NOT EVERYTHING THAT COUNTS CAN BE COUNTED, AND NOT EVERYTHING THAT CAN BE COUNTED COUNTS. ALBERT EINSTEIN
Everyone with a GREEN CARD in their folder, please stand up

Everyone without an ORANGE CARD, please sit down
  o Average BAC of Drivers in Fatal Crashes .16
  o Everyone please sit down

SEAT BELT USE IN NORTH DAKOTA

Everyone with a PINK CARD, please stand up

Everyone without a YELLOW CARD, please sit down

Everyone without a WHITE CARD, please sit down
2015

110 Fatalities were Seat Belt Eligible

- Alcohol: 46%
- No Seat Belt: 61%
- Both: 35%
What do the national statistics say about North Dakota?

According to the Car Insurance Comparison, North Dakota ranked as having the 7th Worst Drivers by State: 2015 rankings

According to the 24/7 Wall St, in 2012 North Dakota had more deaths from drunk driving accidents per 100,000 residents than any other state in the U.S.

The number of drunk driving deaths in the state actually rose by 64.2% over the past 10 years ending in 2012, by far the largest increase of any state in the country.
Why did you come to the Traffic Safety Partner Summit?

I hope the reason is related to Saving Lives and Reducing Serious Injuries from traffic crashes.
What do I want you to remember?

One is a multiplier

It all depends on what number you multiply it by

Everything we do makes a difference

Keep asking questions
Overview

Why should we examine crash profiles
Common and uncommon questions
What do we know
What don’t we know
Asking the data the right questions
  ◦ Who
  ◦ What
  ◦ When
  ◦ Where
  ◦ Why and How
Time for you to ask the data questions
Why should we examine crash profiles?

Reduce all crashes in North Dakota
Save lives and reduce serious injuries
The Common Questions

- How many fatalities from traffic crashes last year on North Dakota highways?
- How many fatalities were not wearing seat belts?
- How many fatalities were alcohol related?
- How many fatalities in my county?
The Uncommon Questions

How many people received no injury in fatal traffic crashes each year?
Why did they receive no injuries and someone else was a fatality?
What are the differences between those who are fatalities and those who are not?
If the observed seat belt use rate is 80% in North Dakota why is it only 39% for our fatalities?
Are there differences in crashes by region
What do we know? (2015 Data)

Fatal Crashes: 111
Fatalities: 131

Seat Belt Eligible Fatalities: 110
- Pickup – Van – Utility: 67
- Passenger Car: 33
- Truck: 8
- School Bus (Drivers): 2

Not Seat Belt Eligible Fatalities: 21
- Motorcyclist: 8
- Pedestrians: 7
- Bicyclist: 1
- Snowmobile: 1
- Off Highway Vehicle: 1
- Construction Equipment: 1
- Farm Equipment: 1
- Bus Passenger: 1
2015 Total Individuals in Fatal Crashes

Total Individuals: 302
- Not Seat Belt Eligible: 75
  - School Bus Passenger: 50
  - Motorcycle: 10
  - Pedestrian: 7
  - Bicycle: 1
  - Snowmobile: 1
  - Construction Equipment: 1
  - Farm Equipment: 2
  - Off Highway Vehicle: 2
  - Sleeper Section (Truck): 1
2015 Total Individuals in Fatal Crashes

Total Seat Belt Eligible: 227
- Pickup – Van – Utility: 127
- Passenger Car: 53
- Truck: 45
- School Bus Drivers: 2
What don’t we know?

We need to make a list
We need to ask the data the right questions?

Who
What
When
Where

Why and How (not sure we can answer why and how yet)
Who

Who was involved in the crash?
- How many individuals involved
- Individual information
  - Injuries
  - Gender
  - Age
  - Alcohol use
  - Safety equipment
  - Ejection status
- Vehicle information
  - Type (configuration)
- Drivers Licensing State
Who (Types of Injuries)

Fatal – An injury that results in death

Incapacitating Injury – Any injury, other than a fatal injury, which prevents the injured person from walking, driving, or normally continuing the activities the person was capable of performing before the injury occurred.

