



Iowa

Vulnerable Road User (VRU) Safety Assessment and Strategic Highway Safety Plan (SHSP)





Iowa VRU Safety Assessment

Overview

- New requirement from the Bipartisan Infrastructure Law
- Must be approved by the governor or designee



Due: November 15, 2023

“All states are required to develop a Vulnerable Road User Safety Assessment as part of their Highway Safety Improvement Program (HSIP) in accordance with 23 U.S.C. 148(1).”



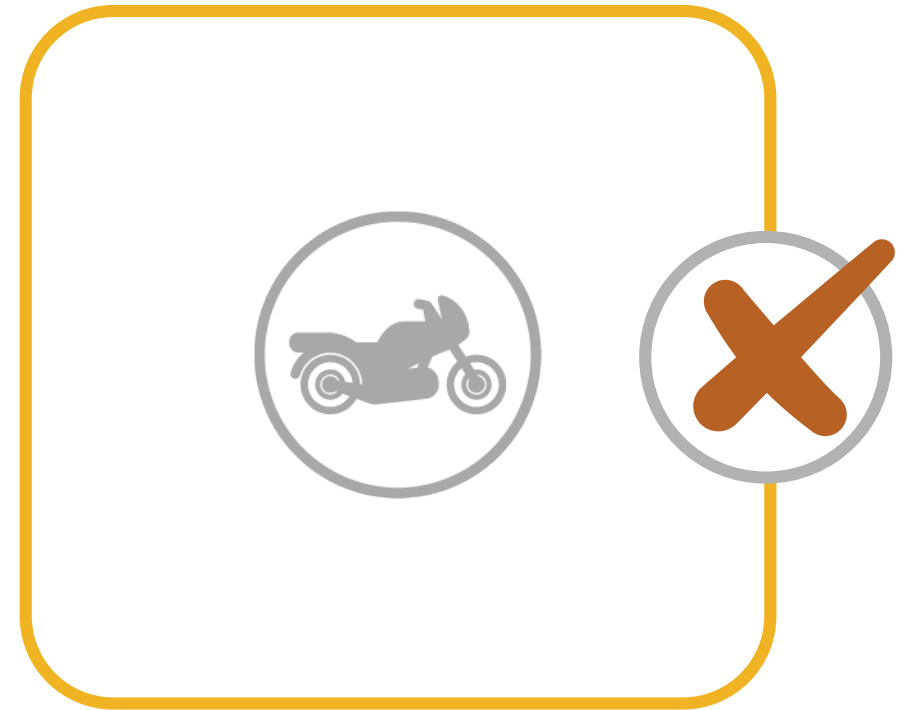
Goal of VRU Safety Assessment?



- Identify areas of higher risk for bicyclist and pedestrian crashes
- Provide insight on areas of necessary infrastructure improvements on Iowa roads
- Furthering the objective of achieving zero fatalities on the nation's roads

What is a VRU?

The definition of “vulnerable road user” is provided in 23 U.S.C. 148(a)(15) as “a nonmotorist.”

