

# Highway Safety Update



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## NDDOT Safety Division

### **The Traffic Records Program**

Collect and analyze crash data to identify traffic safety problems in North Dakota to address through the safety planning processes administered by the NDDOT.

### **The Strategic Highway Safety Plan (SHSP)**

Administer the SHSP which is a data-driven, multi-year comprehensive plan to establish statewide goals, objectives, and key emphasis areas and integrate the four Es of highway safety: engineering, education, enforcement and emergency medical services (EMS).

### **The Traffic Safety Program**

Administer the behavioral Highway Safety Plan which includes strategies to address driver and occupant behavior.





## Why Vision Zero?

- ▶ The State of North Dakota is calling for an end to motor vehicle crash fatalities and serious injuries through *Vision Zero*.
- ▶ Every life matters.
- ▶ Crashes are not accidents!
- ▶ Crashes are preventable.
  - ▶ Ninety-four percent (94%) of motor vehicle crashes are the result of human error.

## Why Vision Zero?

- ▶ Interdisciplinary effort involving state agencies and public and private sector partners.
- ▶ Leadership commitment to a comprehensive, multidisciplinary, aggressive and proactive approach to improving safety.
- ▶ Establishes a culture of personal responsibility behind the wheel, where motor vehicle fatalities and serious injuries are recognized as preventable and no longer tolerated as acceptable.



## 2017 Crash Data (Provisional)

- ▶ 113 fatalities in 2017 - the same number as in 2016
  - ▶ This is a decrease of 33.5 percent since 2012
  - ▶ 61 percent (55) were not wearing their seatbelt
  - ▶ 41 percent (46) were alcohol related (this percent may increase pending final toxicology results)
  - ▶ 24 percent (27) were speed-related
  - ▶ Victims ranged in age from 3 years old to 90 years old

Data Sources: North Dakota Department of Transportation,  
Crash Data, 2017 (provisional)



## 2017 Crash Data (Provisional)

- ▶ 113 fatalities in 2017
  - ▶ 94 (83%) were North Dakota residents
  - ▶ 89 (79%) were in a passenger vehicle, 11 (10%) were motorcyclists, 5 (4%) were pedestrians, 3 (3%) were individuals on all-terrain vehicles (ATVs), 2 (2%) were bicyclists, and 3 (3%) were train-related
  - ▶ 42 (37%) were single vehicle rollovers (excluding motorcycles and ATVs)
    - ▶ 34 (81%) of fatalities in the single vehicle rollovers were unbelted and 29 (85%) of those unbelted were totally or partially ejected.
    - ▶ 20 (48%) of single vehicle rollovers were alcohol related

Data Sources: North Dakota Department of Transportation,  
Crash Data, 2017 (provisional)



## 2017 Crash Data (Provisional)

- ▶ There were 3,259 injury crashes resulting in 466 people being seriously injured

Data Sources: North Dakota Department of Transportation,  
Crash Data, 2017 (provisional)



## How Will We Achieve the Zero Goal?

- ▶ A Strategic Highway Safety Plan (SHSP) is a statewide, coordinated safety plan that provides a comprehensive framework and specific goals and objectives *to reduce fatalities and serious injuries on all public roads*.
- ▶ An SHSP is a federal requirement (23 U.S.C. § 148) and is a major part of the core Highway Safety Improvement Program (HSIP).
- ▶ State DOTs are responsible to meet SHSP requirements.