Examples - severe lacerations, broken or distorted limps, skull or chest injury, unconsciousness
## Who (Types of Injuries)

<table>
<thead>
<tr>
<th>Non-incapacitating Injury</th>
<th>Any injury, other than a fatal injury or an incapacitating injury which is evident to the observers at the scene of the accident in which the injury occurred.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples</td>
<td>lump on head, abrasions, bruises, and minor lacerations</td>
</tr>
<tr>
<td>Possible Claimed Injury</td>
<td>Any injury, reported or claimed which is not a fatal, incapacitating, or non-incapacitating injury</td>
</tr>
<tr>
<td>Examples</td>
<td>momentary unconsciousness, claim of injuries not evident, and limping</td>
</tr>
</tbody>
</table>
Who (227 Seat Belt Eligible in Fatal Crashes)

2015 Percentage of UnBelted People In Fatal Crashes by Injury

- Fatal: 60.91%
- Incapacitating: 48.15%
- Non-Incapacitating: 21.62%
- Possible-Claimed: 10.00%
- None: 6.98%
Who is involved? (Drivers and Passengers)

2015 All Seat Belt Eligible Occupants in Vehicles Involved in Fatal Crashes

**Drivers**

- 154 drivers
- 67.84% of drivers used restraint device
- 51.94% of drivers used restraint device

**Passengers**

- 73 passengers
- 32.15% of passengers used restraint device

**Restrainment Device Use**

- **Drivers**
  - Used: 80 (51.94%)
  - Not Used: 61 (39.6%)
  - Use Unknown: 13 (8.44%)

- **Passengers**
  - Used: 34 (46.58%)
  - Not Used: 31 (42.47%)
  - Use Unknown: 8 (10.96%)

**Fatality and Injuries**

- **Drivers**
  - Fatality: 25 (31.25%)
  - Injured: 24 (30.00%)
  - None: 31 (38.75%)

- **Passengers**
  - Fatality: 9 (26.47%)
  - Injured: 19 (55.88%)
  - None: 6 (17.65%)
Who (Sex of Seat Belt Eligible Occupants)

Drivers: 154
- Male: 121
- Female: 32
- Unknown: 1

Passengers: 73
- Male: 46
- Female: 27
What

What happened

◦ Manner of collision
  ◦ None Collision with Motor Vehicle
  ◦ Head On
  ◦ Side Swipe
  ◦ Rear End

◦ Contributing factors
  ◦ Speed
  ◦ Failed to yield
  ◦ Failed to keep proper lane
Manner of Collision

2015 Passenger Vehicle Crashes by Manner of Collision

- Angle (Not Specific): 4
- Angle Opposite Direction: 4
- Head On: 14
- Non-Coll. w/Motor Veh.: 52
- Rear End: 6
- Right Angle: 9
- Sideswipe (opp. dir.): 1
- Sideswipe (same dir.): 1
Non-Collision with a Motor Vehicle

2015 Crashes Non-Collision with a Motor Vehicle

- Bridge / Pier / Abutment: 1
- Culvert: 1
- MV in Transport: 3
- Overturn / Rollover: 42
- Parked Motor Vehicle: 1
- Ran Off Roadway: 1
- Train: 2
- Tree: 1
2015 Passenger Vehicle Overturn/Rollover Injuries

2015 Overturn / Rollover Injuries

- Fatal: 48
- Incapacitating: 9
- Non-Incapacitating: 12
- Possible-Claimed: 1
- None: 2
2015 Passenger Vehicle Overturn/Rollover Injuries by Seat Belt Usage

Passenger Vehicle Overturn/Rollover Seat Belt by Injury

- **Fatal**
  - Belted: 9
  - Not Belted: 2
  - Unknown: 1
  - Possible-Claimed: 1
  - None: 1

- **Incapacitating**
  - Belted: 37
  - Not Belted: 1
  - Unknown: 7
  - Possible-Claimed: 1
  - None: 1

- **Non-Incapacitating**
  - Belted: 7
  - Not Belted: 1
  - Unknown: 7
  - Possible-Claimed: 1
  - None: 1

- **Possible-Claimed**
  - Belted: 1
  - Not Belted: 1
  - Unknown: 1
  - Possible-Claimed: 1
  - None: 1

- **None**
  - Belted: 1
  - Not Belted: 1
  - Unknown: 1
  - Possible-Claimed: 1
  - None: 1
When

When did it happen

- Month
- Day
- Time
- Light or Dark
Fatal Crashes by Month 2014-2016

2014-2016 Fatal Crashes by Month

January  February  March  April  May  June  July  August  September  October  November  December

2014  2015  2016
When (Month)

2015 Seat Belt Use in Fatal Crashes by Month

- In Use
- Not in Use
- Unknown
When (Day)