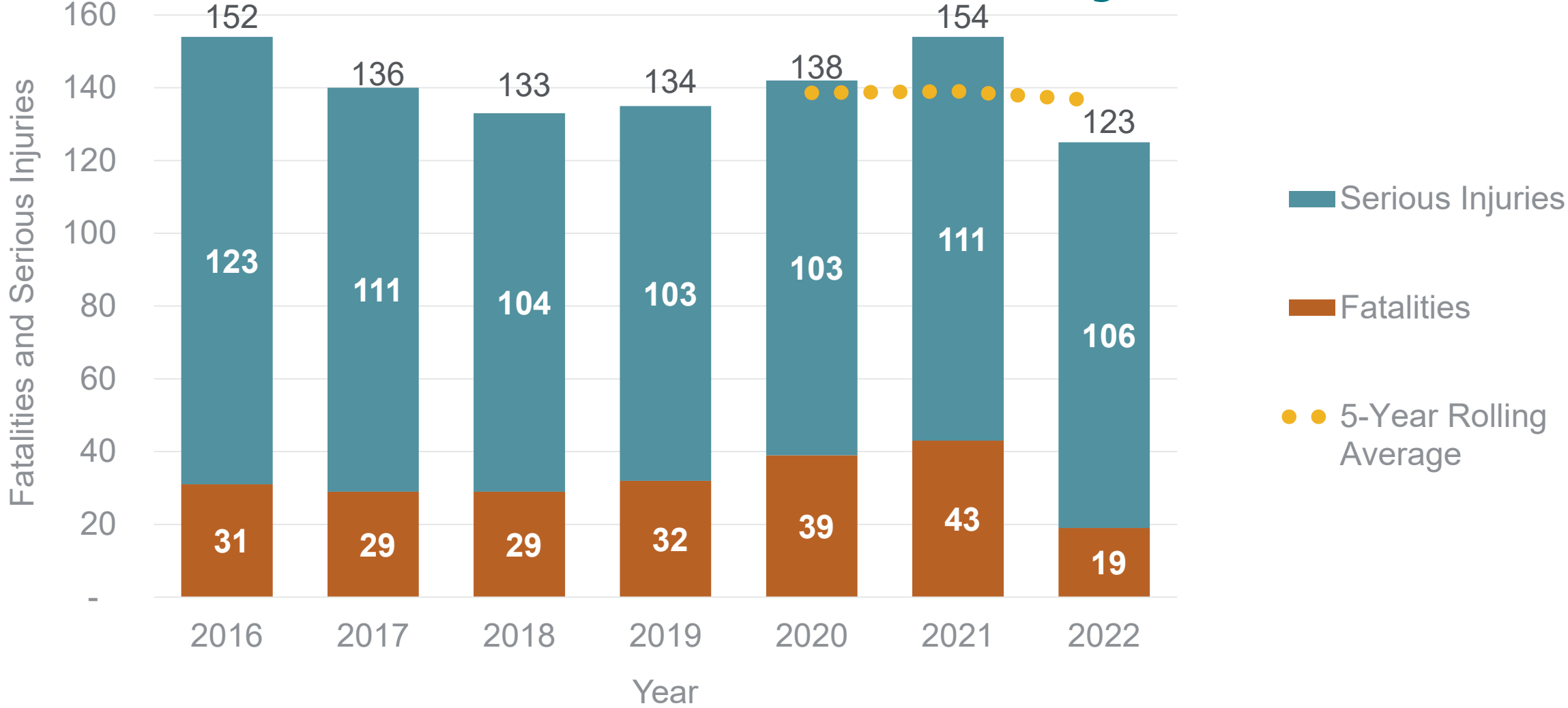


Risk Factor Assessment

- Builds off previous *Statewide Bicycle Pedestrian Systemic Safety Analysis 2020*
- Utilizes 7 years of crash data (January 1, 2016 through December 31, 2022)
- Adds equity data analysis
- Identifies strategies to address safety risks for VRU
- Develops high-level recommendations for selected locations



