



Vulnerable Road User (VRU) Safety Assessment

OTSC Update, June 2023

FHWA PRIORITIZING VRU SAFETY

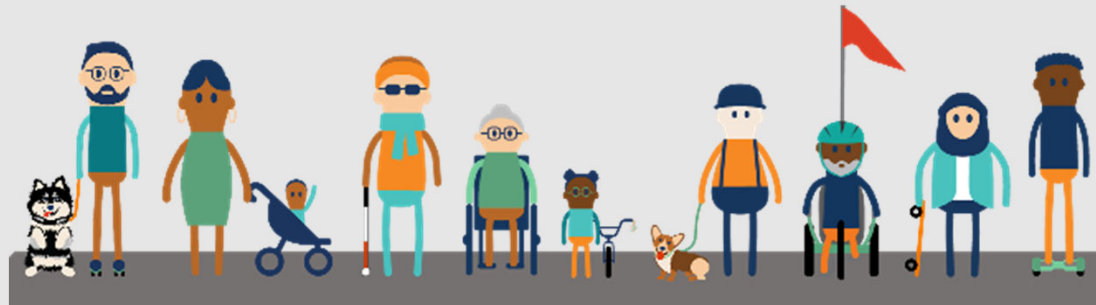
Vulnerable road user safety affects everyone on the roadway - no matter your age, gender, or socioeconomic status.

- Infrastructure Investment and Jobs Act (IIJA)
 - “All states are required to develop a Vulnerable Road User Safety Assessment as part of their Highway Safety Improvement Program (HSIP)”
 - Should be included in the Strategic Highway Safety Plan (known as TSAP in Oregon)
 - Plan must be data-driven and incorporate the Safe Systems Approach (SSA)

[VRU Safety Assessment Guidance \(dot.gov\)](#)

VULNERABLE ROAD USER ASSESSMENT

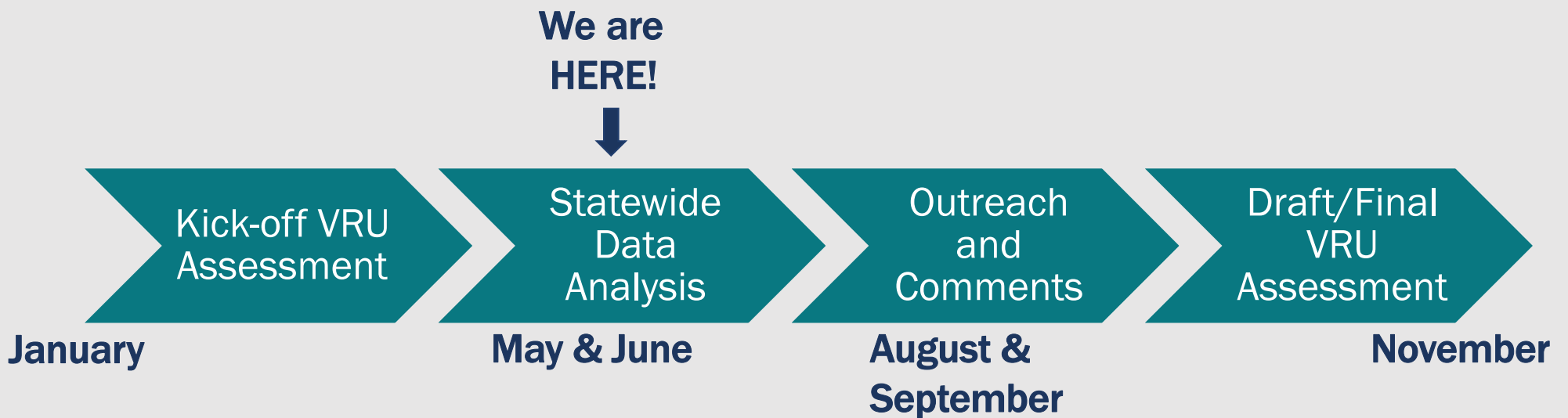
- What is a vulnerable road user (VRU)?
 - Definition can vary, but includes, at a minimum:
 - Pedestrians
 - Persons using wheelchairs
 - Bicyclists
- What is a VRU Assessment?
 - Statewide effort to increase VRU safety by:
 - Studying available data and crash trends
 - Identifying high-risk areas
 - Developing strategies and solutions that compliment other initiatives in Oregon



