



Appendix C

Data Sources

A wide range of Colorado agencies collect, manage, and analyze data related to transportation, public health, emergency response, community engagement, and social and economic conditions. This data, combined with national sources like the Fatality Analysis Reporting System (FARS), the Fatality and Injury Reporting System Tool (FIRST), U.S. Census data, and information from the Emergency Responder Safety Institute (ERSI), helps build a full picture of transportation safety in Colorado.

The SHSP is grounded in a thorough analysis of crash data over time. This historical crash data is used to assess current safety performance and identify high-risk roadways and intersections. In addition, population trends and public health data help reveal broader factors that influence safety outcomes.

Colorado Department of Health and Environment (CDPHE) Emergency Medical Services (EMS) and Trauma Data

<https://cdphe.colorado.gov/emergency-care/ems-and-trauma-data>

CDPHE oversees the state's EMS and trauma systems, focusing on data collection, quality improvement, and system enhancement. CDPHE mandates that all licensed ground and air ambulance agencies submit patient care data for every encounter, adhering to the National EMS Information System (NEMSIS) Version 3.4.0 standards. This data encompasses approximately 270 elements, including patient demographics, assessment findings, interventions, and outcomes.

CDPHE also oversees the Colorado Trauma Registry, which collects data from trauma centers across the state. This registry aids in monitoring patient outcomes, identifying trends, and guiding improvements in trauma care. Facilities are required to submit data in compliance with the NEMSIS standards, with specific data dictionaries provided for different trauma center levels.

This data source was used to analyze EMS data in order to identify key needs for strategies in the EMS focus area.

CDPHE Healthy Kids Colorado High School Survey

<https://cdphe.colorado.gov/hkcs>

The Healthy Kids Colorado Survey is administered biennially by CDPHE in collaboration with various state and academic partners. The survey gathers voluntary responses from middle and high school students across Colorado providing valuable insights into the factors influencing their health behaviors and choices.

This survey was used to analyze the traffic safety culture of young drivers in Colorado. This helped to develop strategies in improving the safety culture around the state at a young age.

Colorado Department of Local Affairs (DOLA) State Demography Office

<https://demography.dola.colorado.gov/>

Colorado's DOLA State Demography Office compiles and disseminates a comprehensive array of demographic data to support local planning, policy development, and community services across the state. This data encompasses population trends, housing statistics, economic indicators, and education metrics.

This data was utilized to identify population trends to analyze crash data on a per capita basis. Additionally, this data was used in identifying key parts of the Transportation Disadvantage Index.

Colorado Department of Public Safety (CDPS) Driving Under the Influence of Drugs and Alcohol Report

Rosenthal, A. (2023). *Driving Under the Influence of Drugs and Alcohol*. A Report Pursuant to C.R.S. 24-33.5-520. Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

The CDPS annual report, *Driving Under the Influence of Drugs and Alcohol*, provides a comprehensive analysis of impaired driving offenses in Colorado. This was used in data analysis of the impairment focus area of the SHSP and provided key insights into what strategies could be implemented to reduce impaired driving in the state.

Colorado Department of Transportation (CDOT) Annual Driver Behavior Survey

Corona Insights. (2024). A Report to the Colorado Department of Transportation. 2024 Driving Behavior Survey.

CDOT conducts an annual Driver Behavior Survey to assess residents' attitudes and practices regarding road safety, including seat belt use, speeding, distracted driving, and impaired driving.

This survey was used to evaluate the safety culture focus areas and provide and was used to select the focus area strategies.

CDOT Crash Data

<https://www.codot.gov/safety/traffic-safety/data-analysis/crash-data>

CDOT maintains a comprehensive crash database to enhance traffic and highway safety, as mandated by federal law. This database includes statewide crash data from 2007 through 2024, with 2024 data being preliminary and subject to updates. CDOT processes and refines this data to support engineering analyses, safety performance evaluations, and infrastructure planning.

The Strategic Highway Safety Plan (SHSP) plan utilized this data as the primary data source for analyzing crash trends, and identifying the key focus areas that needed to be addressed in the SHSP.

CDOT Seatbelt Survey

<https://www.codot.gov/safety/seatbelts>

CDOT conducts an annual statewide Seat Belt Survey to monitor and promote seat belt use across the state. The survey provided context on the seat belt usage rate across the state, which led to the development of strategies for the SHSP.

Emergency Responder Safety Institute

<https://www.respondersafety.com/>

The Emergency Responder Safety Institute (ERSI) serves as an informal advisory panel of public safety leaders committed to reducing deaths and injuries to America's Emergency Responders. ERSI was used to provide additional data and context related to the First Responders Focus Area.

National Highway Traffic Safety Administration (NHTSA) Fatal Analysis Reporting System (FARS)

<https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>

FARS was established by the NHTSA in 1975, and serves as a comprehensive national database documenting fatal motor vehicle crashes across the United States.

This data was used to supplement any crash data that was not captured in CDOT's Crash Data. While this data is more comprehensive, it does not capture serious injury data at the state level, and is not as current as CDOT's crash data as it only captures data through 2022 at the time the SHSP was developed.

NHTSA Fatal and Injury Reporting System Tool (FIRST)

<https://cdan.dot.gov/query>

NHTSA's FIRST is a tool that is an extension of the FARS data system. FIRST creates data queries to capture specific data.

This plan used FIRST in data analysis when specific data was needed and was not captured by other data sets. Examples of where this was used include restraint usage and crashes where speeding was involved.

United States (US) Census Bureau

<https://www.census.gov>

The US Census Bureau is the principal agency of the federal government responsible for producing data about the American people and economy.

US Census Bureau data was used in order to compare per capita crash data in Colorado to the rest of the country.