VRU Fatalities and Serious Injuries



VRU Fatalities and Serious Injuries by User Type



65%
Pedestrian



2%
Skater, personal conveyance, wheelchair

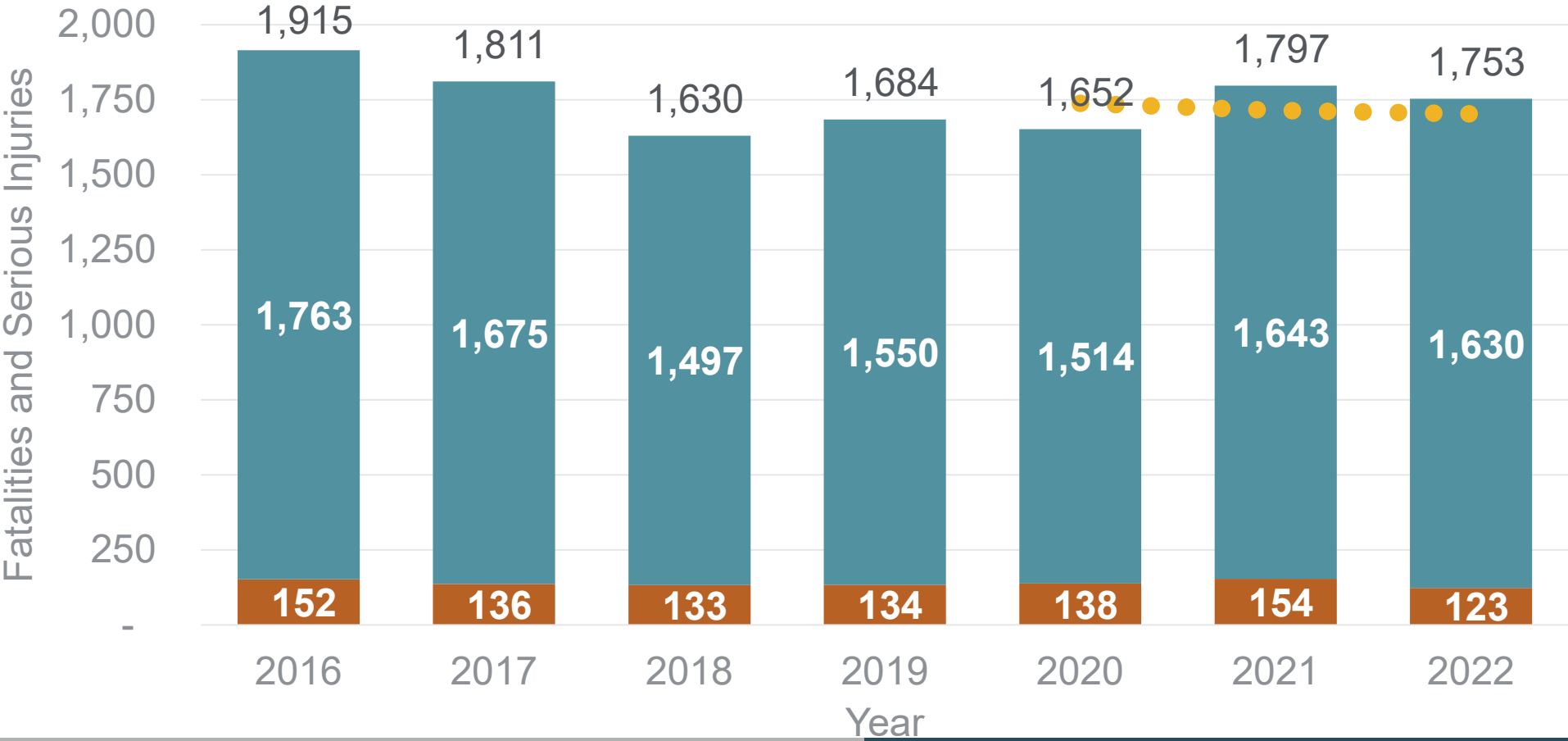


29%
Bicyclist



4%
Other or Unknown

Fatalities and Serious Injuries All Road Users



8%
of all fatalities and serious injuries in Iowa are VRUs in past 7 years

- Other Road Users
- Vulnerable Road Users
- 5-Year Rolling Average

Funding Strategies

- Funding is available via application to Iowa DOT's Highway Safety Improvement Program-Local (HSIP-Local) and Traffic Safety Improvement Program (TSIP)
 - Rectangular Rapid Flashing Beacon (RRFB)
 - Speed feedback sign
 - Leading Pedestrian Interval (LPI)
 - Painted crosswalk
- VRU Safety Assessment document will include a list of high-risk locations that can be used to support funding requests and planning for VRU improvement projects in the future.



