

**MITIGATION OF LANE DEPARTURE CRASHES IN
THE PACIFIC NORTHWEST THROUGH
COORDINATED OUTREACH
PHASE I**

FINAL PROJECT REPORT

by

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List of Abbreviations

FHWA: Federal Highway Administration

PacTrans: Pacific Northwest Transportation Consortium

PSA: Public Service Announcement

Executive Summary

In the United States, lane departure crashes represent 54 percent of the traffic fatalities that occur on roadways (FHWA 2016a). In addition to geometry and design modifications of roadway infrastructure, education and outreach efforts through the form of public service announcements (PSAs) are an option to influence a culture shift in the travelling public to drive more safely. PSAs can be targeted toward specific audiences and inform them about safety behavior in different circumstances. To support this option, PacTrans has supported a student competition to develop PSAs related to lane departure crashes. This report constitutes Phase I of the project, which includes the competition planning phase. More specifically, the issue of lane departure crashes will be explored, along with how PSAs in the transportation industry have been implemented. The guidelines for the college and high school level competition open to students in the Pacific Northwest will be described. These guidelines will request that the students submit a video; a series of Twitter, memes, or Instagram posts; and a poster to develop a comprehensive PSA for lane departure crashes in the Pacific Northwest. This mixed media approach will allow for PSA distribution through several social media outlets. Submissions will be reviewed on pre-selected criteria and monetary awards will be presented to the winning individuals or teams. Additionally, the advertising materials distributed in the form of flyers and websites will be described. Phase II will focus on the collection of the competition entries, selection of the winners, and distribution and promotion of the winning materials. The goal of both phases of this project is to engage the public in the Pacific Northwest regarding the safety issue of lane departure crashes.

Chapter 1 Introduction

Lane departure crashes represent a frequent type of traffic incidents that occur on rural two-lane roadways, although they can occur on a wide variety of functionally classed facilities. These crashes account for more than half of all highway fatalities in the United States. In 2014, more than 17,700 fatalities happened as a result of vehicles departing their lane (FHWA 2016a). There are several possible crash types that could result from a vehicle departing the lane. Figure 1.1 highlights the percentage of fatalities caused by different types of lane departure crashes.

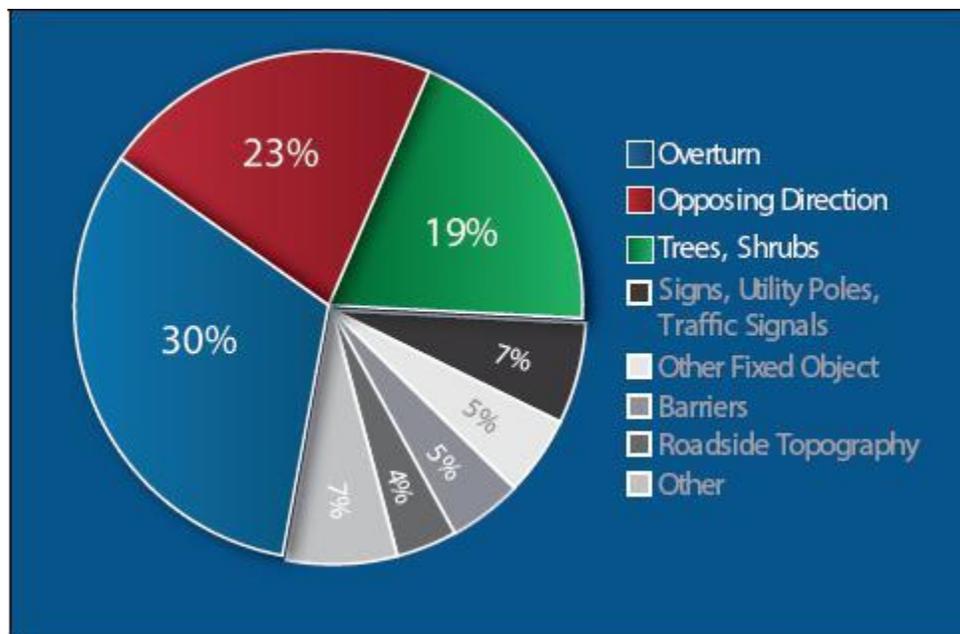


Figure 1.1: Percentage of fatalities caused by different types of lane departure Crashes (FHWA 2016b)

The overrepresentation of overturning, opposing direction, and trees/shrub lane departure crashes explain why these types of crashes represent more than half of all U.S. highway fatalities. All of these types of crashes are severe, particularly the opposing direction (or head-on) crashes (FHWA 2016b).