2015 Seat Belt Use in Fatal Crashes by Day

- In Use
- Not in Use
- Unknown
When (Time)

2015 Seat Belt Use in Fatal Crashes by Time of Day
Where

Where did it happen

- County
- City
- Location (reference point)
- Type of Road
- Road Surface
## Where (County, 2015 Fatal Crashes)

<table>
<thead>
<tr>
<th>County</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Barnes</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>Benson</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Bottineau</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Bowman</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Burleigh</td>
<td>9</td>
<td>8%</td>
</tr>
<tr>
<td>Cass</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Cavalier</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Dunn</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>Emmons</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Grand Forks</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>McKenzie</td>
<td>11</td>
<td>10%</td>
</tr>
<tr>
<td>McLean</td>
<td>4</td>
<td>4%</td>
</tr>
<tr>
<td>Morton</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Mountrail</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Oliver</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Pembina</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Pierce</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>Ramsey</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Richland</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Rolette</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Sargent</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Sheridan</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Sioux</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>Stark</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Stutsman</td>
<td>7</td>
<td>6%</td>
</tr>
<tr>
<td>Towner</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Walsh</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Ward</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>Williams</td>
<td>13</td>
<td>12%</td>
</tr>
</tbody>
</table>
Where (Fatal Crashes by Highway)

<table>
<thead>
<tr>
<th>Non State or Federal Roads:</th>
<th>34</th>
</tr>
</thead>
<tbody>
<tr>
<td>I 94</td>
<td>14</td>
</tr>
<tr>
<td>Highway 2</td>
<td>10</td>
</tr>
<tr>
<td>Highway 1804</td>
<td>7</td>
</tr>
<tr>
<td>Highway 83</td>
<td>5</td>
</tr>
<tr>
<td>Highway 22</td>
<td>4</td>
</tr>
<tr>
<td>Highway 23</td>
<td>4</td>
</tr>
<tr>
<td>Highway 85</td>
<td>3</td>
</tr>
</tbody>
</table>
Questions
What do you want to know from the data?
### People in Fatal Crashes

<table>
<thead>
<tr>
<th>CRASH_COUNTY</th>
<th>CRASH_NUMBER</th>
<th>UNIT_SEQUENCE_NUMBER</th>
<th>UNIT_CONFIG_DESCR</th>
<th>OCCUPANT_SEQUENCE_NO</th>
<th>CRASH_SEVERITY_DESCR</th>
<th>INJURY_CLASS_DESCR</th>
<th>DRIVER_INDICATOR</th>
<th>SEAT_POSITION_DESCR</th>
<th>AGE</th>
<th>CRASH_MONTH_NAME</th>
<th>CRASH_DAY_OF_MONTH</th>
<th>CRASH_YEAR_NAME</th>
<th>CRASH_DAY_NAME</th>
<th>CRASH_TIME</th>
<th>OCCUPANT_SAFETY_EQUPIMENT_DESCR</th>
<th>SEX_DESCR</th>
<th>ALCOHOL_TEST_DESCR</th>
<th>ALCOHOL_RELATED_ACCIDENT</th>
<th>RURAL_URBAN</th>
<th>MANNER_OF_COLLISION_DESCR</th>
<th>MOST_HARMFUL_EVENT_DESC</th>
<th>EJECT_EXTRACTION_DESCR</th>
<th>WEATHER_DESCR</th>
<th>SURFACE_CONDITION_DESCR</th>
<th>LICENSE_ISSUED_STATE_NAME</th>
<th>HIGHWAY_NUMBER</th>
</tr>
</thead>
</table>

### Fatal Crashes

| CRASH_COUNTY | CRASH_NUMBER | CRASH_SEVERITY_DESCR | CRASH_MONTH_NAME | CRASH_DAY_OF_MONTH | CRASH_YEAR_NAME | CRASH_DAY_NAME | CRASH_TIME | ALCOHOL_RELATED_ACCIDENT | RURAL_URBAN | MANNER_OF_COLLISION_DESCR | MOST_HARMFUL_EVENT_DESC | WEATHER_DESCR | SURFACE_CONDITION_DESCR | LICENSE_ISSUED_STATE_NAME | HIGHWAY_NUMBER |
Last Slide

One person can make a difference

- We save one live at a time
- Please tell one person you know to wear their seat belt
- One designated driver can transport several people safely