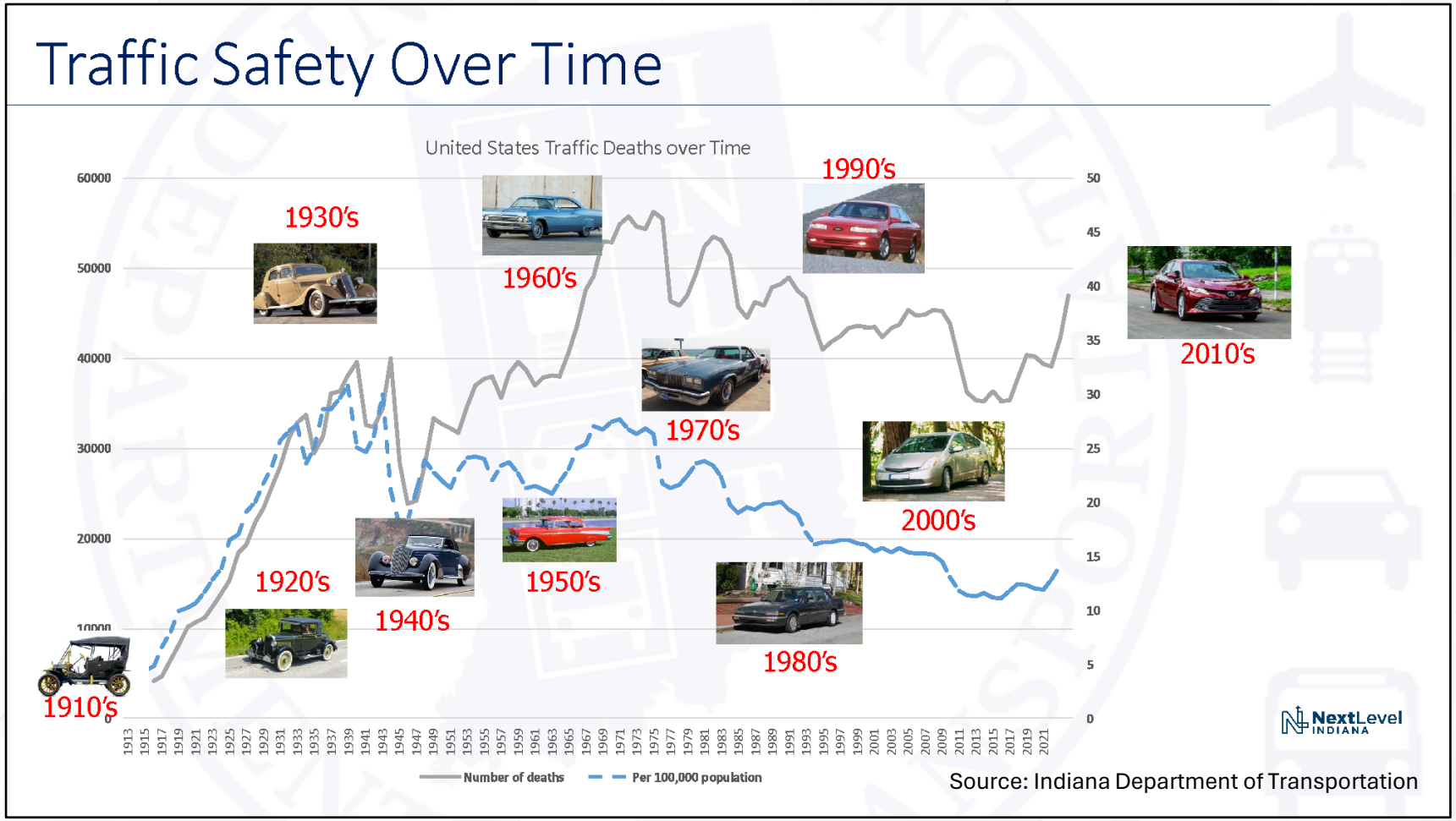
Measures that protect other road users

- Bicyclist and pedestrian detection
- Vehicle size and design

SAP OVERVIEW & BACKGROUND

Safer Vehicles

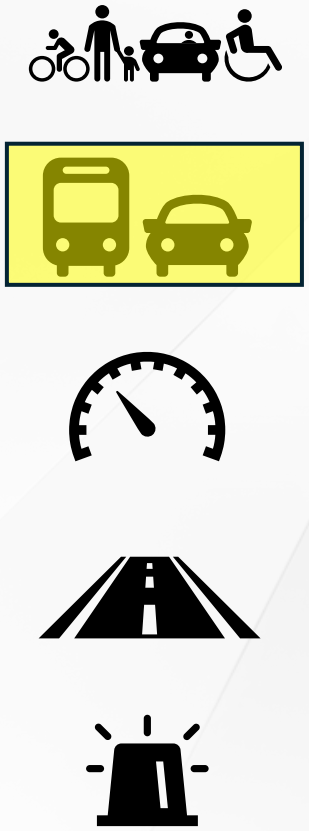


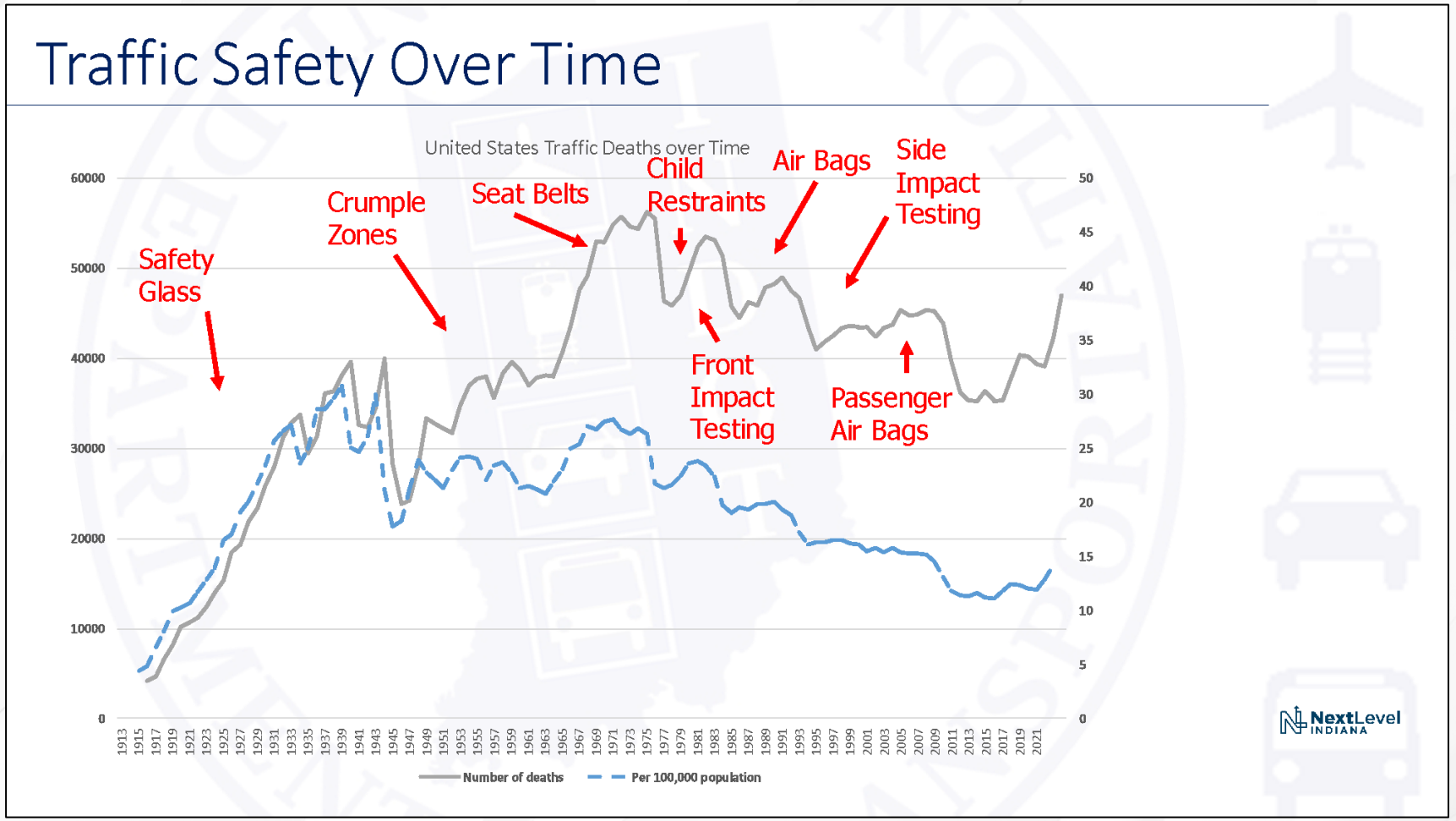


Source: Indiana Department of Transportation

SAP OVERVIEW & BACKGROUND

Safer Vehicles

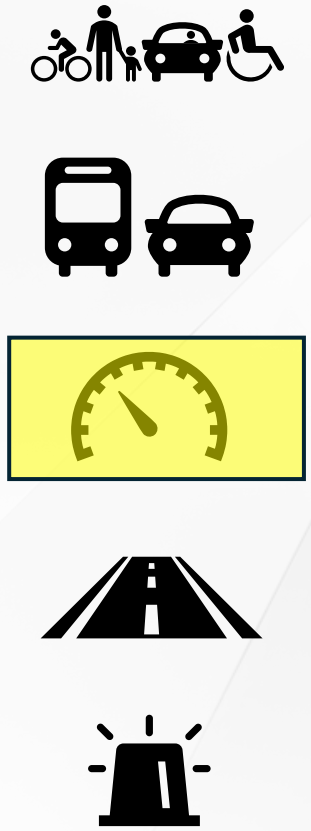




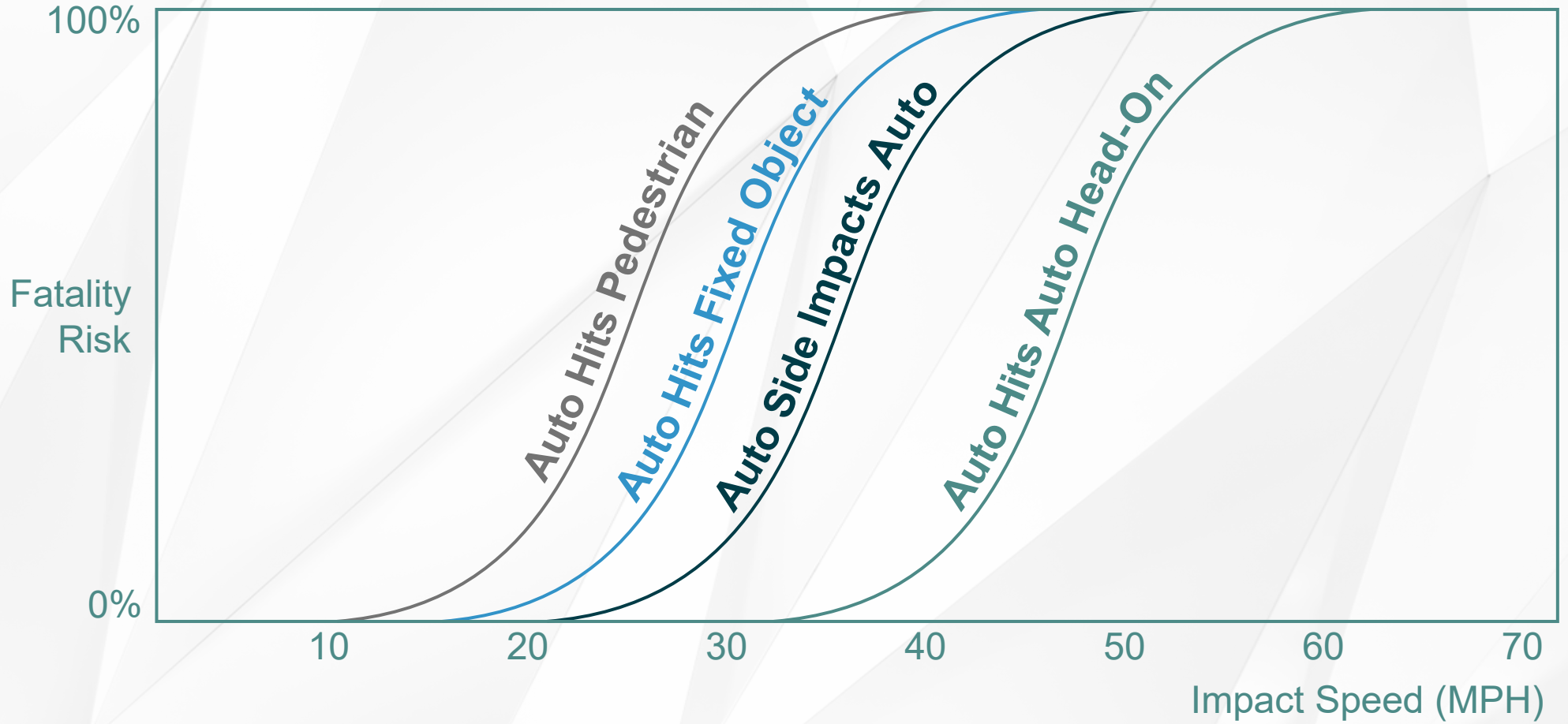
Source: Indiana Department of Transportation

SAP OVERVIEW & BACKGROUND

Safer Speeds

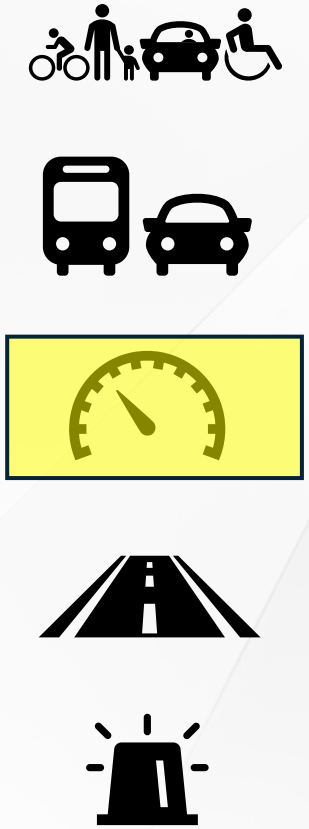


Source: FHWA



SAP OVERVIEW & BACKGROUND

Safer Speeds



Speed through typical intersection

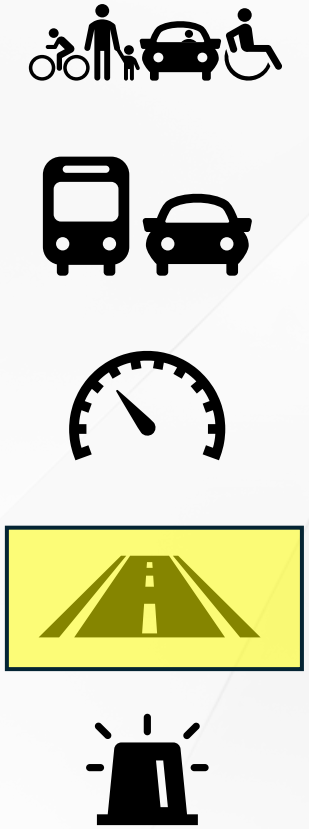
Source: Fehr & Peers

Speed through Safe System intersection

Source: City of Carmel, IN

SAP OVERVIEW & BACKGROUND

Safer Roads

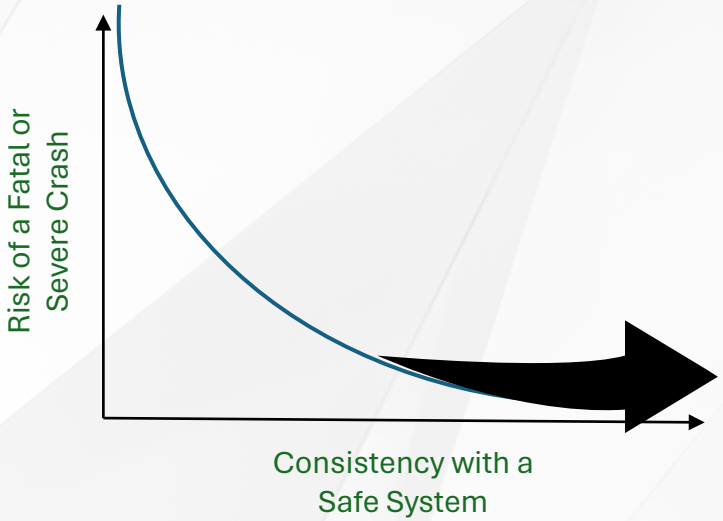


Safe roads are designed and operated to:

1. Prevent crashes among all users
2. Keep impacts on the human body at tolerable levels

Think of "Safe Roads" as a continuum – not an absolute