VRU ASSESSMENT MUST INCLUDE:

- The Safe System Approach (SSA)
- Data-driven analysis of VRU fatalities and serious injuries statewide
- Consideration of community demographics near crash locations, including race, ethnicity, income, and age
- Identification of 'high-risk' areas for VRUs
- Projects and strategies to reduce safety risks in 'high-risk' areas

VRU ASSESSMENT SCHEDULE



PROJECT SCHEDULE HIGHLIGHTS

Task	Deliverable / Milestone	Weeks from NTP	Contract-led Due Date for Discussion
2	Data Collection and Analysis Documentation	8	April 28
6	Partner Consultation Plan	10	Draft: May 12; Final: TBD
★ 6	Partner Roundtable Workshop	12, 14	Mtg Plan: May 27; Draft Materials: June 9; Workshop: TBD
★ 3	Tech Memo #1 VRU Analysis Summary	14	Draft: June 9; Review Meeting: TBD; Final: TBD
3	Tech Memo #2 High Risk Area Methods and Assumptions	16	Draft: June 23; Final: TBD
4	High Risk Areas (Map and Table)	22	Draft: August 4; Final:TBD
5	Program of Strategies Table	28	September 1
8	VRU Assessment Presentation	28	Sep 29
6	Community Engagement Materials (3 Flyers)*	34, 40	Content: October 13; Design: November 24
7-8	VRU Safety Assessment (v1, v3, v5, TSAP)	24, 28, 36, 40	Aug 18; Sep 1; Oct 27; Nov 24 Coordinate with OTSC, OBPA, OTC schedules

TASK 2: STATEWIDE DATA ANALYSIS

- All Public Roads
- Required: 5 years of crash history data

- > How many years?
- > What time period?

- Long List of Related Data

- > Not available on all roads



- Documentation

- > Data collected
- > Analysis methodologies
- > Queries

- Fatal and severe injury patterns (predominant crash types, high-crash intersections, high-crash segments, and predominant contributing factors)
- VRU-involved crashes at other injury levels
- Fatality Analysis Reporting System ("FARS")
- Urban/Rural Context
- System type and location (State Highway/Local Road)
- Roadway functional class
- Roadway features (segment, intersection, intersection control, number of lanes/legs, posted speed limit, roadway width/crossing distance)
- Presence of street lighting and on-street parking
- Month, day, and time of day
- Risk factors
- Land use (generators of walking and bicycle trips such as major activity centers, etc.)
- Traffic Volumes
- Active Transportation Needs Inventory
- Equity-related demographics such as race, ethnicity, income, and age
- Climate change and sustainability

Previous & Current Related Efforts

- ARTS Ped/Bike Analysis
- 2020 Ped/Bike Safety Implementation Plan

TASK 3: ANALYSIS SUMMARY & HIGH RISK AREAS

• 3.1 VRU Data Analysis Summary

- > Analysis performed
- > Results
- > VRU compared to other safety areas
- > Safe System Approach
- > Emerging issues, trends in VRU
- > Progress toward Performance Targets

• Draft → Review Meeting → Final

• 3.2 High Risk Area Analysis Methodology

- > Define **AREA**
 - Geography?
 - Not geography?
- > Data, method, and time period to identify high-risk areas
- > Demographics
- > Draft List

TASK 6: EXTERNAL PARTNER COORDINATION

- Literature Review
- ID Partner Group
- Partner Consultation Plan
- Partner Roundtable/Workshop
- Community Engagement Materials
 - > Three 2-page Flyers

FHWA GUIDANCE

Required if High Risk Areas are in these jurisdictions:

- Metropolitan Planning Organization
- Regional transportation planning organization
- City, County

Recommended if High Risk Areas...

- ...are located within Tribal lands: Tribal Governments
- ...include transit stops or stations: Transit Agencies

NEXT STEPS

DKS actions

- Review tech memo and schedule data analysis meeting
- Schedule Draft Partner Workshop
- Begin VRU Safety Assessment outline (from FHWA Guidance)



Questions?

VRU ASSESSMENT TEAM

DKS Team

- Brian Chandler, Project Manager
- Lacy Brown, Lead Safety Analyst
- Houssam Ghandour, Safety Analyst

Oregon DOT

- Angela Kargel
- Jessica Horning
- Heidi Manlove
- Walt McAllister
- Doug Bish
- Christina McDaniel-Wilson