




Sky Lakes Trauma Program

- Stacey Holmes, BSN, RN, CEN, TCRN
 - Trauma Program Manager
 - Sky Lakes Medical Center
 - Klamath Falls, OR. 97603
-
- Board Certified in Emergency Nursing & Trauma Care
 - 26+ years of Emergency / Trauma Nursing
 - 3+ years of helicopter scene and fixed wing interfacility transports
 - 19+ years of Critical Incident Stress Debriefing

An aerial photograph of the Sky Lakes Medical Center. The main building is a large, modern structure with a light-colored brick facade and large glass windows. It is surrounded by a large parking lot with several cars parked. In the background, there are other hospital buildings, a curved road, and a mountain range under a clear sky.

Sky Lakes Medical Center – Trauma Program

- Level III Trauma Center
- Coverage Area – 10,000 sq miles
- Annual ED Volume – 35,000
- Annual Trauma Volume - 650
 - 9% Transfer to higher level of care
 - 48% Admit
 - 14% to OR

Chiloquin Fire & Rescue

- Chief Mike Cook
- Chiloquin Fire & Rescue
- Chiloquin, OR

- 10 Year Navy Veteran
- Fire Chief - Chiloquin since 2015
- 26 years in Fire & EMS



Chiloquin Fire & Rescue



- Chiloquin, OR - Klamath County
- Combination Department (26 volunteers & 7 paid staff)
- 32 Responding Personnel
- Ambulance Service Area covers 950 sq/miles, Provides mutual aid to over 2500 sq miles

"The 230s"

Mile Posts 228-242

Through The Eyes of the Frontlines

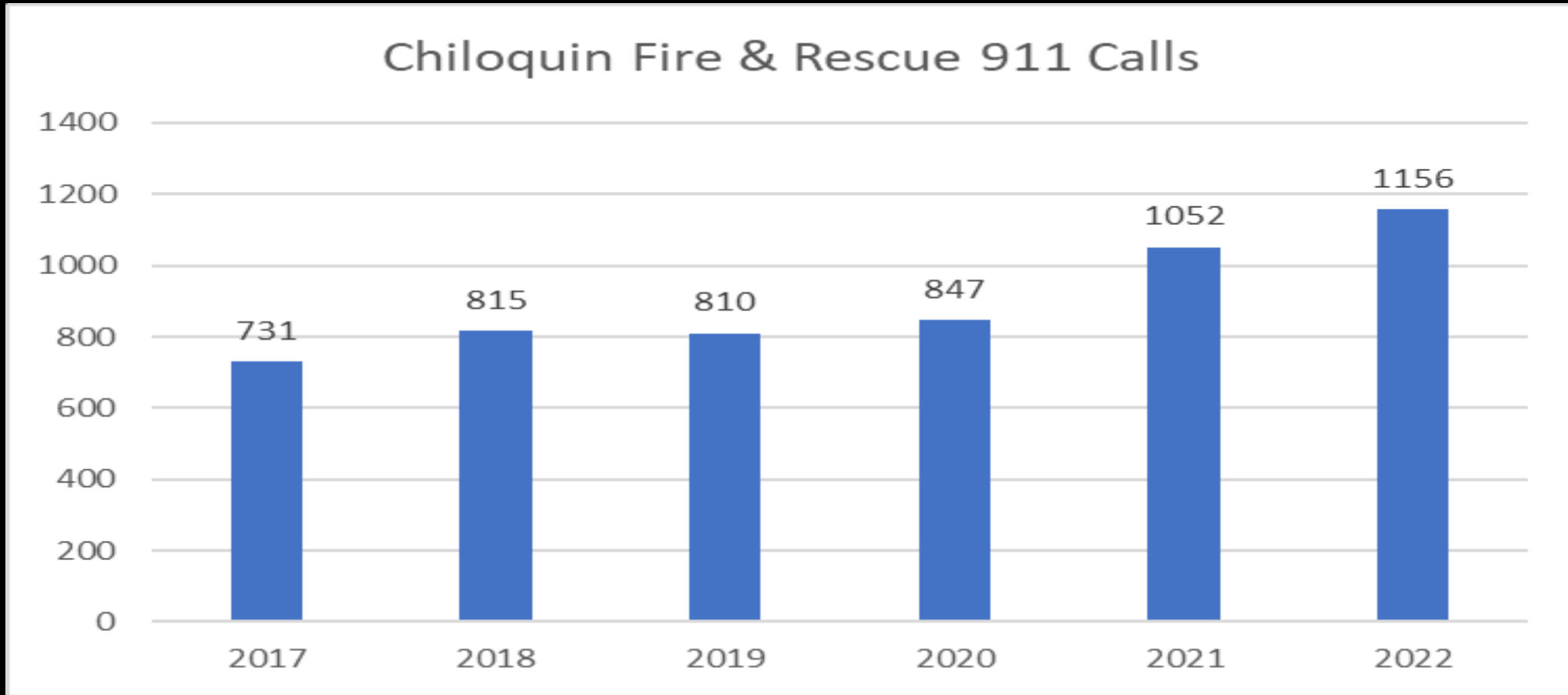
&

The Dinner Table

197



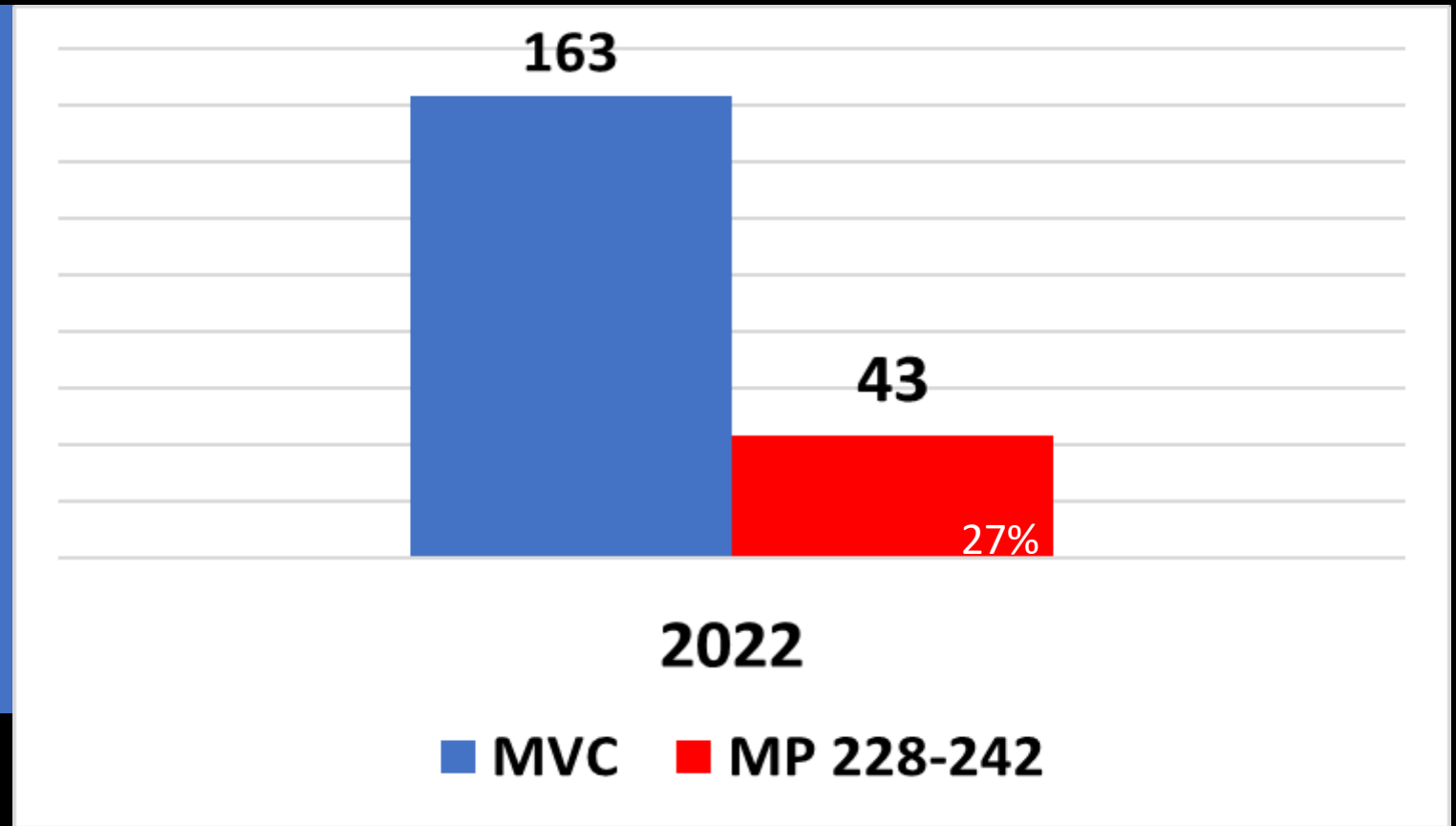
Chiloquin Fire & Rescue Annual Call Volume 2017-2022