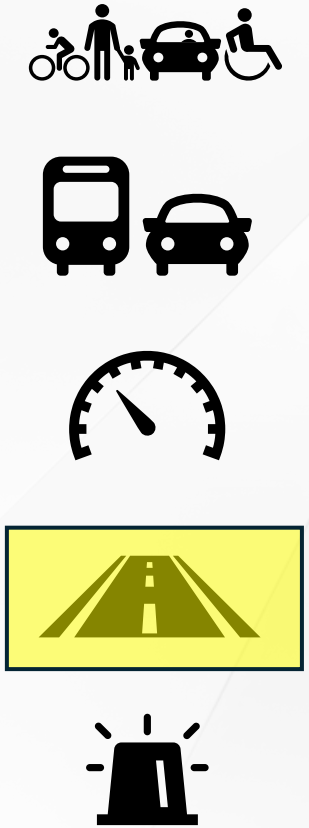
1. The aim is to design and operate roads to continuously approach toward creating a Safe System by implementing features appropriate for the intended and actual road use and speed environment
2. Reduce the likelihood of error
3. Reduce the consequences of error



Source: City of Carmel, IN

SAP OVERVIEW & BACKGROUND

Safer Roads



Source: Indiana Department of Transportation

Source: City of Carmel, IN

SAP OVERVIEW & BACKGROUND

Safer Roads

Managing Kinetic Energy Involves

Managing speed

Managing crash angles

Managing crash energy distribution

SAP OVERVIEW & BACKGROUND

Safer Roads

Producing Effective FHWA Countermeasures Are Identified

Pavement Friction Management

Enhanced Delineation for Horizontal Curves

Longitudinal Rumble Strips and Stripes on Two-Lane Roads

Median Barriers

Wider Edge Lines

Roadside Design Improvements at Curves

SafetyEdge℠

Backplates with Retroreflective Borders

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

Corridor Access Management

Road Diets (Roadway Configuration)

