

North Dakota Crash History; Don't be a Statistic

"THOSE WHO DO NOT LEARN HISTORY ARE DOOMED TO REPEAT IT."
GEORGE SANTAYANA

Overview

Fatality Data 1927 to 2016

Fatality Rate 1997 to 2016

The Last Ten Years of Fatal Crash Indicators

- VMT
- Population
- Licensed Drivers
- Registered Vehicles
- Average Annual Rate of Increase

The Last Ten Years of North Dakota Fatal Crash Data

- Number of People in Fatal Crashes
- Injuries in Fatal Crashes
 - Average Age of Fatalities
 - Sex of Fatalities
 - Top 15 Counties for Highest Number of Fatalities
 - Fatalities Not Seat Belt Eligible

Overview (continued)

Seat Belt Use

 Fatalities

 No Injury

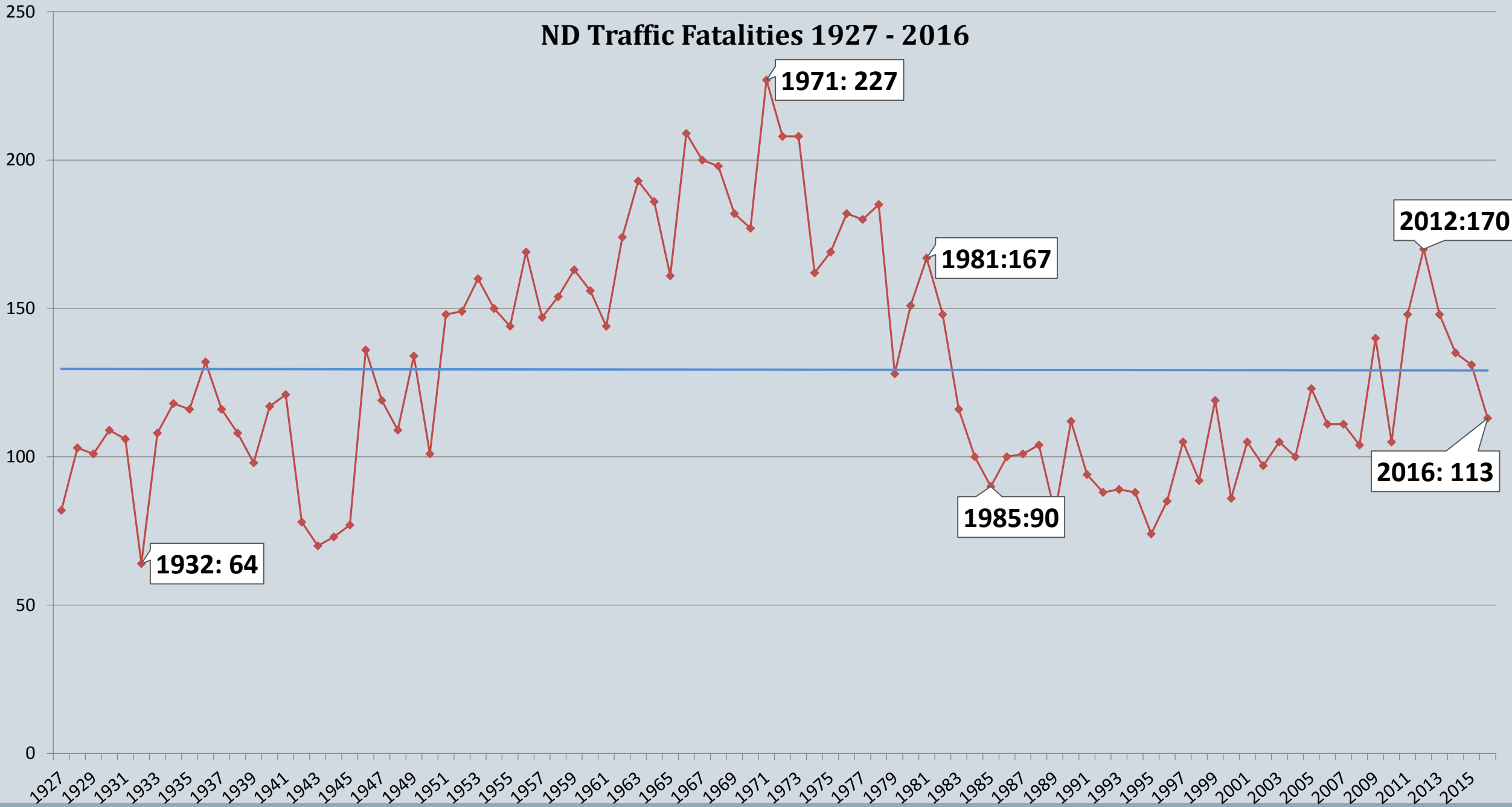
Alcohol Related Fatalities

Unbelted Alcohol Fatalities

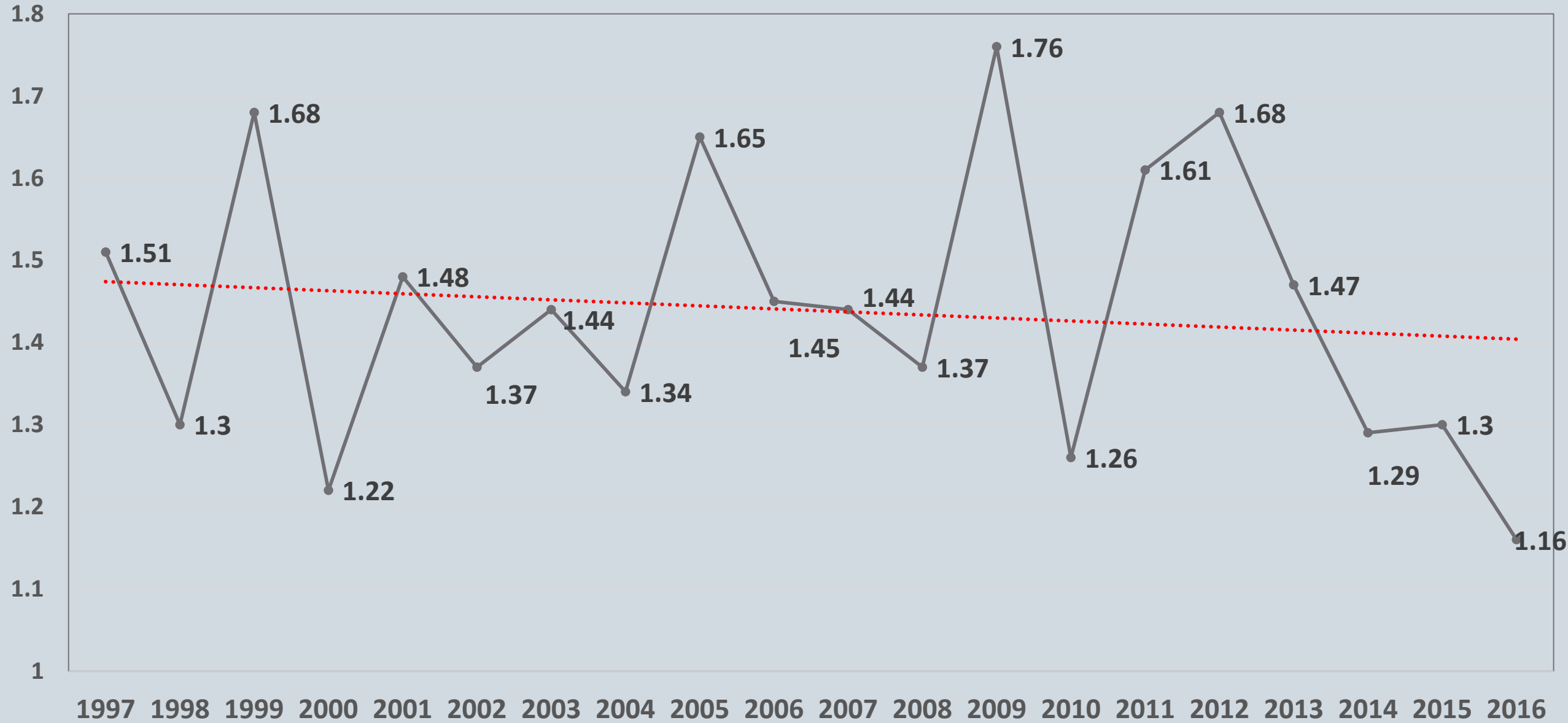
Alcohol and Seat Belts

Questions

ND Traffic Fatalities 1927 - 2016



1997-2016 ND Fatality Rate



What does the last 10 years of data tell us?