While this issue is a national problem, it is also a prominent safety issue in the Pacific Northwest. In 2010 in Oregon, approximately 66 percent of all traffic fatalities were the result

of lane departure crashes (ODOT 2016). This is higher than the national average of just over 50 percent during that same time. In addition, Idaho determined that between 2008 and 2012, 51 percent of its fatal crashes were the result of single vehicle run-off-the-road incidents, where 89 percent of these fatal crashes occurred on rural roads (Jennings 2014). Recent data analysis in Alaska documented the distribution of lane departure crashes based on state level crash data (fig. 1.2). Visual inspection suggests that the distribution of the crash frequency mirrors population density.

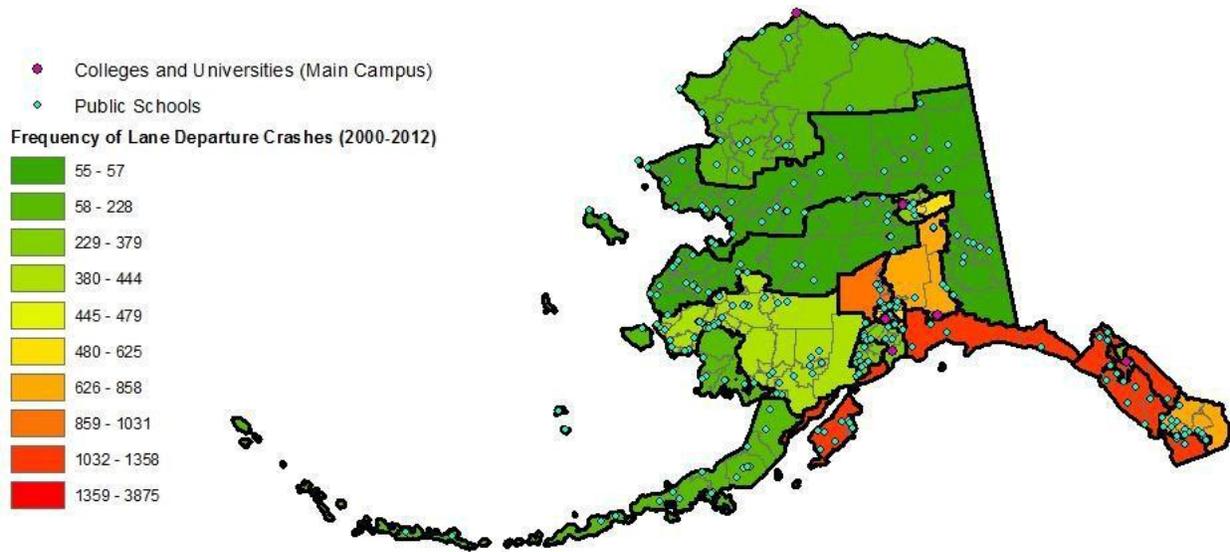


Figure 1.2: Frequency of lane departure crashes (2000-2012)

There are several existing mitigation efforts in place to reduce roadway departure injuries and fatalities. FHWA identifies six specific countermeasures that have shown real or potential safety improvements through reduction of lane departure crashes. These include signage/markings, rumble strips, median cable barriers, safety edge, road widening, and raised median islands (Taylor 2005). However, there are limitations to these mitigation strategies. Specifically, they primarily target improvements to the roadway infrastructure, which can be expensive. Given current pressures to “do more with less,” sustainable and cost-effective safety

approaches must be considered. For a more comprehensive approach to this issue, addressing human factors that relate to lane departure incidents (e.g., speeding, impaired driving, distracted driving, and not using seatbelts) could help promote safer driver behavior (FHWA 2014).

A potential solution to such human factor issues is educating the public through the use of public service announcement (PSAs). In conjunction with the physical improvements, PSAs could better educate and inform the travelling public about the safety issues and lead to altering driver behavior. Hence it is beneficial to strategically plan for the establishment of public awareness campaigns regarding the safety concerns of roadway departure crashes and their corresponding impacts on society, health, and economy, among others. Such campaigns can include advertisement, education plans, and enforcement strategies on this matter. As part of such activities, this research, accordingly, aims to educate the public in the Pacific Northwest regarding the safety issues of lane departure crashes.