37% Increase in call volume

Chiloquin Fire & Rescue

911 Total MVC Calls vs MP 228-242 MVC Calls
2022

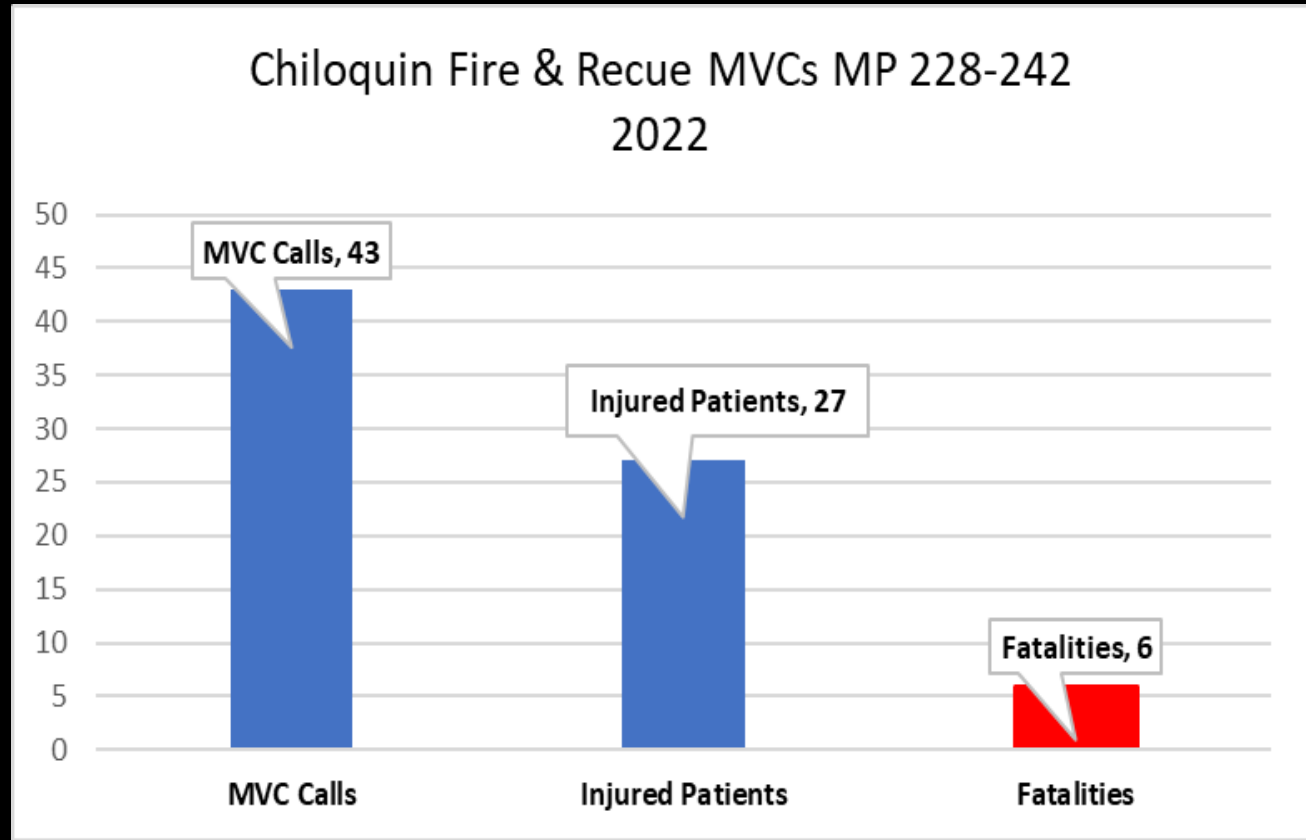




July 2022 – Jan 2023 = 8 Fatalities

2022 Fatalities

MP 228 - 242



23% of Injured Patients Are Fatalities


The 230's



What we want you to know from the frontlines

- We CARE & are invested in our Community.
- We are here to serve our community, our patients & their family members.
- We will answer the call day or night, sunshine or snow and paid or not.
- We will leave our family dinner table to provide that care when needed.
- But it takes toll on us as well.
- WE ARE CONCERNED!
- We don't have all the answers, but the problem can't be fixed if we don't share the information.

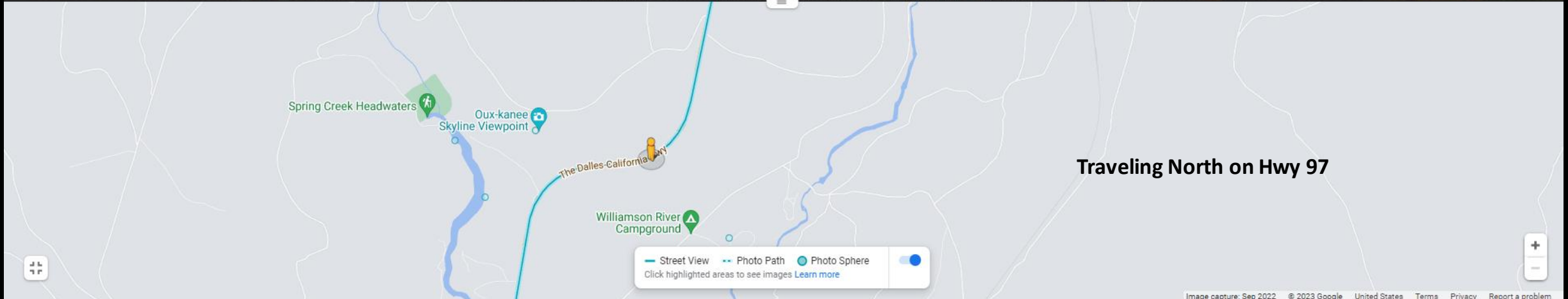


An aerial photograph of a multi-lane highway. A semi-truck with a red cab and a long grey trailer is stopped on the right side of the road. A white ambulance with a blue Star of Life is positioned in front of it. Several yellow traffic cones are placed around the scene. A white van is driving away from the scene in the left lane. The surrounding area is a mix of dry brush and pine trees.

