

## Safety Analysis

The Central Oregon Coast Fire and Rescue Action Plan includes a comprehensive safety analysis designed to identify roadway risks, understand historical crash trends, and guide strategies for reducing fatalities and serious injuries within the department's response area. This analysis establishes a baseline understanding of roadway incidents and helps prioritize resources, training, and equipment improvements.

### **Analysis of Existing Conditions and Historical Trends**

Central Oregon Coast Fire and Rescue respond to a variety of motor vehicle collisions each year within its service area. Historical incident reports and regional crash data provide a baseline for evaluating the frequency and severity of these events. Particular attention is given to crashes involving serious injuries or fatalities occurring along **U.S. Route 101** and **Oregon Route 34**, the two primary transportation corridors serving Waldport and surrounding communities.

Trend analysis focuses on factors such as seasonal tourism traffic, weather-related roadway hazards, and increased vehicle volume during peak travel periods. Understanding these patterns allows the department to establish a baseline level of risk and evaluate future improvements in roadway safety and emergency response effectiveness.

### **Analysis of Crash Locations, Severity, and Contributing Factors**

The action plan incorporates a review of crash locations, the severity of incidents, contributing factors, and common crash types within the jurisdiction. Many incidents occur along coastal highway segments where traffic speeds are high and road conditions can change rapidly due to weather, visibility, or roadway geometry.

Contributing factors often include distracted driving, unfamiliarity with local roads by visitors, adverse weather conditions, and high traffic volumes during tourist seasons. Crash types commonly encountered include high-speed collisions, head-on crashes, rollover incidents, and multi-vehicle accidents. These incidents frequently require complex vehicle extrication operations and coordinated emergency response.

## **Analysis of Systematic and Specific Safety Needs**

Through this analysis, Central Oregon Coast Fire and Rescue has identified several safety needs within its response area. These include improving vehicle extrication capabilities to address modern vehicle construction, enhancing firefighter training for complex rescue scenarios, and strengthening coordination with neighboring agencies during major roadway incidents.

The action plan also identifies the need for improved operational readiness during high-risk periods and continued collaboration with regional partners such as **Yachats Rural Fire Protection District** for incidents occurring along shared response areas.

## **Geospatial Identification of Higher Risk Locations**

A key component of the safety analysis involves the geospatial identification of high-risk crash locations within the jurisdiction. Incident reports and regional crash data can be mapped to identify patterns and concentrations of serious crashes along specific roadway segments. Mapping tools allow the department to visualize where high-frequency or high-severity incidents occur, particularly along Highway 101 and Highway 34. Since 2021 we have had 201 Crash1 calls, 11 Crash2 calls, 6 Crash3 calls, and 4 Crash4 calls. Crash one is worst crash rating we have and it goes down from there. This data tells us we have more severe crashes than another.

By identifying these higher risk locations, Central Oregon Coast Fire and Rescue can prioritize training exercises, pre-incident planning, and equipment deployment strategies to ensure rapid and effective responses to serious vehicle collisions. Geospatial analysis also supports coordination with transportation and public safety partners to improve overall roadway safety within the community.

Through the combination of historical trend analysis, crash data evaluation, and geographic mapping of high-risk areas, this safety analysis provides a data-driven foundation for the action plan and supports the department's commitment to reducing roadway fatalities and serious injuries.