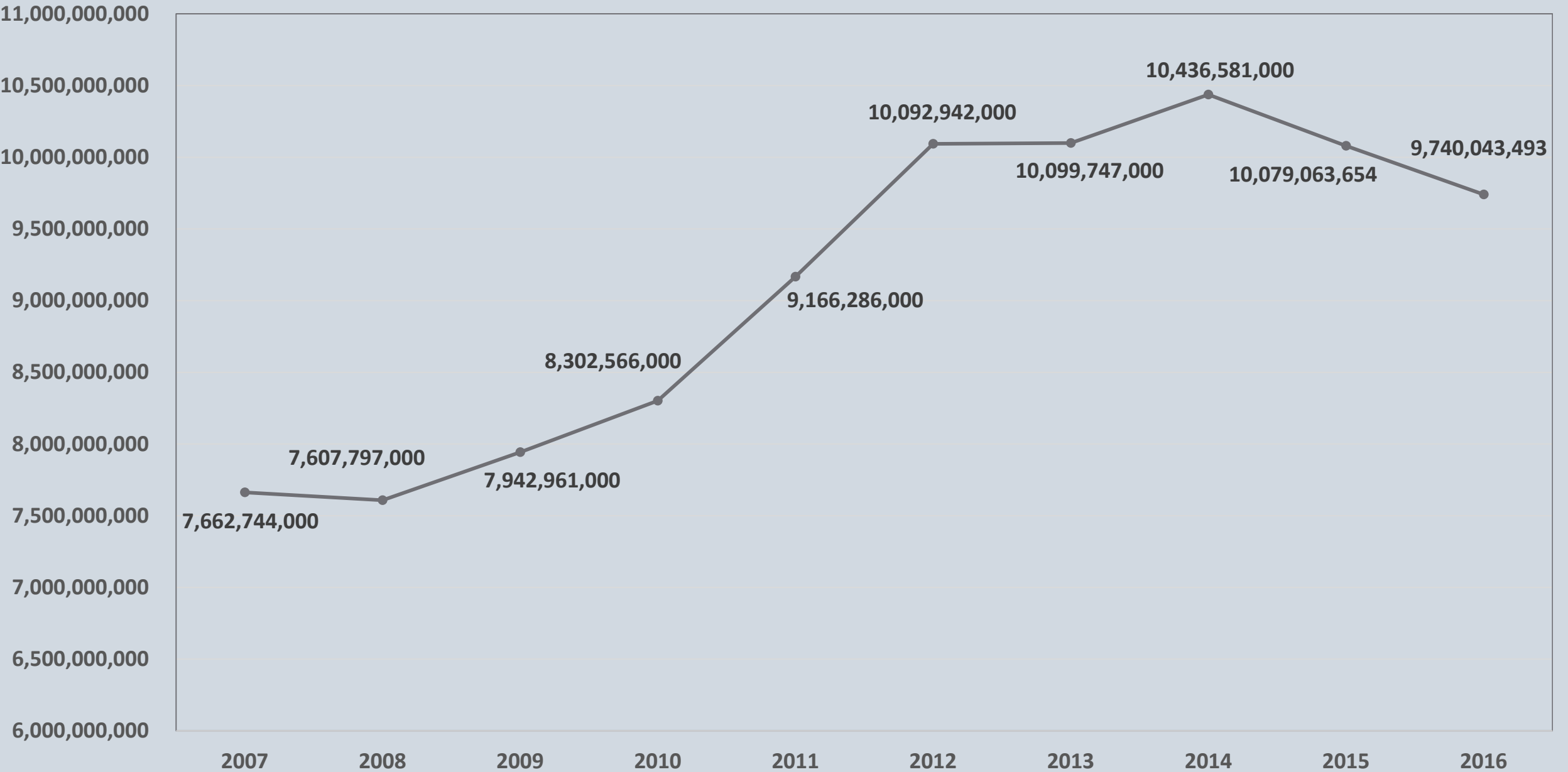
VMT

Population

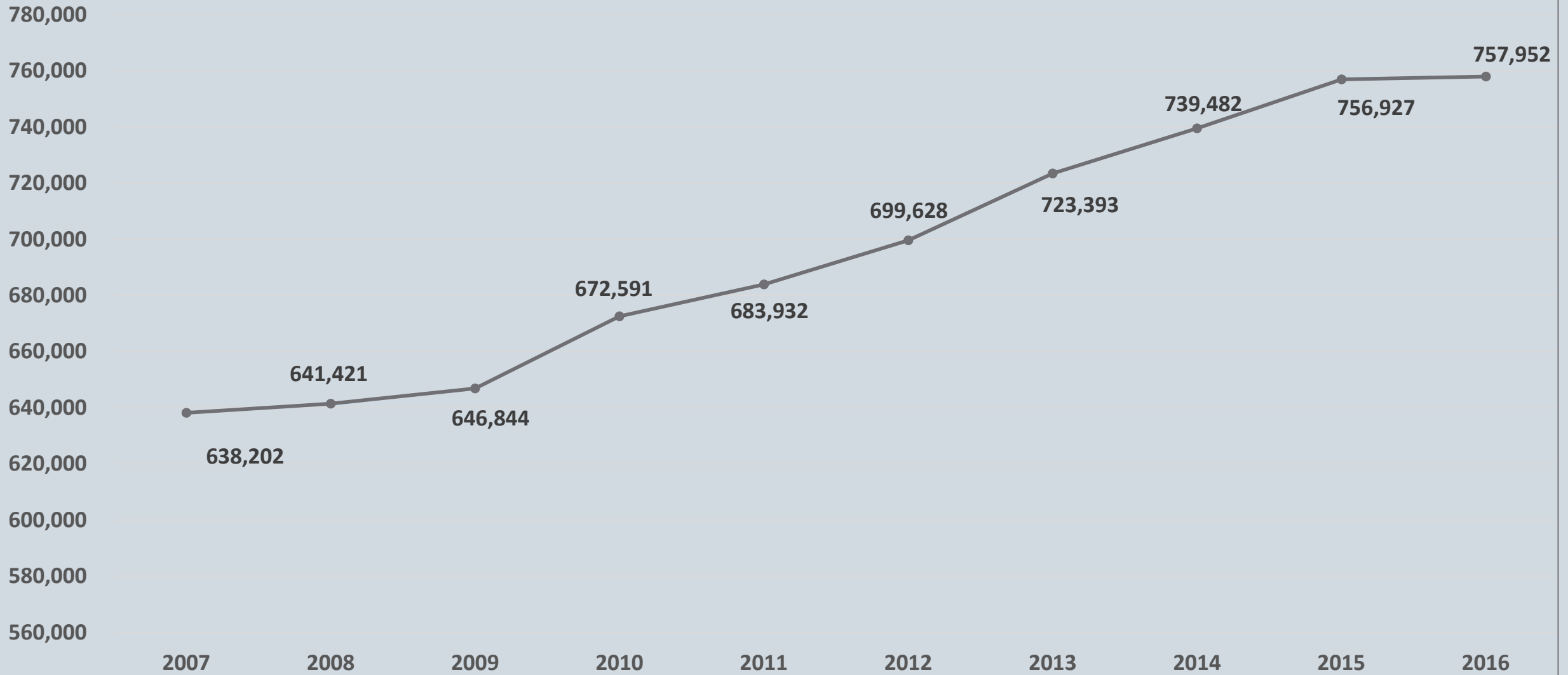
Licensed Drivers

Registered Vehicles

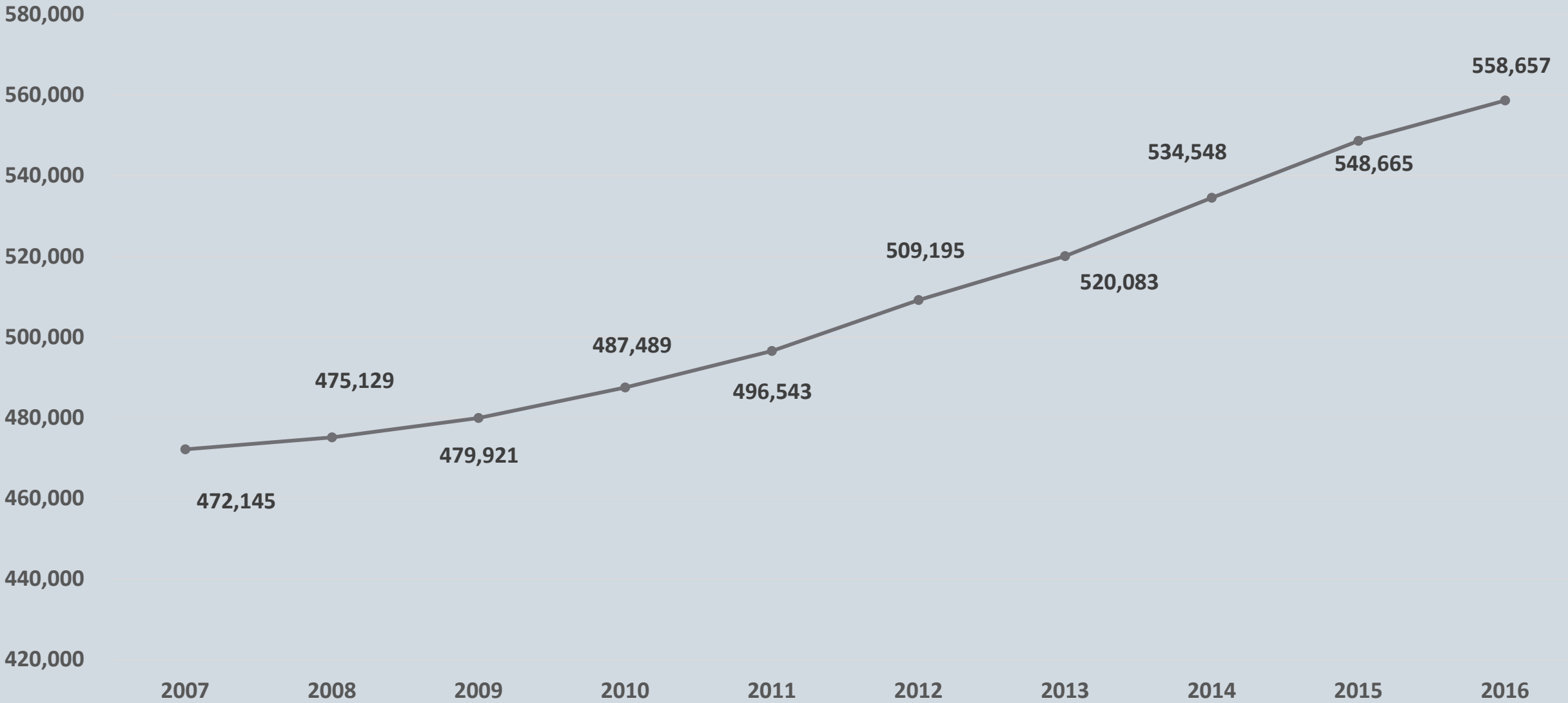
2007-2016 ND Vehicle Miles Traveled



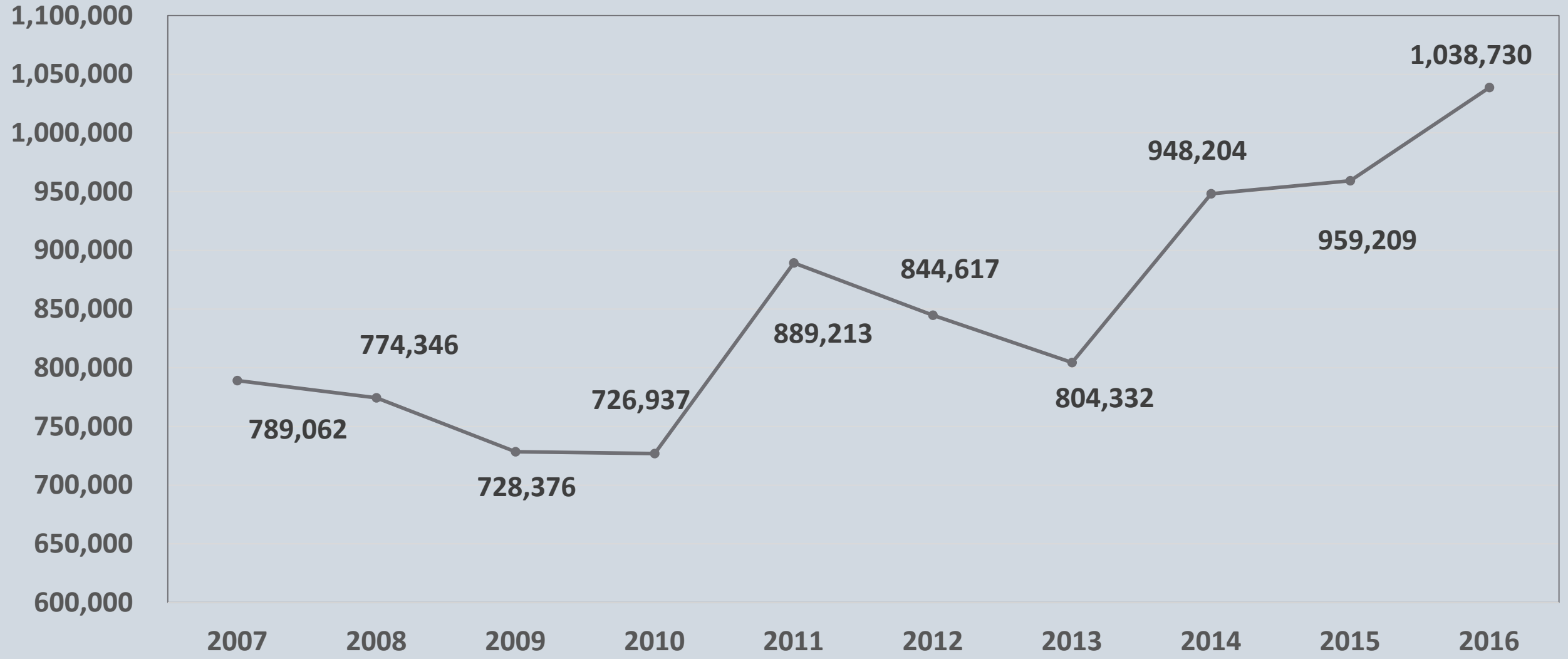
2007-2016 ND Population



2007-2016 ND Licensed Drivers



2007-2016 ND Registered Vehicles



How do we make the indicators equal in order to compare them to our fatalities?