The 230's Gaining Support

- Sky Lakes Medical Center's Trauma Committee
- Sky Lakes Medical Center's Board of Directors
- Klamath County Ambulance Advisory Committee
- Klamath County Fire Defense Board
- South Central Oregon Area Commission on Transportation
- Oregon Transportation Commission – Salem 6.29.2023
- Oregon Trauma Program Manager's Meeting
- ATAB 7
- Northwest States Trauma Conference

Mile Post 242 – Spring Creek Hill



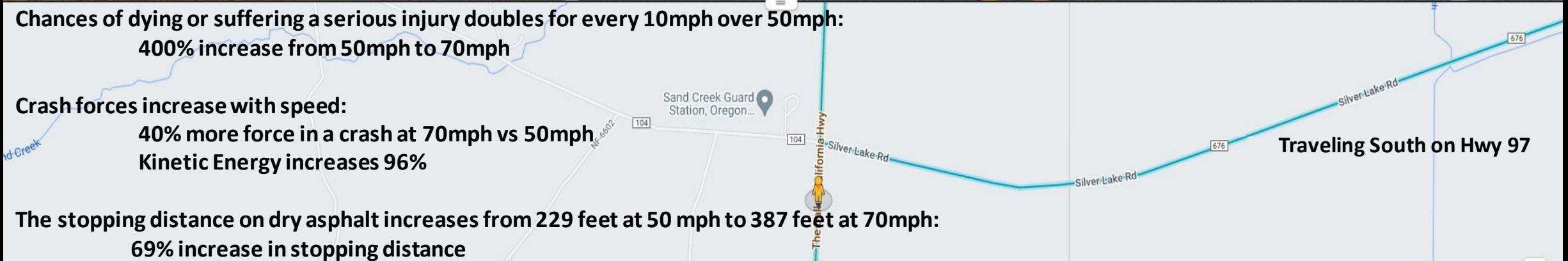
Mile Post 228 – Silver Lake Junction



**Chances of dying or suffering a serious injury doubles for every 10mph over 50mph:
400% increase from 50mph to 70mph**

**Crash forces increase with speed:
40% more force in a crash at 70mph vs 50mph
Kinetic Energy increases 96%**

**The stopping distance on dry asphalt increases from 229 feet at 50 mph to 387 feet at 70mph:
69% increase in stopping distance**

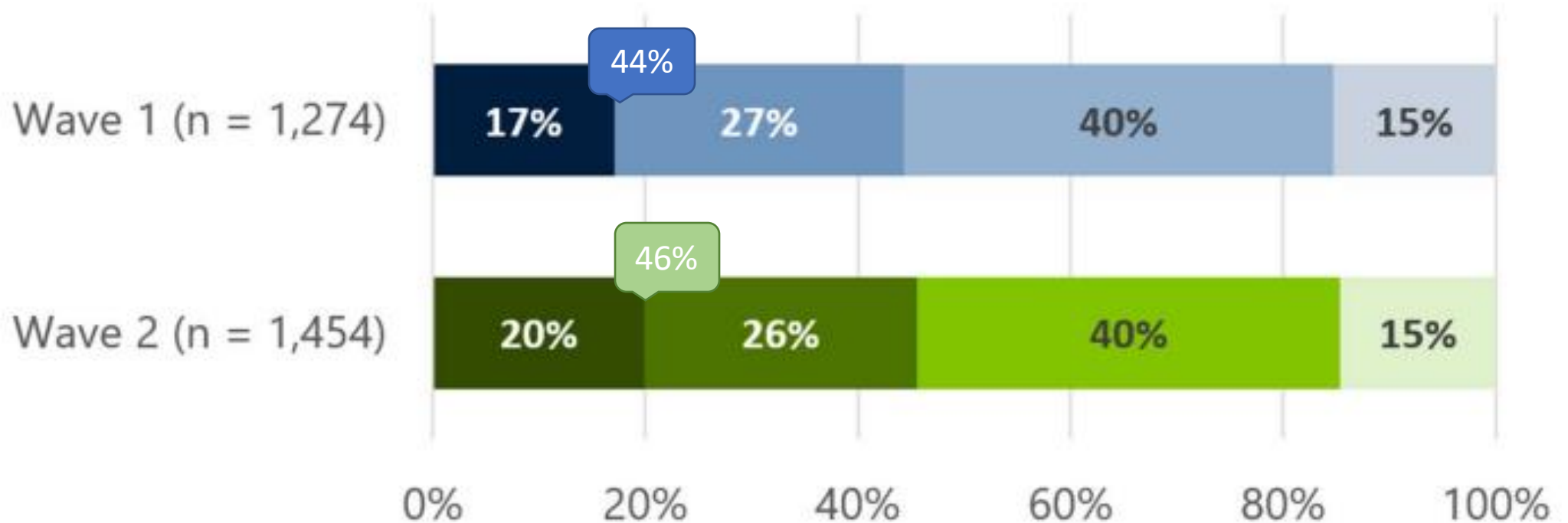


2021 ODOT Statewide Public Opinion Survey

On a road with a speed limit of 65 mph, how often do you drive faster than 70 mph?

Base: all respondents.

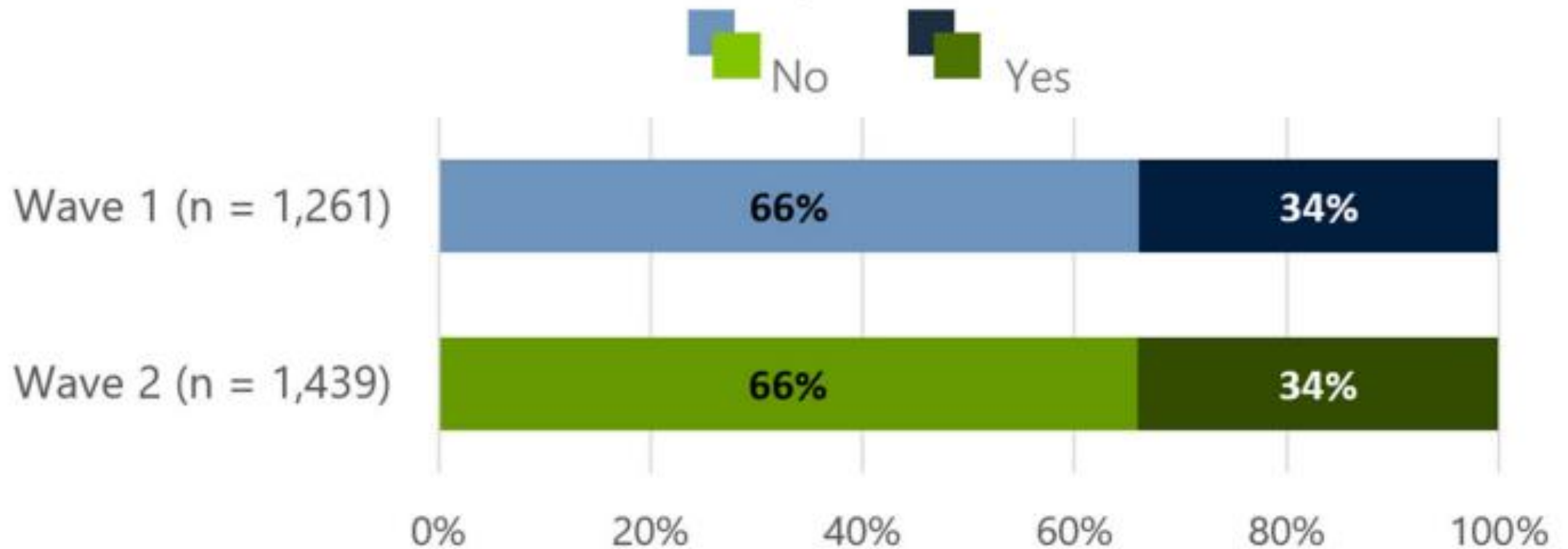
■ Most of the time ■ Half the time ■ Rarely ■ Never



2021 ODOT Statewide Public Opinion Survey

Do you believe traveling ten (10) miles an hour over the posted speed limit is safe?

Base: all respondents.