Chapter 2 Literature Review

2.1 Transportation Safety PSAs

The ultimate goal of transportation safety PSAs is to change the behavior of the public. Specifically, transportation safety PSAs generally try to target the travelling public and influence their behavior during travelling tasks. Some of the most visible transportation PSAs include anti-drunk driving efforts and anti-texting and driving efforts. The National Highway Traffic Safety Administration understands the importance of a well-coordinated PSA campaign in transportation safety. It states that the most successful past campaigns have included the combination of advertisement and enforcement. This combination specifically requires well targeted advertising efforts that publicize the issue and the enhanced enforcement efforts. Additionally, the enforcement efforts (generally legal enforcement) should be highly visible. When these two initiatives are combined, there is more likely to be meaningful change in public behavior in the targeted communities (NHTSA 2016a).

2.2 Social Media and PSAs

The expanded use of social media has changed how people receive information. This includes information from safety and government groups whose goal is to educate the public about specific safety issues. There are many different social media platforms that specialize in different types of virtual interactions. The following are some of the most popular and utilized social media sites with a brief description of their function (NHTSA 2016b):

- Facebook – A social networking site that allows the posting of statuses, videos, photos and internet links
- Instagram – A photo and video sharing site
- YouTube – A platform to upload and share original videos
- Twitter – A site for sharing 140 character messages to followers

These platforms, each in different ways, have the capacity to reach large numbers of people. Given one of the goals of PSAs is to reach large populations of the public, social media is an inexpensive method to reach large numbers of people.

2.3 Engagement of Younger Drivers

To accomplish the goal of positively impacting the safety of the travelling public, the opportunity to target younger drivers could result in the greatest impact. According to the Centers for Disease Control, teenage drivers (ages 16-19) are at the highest risk for motor vehicle crashes. In 2013, 2,163 teens were killed and more than 240,000 were injured in vehicle crashes (CDC 2015). Since this group is not only at the highest risk for crashes, but also will be members of the travelling public for the longest amount of time, engaging these drivers could have the largest benefits in long term behavior shifts. Therefore, PSAs that target younger drivers may have more extended benefits than those that target other population groups.

The outreach efforts being presented here will target schools and universities in the Pacific Northwest region to engage students on the importance of attentive and safe driving habits that can serve to minimize lane departures while driving. School-based initiatives have been proven to be an effective means of changing behaviors at the household level including environmental awareness (Damerell, Howe, & Milner-Gulland 2013), eating habits (Atkins & Atins 2010), other healthy lifestyle choices (Fisher, Hunt, Kann, et al. 2003). It is anticipated that by engaging students at the high school and college level across the Pacific Northwest, a larger audience can be made aware of the risks regarding lane departure crashes and how certain behaviors can mitigate their occurrence.

2.4 Examples of Transportation PSAs

PSA campaigns can vary greatly in scope, audience, and content. Some, such as the U.S. Department of Transportation's annual *Click It or Ticket* campaign, are nationwide efforts that

partner advertisement and state and local law enforcement to encourage seatbelt use among motorists (NHTSA 2016c). Other efforts are based at the state level. One example of this was the “*Let ‘em work, let ‘em live*” work zone safety enforcement campaign in South Carolina between 1999 and 2007. This campaign was a data driven effort that developed television ads that depicted work zone crashes. Through focus groups and surveys, the South Carolina Department of Transportation adjusted the ads to ensure they had maximum impact on the viewers and reached the target audience (Wilson 2016)

Some campaigns are more targeted for specific localities or issues. The Los Angeles Metro Rail released a series of video PSAs in June 2016 to educate the public about the potential unsafe activities around Metro facilities. These 20- to 30-second clips are cartoonish and show stick figures interacting unsafely with Metro facilities and meeting an unfortunate (but not visibly gruesome) end (Metro Los Angeles 2016). Figure 2.1, a screen capture of one of the video PSAs, provides a glimpse of how this campaign combines the cartoonish look with conveying a serious message.



