2.4 Decrease the number of traffic related fatalities to zero by 2030

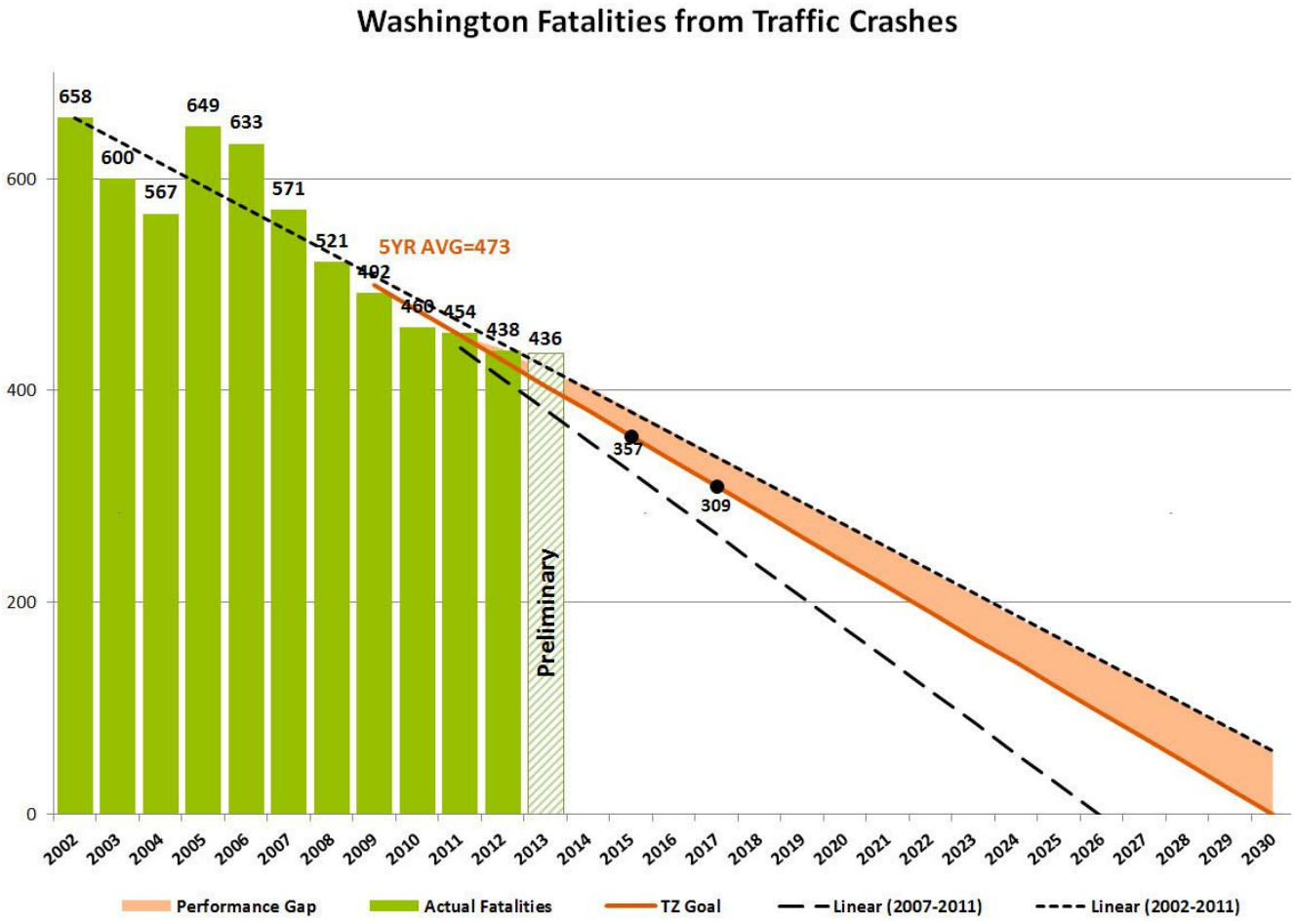
Supplemental report: Sept. 2014

Target ZERO

Washington's Strategic Highway Safety Plan

Why Target Zero?

- What if a target above zero included someone in your family?
- Traffic-related fatalities and serious injuries are becoming 100% preventable.
- Prevention strategies cover the four E's of traffic safety: Enforcement, Engineering, Education and EMS/Trauma Systems.
- Washington is **near target** to reach zero by 2030.



Top factors contributing to traffic fatalities and serious injuries

Washington State 2009-2011		Fatalities # of People	Fatalities % of Total	Serious Injuries # of People	Serious Injuries % of Total
Priority Level One					
✔ Impaired Driver Involved	**(2.4.a)**	704	50.1%	1,519	21.0%
Run-Off-the-Road		615	43.7%	2,156	29.7%
✔ Speeding Involved	**(2.4.b)**	555	39.5%	2,126	29.3%
✔ Young Driver 16-25 Involved	**(2.4.c)**	487	34.6%	2,763	38.0%
Distracted Driver Involved		426	30.3%	868	11.9%
Intersection Related		290	20.6%	2,474	34.1%