## North Dakota SHSP Processes

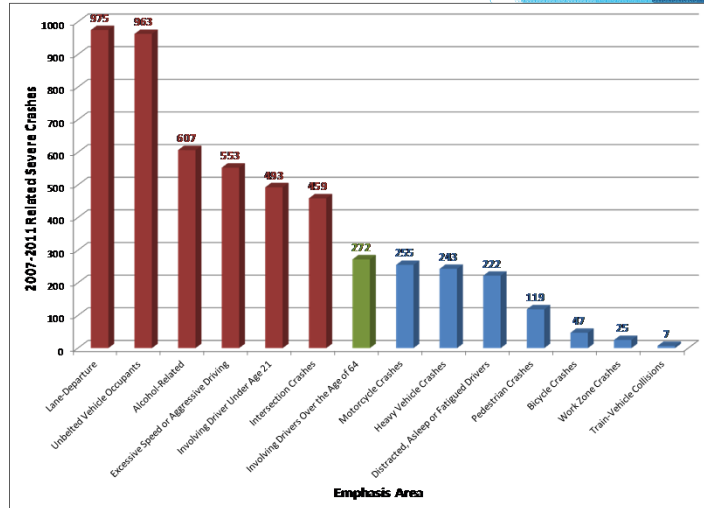
- ▶ Develop (2013)
  - ▶ Analyze crash data
  - ▶ Select emphasis areas
  - ▶ Develop evidence-based list of safety strategies
  - ▶ Solicit stakeholder input
  - ▶ Identify goals (long-term and interim)
- ▶ Implement (Ongoing)
- ▶ Evaluate (Ongoing)
- ▶ Revise (2018)
  - ▶ Every five years



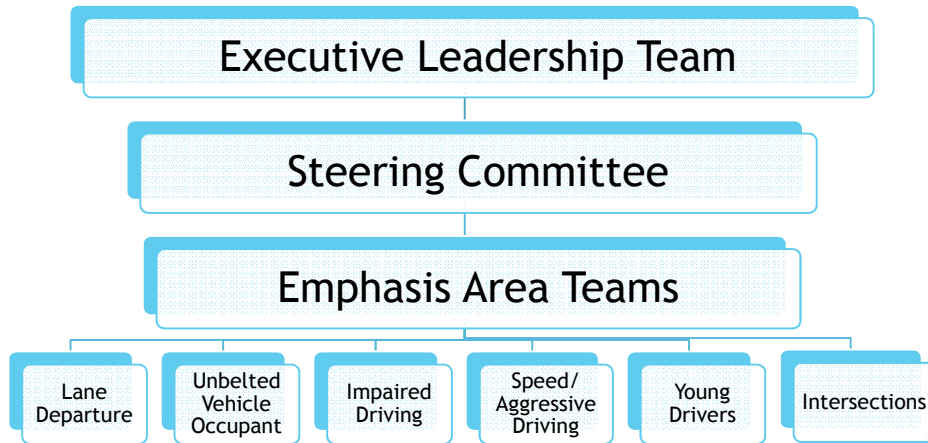
# North Dakota Severe Crashes 2007-2011

## Priority Emphasis Areas

1. Lane departure
2. Unbelted vehicle occupants
3. Alcohol-related
4. Excessive speed/aggressive driving
5. Involving driver under 21
6. Intersection crashes



# North Dakota SHSP Structure



## North Dakota SHSP Executive Leadership Team

- ▶ Tom Sorel, Director, North Dakota Department of Transportation
- ▶ Mark Nelson, Deputy Director, North Dakota Department of Transportation
- ▶ Colonel Michael Gerhart, North Dakota Highway Patrol
- ▶ Mylynn Tufte, State Health Officer, North Dakota Department of Health
- ▶ Mark Johnson, Executive Director, North Dakota Association of Counties
- ▶ Blake Crosby, Executive Director, North Dakota League of Cities
- ▶ Chief Justice Gerald VandeWalle, North Dakota Supreme Court
- ▶ Scott Davis, Executive Director, North Dakota Indian Affairs Commission
- ▶ Phil Pfennig, Chief Agent, Bureau of Criminal Investigation, North Dakota Office of Attorney General



