

CHAPTER 7

TRANSPORTATION SAFETY

CIM 2040 assesses regional safety in terms of roadway crashes. The term “crash” is used in this plan because “accident” implies something that can’t be foreseen or prevented. Most, if not all, crashes can be prevented by changing driver behavior, roadway design, or both.

Reducing Fatalities and Serious Injuries on Public Roads

Federal regulations state that regional transportation plans such as CIM 2040 shall “increase the safety of the transportation system for motorized and non-motorized users” and “...should be consistent with the Strategic Highway Safety Plan...and other transit safety and security planning and review processes, plans, and programs, as appropriate.”

The Strategic Highway Safety Plan (SHSP) is a federally mandated safety plan for all states to reduce highway fatalities and serious injuries on all public roads. In Idaho, ITD develops and manages the SHSP, establishing statewide goals, objectives, and key emphasis areas in consultation with federal, state, local, and private sector safety stakeholders. SHSP elements are integrated into statewide and regional transportation plans and transportation improvement programs to place safety on par with other planning factors, particularly when choosing or evaluating new and continuing projects and initiatives.



A well-maintained roadway in Meridian. Photo: Shelly Houston, as part of the *Your Treasure Valley Future Photo Challenge*.

Note: A glossary of terms is available at www.compassidaho.org/comm/glossary.htm. Acronyms in this document are defined in Appendix B.

ITD approved the base SHSP in 2010 (view [original 2010 plan](#) and a [2013 update without county-level statistics](#)). The safety plan's subtitle, *Toward Zero Deaths*, supports its vision of death and injury-free travel on Idaho roadways. Ada and Canyon Counties are showing progress toward this goal. In Ada and Canyon Counties, fatality rates from crashes dropped from 7.6 per 100,000 people in 2007 to 3.6 per 100,000 in 2011. Serious injury rates for that same period fell from 104.5 to 78.0 per 100,000 people, and the total number of crashes declined by about 30%.

SHSP Goals and Strategies

The SHSP divides crash issues into 11 emphasis areas, each of which is supported by strategies to increase safety and reduce crashes, injuries, and deaths. The strategies associated with each emphasis area are summarized in Table 7.1; more detail can be found in [the original SHSP](#) and the [2013 update](#).

Table 7.1. Strategies and emphasis areas in the Strategic Highway Safety Plan, 2010

Strategies	Aggressive driving	Distracted driving	Occupant protection	Impaired driving	Young drivers	Vulnerable users	Commercial vehicles	Motorcyclists	Roadway-related	Intersections	Emergency response
Non-capital strategies											
Improved enforcement	•	•		•	•		•	•	•	•	
New or changed laws	•			•	•		•				
Speed limit changes										•	
Training for professionals, officials	•			•		•			•		•
Training for public, including events	•	•		•	•	•	•	•	•		
Data monitoring and analysis		•				•		•		•	•
Public transportation						•					
Safe Routes to School						•					
Partnerships between private sector and transportation		•		•	•	•	•	•	•		•
Other public or private policies	•	•					•				

Strategies	Aggressive driving	Distracted driving	Occupant protection	Impaired driving	Young drivers	Vulnerable users	Commercial vehicles	Motorcyclists	Roadway-related	Intersections	Emergency response
Capital-related strategies											
New or improved facilities						•	•				
Intersection and roadway design						•	•		•	•	
Shoulder, edge line, and centerline rumble strips/stripes, drop-off removal, paint markings		•	•					•	•	•	
Roundabouts						•				•	
Traffic calming						•				•	
Guardrail design and installation									•		
Message boards and signs	•		•				•	•	•		
Rail crossing improvements							•				
Traffic control devices										•	
Rest area parking		•									
Pullouts for emergency vehicles									•		•
Improved clear zones off road									•		
Lighting and beacons						•				•	
Visual obstruction clearance						•				•	
Work zone safety projects	•						•				
Equipment funding							•				•

CIM 2040 and Transportation Safety

CIM 2040 specifically addresses safety issues in goal 1.2: *Improve safety and security for all transportation modes and users*. Several other CIM 2040 goals, as well as related objectives and tasks, also address safety either directly or indirectly. These are discussed below, organized by SHSP emphasis area.

CIM 2040 and SHSP Emphasis Areas

1. Aggressive Driving

Aggressive driving includes failure to yield right-of-way, driving too fast for conditions, exceeding the posted speed, and following too closely. Ever-increasing vehicle miles of travel, traffic congestion, travel delays, and the resulting frustration and impatience all contribute to aggressive driving.

CIM 2040 addresses aggressive driving through improvements to minimize congestion and manage increases in vehicles miles of travel.

2. Distracted Driving

Distracted driving collisions occur when at least one of the drivers is not paying attention. The SHSP indicates that distracted driving crashes resulted in 160 fatalities and 1,073 serious injuries in Idaho from 2009 to 2011.

CIM 2040 helps alleviate distracted driving by supporting education on sharing the road, coordinating with law enforcement, and reducing distractions via improvements in the current transportation system.

3. Occupant Protection

A 2012 seat belt survey placed Ada and Canyon County seat belt usage at 95% and 94%, respectively.

While CIM 2040 does not directly address occupant protection (seat belt usage), it does help support this target area through data collection and sharing.

4. Impaired Driving

An impaired driving collision is one in which alcohol or drugs may have contributed to the collision. Impaired driving is of particular concern due to the significant number of fatal crashes caused by impaired drivers (42% of fatal crashes in Ada/Canyon Counties between 2007–2011) as well as the high number of youth

involved. Statewide, nearly 15% of drivers in impaired driving crashes were under the age of 21.

As with occupant protection, CIM 2040 does not directly address impaired driving, but does help support this target area through data collection and coordinating with law enforcement.