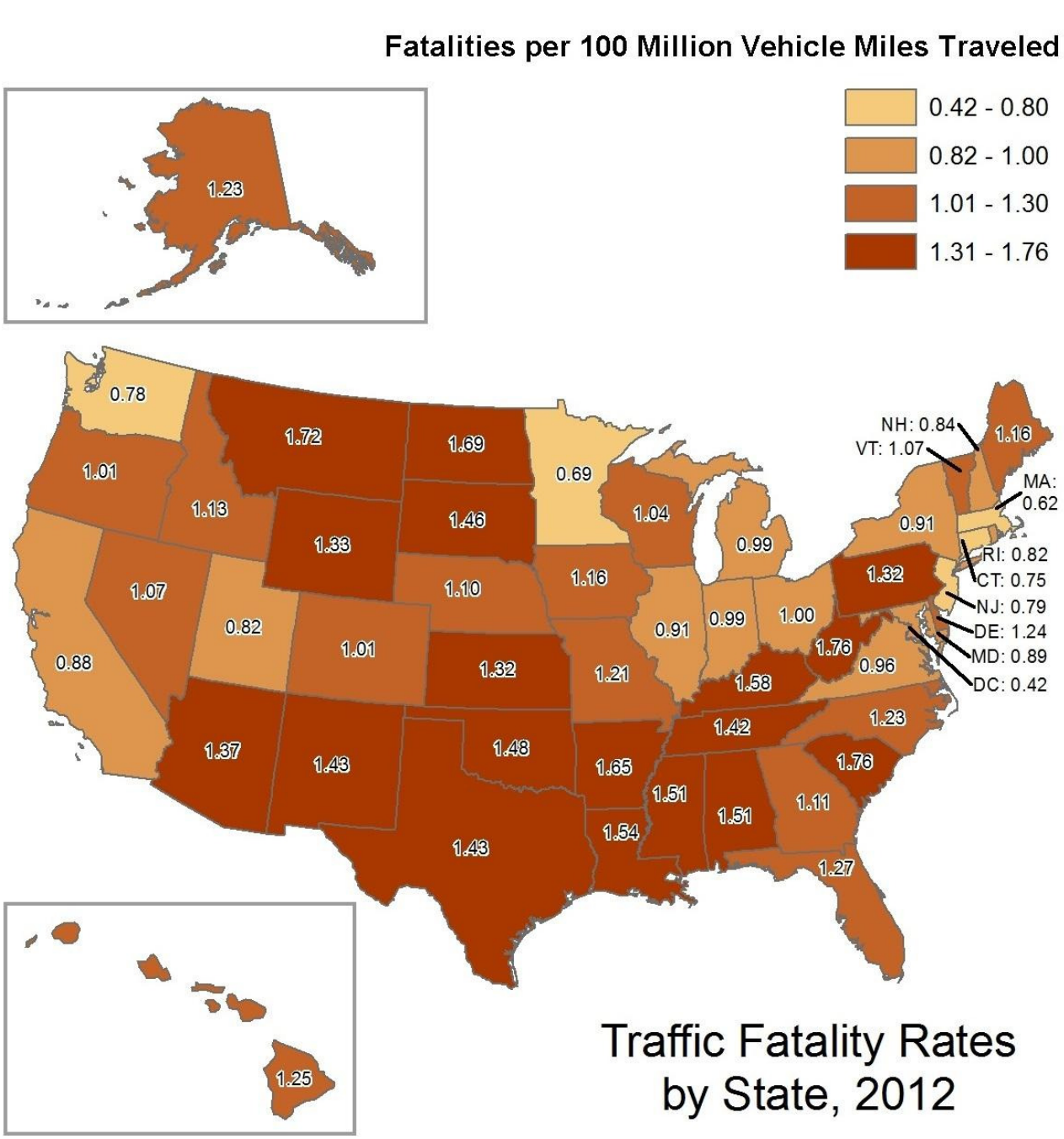
Top Priorities

2.4.a - Decrease alcohol and/or drug impaired driver-involved fatalities from 199 in 2011 to 152 or less by 2017.

2.4.b - Decrease speeding driver-involved fatalities from 169 in 2011 to 123 or less by 2017.

2.4.c - Decrease young driver-involved fatalities from 146 in 2011 to 110 or less by 2017.

Where does Washington rank in national fatality rates?



2012 Rank	*STATE*	*Traffic Fatalities*	*Traffic Fatality Rate*
1	District of Columbia	15	**0.42**
2	Massachusetts	349	**0.62**
3	Minnesota	395	**0.69**
4	Connecticut	236	**0.75**
5	Washington	444	**0.78**
6	New Jersey	589	**0.79**
7	Rhode Island	64	**0.82**
8	Utah	217	**0.82**
9	New Hampshire	108	**0.84**
10	California	2,857	**0.88**

Impaired Driver Action Plan Highlight

Leading Indicator

2.4.a Decrease the number of alcohol and/or drug impaired driver-involved fatalities from 199 in 2011 to 152 in 2033

Owner

WTSC

Partner

WSP, Local Law Enforcement, TZ Managers

TZ Reference 5.1

Key Strategy

Continue statewide, high-visibility saturation enforcement and media campaigns to reduce impaired driving. (R, CTW)

Action

Conduct four statewide DUI crackdowns during the holidays, St. Patrick's Day, Summer kick-off, and Labor Day. Over 150 law enforcement agencies participate. Each dollar spent on enforcement overtime funding is matched with publicity campaigns and paid media to inform the target groups

Due Date

12/30/2020 12:00:00 AM

Progress Report

With retail marijuana stores set to open in July, WTSC launched the statewide summer kick-off campaign July 1. The campaign is designed to remind those planning on patronizing the new businesses that driving high is illegal. It's called "Drive High, Get a DUI."