I used an average annual rate of increase to see if fatalities were growing faster than other indicators.

Average Annual Rate of Increase of Indicators

Vehicle Miles Traveled: 2.82%

Population: 1.94%

Licensed Drivers: 1.89%

Registered Vehicles: 3.54%

Fatalities: 2.30%

2007-2016 North Dakota Fatal Crashes

1145 Fatal Crashes

- 1305 Fatalities
- 209 Incapacitating Injuries
- 353 Non-Incapacitating Injuries
- 131 Possible Claimed Injuries
- 62 Disabling Injuries
- 47 Non-Disabling Injuries
- 36 Possible Claimed Injuries
- 586 No Injuries

Average Age of Fatalities

2007	35.5
2008	39.9
2009	43.2
2010	41.2
2011	39.6
2012	40.5
2013	38.6
2014	38.7
2015	40.2
2016	42.7

Sex of Fatalities

Year	Female	Percentage	Male	Percentage
2007	30	27%	81	73%
2008	31	30%	73	70%
2009	54	39%	86	61%
2010	24	23%	81	77%
2011	36	24%	112	76%
2012	39	23%	131	77%
2013	31	21%	117	79%
2014	32	24%	103	76%
2015	30	23%	101	77%
2016	31	27%	82	73%
Grand Total	338		967	