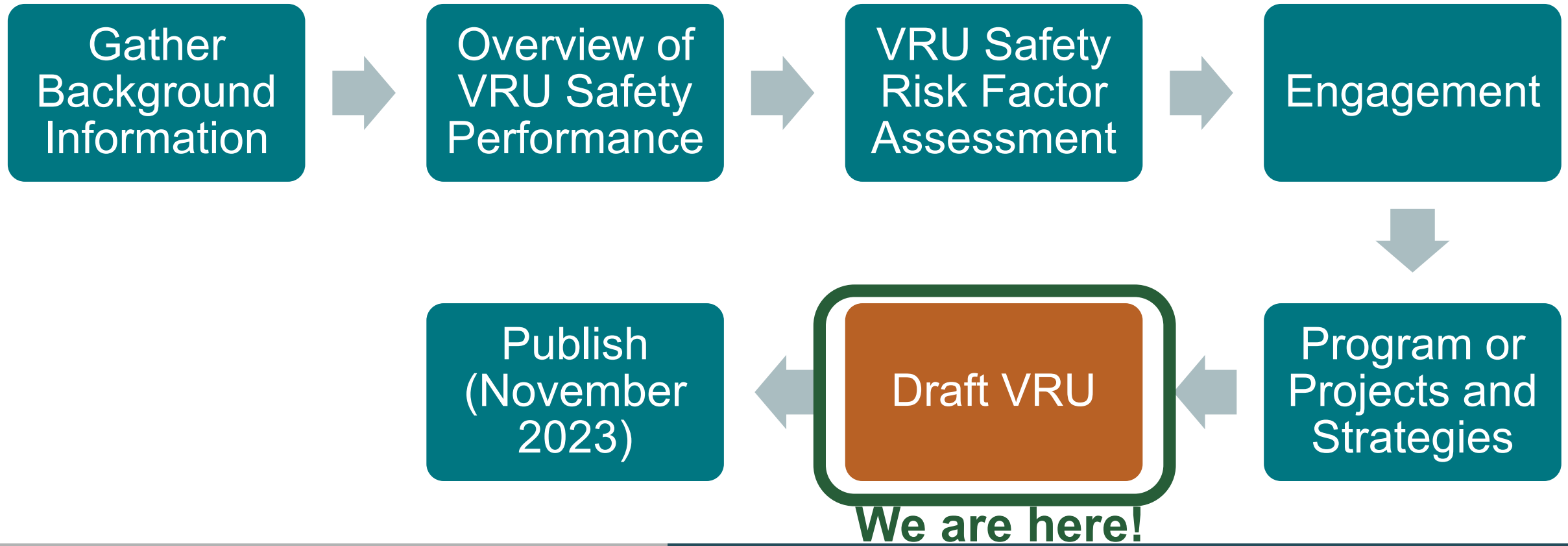
Discretionary Grants



- Safe Streets for All (SS4A)
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- If meets appropriate criteria:
 - Reconnecting Communities and Neighborhoods (RCN)
 - Railroad Crossing Elimination (RCE)
 - Consolidated Rail Infrastructure and Safety Improvements (CRISI)
 - Strengthening Mobility and Revolutionizing Transportation (SMART)

**List is not all-inclusive go to:*
https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/

Development Process

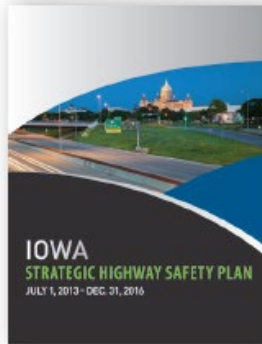




Iowa SHSP

SHSP Overview

- Federal requirement for states since the adoption of SAFETEA-LU in 2005
- Drives funding and safety initiatives statewide
- Must be updated every five years
- Must:
 - Incorporate multidisciplinary input
 - Be driven by data
 - Address all roads
 - Focus on fatalities and serious injuries