Figure 2.1: Los Angeles Metro video PSA screen capture (Metro Los Angeles 2016)

These three campaigns took different approaches, some serious - some humorous, to achieve the same goal of influencing the public's behavior to be more alert and act in a safer manner. Each PSA campaign created their campaign to target their individual audience. They used available resources and took advantage of visual advertising platforms such as television and YouTube.

Chapter 3 Competition Planning

In order to interact with the Pacific Northwest community and promote strategies to help prevent roadway departure crashes in the area, PacTrans and its partner universities have chosen to sponsor a student PSA competition. The purpose of this competition is to engage young people in the Pacific Northwest with current transportation safety issues by encouraging them to learn about and develop transportation safety PSAs on lane departure crashes in the region, where they live. Additionally, this competition is designed to incorporate the use of social media into a PSA so that the campaign's message can be more easily understood and widely distributed.

3.1 Competition Guidelines

The competition portion of this PacTrans outreach project aims to engage young people's awareness, pull in their interest by developing effective transportation safety PSAs, and guarantee the PSA campaign's dissemination success via the use of social media. For this particular competition, the safety issue to be highlighted by the PSAs will be lane departure crashes in the Pacific Northwest. The goal of the competition is to solicit PSAs from the student community in the Pacific Northwest to highlight and mitigate the issue of lane departure crashes in the region.

This competition is open to both high school and college students in the Pacific Northwest states (Alaska, Idaho, Oregon, and Washington). College and high school students, while the guidelines will be primarily identical, will compete separately and receive judgment and rewards on the basis of their academic level (high school or college). The elements required for the competition purposely focus on the social media aspect of the PSA campaigns.

Participants are required to submit the following three items to have a complete submission:

- One video approximately 20 to 30 seconds in length
- A series of five Twitter or Instagram posts, which can include text, photos, or memes

- A poster (2 feet tall x 3 feet long).

These requirements are meant to showcase the creativity of the participants and maintain the PSA focus on the social media component. All elements of the submission must be uploaded by the participant to the appropriate web page on the PacTrans website by the deadline. The details of submission will be described in the advertising materials for the competition.

Deadlines for this project are October 5, 2016, for the high school students and October 21, 2016, for the college level students.

After the deadlines, the winners will be selected by the Principle Investigators from the participating universities and other transportation professionals. The prize money for the competition will be as follows:

1st prize: \$750

2nd prize: \$500

3rd prize: \$250.

These prizes will be distributed to the winning individuals or teams for each competition level: college and high school. Each state will run its own competition. Prizes will be awarded to the top individuals or teams in each of the four states (Alaska, Idaho, Ore., and Wash.) in both the college and high school competition levels.

3.2 Advertising and Supporting Materials

To convey the competition guidelines to the potential participants, flyers were generated to provide the basic guidelines for the project to the potential participants. These flyers were created to fully explain the requirements and benefits of the competition process and serve as stand-alone advertising materials that could be distributed around the appropriate high schools and colleges in the Pacific Northwest. Separate flyers were created for the high school and college level competitions, primarily to reflect the different groups being targeted and the different submission deadlines (due to the differences in their academic calendars)

for the two groups. These flyers, which are included in figures A.1 and A.2 in Appendix A, briefly describe the purpose and background of the competition. Additionally, they describe the competition requirements, competition prizes, and the process for submitting a project.

In addition to the flyers that can be distributed, several web pages are included in the PacTrans website regarding the PSA competition. The main page for the safety completion is located at the following URL:

<https://depts.washington.edu/pactrans/students/safety-competition/>

This and the five sub-pages compose the PacTrans web advertising for the competition. Screen captures of all of the competition web pages on the PacTrans website are located in Appendix B. The main page shows a combination flyer that includes the information for both high school and college level entries.

In addition to providing advertisement for the safety PSA competition, the web pages provide supporting materials and additional information about the project for the potential participants. The “Useful Resources” (fig. B.4, Appendix B) page provides URL links to several categories of related websites that would be helpful for the participants to learn more about lane departure crashes and ideas for potential public service announcements. The categories of URL links are as follows:

- General Information – These links are to websites such as FHWA that provide information on distracted driving and lane departure crashes.
- Examples of Seminal Research Studies – These are links to academic publications that describe research related to lane departure issues.
- Examples of Social Media Campaigns – These are links to example social media posts (Facebook, YouTube, Twitter, and Instagram) related to transportation and transportation safety.