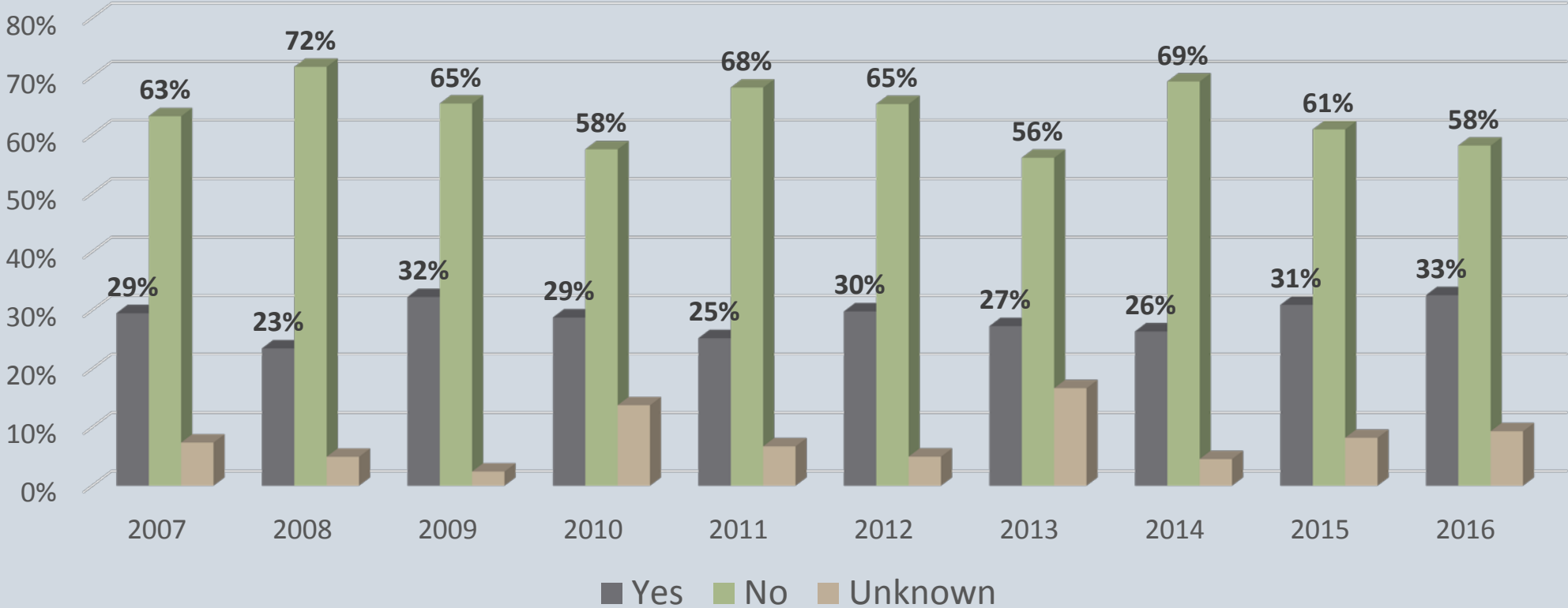
Top 15 Counties by Total Fatalities

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Grand Total
Grand Total	111	104	140	105	148	170	148	135	131	113	1305
McKenzie	4%	7%	6%	8%	11%	11%	16%	17%	14%	7%	
Williams	4%	1%	3%	3%	7%	16%	17%	9%	14%	1%	
Ward	6%	8%	9%	3%	9%	6%	12%	7%	6%	5%	
Mountrail	5%	6%	9%	5%	5%	3%	4%	4%	4%	7%	
Cass	6%	5%	4%	11%	6%	4%	1%	4%	5%	4%	
Burleigh	5%	5%	6%	7%	1%	4%	1%	3%	8%	5%	
Rolette	9%	4%	5%	3%	5%	2%	3%	2%	1%	5%	
Morton	6%	3%	1%	2%	5%	2%	2%	1%	5%	8%	
Stark	4%	4%	3%	4%	1%	4%	4%	5%	5%	3%	
Stutsman	3%	1%	2%	5%	3%	9%	1%	1%	5%	3%	
Grand Forks	4%	5%	4%	8%	1%	3%	3%	2%	5%	1%	
Benson	3%	3%	3%	8%	4%	4%	0%	3%	2%	3%	
Richland	3%	7%	4%	4%	3%	0%	1%	2%	2%	4%	
Dunn	3%	3%	1%	5%	5%	1%	3%	4%	2%	1%	
McLean	4%	3%	4%	1%	0%	2%	1%	1%	5%	5%	

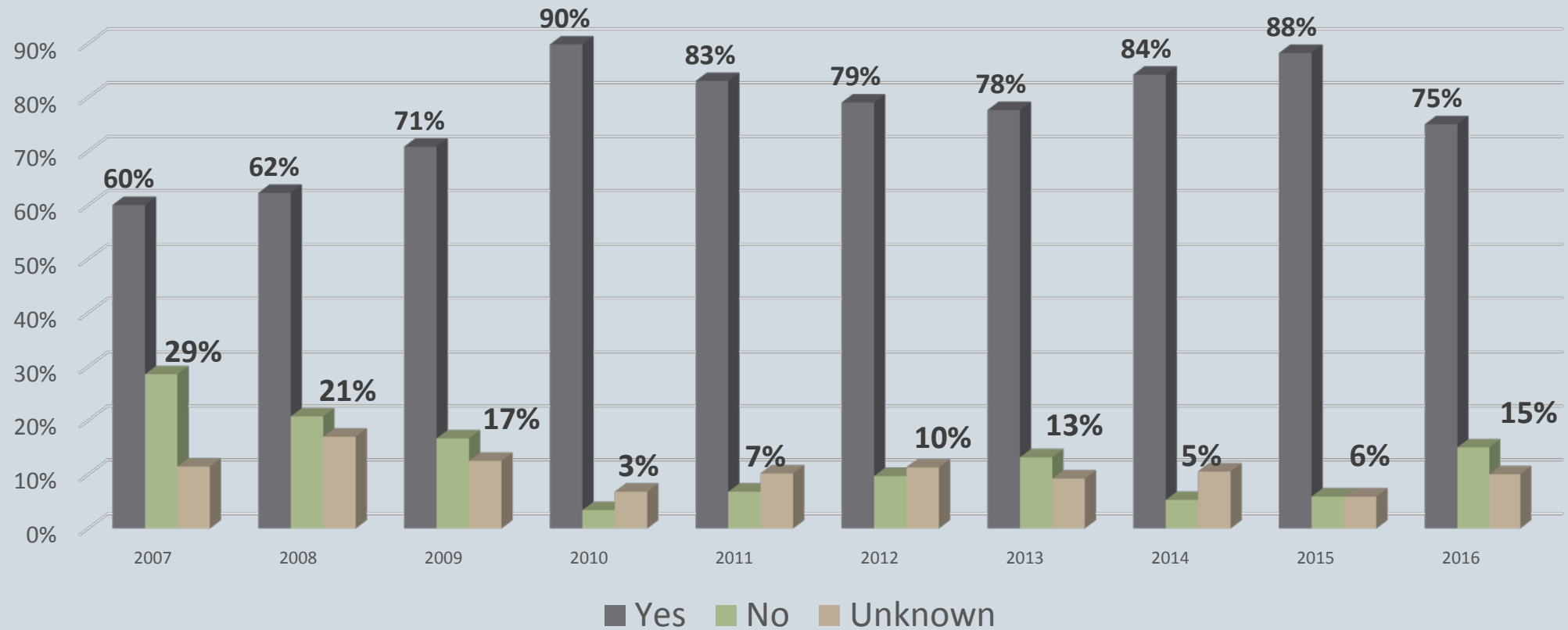
Fatalities Not Seat Belt Eligible

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Grand Total
Motorcycle	8	13	7	15	14	16	9	10	8	12	112
Pedalcycle		1	1	1	1		1	3	1	3	12
Pedestrian	5	7	4	8	9	10	2	9	7	7	68
Other	3	2	4	1	5	3	4	3	5	5	35
Total	16	23	16	25	29	29	16	25	21	27	227