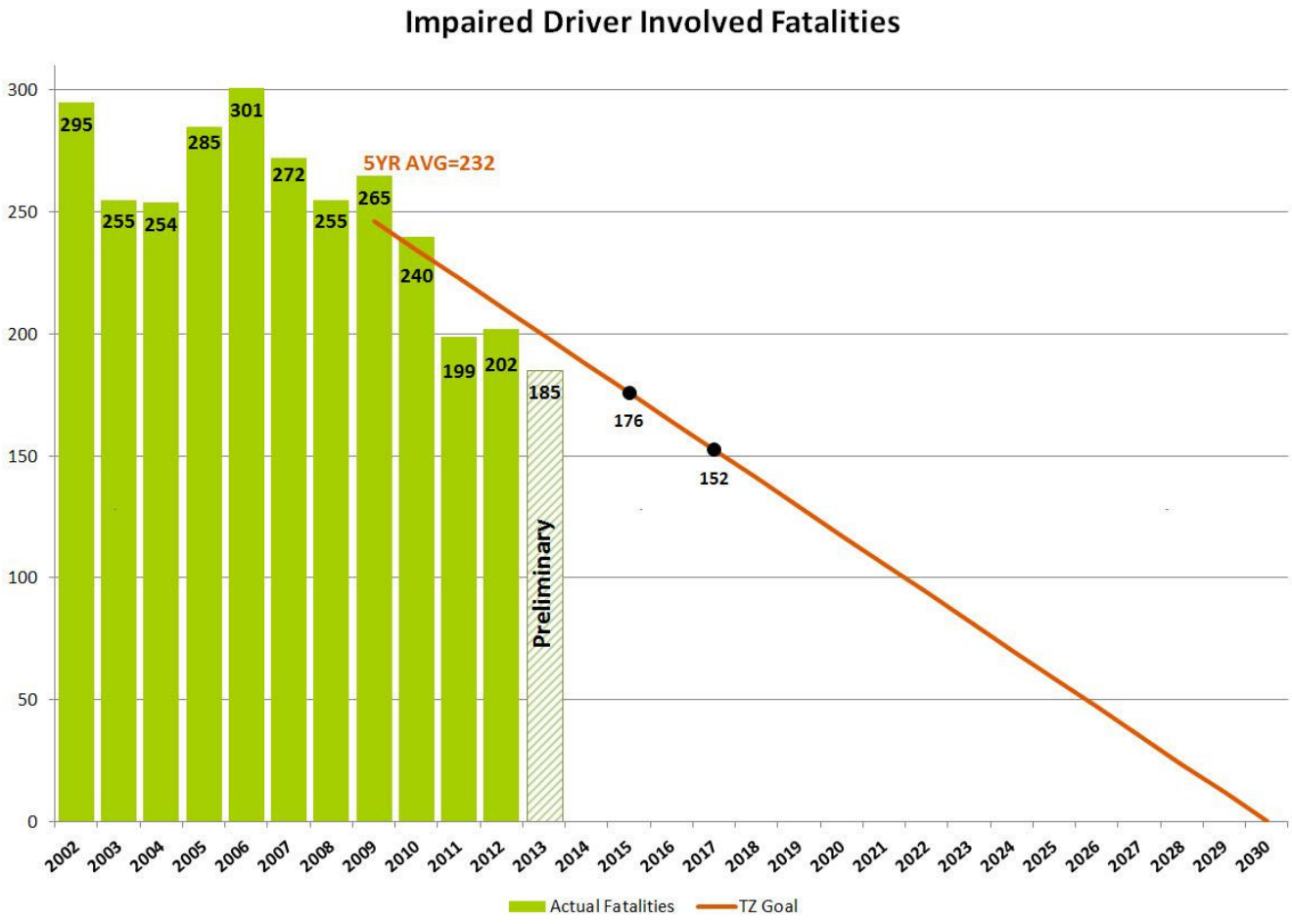
Additional Information

http://www.wadrivetozero.com/

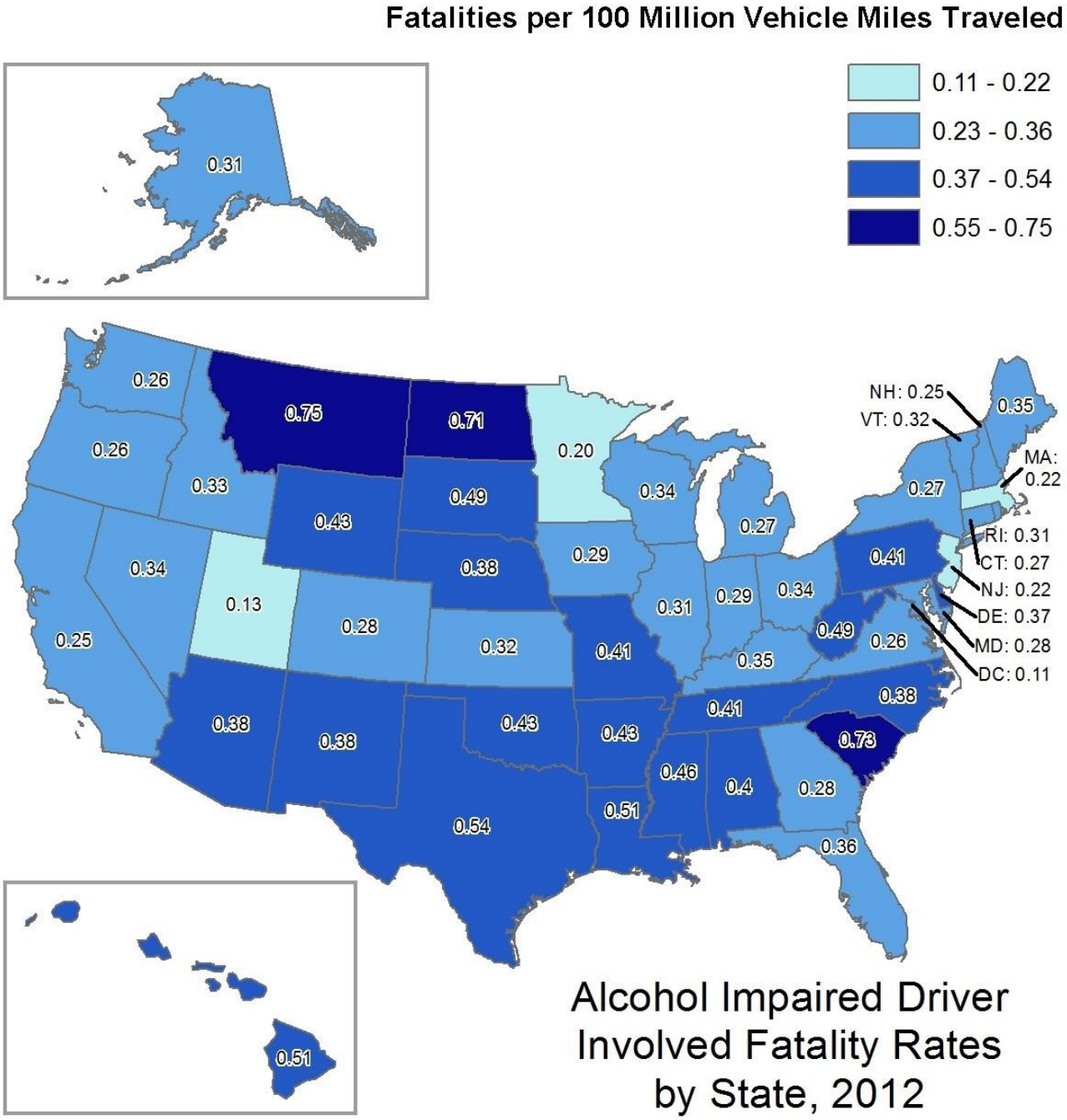
Explore the data

Leading Indicator 2.4.a - Impaired Driver-Involved Traffic Fatalities

On Target based on five year projection method.



Where does Washington rank in national impaired fatality rates?



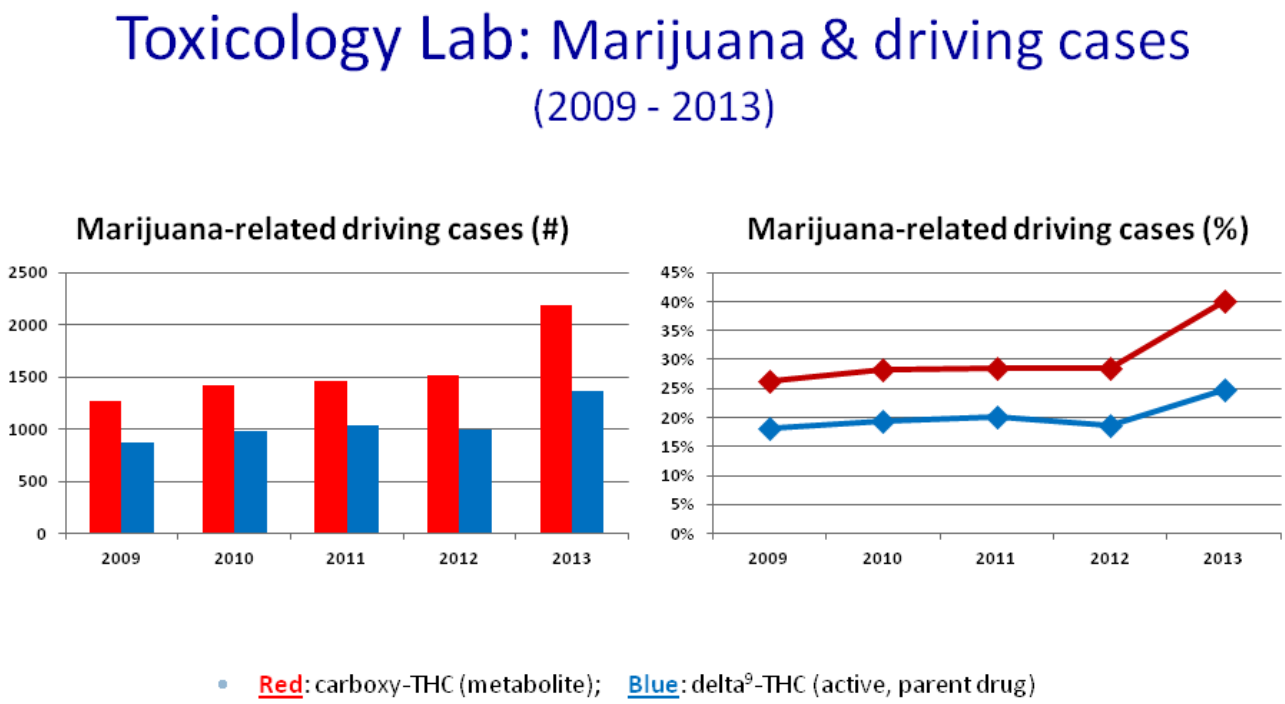
Impaired Driver-Involved Fatalities - A traffic fatality that involved a driver with a Blood Alcohol Concentration (BAC) at or above 0.08 and/or any positive drug result as confirmed by the WSP State Toxicology Lab and reported in FARS.

In 2012, Washington ranked 8th in the nation for **Alcohol-Impaired** driver-involved fatality rate (drug impairment not available for national estimates).

From 2009-2012, Washington experienced an 11% decrease in total traffic fatalities, but a 33% decrease in alcohol impaired driver-involved fatalities.

Trends in Impaired Driving and Enforcement Challenges

- First in 2010, and again in 2012 and 2013, drivers involved in fatal crashes impaired by drugs (any positive drug result) exceeded drivers impaired by alcohol, with a substantial number impaired by both drugs and alcohol.
- Marijuana is the most frequent drug detected among drug-positive drivers in crashes.
- Challenges persist among officers in drug impairment enforcement.
- Drivers under the influence of marijuana has increased since the passage of I-502.



The first diagram shows two graphs depicting marijuana-related driving case. The information compares 'carboxy-THC(metabolite)' and 'delta9-THC(active, parent drug)' arrests between 2009 and 2013.