There is also a “Contact Us” (fig. B.6, Appendix B) page on the PacTrans competition website that includes the email addresses for the different Principle Investigators at each of the PacTrans partnered universities. This contact information is provided to allow the potential participants to ask questions about any of the details of the competition that may have been unclear to them.

3.3 Submission Web Page

The submission web page is located on the PacTrans website as one of the tabs under the Safety Competition main page. It is located at the following URL:

<https://depts.washington.edu/pactform/safety-competition-submission-page/>

This URL was printed on the advertising material developed for the competition. The purpose of the submission page is to provide a common method for the students participating in the competition to submit the materials for the competition. The submission page will remain active through the competition deadline. A screen capture of the submission web page is shown in fig. B.5 in Appendix B, which indicates the layout of all the materials and information required or requested from the participants.

The page collects basic demographic information for the participants in the project. The first and last name of the lead team member is required, as well as an email address. If there are any teammates, there is a location to list their names as well. The home address for the team lead is requested, but not required. The address is meant to facilitate the distribution of the prize money to the winning individuals or teams. The name of the school that the individual or team attends is required.

As required from the competition guidelines, a complete submission to the competition will require the video file, the Twitter or Instagram posts, and the poster. An individual file must be uploaded for each of submission elements. The files can be from a variety of file types

and vary for each element of the submission. The list of accepted file types for each of the project elements can be seen in fig. B.5 in Appendix B. Finally, the students are required to identify whether they are a high school student or a college student so that their submission will be filtered into the right category. Students can then submit their entries to the competition, provided all of the required information in the submission form is provided.

3.4 Distribution of Advertising Material

To help solicit submissions for the competition, the advertisement materials were distributed to the targeted groups across the four participating states. The Principle Investigators at each of the participating universities were tasked with distributing the college and high school advertisement flyers in their respective states. In each of the states, the college level flyers were disseminated to the university students through listserves and other methods based on the university, and other university satellite campuses in the state. These universities included University of Alaska Fairbanks, University of Washington, Washington State University, Oregon State University, and University of Idaho. Additionally, the high school advertisement flyers were distributed to high schools across the region. Given the variable volume of high schools in each of the states, some states distributed the recruiting materials to all of the high schools in the state, while others only contacted specific schools to have the flyer distributed. These schools included those located in prominent cities as well as schools where the research group had personal contacts.

Chapter 4 Next Steps

The elements described in Chapter 3 of this report constitute Phase I of the project. Phase II of this project will include the administration of the competition prepared in Phase I. More specifically, Phase II will include the collection of the entries for the competition from the high school and college students, selection of the winners, and distribution and promotion of the winning materials.

The entries from both high school and college students will be collected by the stated deadlines (October 5, 2016, and October 21, 2016, respectively). The submission web page for the entries, which is shown in Figure B.5 in Appendix B, will remain active through these deadlines. Once all submissions received by the deadlines have been collected, the Principle Investigators at each of the participating universities will begin the process of selecting the best entries based on the criteria described in the competition guidelines. The best three entries at the college level and high school level in each state will be ranked from 1st to 3rd place. These teams will be notified, and prize money described in the advertising material for the competition will be distributed.

Once the best PSAs from each state's colleges and high schools have been recognized for their productions, PacTrans will use the materials for promotion of transportation safety and community engagement. It is anticipated that there will be 24 award winning submissions in total; there will be six from each state (Alaska, Idaho, Ore., and Wash.) from the top three college submissions and top three high school submissions. The materials from the winning teams will then be used by PacTrans in its promotional materials and publications to educate the public in the Pacific Northwest about the issue of lane departure crashes. All of these steps will be documented further in the Phase II report for this project.

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Appendix A: Flyers



Pacific Northwest Transportation Consortium

High School Student Safe Driving Public Service Announcement Competition:

Preventing Roadway Departure Crashes in the Pacific Northwest

What is a roadway departure crash



A roadway departure crash is defined as a crash which occurs after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way. In 2014, there were about 18,000 fatalities as a result of roadway departure crashes, which was 54 percent of the traffic fatalities in the United States.