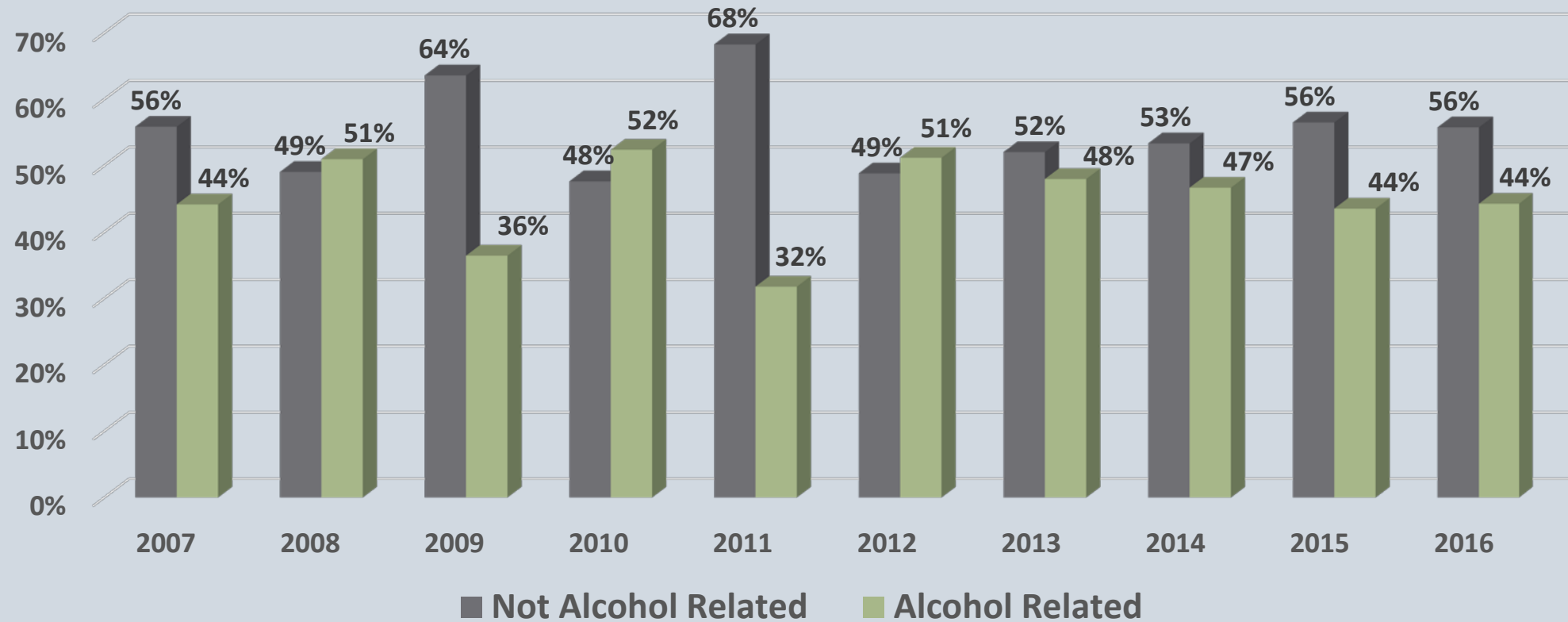
Fatalities Seat Belt Use



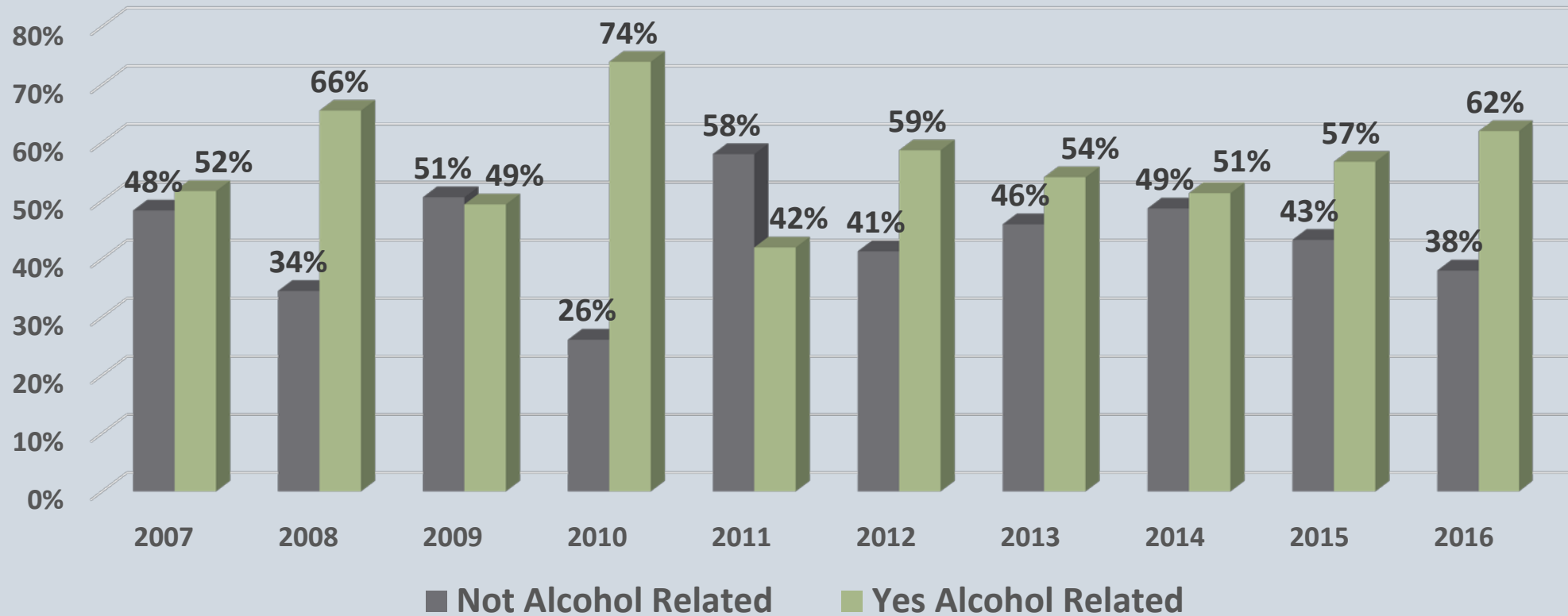
No Injury Seat Belt Use in a Fatal Crash