5. Young Drivers

Drivers between the ages of 15 and 19 are considered “young” drivers. Between 2007 and 2011 in Ada and Canyon Counties, there were 10,382 crashes involving young drivers. Regionally, this is 25% of all crashes and 20% of all fatalities.

CIM 2040 goals and tasks address issues relating to young drivers by placing a high priority on creating walkable and bikeable communities and improved access to transit, thus providing young drivers with accessible, safe options to driving a car or riding with a friend.

6. Vulnerable Users

Bicyclists and Pedestrians

Between 2007 and 2011, there were 945 crashes involving bicycles in Ada and Canyon Counties, resulting in six fatalities and 129 serious injuries. During that same time frame, there were 424 crashes involving pedestrians, resulting in 19 fatalities and 113 serious injuries.

CIM 2040 addresses bike and pedestrian safety through supporting more walkable and bikeable communities, prioritizing projects that help complete bike and pedestrian networks, and supporting education on sharing the road with all users.

Mature Drivers

National research indicates drivers and passengers over the age of 65 are more likely than younger persons to sustain injuries or die in traffic collisions.

While mature drivers are not specifically addressed in CIM 2040, several CIM 2040 goals and tasks will serve to assist this part of the population. These goals and tasks include creating walkable and bikeable communities, improving access to transit, and reducing distractions by addressing congestion and providing for overall improvements to the current transportation system.

7. Commercial Vehicles

Commercial vehicles include buses, truck tractors, truck-trailer combinations,

trucks with more than two axles, trucks with more than two tires per axle, and trucks exceeding 8,000 pounds that are primarily used for the transportation of property. The SHSP states that in 2008, 36 people died in collisions with commercial vehicles. This number makes up 16% of fatalities in Idaho; 61% of those fatalities were occupants of personal vehicles. Commercial vehicles are addressed in CIM 2040 through numerous goals, objectives, and tasks to better manage congestion and roadway access, including encouraging entities to adopt measures in the *Access Management Toolkit*.

8. Motorcyclists

In 2008, motorcycle collisions represented just 3% of the total number of collisions in Idaho, yet accounted for almost 13% of the total number of fatalities and serious injuries. Between 2007 and 2011 there were 987 motorcycle crashes in Ada and Canyon Counties.

CIM 2040 helps address issues related to motorcycle safety by supporting education on sharing the road with all users and coordinating with law enforcement.

9. Roadway-Related Crashes

The SHSP identified two components to roadway-related crashes:

- single-vehicle run-off-road crashes
- head-on and side-swipe crashes

Between 2004 and 2008, nearly half of the 1,286 Idaho highway fatalities resulted from roadway departure crashes.

This issue is addressed in CIM 2040 through goals, objectives, and tasks that prioritize projects that help complete and improve the overall transportation system.

10. Intersections

Statewide, in 2008, 82% of intersection crashes occurred on urban roads, but 60% of the fatalities were at rural intersections. This is a result of higher speeds and fewer signalized intersections in rural areas.

Collisions at intersections are addressed in CIM 2040 through encouraging entities to adopt measures in the *Access Management Toolkit* and reducing conflict points between modes.

11. Emergency Response

The availability and quality of services provided by local emergency management agencies may mean the difference between life and death for someone injured in a traffic crash. The sooner someone receives appropriate medical care, the better the chances of recovery; however, no data are available for this emphasis area.

The SHSP has a goal of re-opening a roadway as quickly as possible after a crash but notes that other needs take precedence over this goal:

- quick and effective response to address care of crash victims
- safety of emergency responders, incident victims, and the public
- collection of accurate crash data

CIM 2040 addresses emergency response issues by improving the transportation system as a whole, coordinating with law enforcement, and implementing the updated *Treasure Valley Transportation System: Operations, Management, and Intelligent Transportation Systems (ITS) plan*.

Safety Performance Measures and Targets

As discussed above, CIM 2040 specifically addresses safety issues in goal 1.2—*Improve safety and security for all transportation modes and users*—as well as through several objectives and tasks.

However, simply developing goals and tasks is not enough. To impact safety, and reduce crashes, injuries, and deaths, the plan must be implemented. COMPASS will track progress toward meeting goal 1.2 by monitoring the following performance measures and advancement toward their specific targets for 2040:¹

- Number of auto crashes per year
 - Current: 8,538
 - Target: Less than previous year
- Number of bike crashes per year
 - Current: 187
 - Target: Less than previous year

¹ See Chapter 10 for a discussion on the development of CIM 2040 performance measures and targets.

- Number of pedestrian crashes per year
 - Current: 86
 - Target: Less than previous year
- Number of transit crashes per year
 - Current: 46
 - Target: Less than previous year
- Number of auto fatalities per year²
 - Current: 30.6
 - Target: 0
- Number of bike fatalities per year³
 - Current: 1
 - Target: 0
- Number of pedestrian fatalities per year⁴
 - Current: 4
 - Target: 0
- Number of auto injuries per year⁵
 - Current: 369
 - Target: Less than previous year
- Number of bike injuries per year⁶
 - Current: 21.2
 - Target: Less than previous year
- Number of pedestrian injuries per year⁷
 - Current: 5
 - Target: Less than previous year

The annual performance monitoring report, reflecting progress toward meeting regional performance measures, is available on the [COMPASS Performance Dashboard](#). The 2014 report will be the first to address the above performance measures.

² Baseline is 2002-2012 average.

³ Baseline is 2002-2012 average.

⁴ Baseline is 2002-2012 average.

⁵ Baseline is 2002-2012 average.

⁶ Baseline is 2002-2012 average.

⁷ Baseline is 2002-2012 average.