Total Crashes by Year & Posted Speed Group

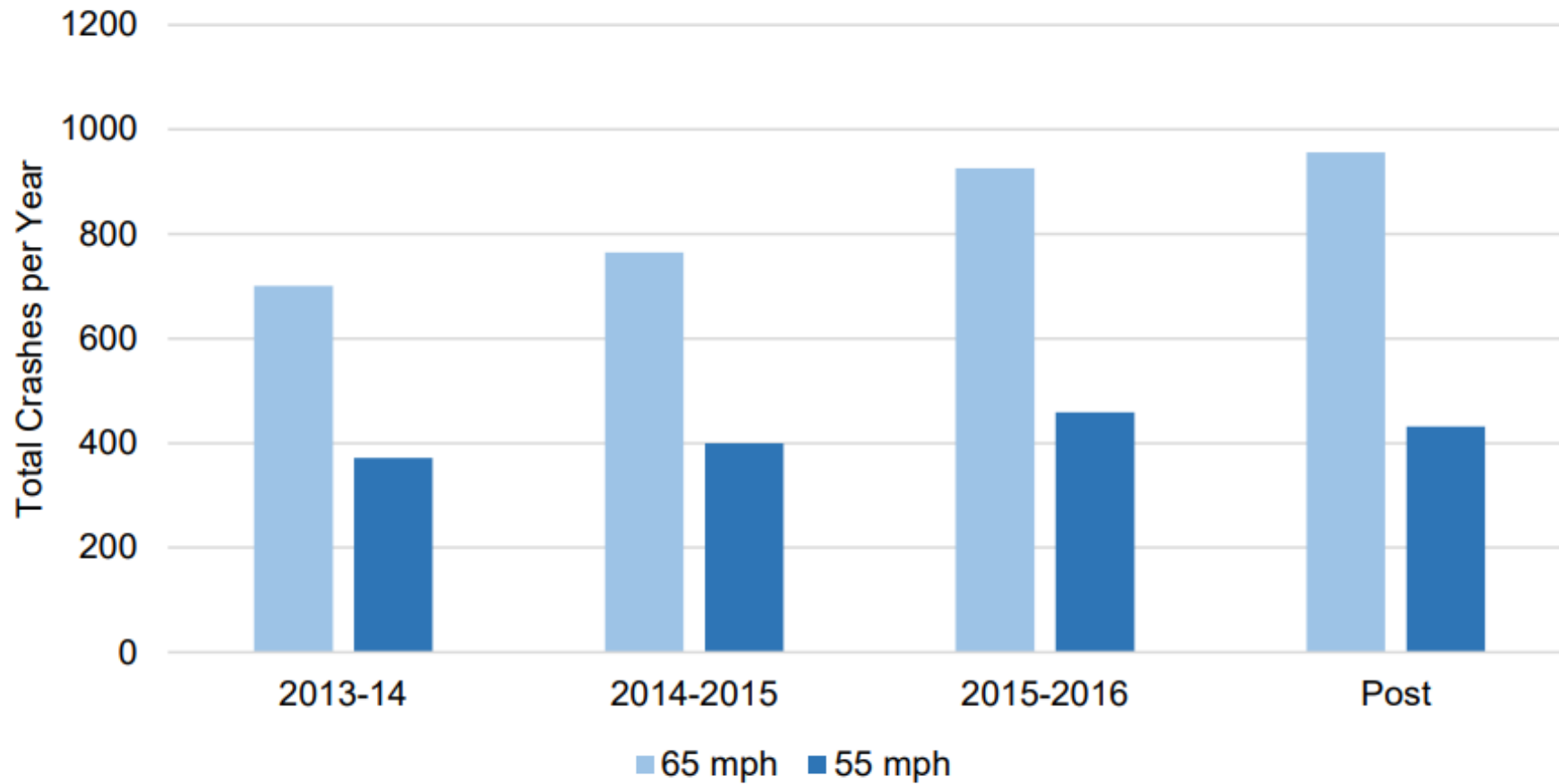


Figure 3-5 Total Crashes by Year and Posted Speed Group, All Control Segments

Highway 97
Oregon's 2nd Deadliest Highway
2016-2020
ODOT Report

- 77 Fatal Crashes on Hwy 97
- 23 Fatal Crashes in Klamath County
(30% of all Hwy 97 Fatalities)



FATAL
CRASH

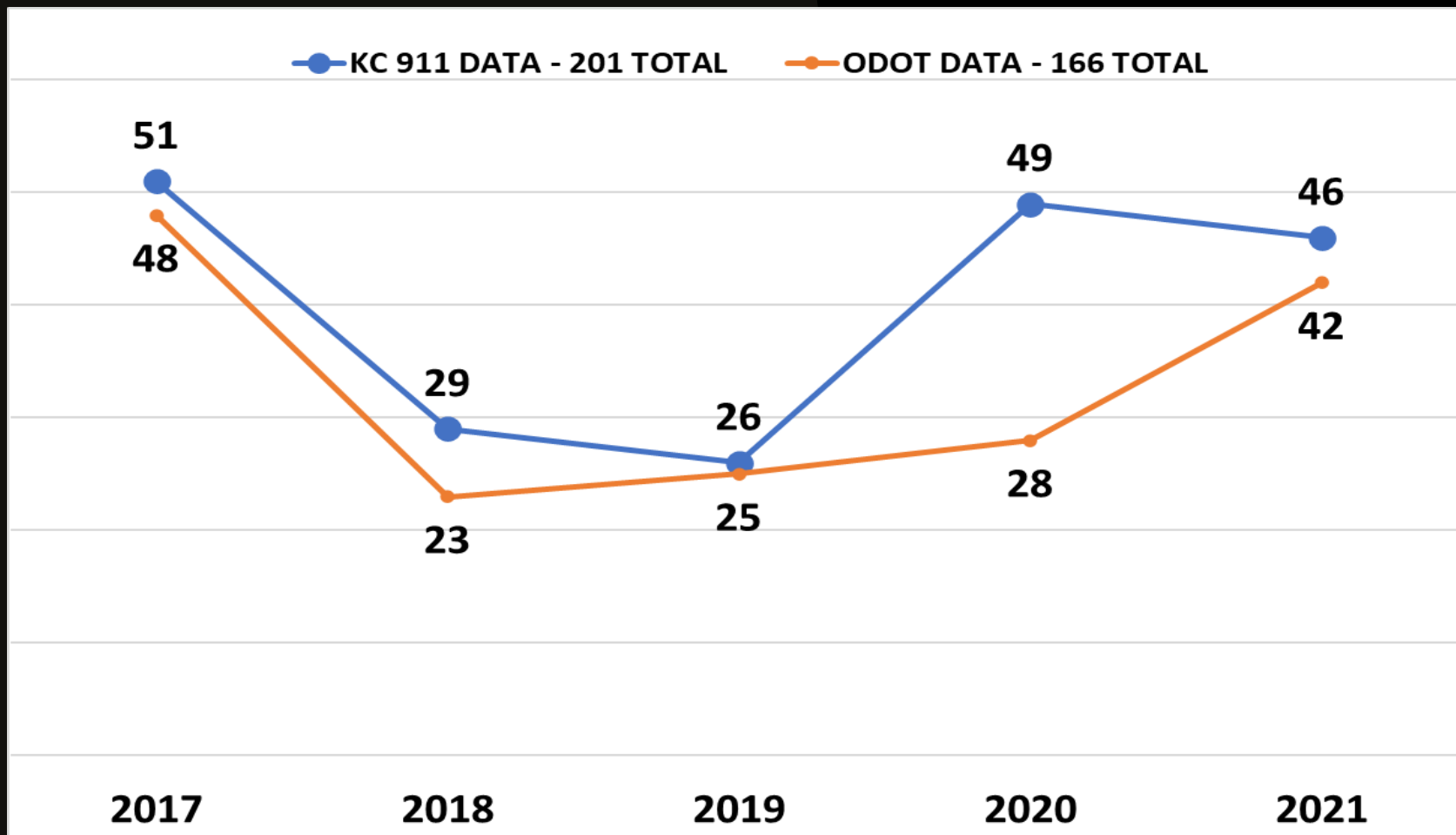
ODOT Injury Reporting - KABCO

Severity: Crash severity is equal to the most serious injury sustained by anyone involved in the crash, based on the *on-scene assessment*, which may not align with final medical determination of injuries.