## North Dakota SHSP Strategies

### Infrastructure Safety

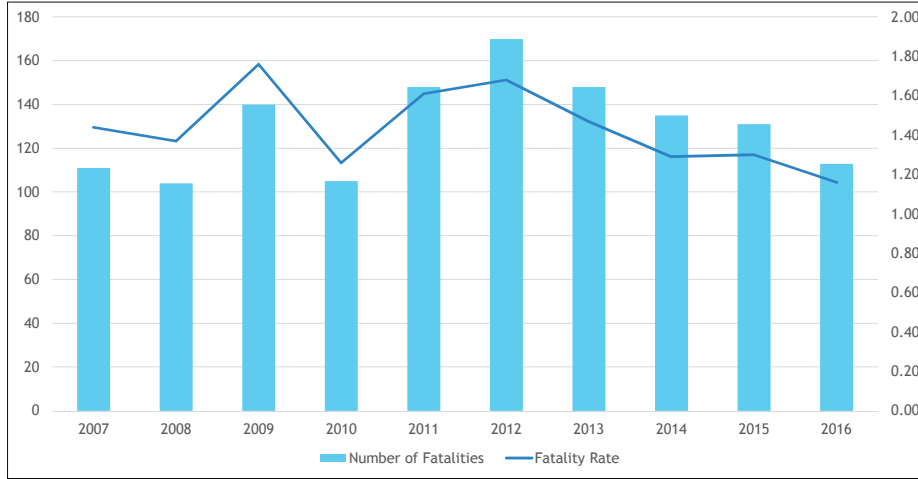
- ▶ Deploy center, shoulder and edge line rumble strips/stripes
- ▶ Use enhanced edge line markings
- ▶ Provide enhanced shoulders, lighting, delineation, or pavement markings for sharp horizontal curves
- ▶ Improve roadway shoulders
- ▶ Confirmation lights
- ▶ Roundabouts

### Behavior Safety

- ▶ Education/Outreach
- ▶ Enforcement
- ▶ Engineering
- ▶ Emergency Medical Services
- ▶ Environmental Strategies