What to submit



and



and



One Video
(20 to 30 seconds long)

A series of five tweets or Instagram posts, which can include text, photos, or memes

One Poster
(2 feet tall x 3 feet long)

What is the purpose

Helps to raise awareness of drivers in the Pacific Northwest about the risks of roadway departure crashes and how their behavior can help reduce how often they happen.

What if we win



1st place - \$750



2nd place - \$500



3rd place - \$250

Who can submit

Submissions can be generated by an individual or team of individuals currently enrolled in any high school in Oregon.

When to submit

Submissions are due by October 5, 2016

How to submit

Upload to the PacTrans website: <http://depts.washington.edu/pactrans/students/safety-competition/submission/>



Figure A.1 High school flyer



Pacific Northwest Transportation Consortium
College Student Safe Driving Public Service Announcement Competition:

Preventing Roadway Departure Crashes in the Pacific Northwest

What is a roadway departure crash



A roadway departure crash is defined as a crash which occurs after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way. In 2014, there were about 18,000 fatalities as a result of roadway departure crashes, which was 54 percent of the traffic fatalities in the United States.



What to submit



and



and



One Video
(20 to 30 seconds long)

A series of five tweets or Instagram posts, which can include text, photos, or memes

One Poster
(2 feet tall x 3 feet long)

What is the purpose

Helps to raise awareness of drivers in the Pacific Northwest about the risks of roadway departure crashes and how their behavior can help reduce how often they happen.

What if we win



1st place - \$750



2nd place - \$500



3rd place - \$250



Who can submit

Submissions can be generated by an individual or team of individuals currently enrolled in any college or university

When to submit

Submissions are due by October 21, 2016

How to submit

Upload to the PacTrans website: <http://depts.washington.edu/pactrans/students/safety-competition/submission/>



Figure A.2 College flyer

Appendix B: Web Pages

Education and Workforce Development	<h3>Pacific Northwest Transportation Consortium</h3> <p><i>Safe Driving Public Service Announcement (PSA) Competition:</i></p> <h2>Preventing Roadway Departure Crashes in the Pacific Northwest</h2> <p><u>What is a roadway departure crash</u></p>  <p>A roadway departure crash is defined as a crash which occurs after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way. In 2014, there were about 18,000 fatalities as a result of roadway departure crashes, which was 54 percent of the traffic fatalities in the United States.</p>  <p><u>What to submit</u></p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>WATCH One Video (20 to 30 seconds long)</p> </div> <div style="text-align: center;"> <p>and</p>  <p>A series of five tweets or Instagram posts, which can include text, photos, or memes</p> </div> <div style="text-align: center;"> <p>and</p>  <p>One Poster (2 feet tall x 3 feet long)</p> </div> </div> <p><u>What is the purpose</u></p> <p>Helps to raise awareness of drivers in the Pacific Northwest about the risks of roadway departure crashes and how their behavior can help reduce how often they happen.</p> <p><u>What if we win</u></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>1st place - \$750</p>  </div> <div style="text-align: center;">  <p>2nd place - \$500</p>  </div> <div style="text-align: center;">  <p>3rd place - \$250</p>  </div> </div> <p><u>Who can submit</u></p> <p>There will be high school student level and a college student level competitions. At the high school level, any individual or team of individuals currently enrolled in any high school in Oregon. At the college student level, any individual or team of individuals currently enrolled in any college or university on Oregon.</p> <p><u>When to submit</u></p> <p>HIGH SCHOOL SUBMISSIONS DUE: October 5, 2016 COLLEGE SUBMISSIONS DUE: October 21, 2016</p> <p><u>How to submit</u></p> <p>Upload to the PacTrans website: http://depts.washington.edu/pactrans/students/safety-competition/submission/</p> <div style="display: flex; justify-content: center; gap: 20px;">      </div>
Conferences	
Seminar Series	
Outreach	
News in Outreach	
Employment Opportunities	
Safety Competition	
Why is it Important	
Competition Guidelines	
Useful Resources	
Safety Competition Submission	
Contact Us	

Figure B.1 Safety Competition: home page

Education and Workforce Development

Conferences

Seminar Series

Outreach

News in Outreach

Employment Opportunities

Safety Competition

Why is it Important

Competition Guidelines

Useful Resources

Safety Competition Submission

Contact Us

Preventing Roadway Departure Crashes in the Pacific Northwest

A roadway departure crash is defined as a crash which occurs after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way. In 2014, there were about 18,000 fatalities as a result of roadway departure crashes, which was 54 percent of the traffic fatalities in the United States.