Lighting

SAP OVERVIEW & BACKGROUND

Post Crash Care

Crash investigation

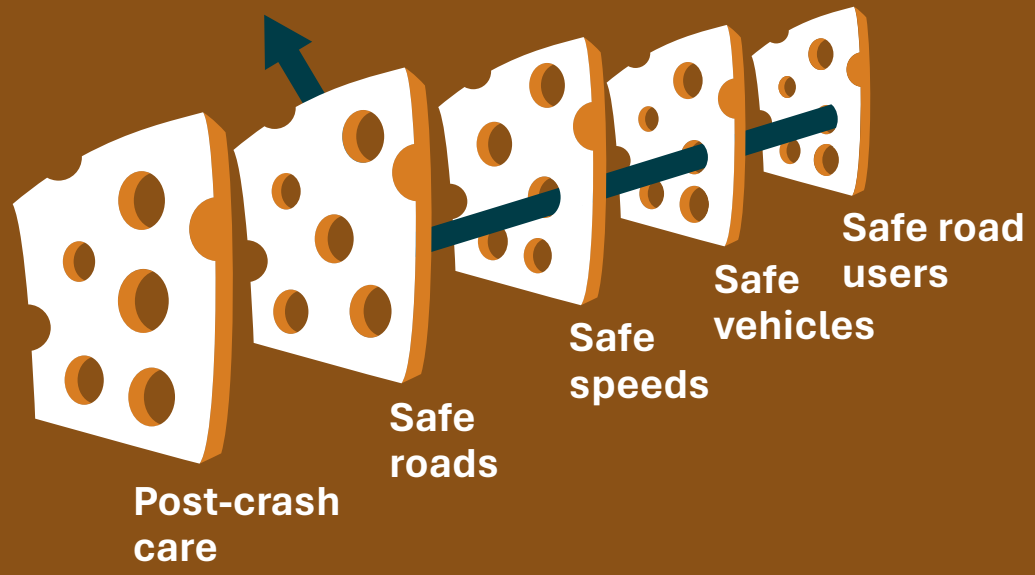
First responders

Medical care

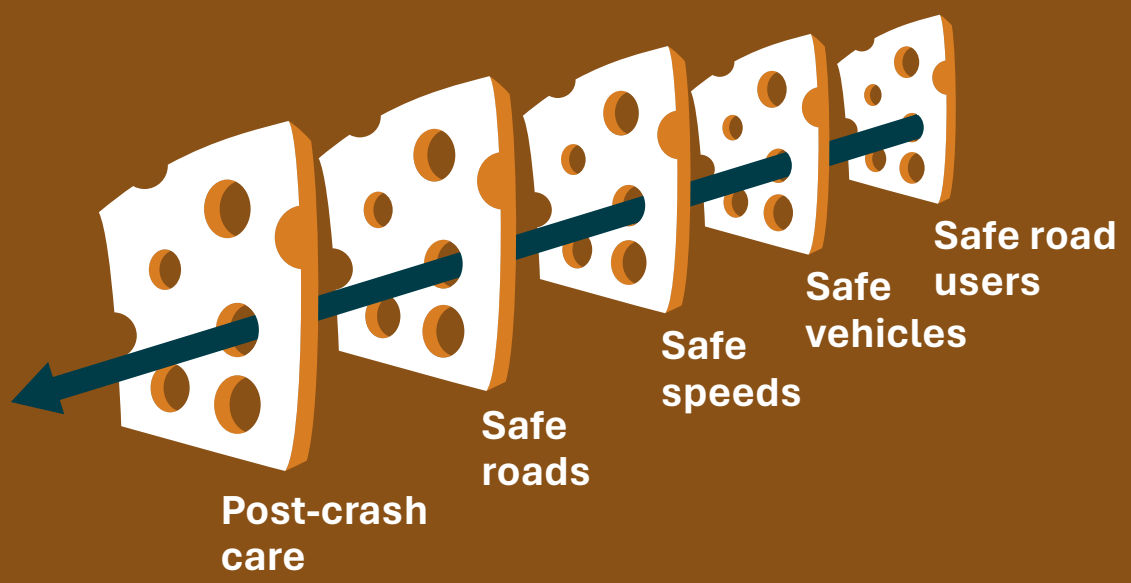
SAP OVERVIEW & BACKGROUND

The Safe System Elements Create Redundancy

The "Swiss Cheese Model" of redundancy creates layers of protection



Death and serious injuries only happen when all layers fail



Source: FHWA

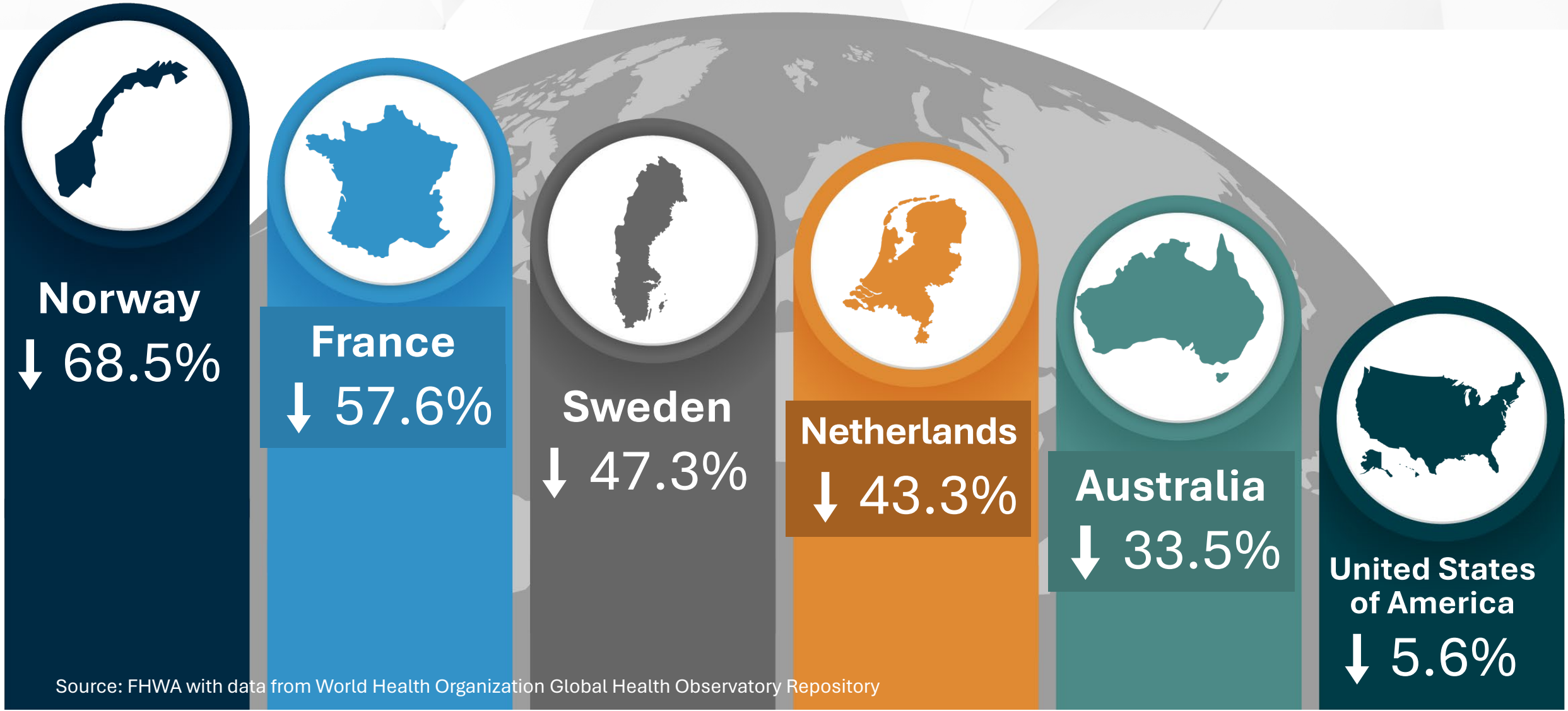
PURPOSE OF A SS4A SAFETY ACTION PLAN

Why is it valuable?

Traditional approach		Safe System approach
Prevent crashes	→	Prevent death and serious injuries
Improve human behavior	→	Design for human mistakes/limitations
Control speeding	→	Reduce system kinetic energy
Individuals are responsible	→	Share responsibility
React based on crash history	→	Proactively identify and address risks

PURPOSE OF A SS4A SAFETY ACTION PLAN

Why is it valuable?



Source: FHWA with data from World Health Organization Global Health Observatory Repository

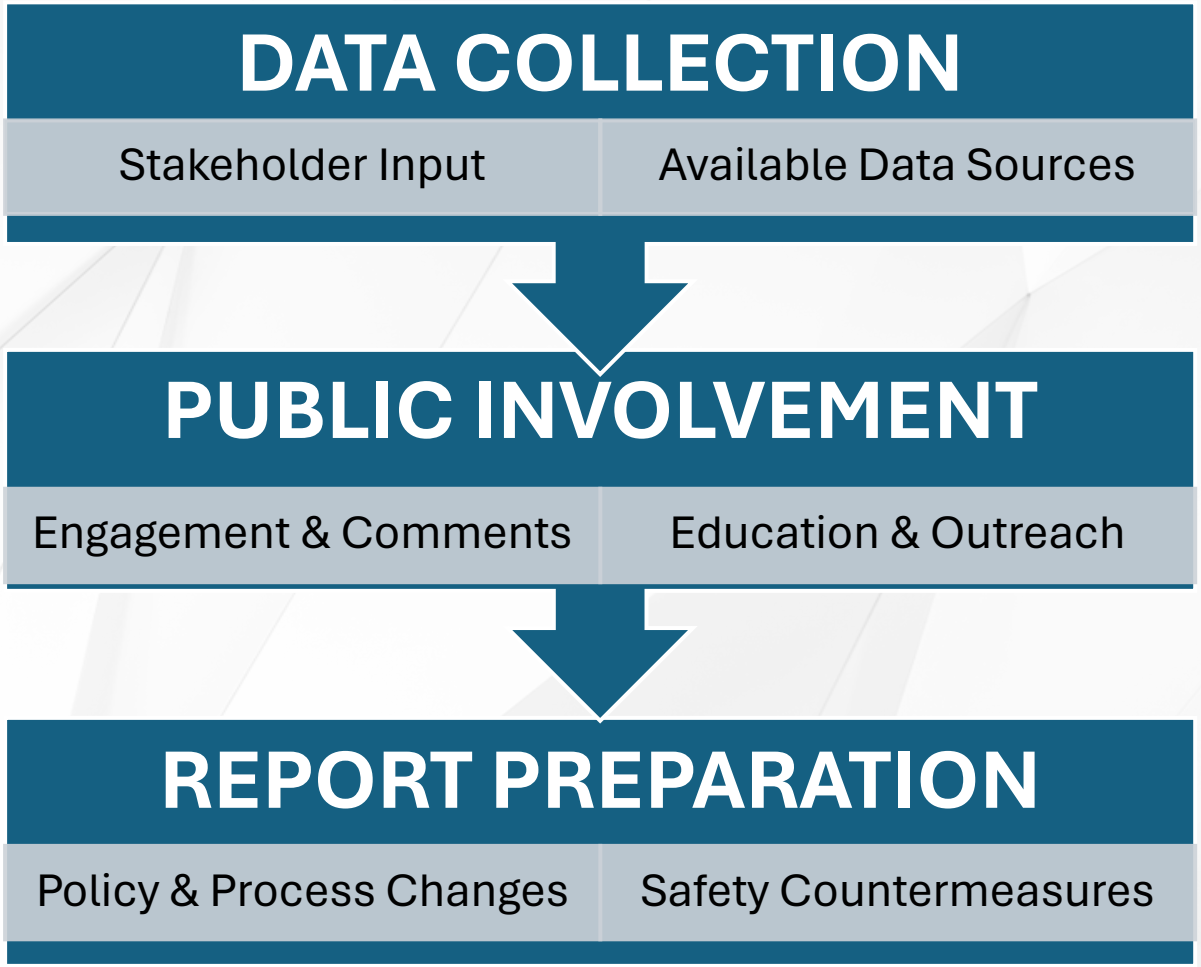
SAP OVERVIEW & BACKGROUND

What goes into the SAP?

The SAP will rely on data collected, surveys, and **stakeholder input** to suggest safety countermeasures that will be in accordance with SS4A program requirements.

The SAP will be used as a **guide** for future infrastructure, design, engineering, and policy.

The ultimate goal of SS4A programs is to reach **zero deaths.** This vision is going to take an **100% commitment**, not only from municipal leadership, but from the public as well.



DATA COLLECTION

Data – what are we reviewing?