Definitions:

- Delta9-THC(active, parent drug) – is the principal psychoactive constituent (or cannabinoid) of the cannabis plant. This is available by prescription in the U.S. and Canada. (Wikipedia, Tetrahydrocannabinol)
- Carboxy-THC(metabolite) – is the second metabolite of THC which is formed in the body after cannabis is consumed. (Wikipedia, 11-nor-9-Carboxy-THC)

Impaired Driver Action Plan Highlights

Leading Indicator

2.4.a Decrease the number of alcohol and/or drug impaired driver-involved fatalities from 199 in 2011 to 152 in 2037

Owner

WTSC

Partner

WSP

TZ Reference 6.2

Key Strategy

Enhance law enforcement DUI training with Advance Roadside Impaired Driving Enforcement (ARIDE) training. (P, NHTSA)

Action

Provide ARIDE classes trained to law enforcement officers statewide. ARIDE is now mandatory before entering DRE school.

Due Date

12/31/2020 12:00:00 AM

Progress Report

For the first two quarters of FFY 2014 (October 1, 2013 - March 31, 2014), 23 ARIDE classes have been held with 284 students receiving this training statewide. Third quarter numbers will be available in the next report. In addition, a statewide Impaired Driving Symposium was held April 30-May 2, 2014 with trainers and attendees representing law enforcement, EMS, judicial, treatment, health, and others.

Additional Information

Leading Indicator

2.4.a Decrease the number of alcohol and/or drug impaired driver-involved fatalities from 199 in 2011 to 152 in 2017

Owner

WSP

Partner

WTSC

TZ Reference 6.2

Key Strategy

Enhance law enforcement DUI training with Advance Roadside Impaired Driving Enforcement (ARIDE) training. (P, NHTSA)

Action

Provide all field personnel Advanced Roadside Impaired Driver Enforcement (ARIDE) training.

Due Date

12/30/2020 12:00:00 AM

Progress Report

Annual Target: 88% Line Troopers Trained. Current Status: 93%

Additional Information

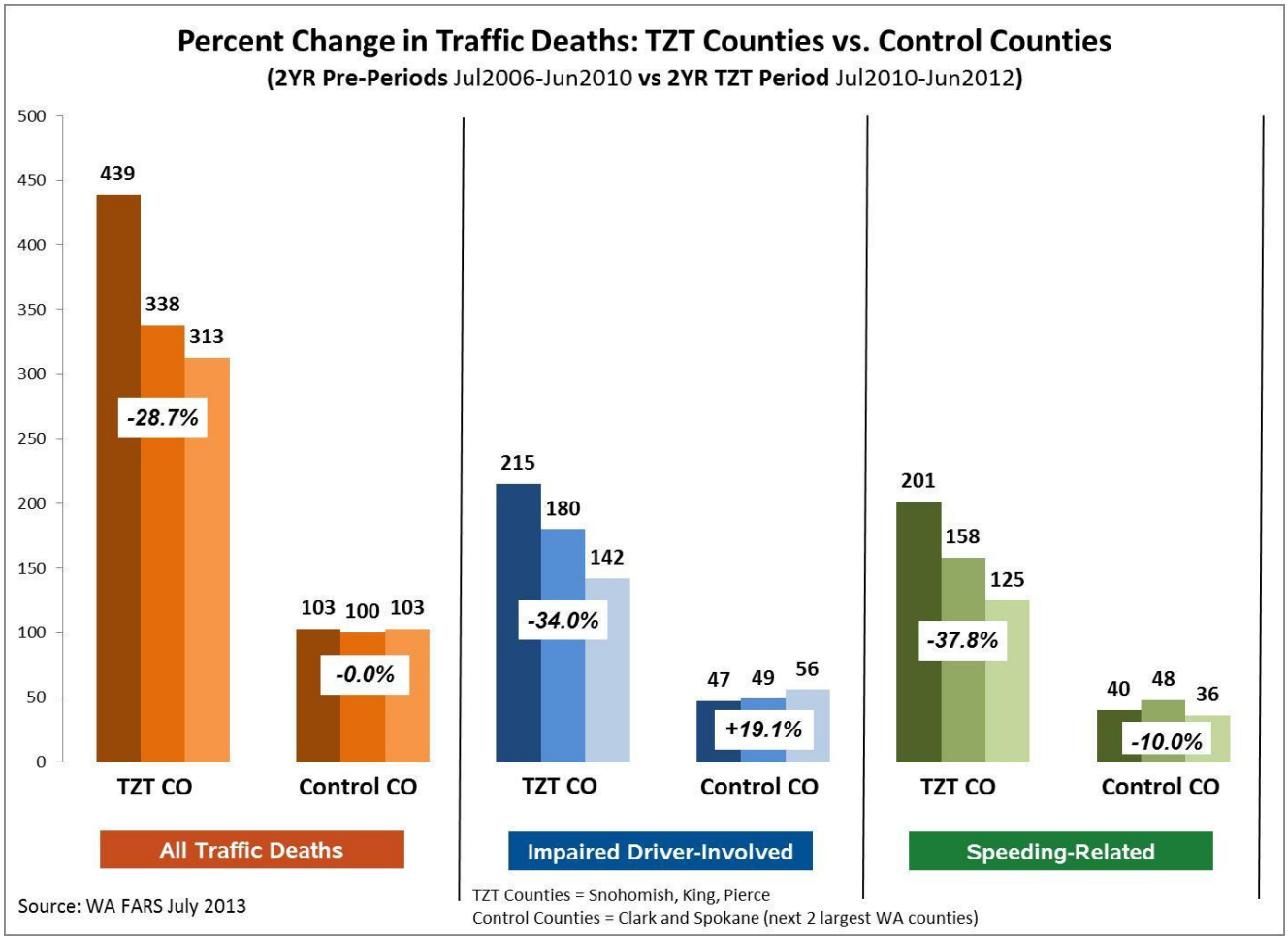
Courses are offered to all LEO's in the state.

Explore the data

Detecting Impairment Roadside – Alcohol vs. Marijuana		
	ALCOHOL	**MARIJUANA**
GENERAL INDICATORS	• **Odor of Alcohol** • **Uncoordinated/Disoriented** • **May have elevated Pulse** • Unsteady Walk/Fumbling • Slurred Speech • Drowsiness/Sluggish • Preliminary Breathe Test/Breathalyzer	• **Odor of Marijuana** • **Disorientation** • **Elevated Pulse and Blood Pressure** • Red/Bloodshot eyes • Body/Eyelid Tremors • Incomplete Thought Process • Impaired Perception of Time and Distance • Relaxed Inhibitions • Increased Appetite
Eyeball Jerking (Horizontal Gaze and Vertical Nystagmus)	May be present	Not present
Cannot Cross Eyes (Lack of Convergence)	Present	Present
Pupil Size	Normal	May be Dilated
Muscle Tone	Flaccid	Normal

Target Zero Teams - Snohomish, King, Pierce, Spokane, and Yakima Counties

Initial Target Zero Teams in Snohomish, King, and Pierce counties achieved the desired reductions in impaired driver-involved fatalities, but also achieved significant reductions in speeding driver-involved fatalities.



Impaired Action Plan Highlight

Leading Indicator

2.4.a Decrease the number of alcohol and/or drug impaired driver-involved fatalities from 199 in 2011 to 152 in 2034

Owner

WSP

Partner

WTSC, Local Law Enforcement

TZ Reference 5.2

Key Strategy

Expand full-time DUI squads targeting areas with high numbers of DUI-related crashes. (R, DDACTS)

Action

Target Zero Teams area a coalition of state and local law enforcement agencies providing full-time, multiagency police squads to reduce impaired driving crashes in select counties. They use data to direct them to roads most likely to be used by impaired drivers. Targeted paid and earned media supports the project.