Severity is ranked on the KABCO scale:

- **K** – Fatal injury, an injury that results in death
- **A** – Incapacitating injury, a nonfatal injury that prevents the person from walking, driving, or doing activities they were capable of before the injury
- **B** – Non-incapacitating evident injury, an injury that is evident to observers at the scene of the crash
- **C** – Possible Injury, an injury or claim of an injury that is not evident to observers at the scene of the crash
- **O** – No injury, also described as Property Damage Only (PDO)

Klamath County 911 Dispatch & ODOT MVC Data Comparison MP 228-242



Head-On MVC – Auto vs Semi Actual Outcomes

#1 DOA

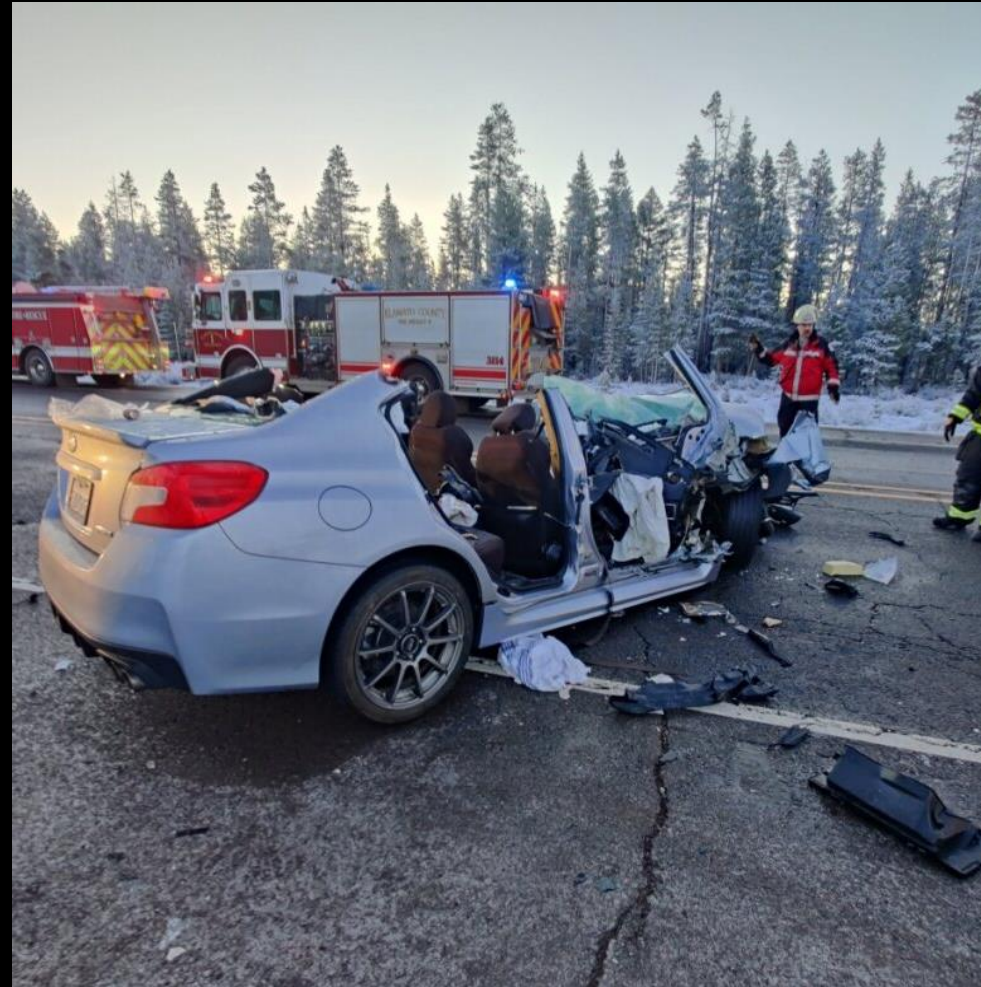
#2 Critical
Transfer

Died HOD#3

#3 Critical
Admission

#4 Stable
Discharged

Trauma One - Injury Tracking



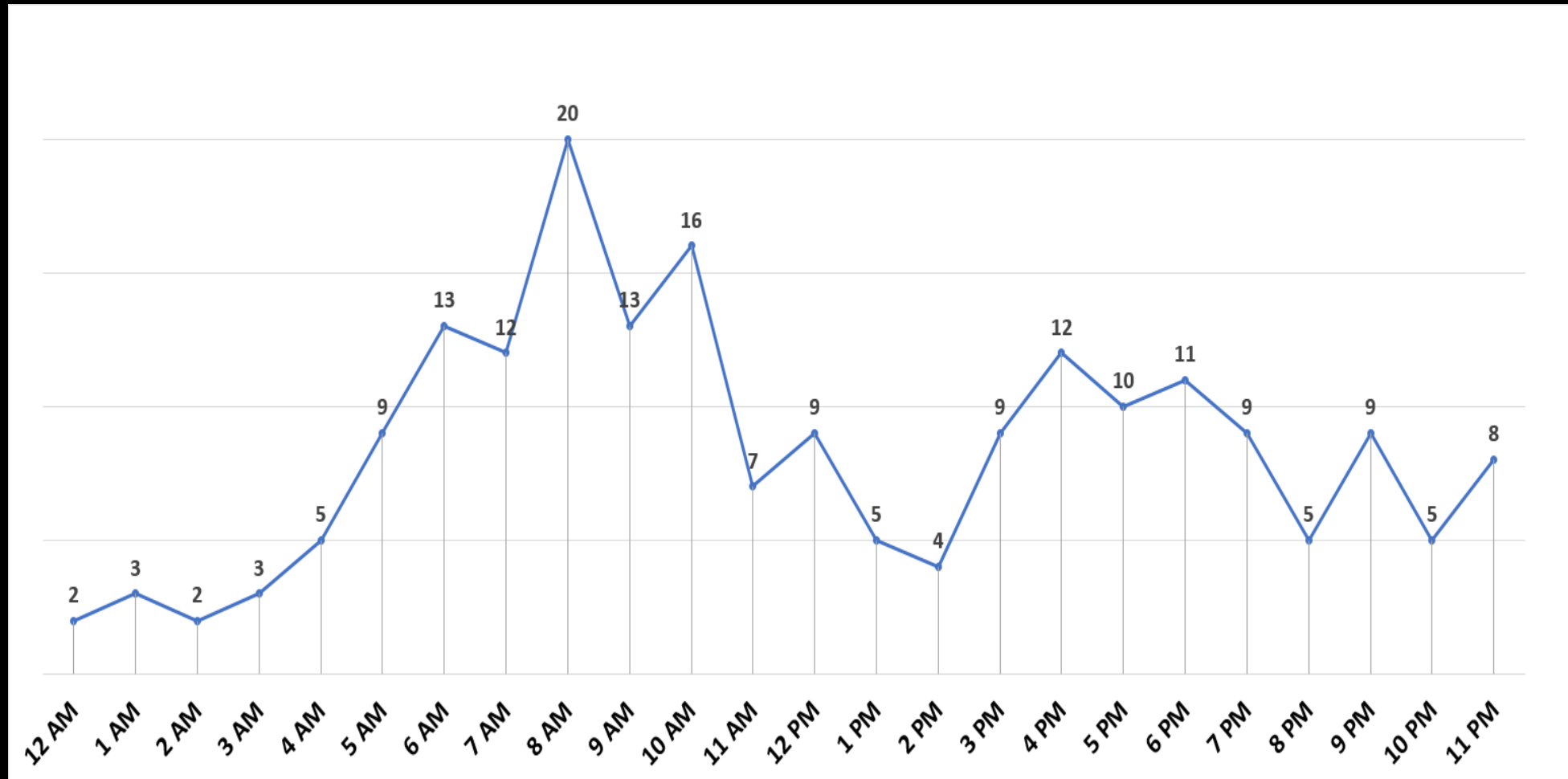
Actual Injuries – 6 Patients

- #1 DOA
- #2 DOA
- #3 Critical -> SLMC -> OHSU
- #4 Critical -> SLMC -> OHSU-D
- #5 Serious -> SLMC -> OR
- #6 Stable -> SLMC -> Home

2017 - 2021 Klamath County 911 MVC by Time of Day MP 228 - 242

ODOT Data 2017-2021 (166 Crashes)

- 160 Crashes on Straight Sections
- 110 Crashes on Snow or Icy Roads
- 105 Crashes Run off the Side of the Road
- 102 Crashes caused by driving too fast for conditions



Oregon Highway Safety Performance Plan – Fiscal Year 2023



Goals:

- Decrease fatalities & serious injuries in Region 4 by December 31, 2023.