Alcohol Related Fatalities

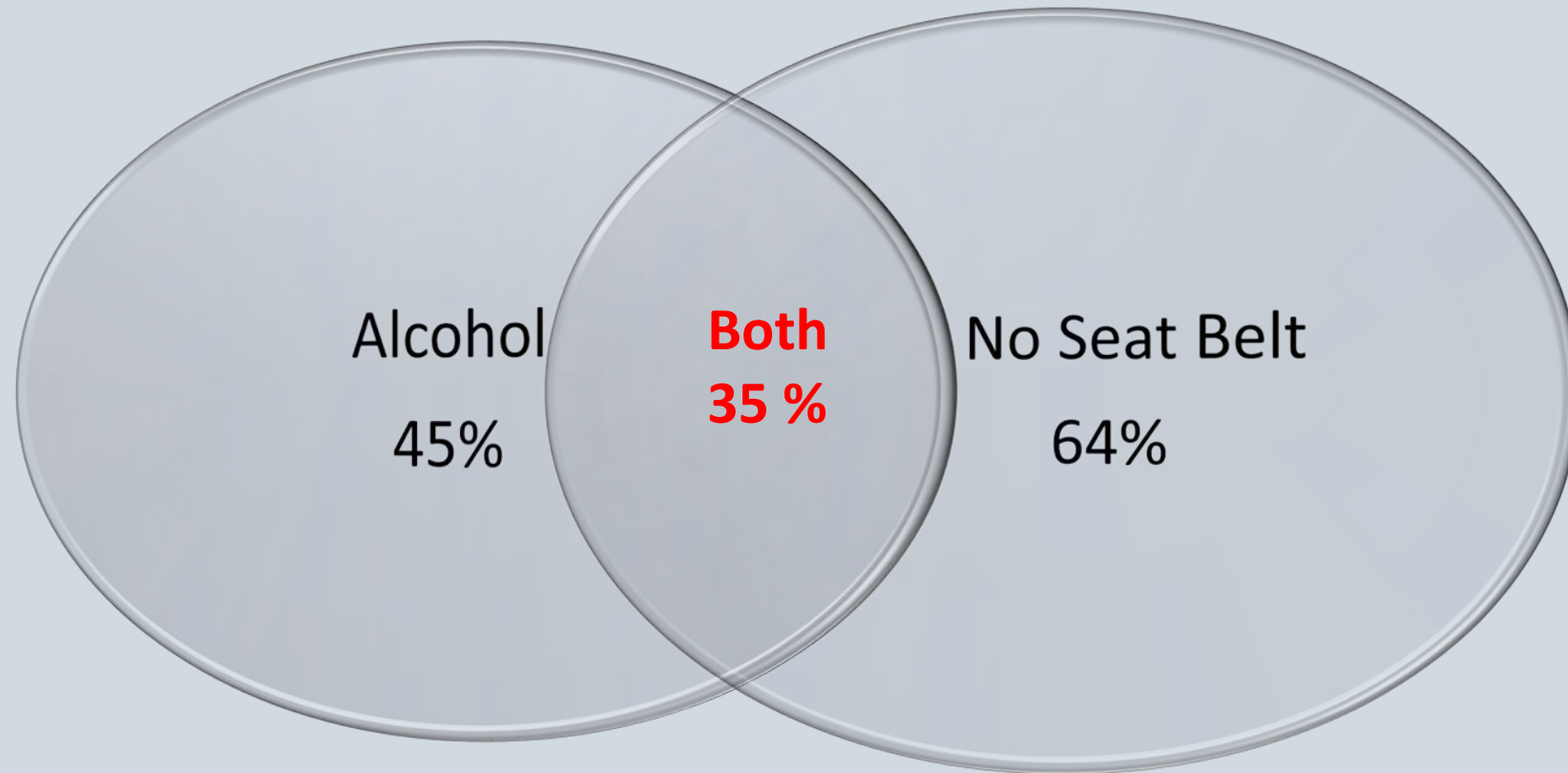


Un-Belted Alcohol Related Fatalities



2007 to 2016

Fatalities Who were Seat Belt Eligible



Questions