Collaboration

- Diverse group of safety professionals involved in the update





Emphasis Areas

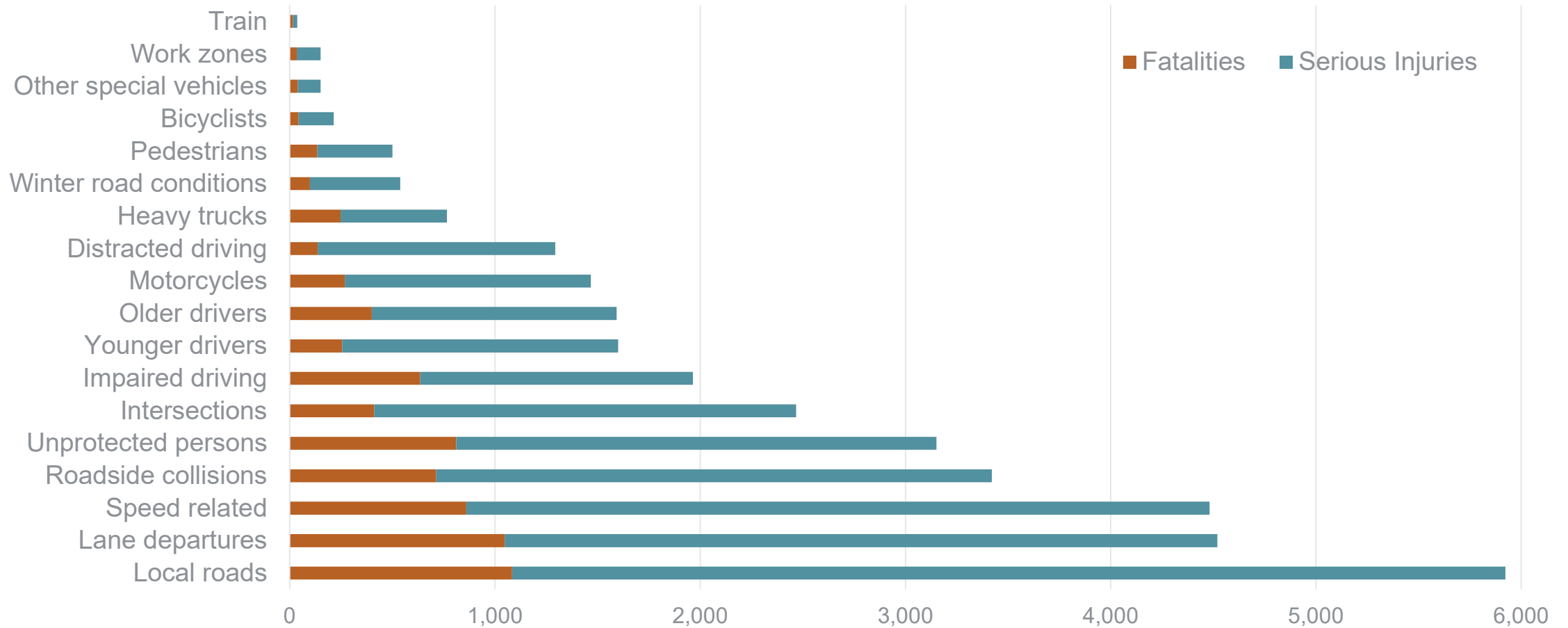
SHSP Emphasis Areas

- Analyzed 18 emphasis areas that impact roadway safety
 - Fatal and serious injury crash analysis by emphasis
 - Survey of Advisory Team and stakeholders

Goal: Identify critical emphasis areas that have the greatest potential to reduce fatalities and serious injuries on Iowa's roads

Crash Analysis

Fatalities and Serious Injuries by Emphasis Area (2017 - 2021)



Note: Fatalities and serious injuries can include multiple emphasis areas.