Due Date

12/30/2023 12:00:00 AM

Progress Report

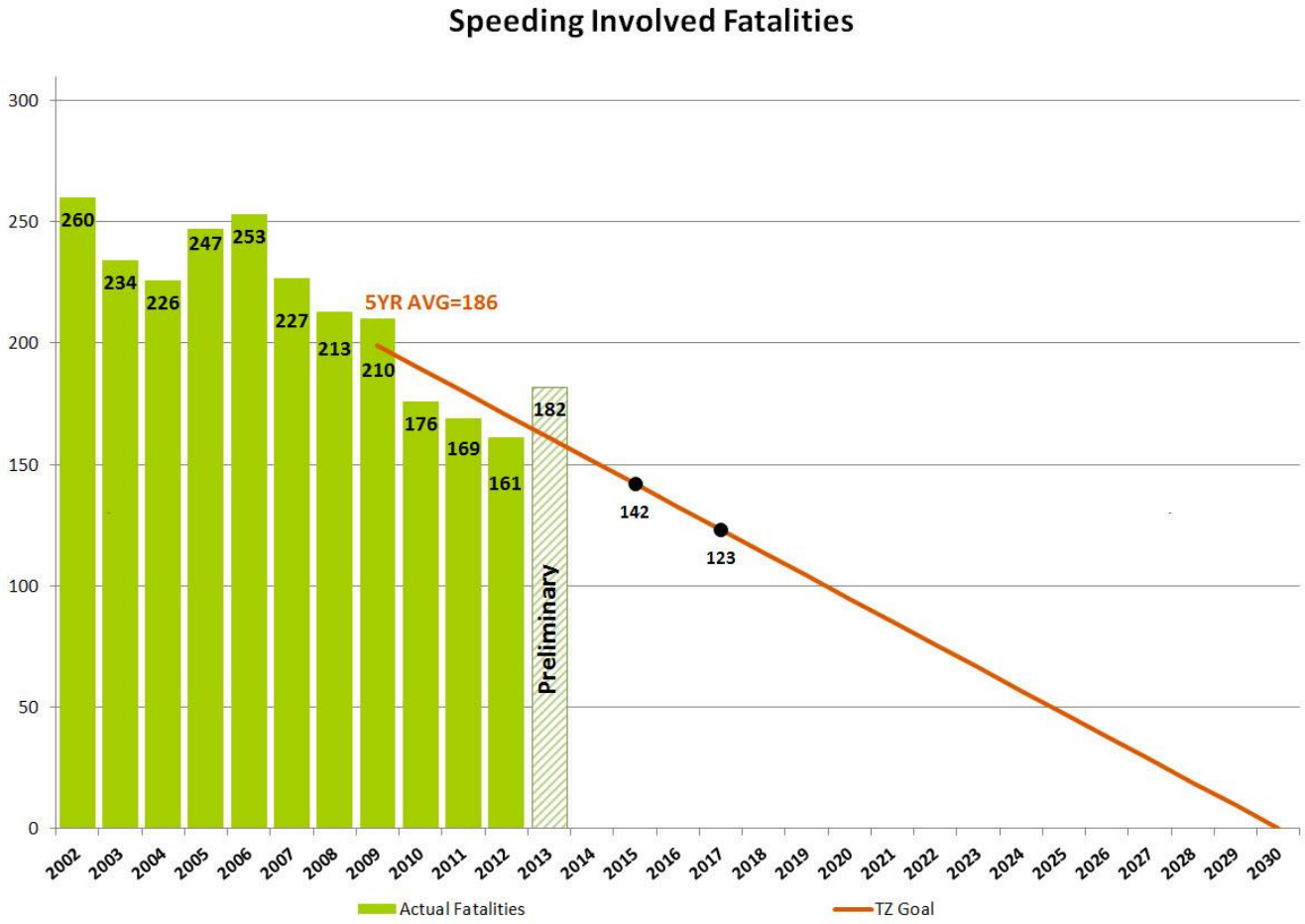
TZT squads have been expended from three to five counties

Additional Information

Explore the data

Leading Indicator 2.4.b - Speeding-Involved Traffic Fatalities

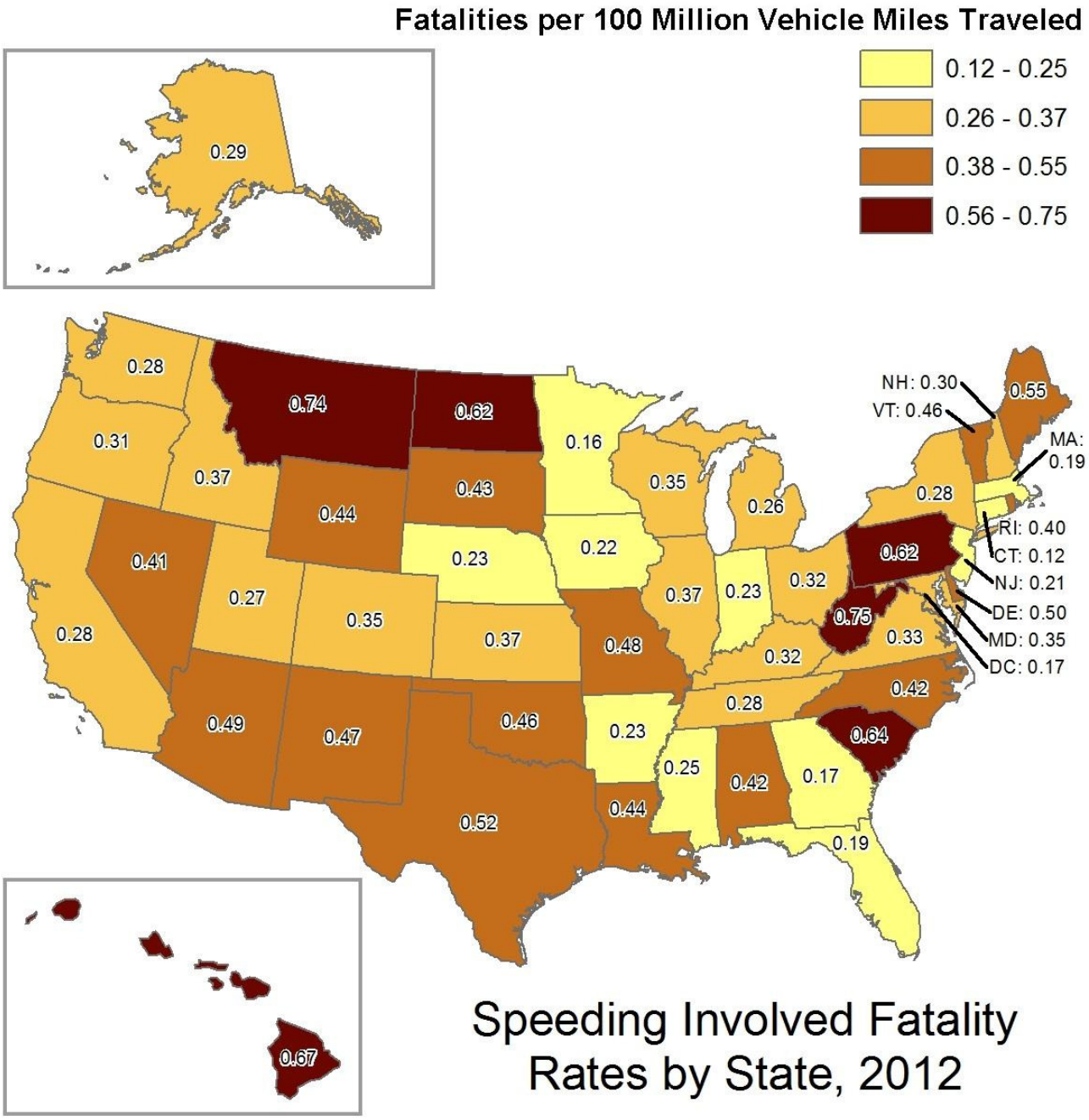
On Target based on five year projection method.



In 2012, Washington ranked 15th (along with three other states) in the nation for speeding-involved fatality rates.