Crash Records

Source: Illinois Department of Transportation (IDOT) (2018-2022)

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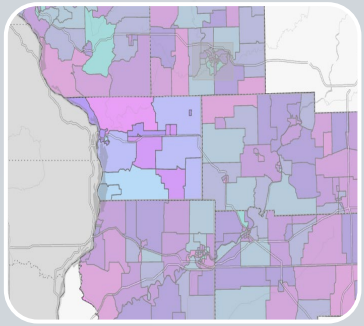
Data-Driven Safety Analysis



Demographics

Source: U.S. Census Bureau, 5-Year American Community Survey (2022)

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Equity Analysis

Existing Plans and Policies

Source: Participating Agencies; (Para)Transit, Freight, Ped/Bike, Complete Streets

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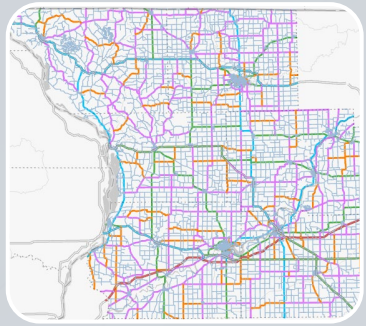
Planning Synergy



Roadway Network

Source: IDOT Illinois Highway System File (2022)

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High Risk Locations Geospatial Identification

Stakeholder Input

Source: You

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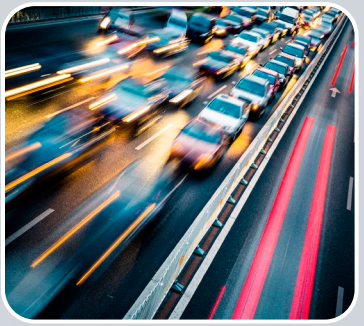
Local Expertise



Average Speed Trends

Source: GPS Data (Iteris)

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Risk Identification

IDENTIFYING SAFETY ISSUES

Where are the areas of concern?

Collision Reports

- Existing Conditions & Historical Trends

Crash Location

- Geospatial Identification

Risk Assessment

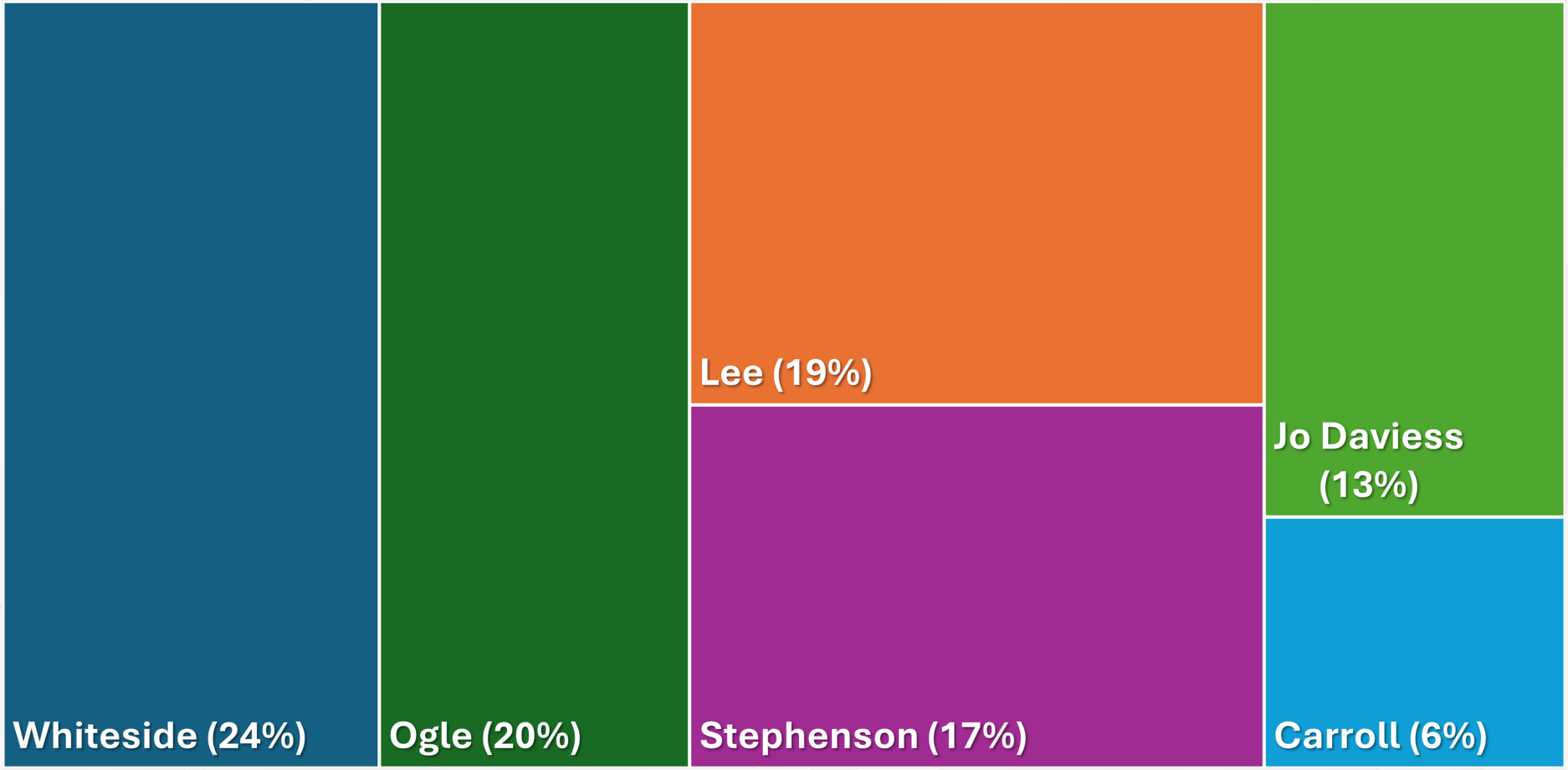
- Systemic/Specific Safety Needs

Roadway Data

- Location, Severity, & Contributing Factors

IDENTIFYING SAFETY ISSUES

Where are the crashes located?



IDENTIFYING SAFETY ISSUES

What are the crash types?

All Severities – 19,090 Crashes

- Animal (4917, 26%)
- Fixed Object (3902, 20%)
- Rear End (2062, 11%)

Pedestrian & Bicyclist Crashes

All Severities

159, <1%

Fatal and Incapacitating Injury – 948 Crashes

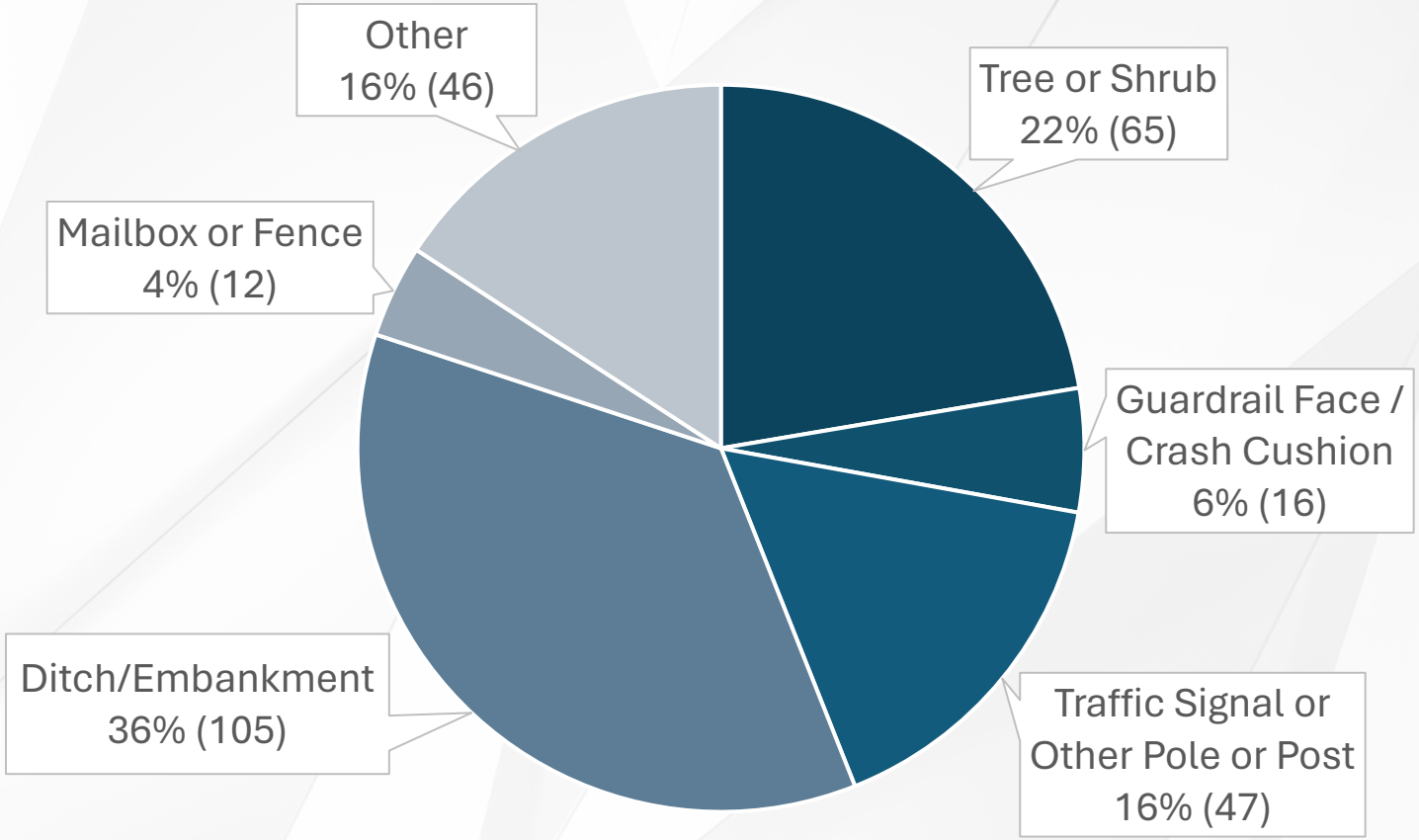
- Fixed Object (276, 29%)
- Overturned (167, 18%)
- Angle (107, 11%)