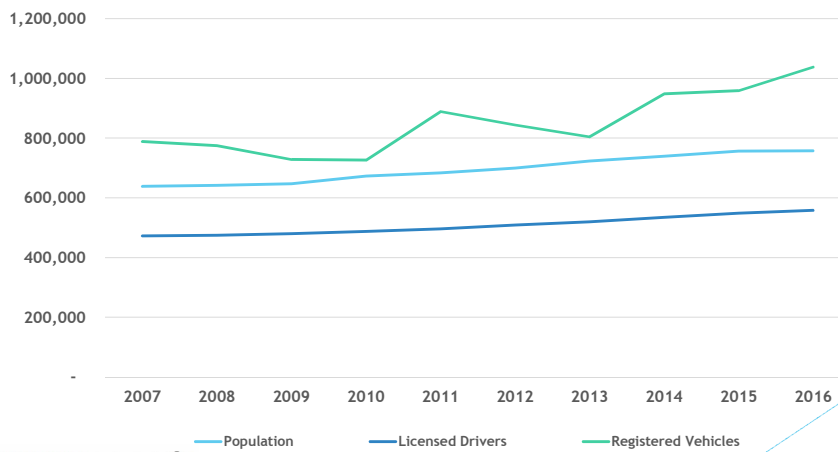


## Number and Rate of Motor Vehicle Fatalities, North Dakota, 2007-2016



**VISION ZERO**  
Zero fatalities. Zero excuses.

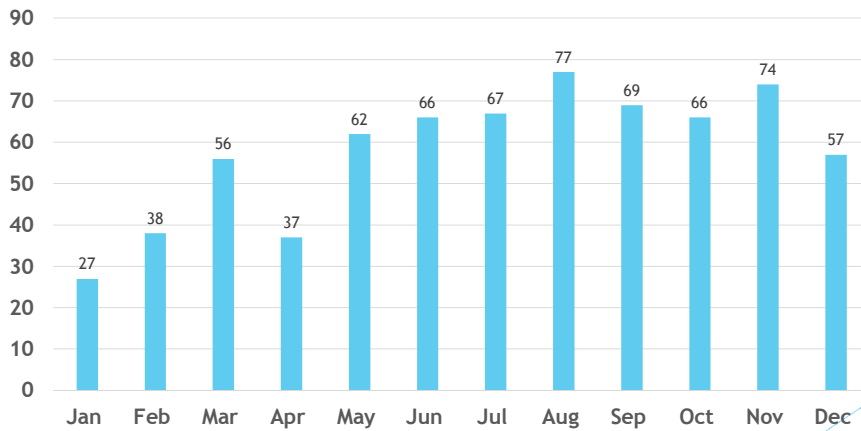
## People, Drivers and Vehicles North Dakota, 2007-2016



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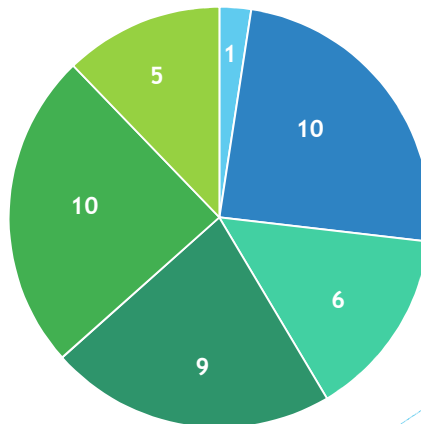


## Number of Vehicle Fatalities by Month North Dakota, 2012-2016

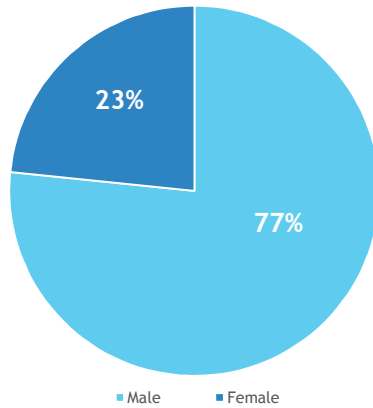


## Holiday Vehicle Fatalities North Dakota, 2012-2016

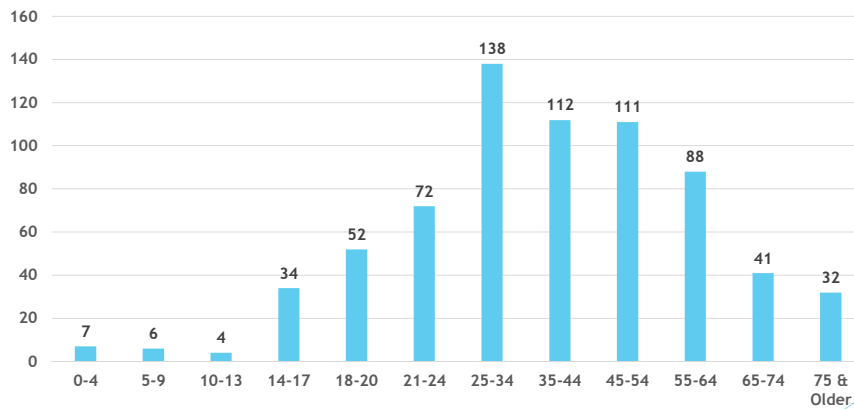
- New Years
- Memorial
- Independence Day
- Labor Day
- Thanksgiving
- Christmas



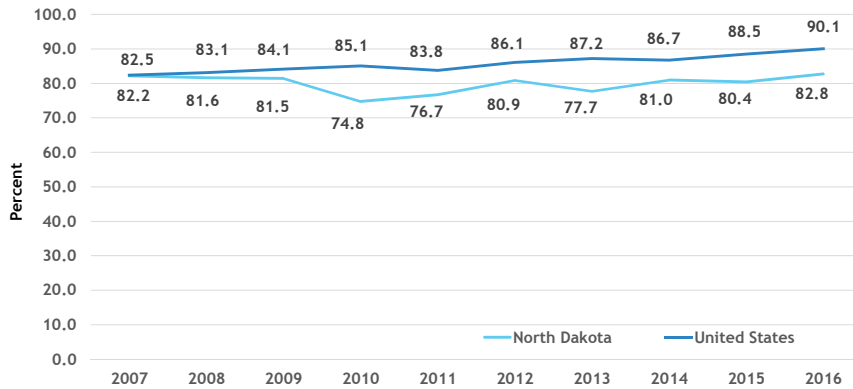
## Vehicle Fatalities, Males vs. Females North Dakota, 2012-2016