Motorcycle troopers are very effective for speeding enforcement. Currently, WSP is experiencing a shortage in trooper personnel.

Where does Washington Rank in national speeding fatality rates?



Speed Involved Action Plan Highlight

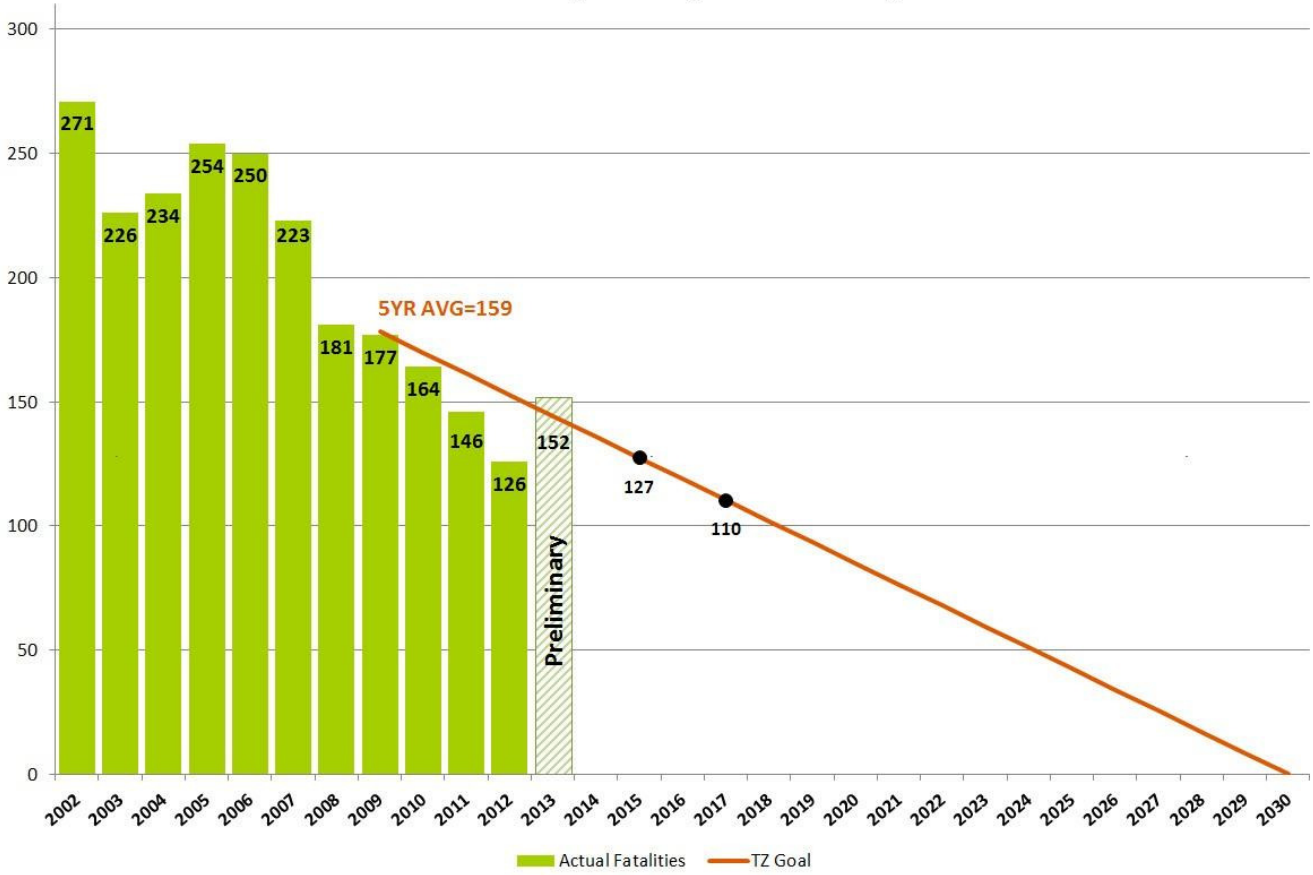
Leading Indicator 2.4.c - Fatalities Involving Young Drivers Age 16 to 25

Young drivers were involved in 35% of traffic fatalities, but only made up 14% of licensed drivers.

(Based on 487 deaths: 2009 thru 2011)

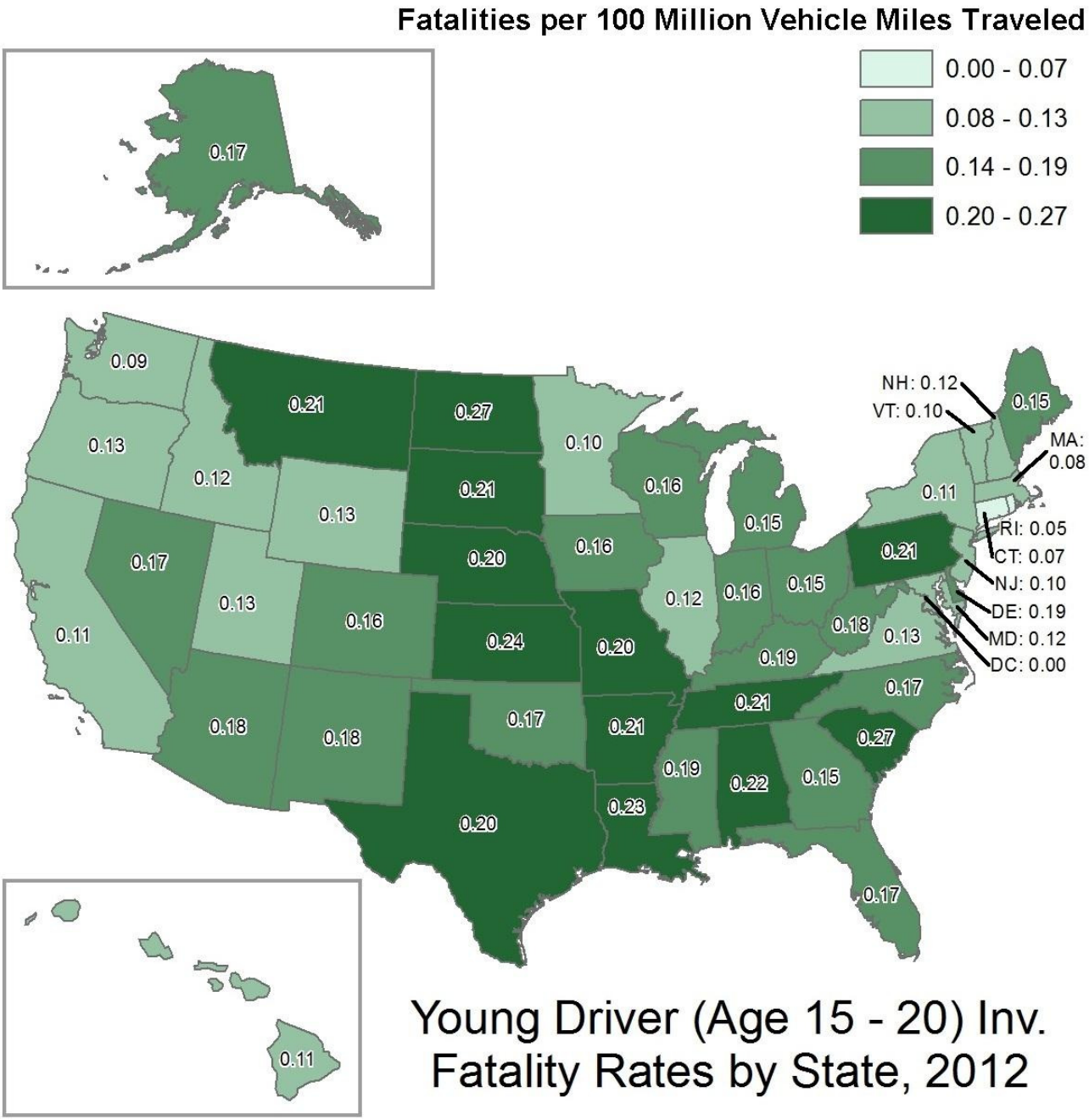
- Young drivers have the highest rates of crashes, speeding, impairment and distraction of any driver age group.
- Motor vehicle crashes are the leading cause of death for 16 to 25 year olds.
- Fatalities involving young drivers are on target to reach zero by 2030 (based on matured data through 2012, excluding preliminary 2013 data).