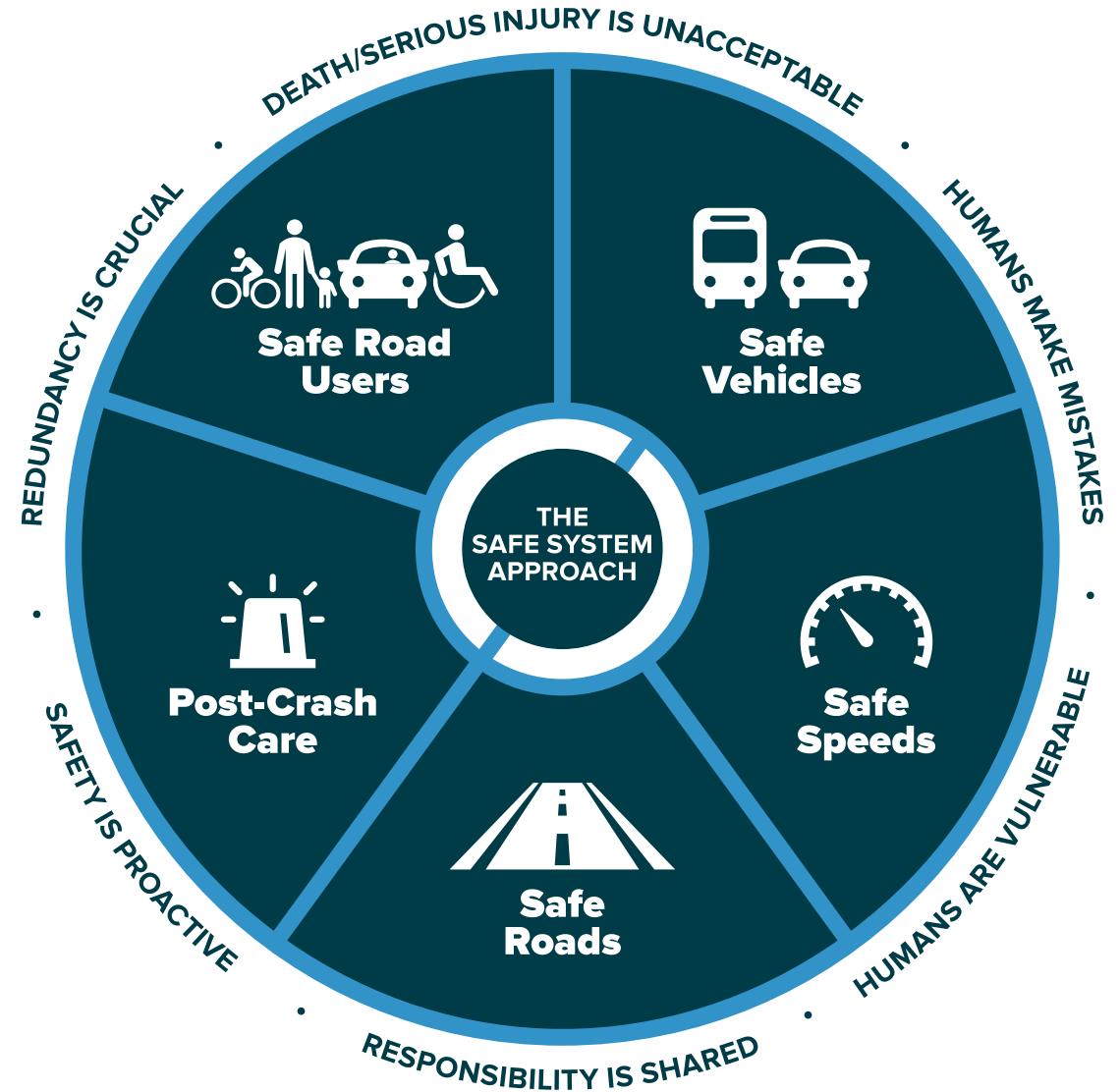
Safe System Approach



SAFE SYSTEM

APPROACH

Zero is our goal. A Safe System is how we get there.