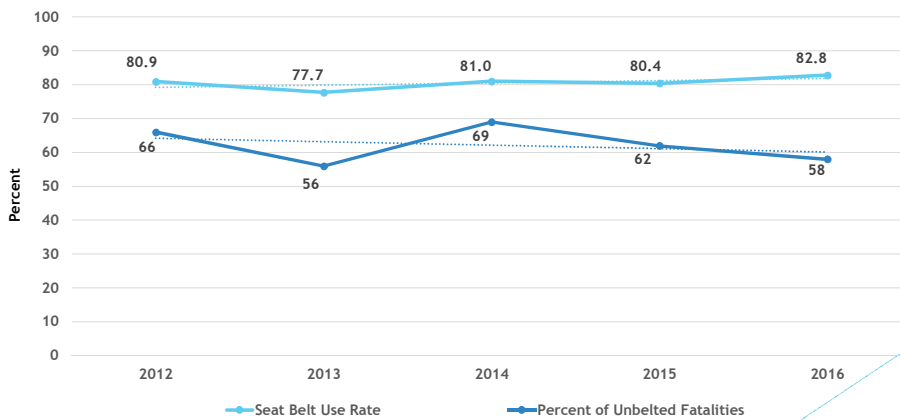
## Vehicle Fatalities by Age North Dakota, 2012-2016



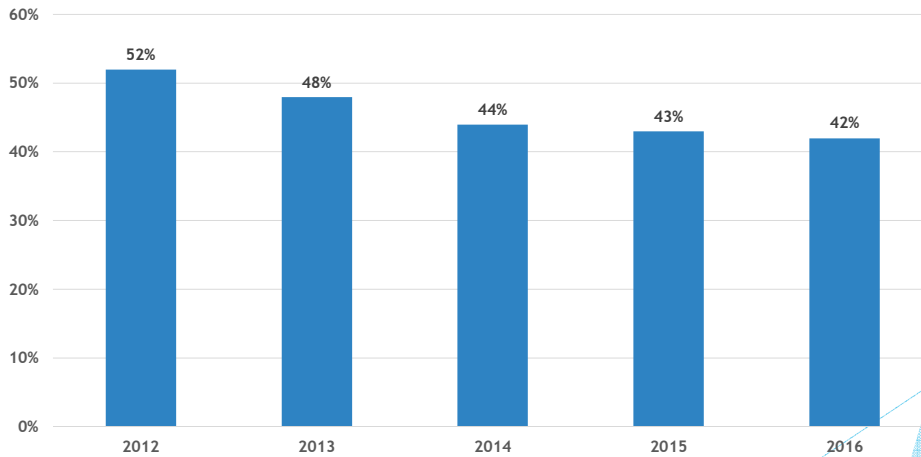
## Seat Belt Use Rate North Dakota and United States, 2007-2016



## Seat Belt Use and Unbelted Fatalities North Dakota, 2012-2016



## Percent Alcohol-Related Fatal Vehicle Crashes North Dakota, 2012-2016



## Fatal Vehicle Crashes Involving Speed North Dakota, 2012-2016

Year	Total Fatal Crashes	Speed-Related Fatal Crashes	Percent Speed-Related Fatal Crashes
2012	147	53	36%
2013	133	50	38%
2014	121	43	36%
2015	111	36	32%
2016	102	25	25%