Fatalities Involving Young Drivers Age 16 to 25



Washington ranks 5th in the nation for fatalities involving young drivers.

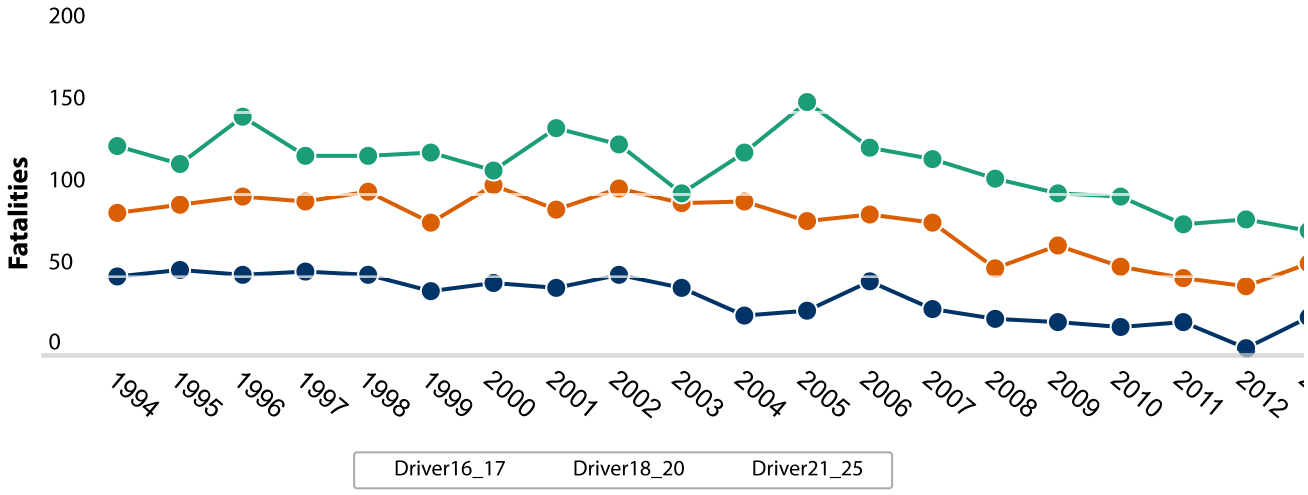
States ranking one through four are: District of Columbia, Rhode Island, Connecticut, and Massachusetts .



Different age groups require different strategies.

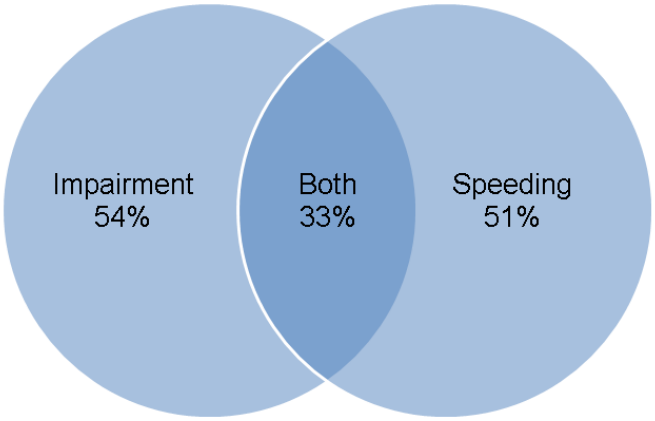
Fatalities Involving Young Drivers by Age Group

- Young drivers are studied as three different age groups because laws impact them differently, interventions may impact them differently, and we watch for changes in fatalities and traffic violations after implementing new laws and interventions.
- Traffic violations are higher among 18 to 20 year olds who wait till 18 to get their license. They now receive a new intervention, an early warning letter.
- Individual driver records are being studied for possible factors contributing to the increase in 2013.



Explore the data

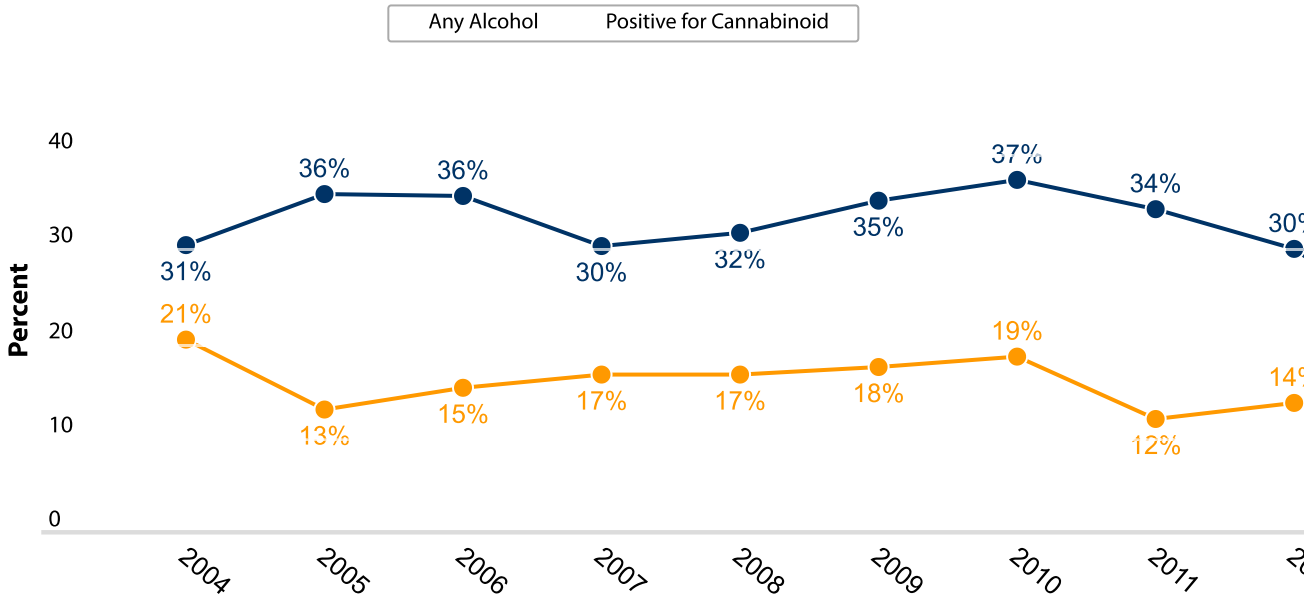
Impairment and speeding are the top two contributing factors in fatalities involving young drivers.



Based on 487 deaths 2009-2011.

Alcohol and marijuana remain the top forms of impairment, although both are declining.

Fatalities Involving Young Drivers with Impairment



Explore the data

- Fatalities involving alcohol impaired young drivers have decreased three years in a row.
- Fatalities involving marijuana impairment have also declined from 2010.
- Alcohol was found nearly twice as often as marijuana; alcohol findings declined from 48 to 29 cases while marijuana cases were stable at 17 cases per year.

Strategies for Influencing Young Driver Behavior

Education: DOL is currently updating and improving the driver training curriculum, guide and tests to reflect updated national and state research. DOL continues to produce young driver safety videos through the DOL website and YouTube. Over 4.6 million views have occurred.