Performance Measures:

- Decrease roadway departure fatalities & serious injuries in Region 4 by December 31, 2023.
- Decrease speed related fatalities & serious injuries in Region 4 by December 31, 2023.

Oregon Highway Safety Performance Plan – Fiscal Year 2023



Strategies:

- Identify corridors that have high frequencies of roadway departure crashes and collaborate and assist partner agencies with low-cost engineering, education, and enforcement initiatives to improve safety at those locations.
- Continue to increase the number and effectiveness of partnerships with groups outside of ODOT. Maintain and grow partnerships with local safety committees, and community-based services such as hospitals, EMS providers, fire, health educators and health programs.

ODOT Problem Identification Statements r/t EMS

Chiloquin Fire & Rescue

911 Dispatch to First On-Scene
28 Minutes

911 Dispatch to First Ambulance On-Scene
40 Minutes

Ambulance On-Scene
7 Minutes

Transport from Scene to Sky Lakes Medical Center
58 Minutes

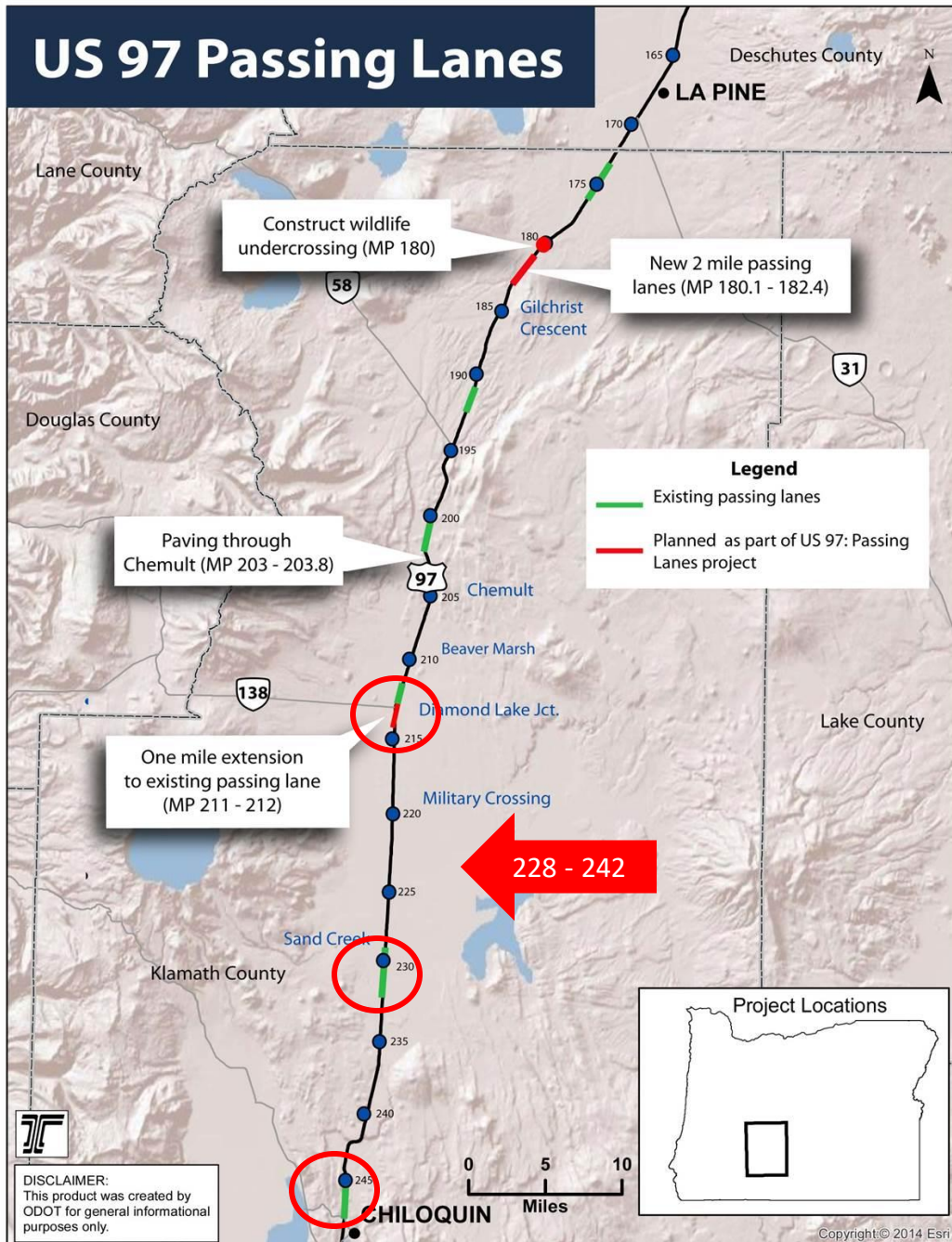
**Crash to Hospital
1 Hour & 45 Minutes**

- Rural crashes can be more severe than other crashes
 - often involve higher rates of speed
 - longer emergency response times.
- The stabilization and long-distance transport of MVC patients to facilities that can provide the appropriate level of trauma care is critical to reducing the health and financial impact of these injuries.
- The location of these crashes can seriously extend response times and delay adequate care needed in that critical 'golden hour' after a serious crash injury

MP 228-242



US 97 Passing Lanes



Passing Lanes:

- North on Sand Creek Hill
- South of Silver Lake Junction

Single Lanes :

- MP 228 – 242
- No Safety Corridor
- No Center Dividers
- No Side Rumble Strips





Passing Lanes & Rumble Strips

- Mile Post 207
- ~ 8.5-feet of asphalt Shoulder
- Side rumble strips



Single Lanes

- ~ 3.5-feet of asphalt shoulder
- No side rumble strips
- No safety signage
- 65mph speed zone