Fatal and Incapacitating Injury

53, 6%

IDENTIFYING SAFETY ISSUES

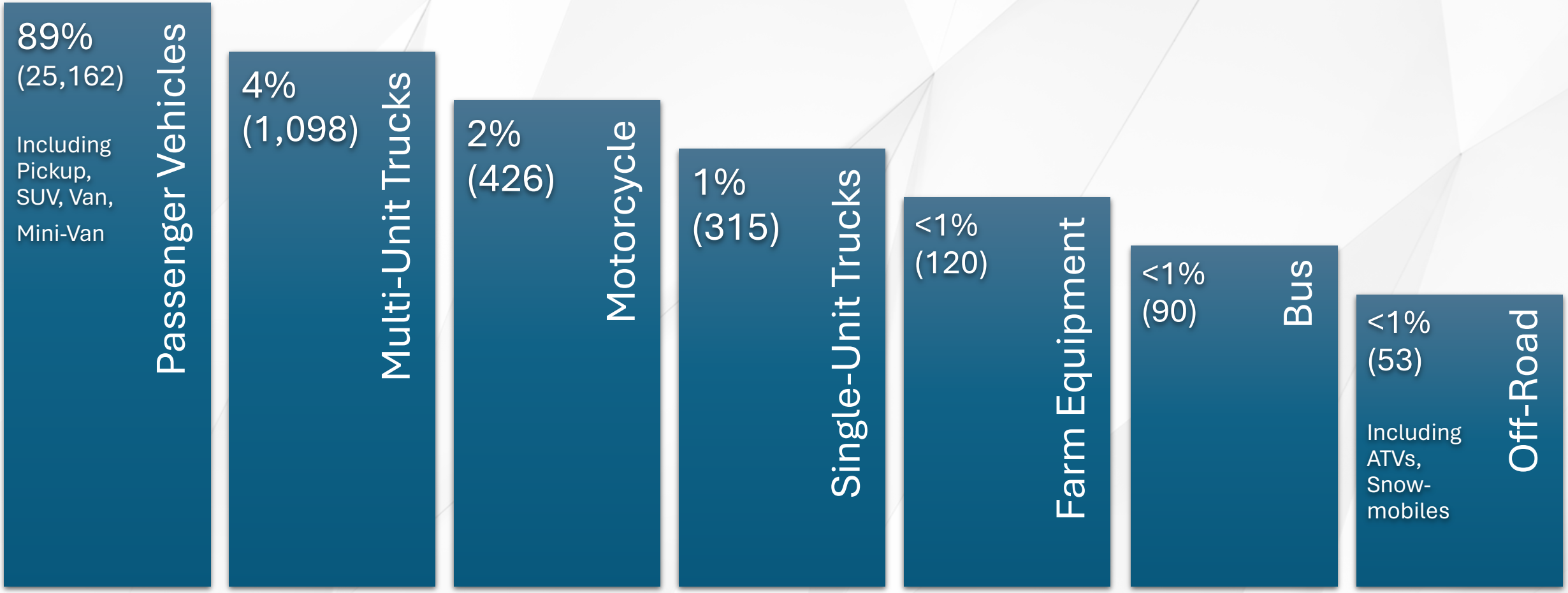
What are the fixed object types?



*Representing Fixed Object collision types with Fatal and Serious Injury severity

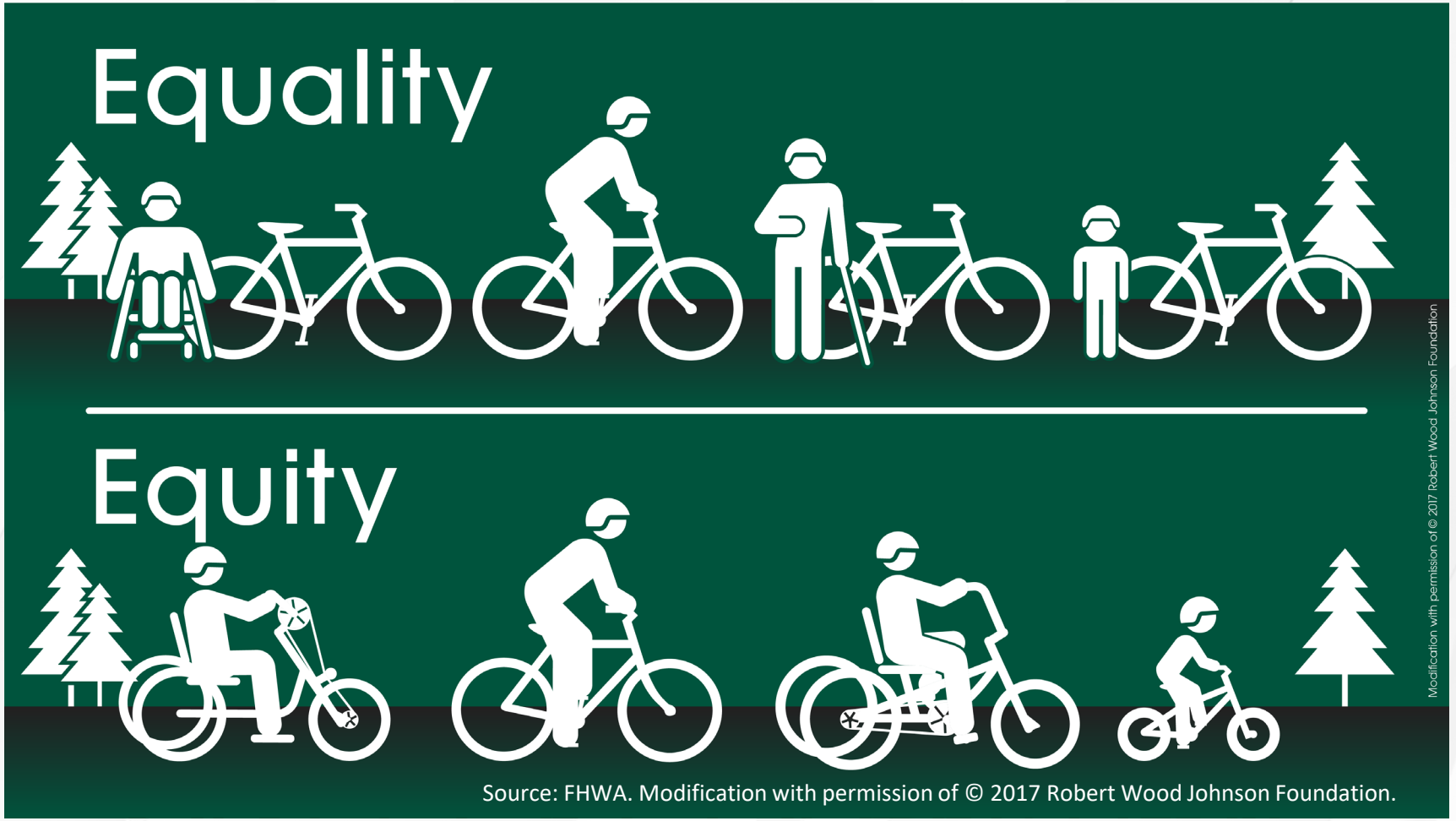
IDENTIFYING SAFETY ISSUES

What vehicle types are involved in crashes?



EQUITY CONSIDERATIONS

What demographics and/or equity considerations should we be cognizant about during the study?



Source: FHWA. Modification with permission of © 2017 Robert Wood Johnson Foundation.

EQUITY CONSIDERATIONS

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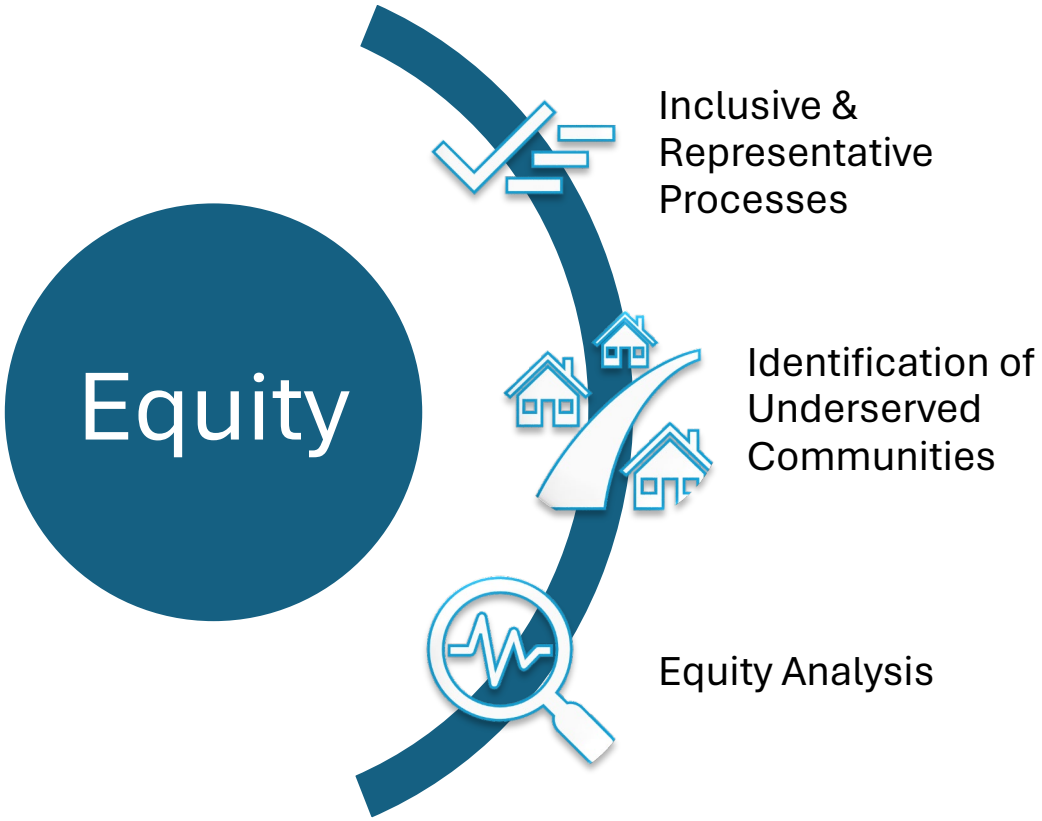


Inclusive and representative processes:

- Meaningful and empowering public involvement
- Fairness in mobility and accessibility

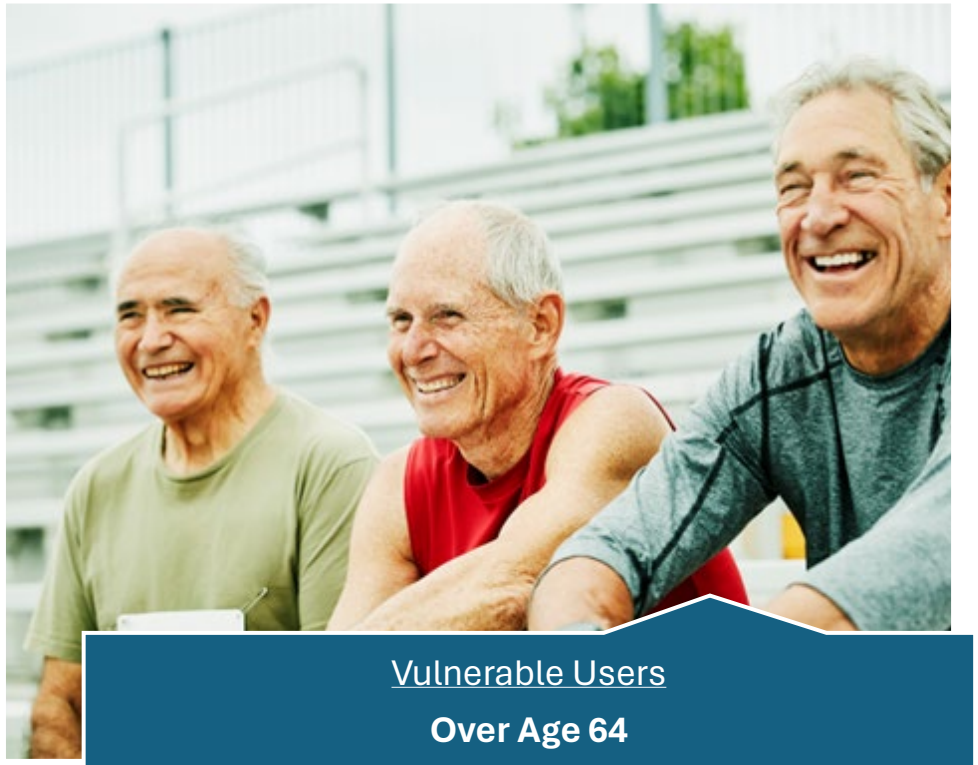
Vulnerable roadway users and underserved communities:

- Age
- Ethnicity
- Disability
- Income
- Mode of Transportation

In collaboration with:

- You
- Proposed projects
- Proposed strategies

EQUITY CONSIDERATIONS

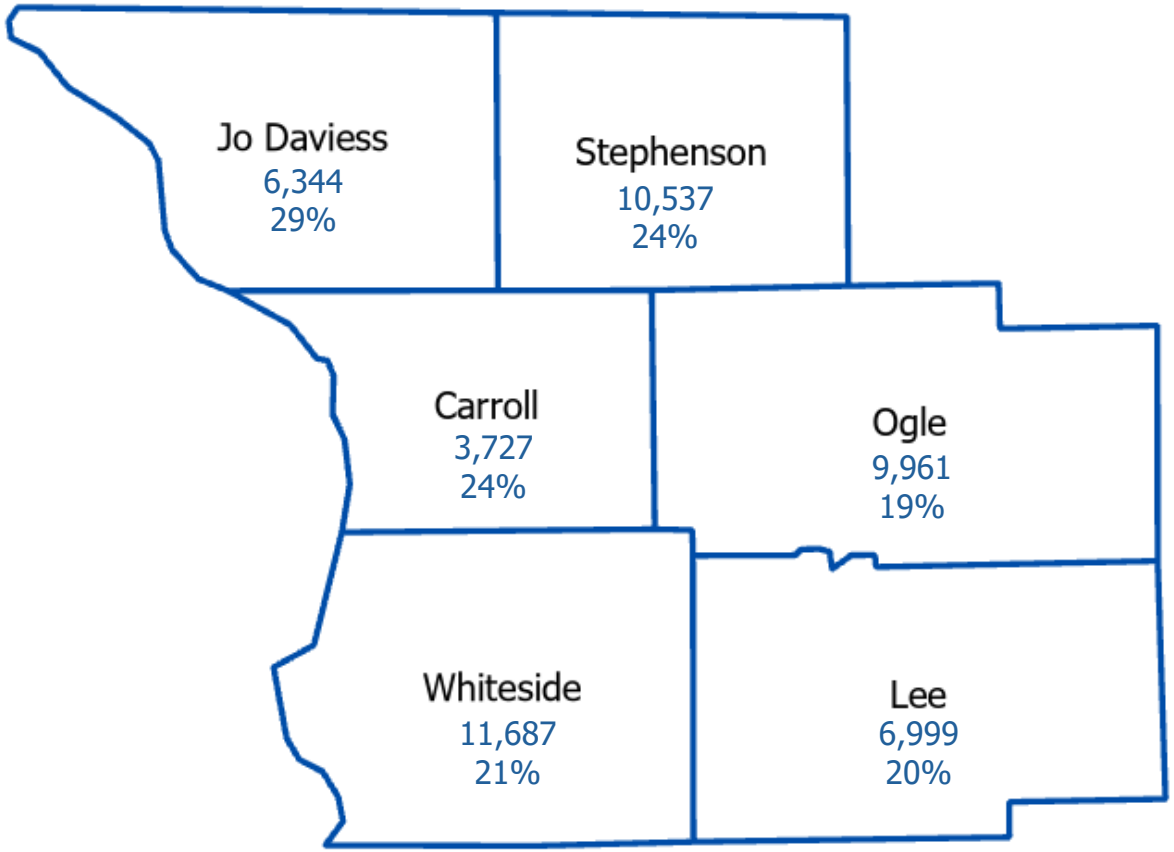


Vulnerable Users

Over Age 64

49,256 people

out of a total surveyed population of 223,480 (22%) are over the age of 64



Source: U.S. Census Bureau
2018-2022 ACS 5-Year Estimates

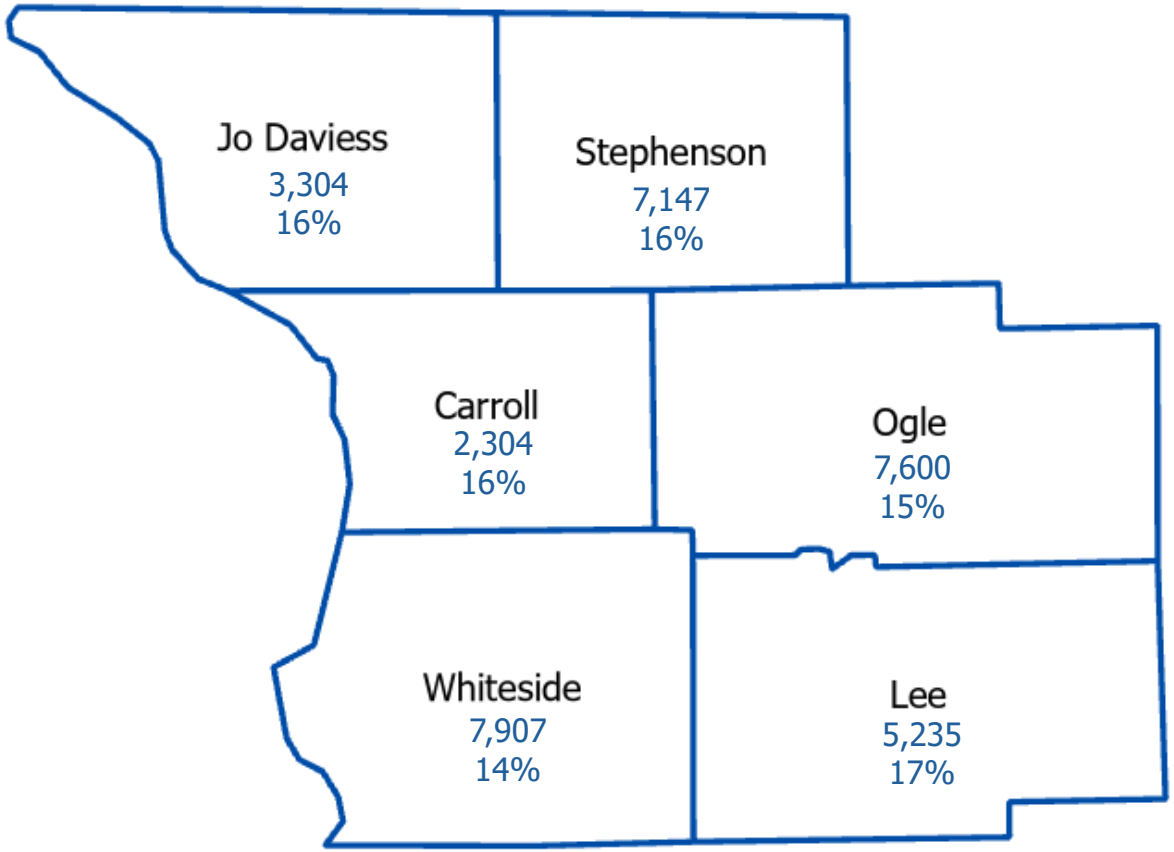
EQUITY CONSIDERATIONS

Vulnerable Users

Ambulatory or Visual Disability

33,498 people

out of a surveyed 217,618 total people (15%) have an ambulatory, visual, or other disability



Source: U.S. Census Bureau
2018-2022 ACS 5-Year Estimates

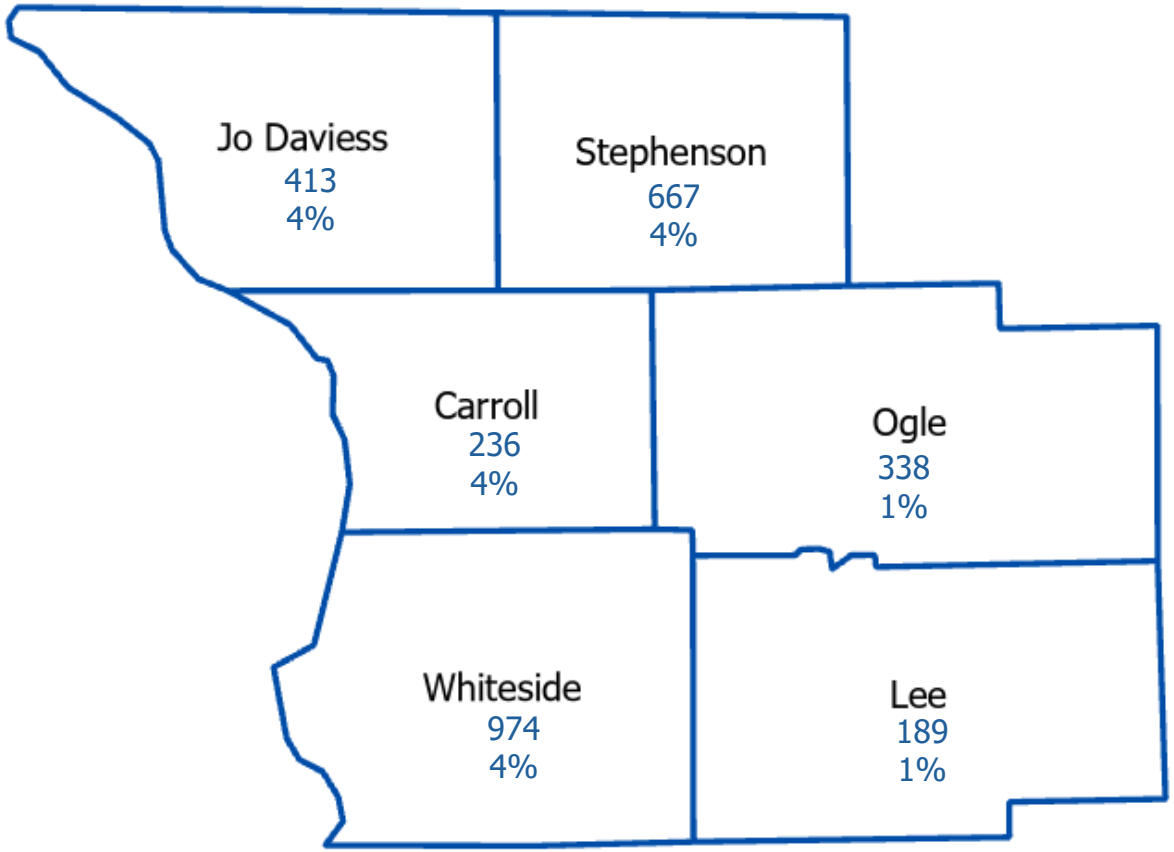
EQUITY CONSIDERATIONS

Vulnerable Users

Pedestrians and Bicyclists

2,817 people

out of a total surveyed population 96,416 (3%) reported biking or walking to work