Restrictions: The Intermediate Driver Licensing (IDL) law of 2001 imposed stronger requirements and restriction on 16 and 17 year old drivers. The wireless device law of 2008 prohibited all use of these devises for 16 and 17 year olds. Young driver collisions decreased following these restrictions.

Intervention: DOL intervenes when young drivers receive their first traffic violation. DOL sends an early warning letter to parents of 16 and 17 year old drivers. Since 2011, DOL sends a separate early warning letter to 18 to 21 year olds. This is based on our predictive modeling research which found their risk of a collision doubled after just one violation.

Research: DOL continues to research the violation, education and licensure patterns exhibited by young drivers to determine which strategies have positive impacts on their driving behavior. Now that two years of data are available after launching the 18 to 21 year olds' warning letters, the impact on recidivism has been studied. Recidivism has been reduced.

Partnerships: DOL collaborates with public and private stakeholders to continuously assess and impact young driver safety, including the Young Driver Task Force and Washington State Coalition to Reduce Underage Drinking. DOL partners with private driver training schools and instructors to make testing more accessible to the public, and regulates and audits these partners' performance.

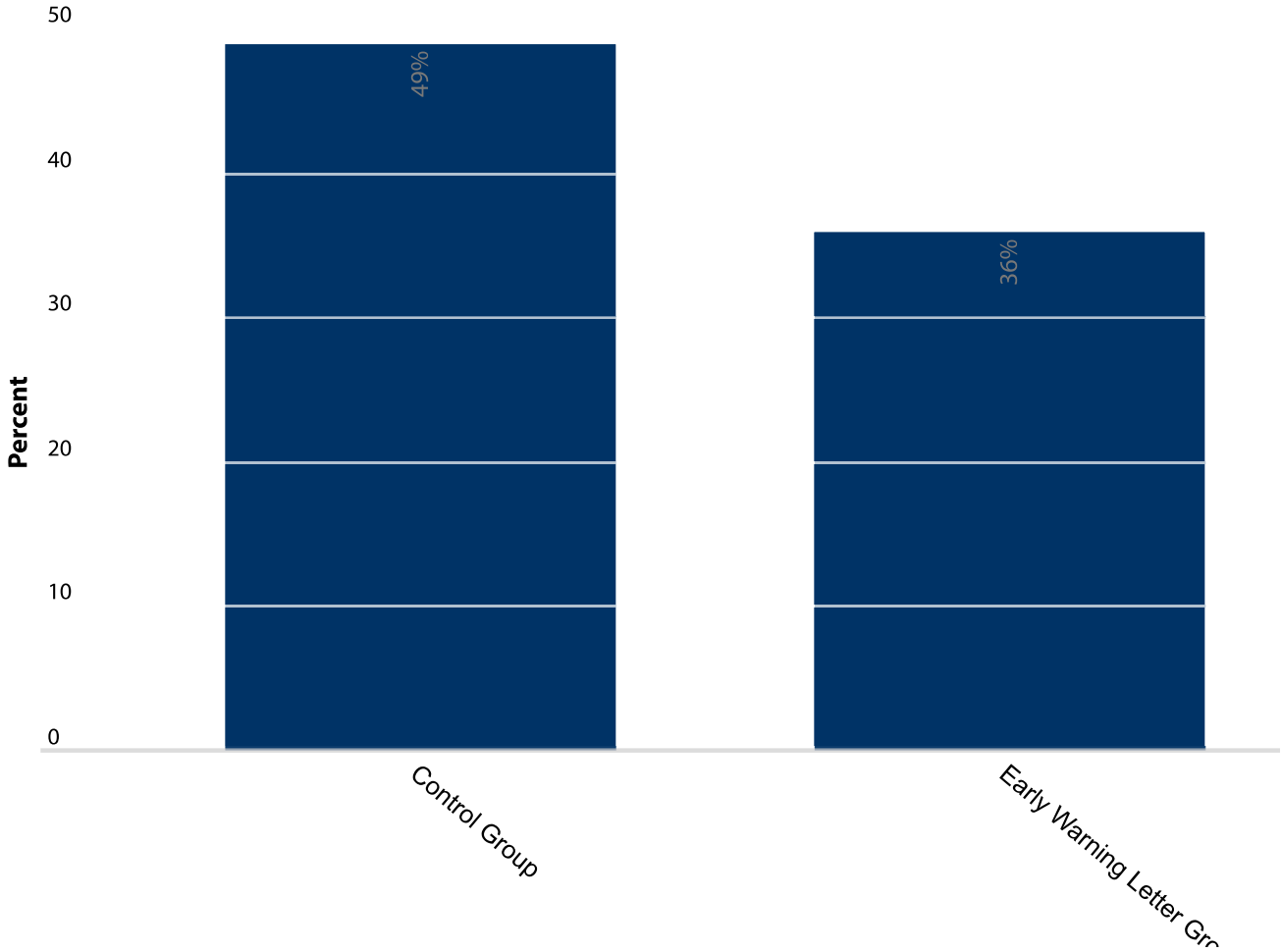
Young Driver Action Plan Highlights

Leading Indicator 2.4.c Decrease the number of young driver-involved fatalities from 146 in 2011 to 110 in 2017 **TZ Reference** 3.1 **Key Strategy** Review and revise the Driver Guide, testing process, curriculum guidelines, and training standards to construct an overall driver training package focused more on hazard identification and less on skill training. (R, CTW)	**Owner** DOL **Partner** **Action** Improve driver training curriculum, tests and driver guides to reflect best research (state, national, international), and the data, risks and proven strategies identified by Target Zero partners. **Due Date** 07/31/2015	**Status** On Schedule **Progress Report** Cross-divisional project team established, analyzed current curriculum for gaps in best practices and research, evaluated 3 options for improved curriculum, assigned short term project milestones which include revising current curriculum to address causes of young driver involved fatalities and serious injuries (as documented in current Target Zero Plan), new laws, marijuana risks, and provide new video by 09/30/14. **Additional Information**
Leading Indicator 2.4.c Decrease the number of young driver-involved fatalities from 146 in 2011 to 110 in 2017 **TZ Reference** n/a **Key Strategy** Provide quality assurance and review of Drive Training Schools.	**Owner** DOL **Partner** **Action** Conduct all audits of driver training schools and routes by redistributing FTE to eliminate the backlog caused by the number of school locations doubling (to nearly 500) in the last two years (with the privatization of testing in HB1635). **Due Date** 12/31/2014	**Status** Off-Schedule **Progress Report** Five FTE were originally redistributed from licensing offices to the driver training school program to respond to the growing demand for licensing schools, instructors and examiners. Now four more FTE are redistributed from other auditing and investigating functions to conduct priority one audits of instruction and testing. By December 2014, priority one audits will be current but priority two audits of school changes will remain backlogged. **Additional Information**
Leading Indicator 2.4.c Decrease the number of young driver-involved fatalities from 146 in 2011 to 110 in 2017 **TZ Reference** 3.2	**Owner** DOL **Partner** **Action** Complete the traffic violations recidivism study on recipients of the	**Status** On Schedule **Progress Report** First sixteen months of matured data on letter recipients' traffic violation recidivism has been analyzed, and

Explore the data

Results: Early Warning Letters reduced subsequent traffic violations by 13%.

Subsequent Traffic Violations over 24 Months



Explore the data

- 35,000 early warning letters were sent to 18 to 21 year old drivers after their first moving traffic violation.
- 11,000 fewer traffic violations occurred over the next two years for letter recipients compared to the control group.
- 42 collision injuries were likely avoided (Based on applying the actual injury rate of the control group to letter recipients, letter recipients involved in 2,582 actual injuries could have been involved in 2,624 injuries).
- 14 traffic fatalities were likely avoided (Based on applying the actual fatality rate of the control group to the letter recipients, letter recipients involved in 10 actual fatalities could have been involved in 24 fatalities).