Emphasis Areas

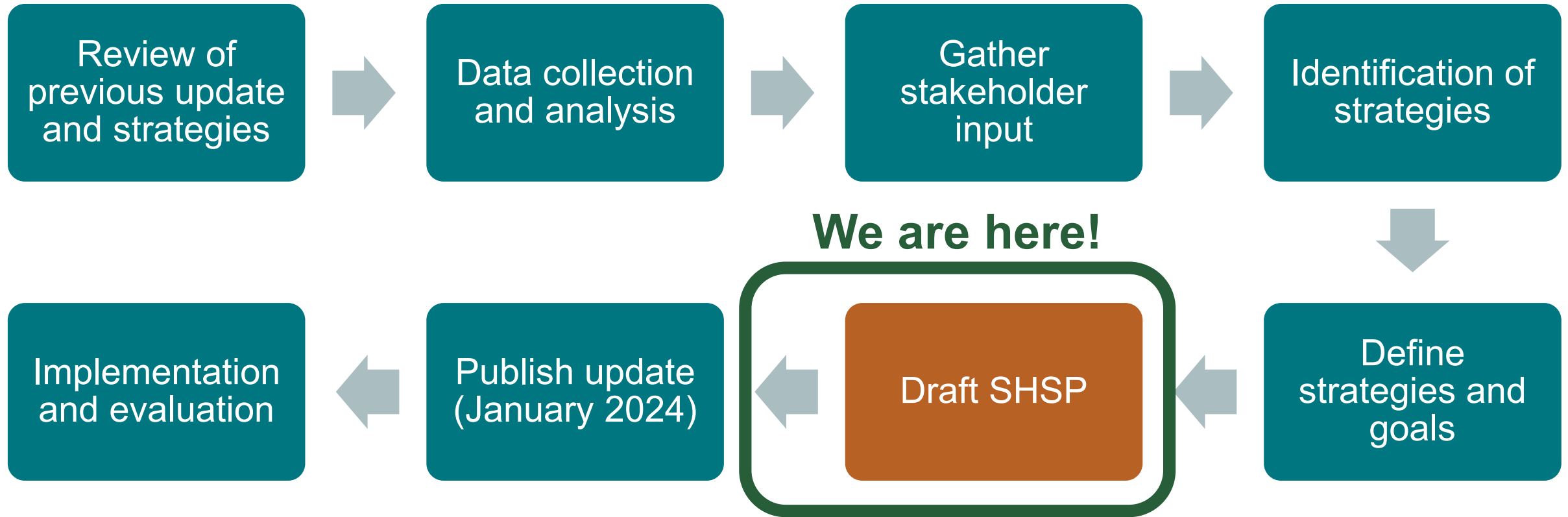
- Grouping based on the Safe System Approach

Safer People	Post-Crash Care	Safer Vehicles	Safer Speeds	Safer Roads
<p>Occupant Protection (37%) *</p> <p>Impairment Involved (23%) *</p> <p>Distracted Driving (15%) *</p> <p>Younger Drivers (19%)</p> <p>Older Drivers (19%)</p> <p>Bicyclists (3%)</p> <p>Pedestrians (6%)</p>	<p>Post Crash Care</p>	<p>Heavy Trucks (9%)</p> <p>Motorcycles (17%)</p> <p>Other Special Vehicles (2%)</p> <p>Train (0.4%)</p>	<p>Speed-related (52%) *</p>	<p>Local Roads (69%) *</p> <p>Lane Departures (53%) *</p> <p>Intersections (29%) *</p> <p>Roadside Collisions (40%)</p> <p>Winter Road Conditions (6%)</p> <p>Work Zones (2%)</p>

Percent indicates percentage of fatalities and serious injuries associated with the Emphasis Area. Note: Fatalities and serious injuries can include multiple Emphasis Areas.

** Indicates Key Emphasis Areas*

Development Process





Contact

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