Source: U.S. Census Bureau
2018-2022 ACS 5-Year Estimates

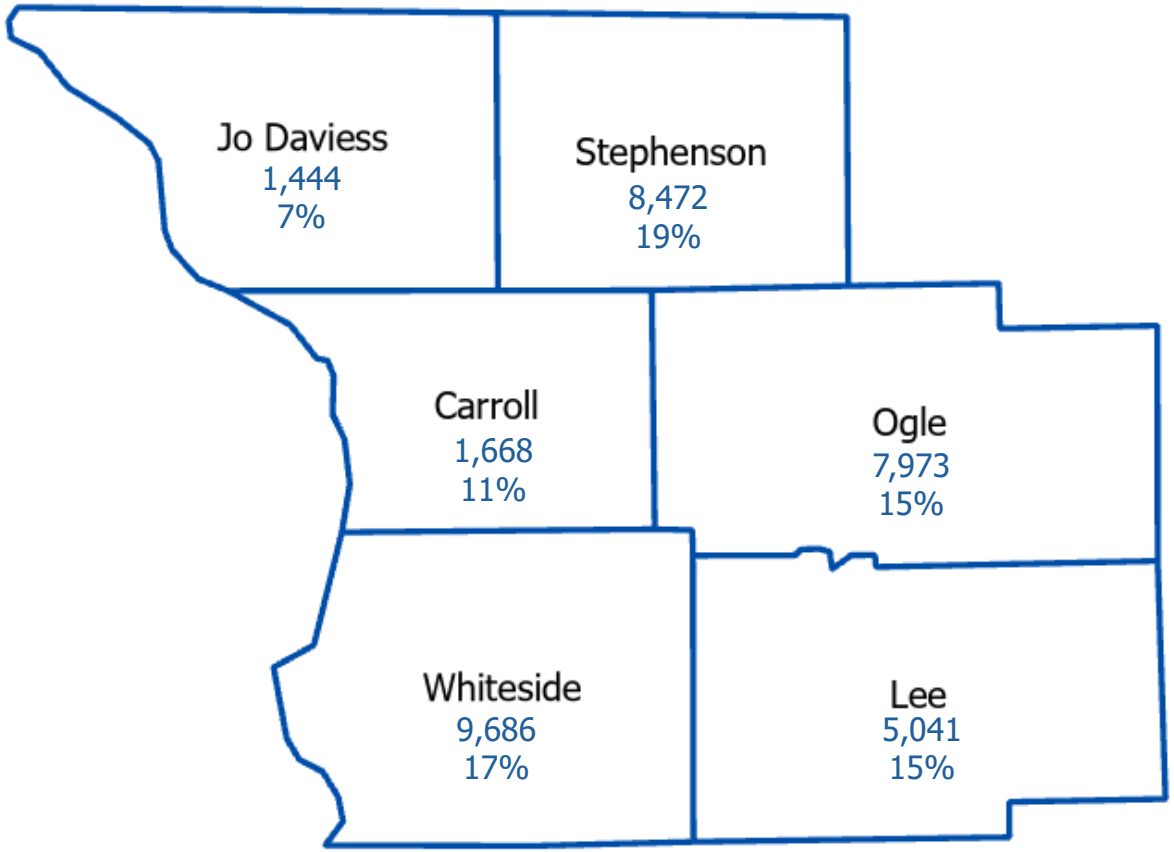
EQUITY CONSIDERATIONS

Historically Underserved Communities

Minority Ethnicities

34,284 people

out of a total surveyed population of 223,480 (15%) are of minority ethnicity



Source: U.S. Census Bureau
2018-2022 ACS 5-Year Estimates

EQUITY CONSIDERATIONS

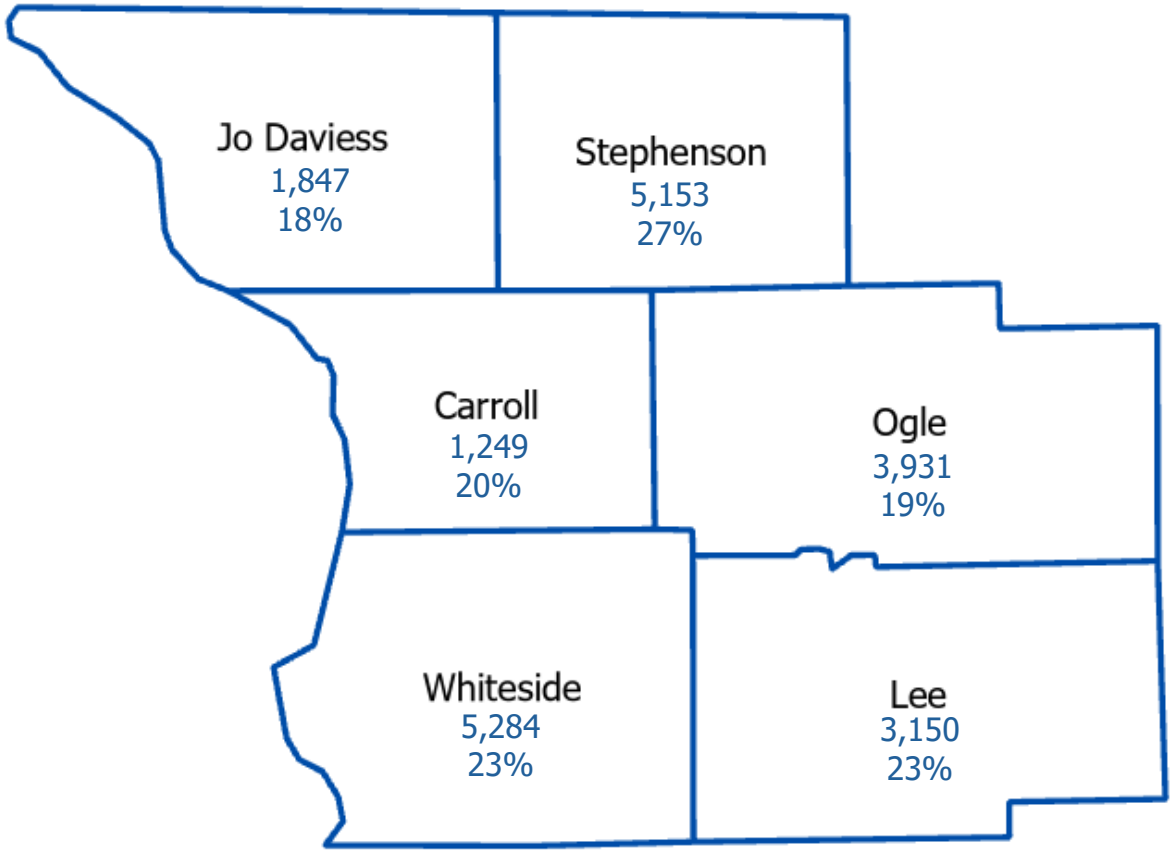
Historically Underserved Communities

Low Income

20,614 households

out of a total 93,368 surveyed households (22%) reported a median household income below $30,000*