Figure B.2 Safety Competition: Why it is important

Education and Workforce Development	<h2>Competition Guidelines</h2> <p>The high school competition is open to all high school students (grades 9-12) in AK, WA, ID, and OR. The college competition is open to all college students (freshmen through senior) at UAF, UW, WSU, OSU, and UI.</p> <p>Entries must be the student's original work.</p> <p>Entries include one video 20 to 30 seconds in length, a series of five tweets or Instagram posts, and one poster 2 feet tall by 3 feet wide.</p> <p>Each entry must be submitted through this website at http://depts.washington.edu/pactrans/students/safety-competition/submission/.</p> <p>High school entries must be received by Oct 5, 2016. College entries must be received by Oct 21, 2016.</p> <p>Winning entries will be selected on the basis of:</p> <ul style="list-style-type: none"> • Creativity • Originality • Fulfillment of competition guidelines • Expression of the competition theme, "Make Safety Your Focus: Mitigation of Lane Departure Crashes." <p>Winners will be notified by the end of Nov, 2016 so be sure to provide your complete contact information in the competition entry form.</p>
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Figure B.3 Safety Competition: competition guidelines

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Useful Resources

General information

- http://safety.fhwa.dot.gov/roadway_dept/
- <http://www.fhwa.dot.gov/publications/publicroads/05jul/03.cfm>
- http://safety.fhwa.dot.gov/local_rural/training/fhwasa14092/road_dep.pdf
- <http://www.extremetech.com/extreme/225270-the-dumb-distracted-things-drivers-do-before-they-crash>

Examples of Seminal Research Studies

- <http://d2dtl5nnlpfr0r.cloudfront.net/tti.tamu.edu/documents/0-6031-1.pdf>
- <http://www.nap.edu/read/22848/chapter/7>
- <http://www.sciencedirect.com/science/article/pii/S0001457512002370>

Examples of Social Media Campaigns

- <https://www.facebook.com/MOBarrelBob/>
- <https://www.youtube.com/watch?v=HbjSWDwJLLs>
- <https://twitter.com/FMAT5/status/745765056332259329>
- <https://www.instagram.com/p/BlnS311B4dx/?taken-by=sarasotasheriff>

Meme:



Figure B.4 Safety Competition: useful resources

Safety Competition Submission Page

Thank you for participating in the PacTrans Safety Competition. Please use the templates, images and logos on this page as tools to start your submission. Please complete the following contest entry form and then upload your file directly. Good Luck!

Safety Competition Submission

Education and Outreach Public Service Announcement Competition on Lane Departure Crashes.

Name: *

<input type="text"/>	<input type="text"/>
First	Last

Email: *

List All Teammates (if any):

Home Address:

Street Address

Address Line 2

<input type="text"/>	<input type="text"/>
City	State / Province / Region

City

State / Province / Region

<input type="text"/>	<input type="text"/>
ZIP / Postal Code	Country

ZIP / Postal Code

Country

School Name: *

Video File Submission *

No file chosen

Accepted file types: avi, wmv, mp4, mov, qt.

Tweet or Instagram File Submission: *

No file chosen

Accepted file types: jpg, png, pdf, gif, doc, docx.

Poster File Submission: *

No file chosen

Accepted file types: pdf, jpg, png, gif, doc, docx, ppt, pptx.

Competition Level: *

CAPTCHA

<input type="checkbox"/> I'm not a robot	
--	---

Figure B.5 Safety Competition: submission form

Education and Workforce Development

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Contact Us

If you have any questions about the details of the competition, please email David Hurwitz at Oregon State University (david.hurwitz@oregonstate.edu), Nathan Belz at the University of Alaska Fairbanks (npbelz@alaska.edu), Linda Boyle at the University of Washington (linda@uw.edu), Leila Hajibabai at Washington State University (leila.hajibabai@wsu.edu), or Ahmed Abdel-Rahim at the University of Idaho (Ahmed@uidaho.edu). We will respond to all messages as quickly as possible.

If you have any technical question about uploading your submission, please email Cole Kopca (ckopca@uw.edu).

Figure B.6 Safety Competition: contact us page