Mile Post 228 - 242





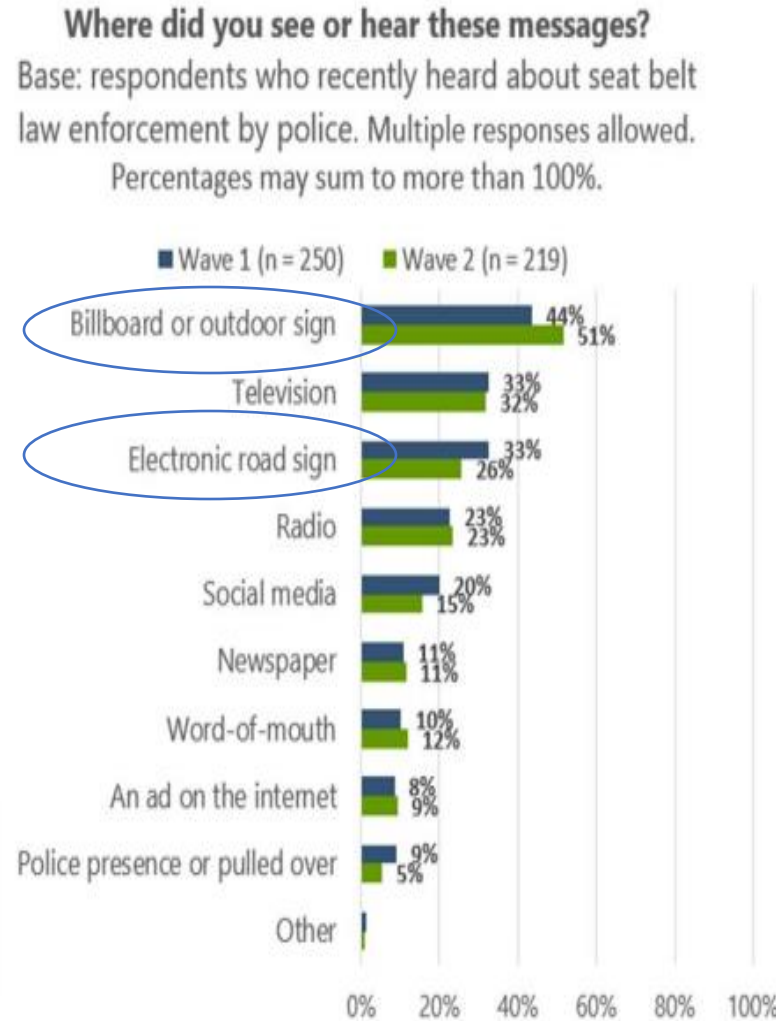
On-Scene Safety

- Fire
- EMS
- Flight Crews
- Law Enforcement
- ODOT Crews
- Tow Trucks

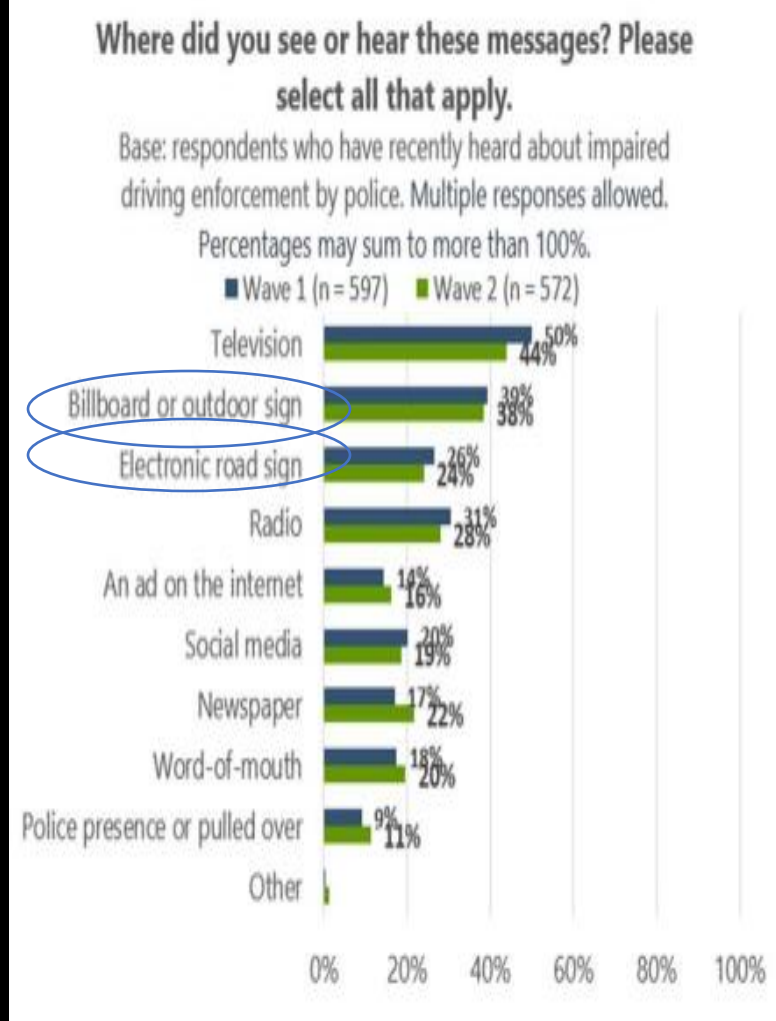
Safety Messaging

Seat Belts

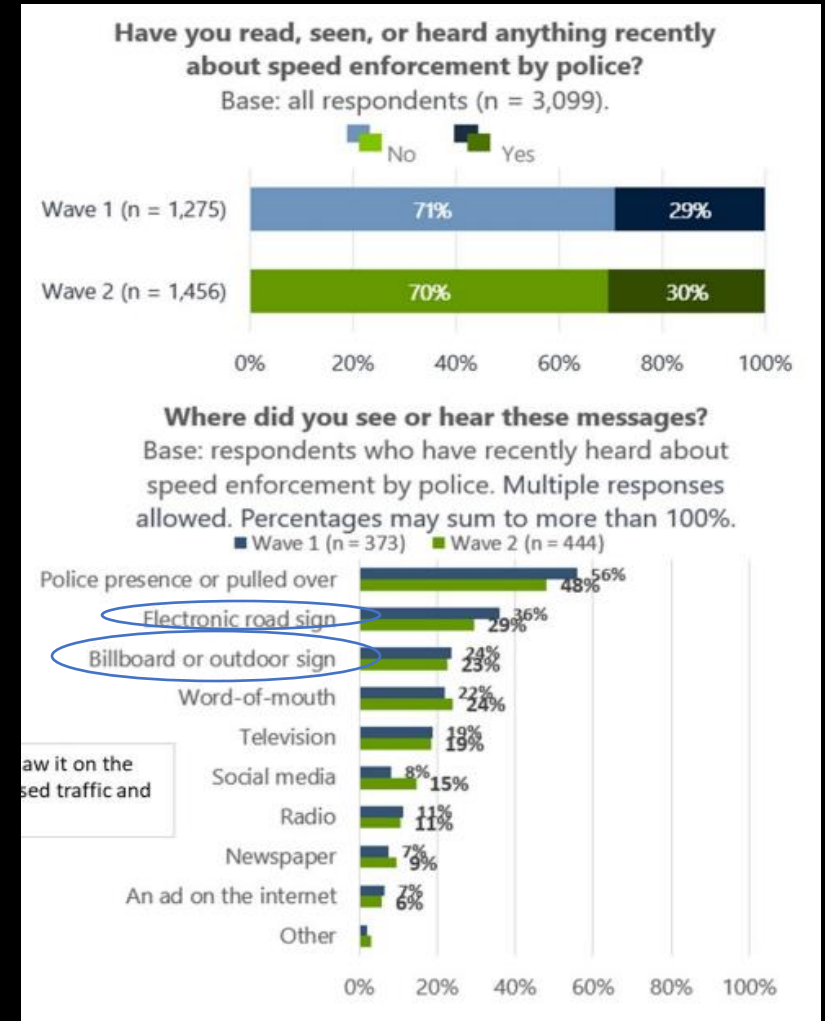
Enforcement



Impaired Driving

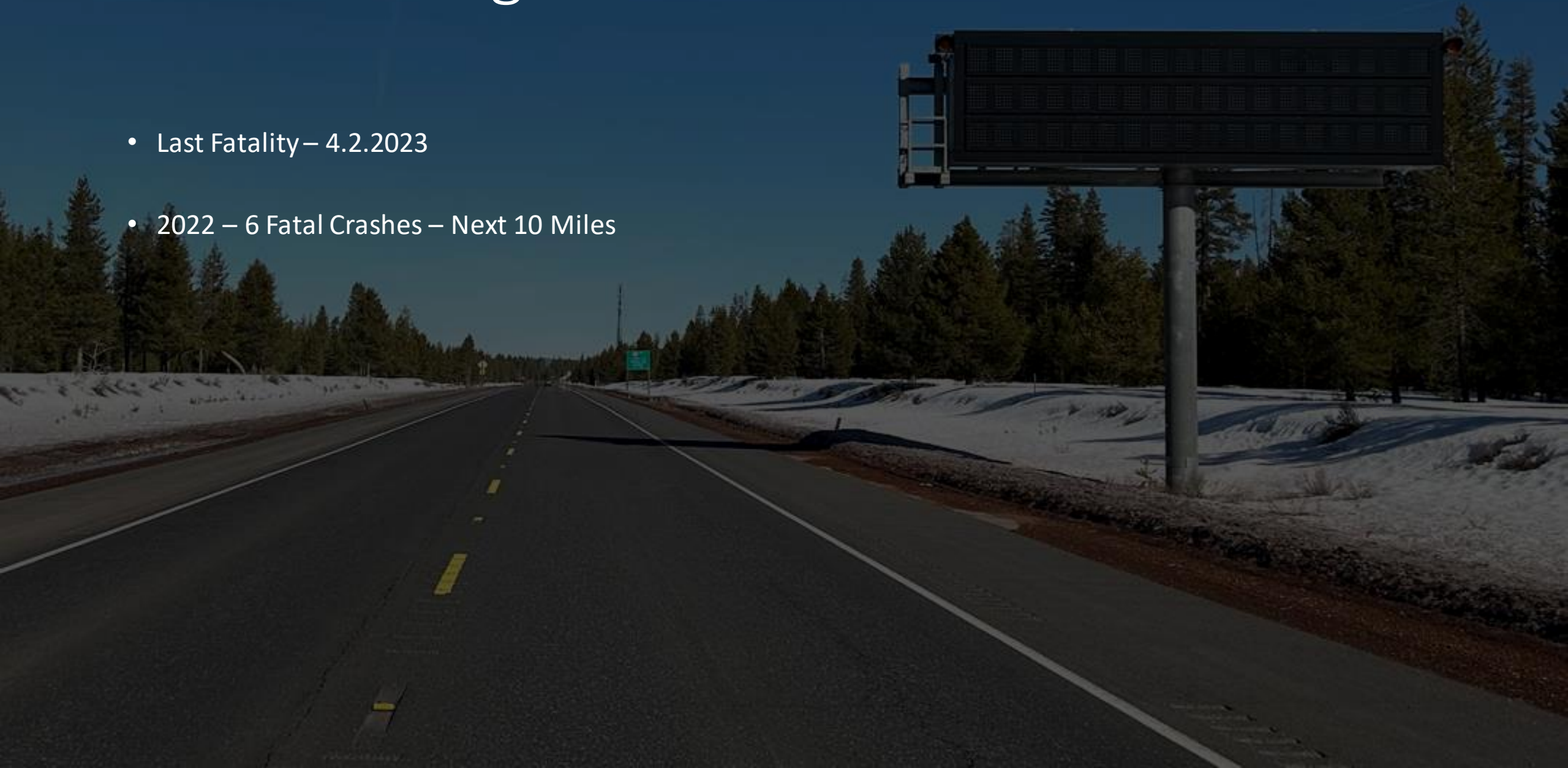


Speed



Traveling North Near Diamond Lake

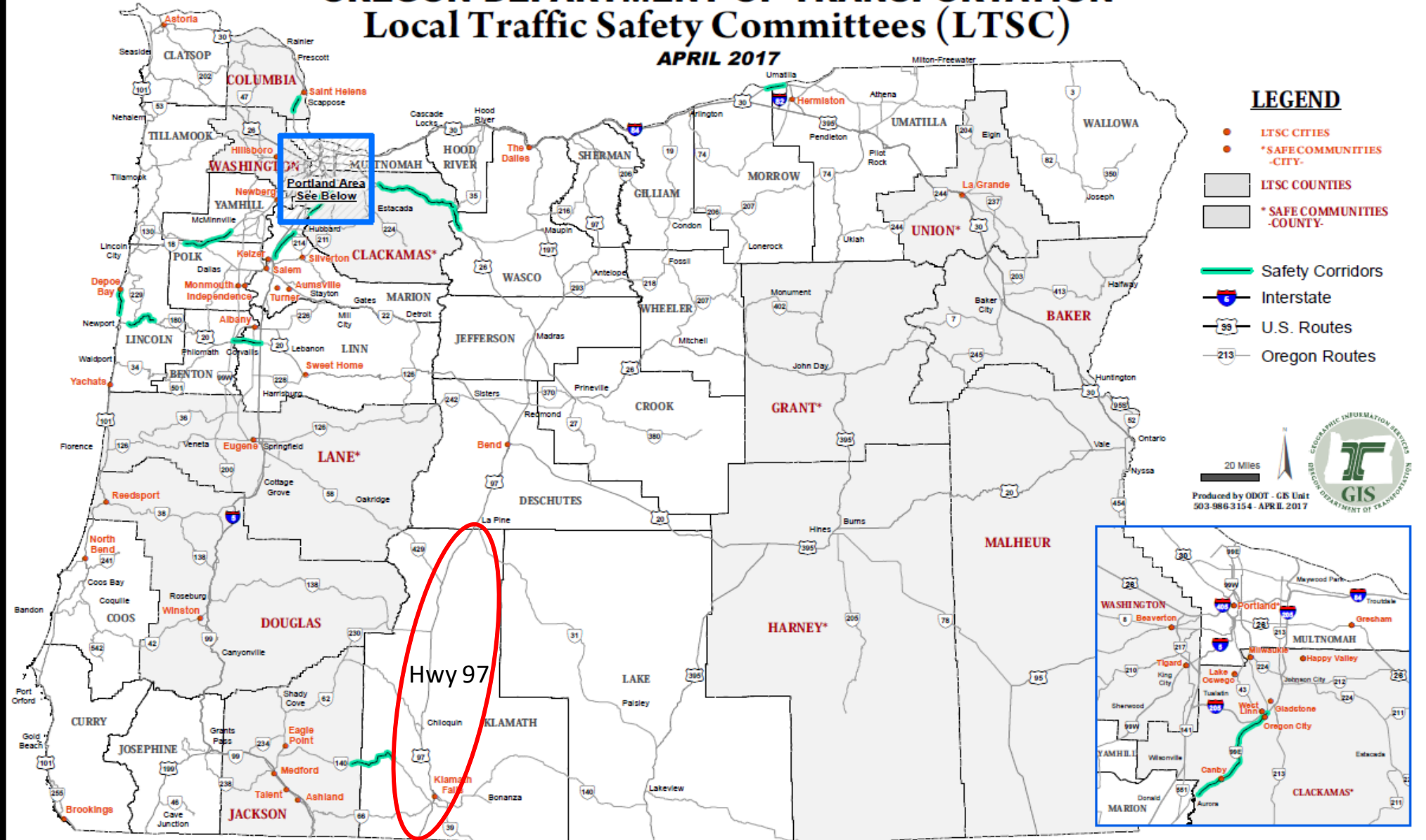
- Last Fatality – 4.2.2023
- 2022 – 6 Fatal Crashes – Next 10 Miles



Oregon's Safety Corridors

OREGON DEPARTMENT OF TRANSPORTATION Local Traffic Safety Committees (LTSC)

APRIL 2017



LEGEND

- LTSC CITIES
- *SAFE COMMUNITIES -CITY-
- LTSC COUNTIES
- *SAFE COMMUNITIES -COUNTY-
- Safety Corridors
- Interstate
- U.S. Routes
- Oregon Routes

20 Miles
Produced by ODOT - GIS Unit
503-986-3154 - APRIL 2017





As Our Trauma Teams
Prepare



As Our Family Members
Serve



As We Travel Hwy 97 For
Work



As We Travel Hwy 97 For
Pleasure

WE WANT TO
THANK YOU FOR HELPING KEEP OUR FAMILIES & HIGHWAYS SAFE