*2021 Illinois Poverty Line for a family of four is $27,479

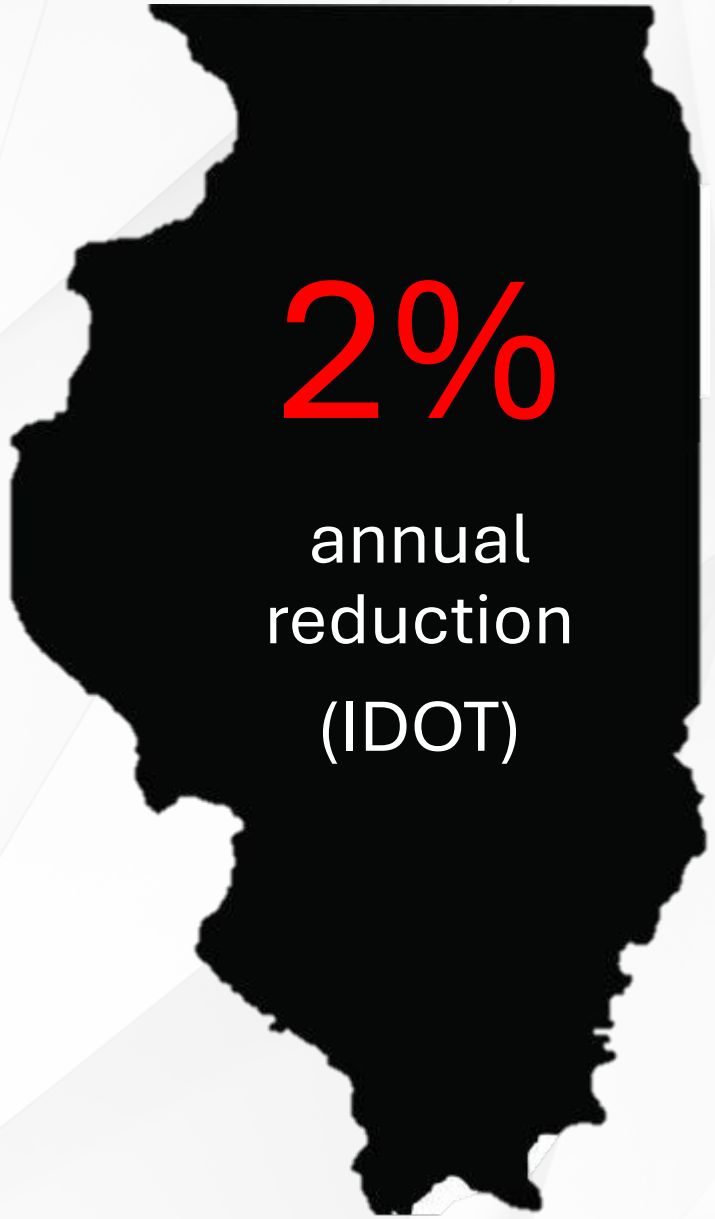


Source: U.S. Census Bureau
2018-2022 ACS 5-Year Estimates

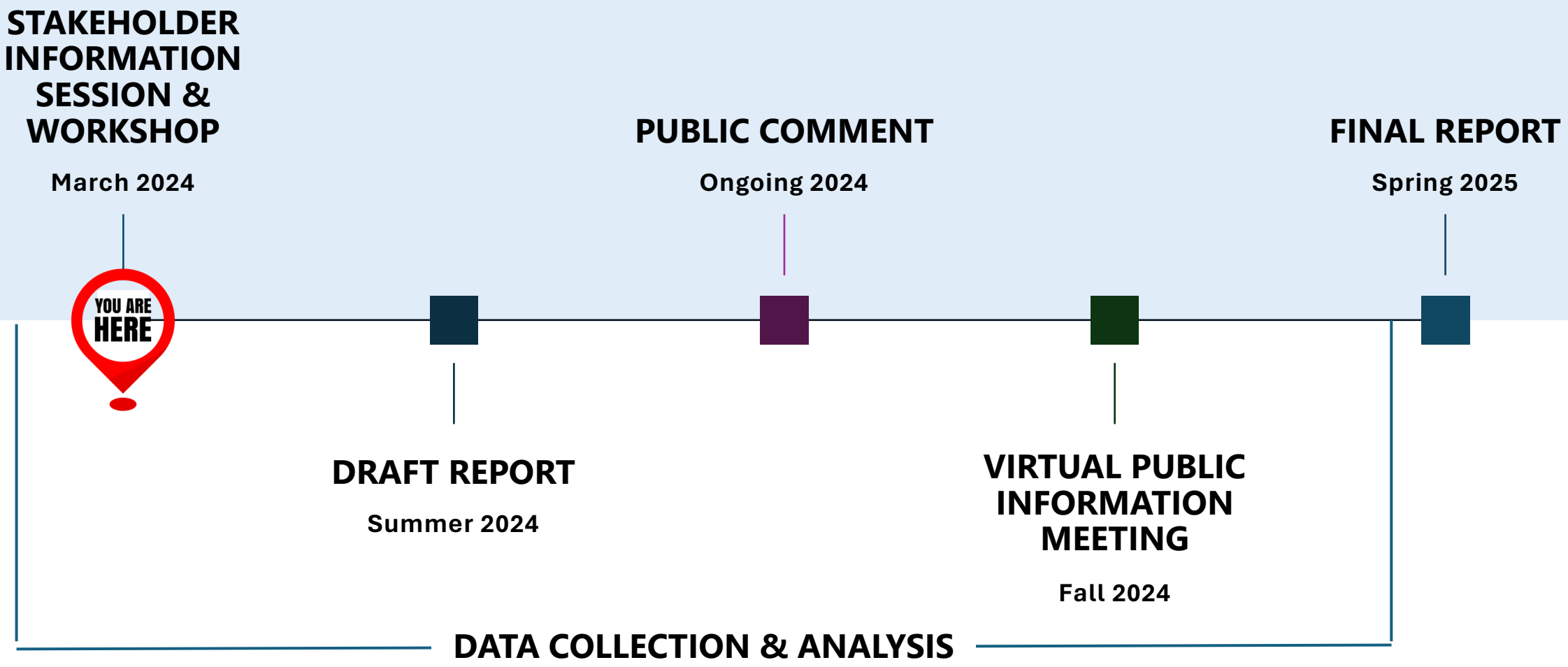
GOAL SETTING

Making roads safer and protecting users.

- ✓ Critical to meeting SS4A funding requirements.
- ✓ What do you need to consider for goal setting?
- ✓ Is it a percentage reduction over time?
- ✓ Match IDOT?



WHAT TO EXPECT



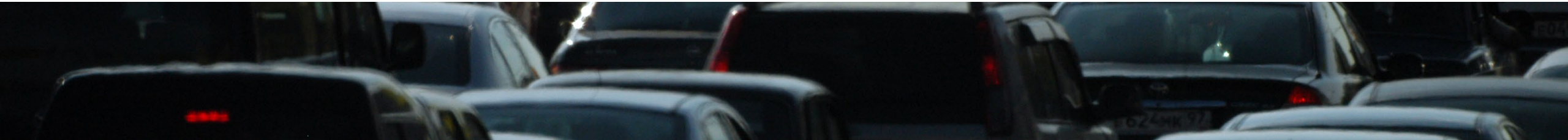
HOW TO REACH US

Project Website & Comment Submission

SCAN ME

Virtual Safety Issue Interactive Map

SCAN ME



ATTENDEE POLL

What corner of the transportation and/or infrastructure area do you represent?

POLL #1 RESULTS

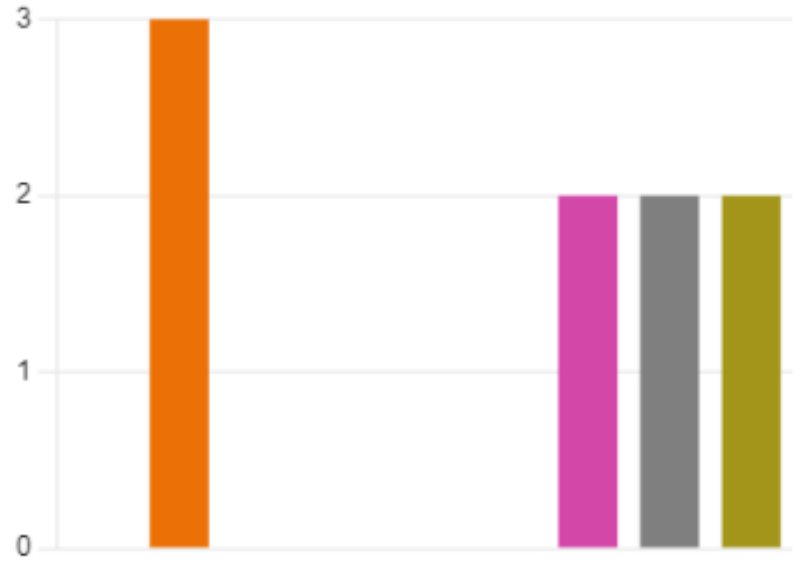
Results Summary

View results

1. What corner of the transportation and/or infrastructure area do you represent?

More Details

Health and Safety	0
Engineering	3
Maintenance	0
Elected Official	0
Enforcement	0
Emergency and Medical	0
Roadway Commissioners	2
Other Agency Employee	2
Other	2



ATTENDEE POLL

Other than driving a car (truck, suv, compact, etc.), what modes of transportation do you see used in your community?

POLL #2 RESULTS

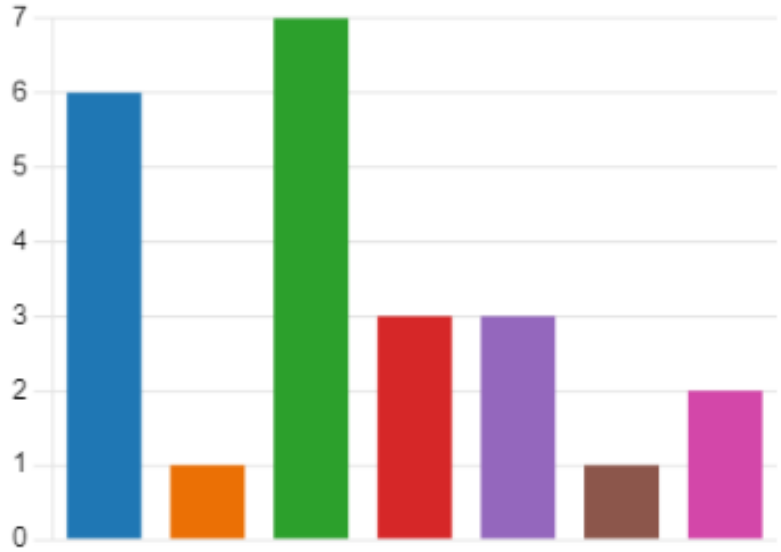
Results Summary

View results

1. Other than driving a car (truck, suv, compact, etc.), what modes of transportation do you see used in your community?

More Details

Bicycle	6
Bus	1
Walk	7
Off-Road Vehicles	3
Motorcycles	3
Horse and Buggy	1
Other	2



ATTENDEE POLL

What behavioral issues do you see as a motorist and/or pedestrian?

POLL #3 RESULTS

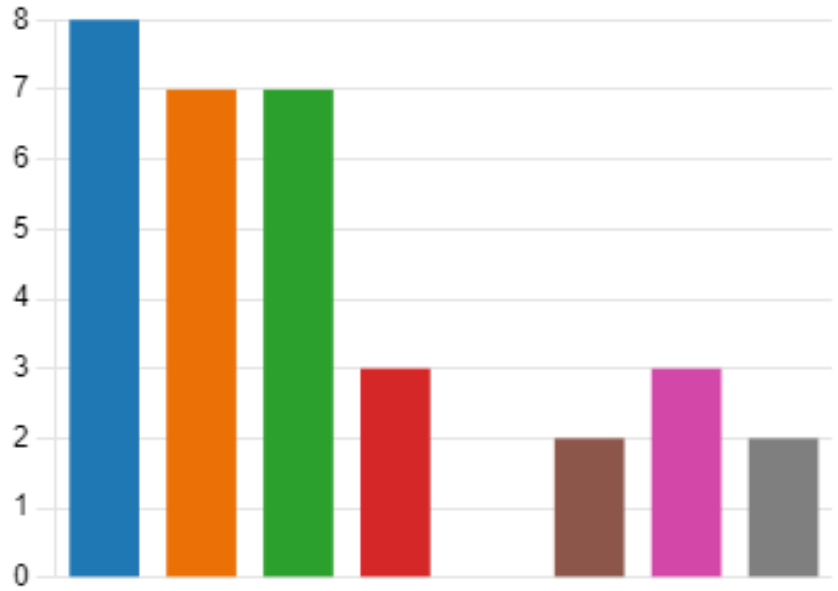
Results Summary

View results

1. What behavioral issues do you see as a motorist and/or pedestrian?

More Details

Phone Usage	8
Speeding	7
Not Adhering to Signage	7
Impaired Driver or Pedestrian	3
Seatbelts Not Used	0
Unlicensed Drivers	2
Red Light Running	3
Other	2



ATTENDEE POLL

What equity concerns do you have in your region/community?

POLL #4 RESULTS

Results Summary

View results

1. What equity concerns do you have in your region and/or community?

More Details

Elderly Population	10
Race	4
Disabilities	6
Pedestrians and Bicyclists	9
Low Income Population	5
Other	1