Outer Division Street Needs a Vision Zero Redesign

• Vision Zero uses tools that are proven to prevent traffic deaths and serious injuries.
• Outer Division Street is Portland’s deadliest street, making it a priority for a Vision Zero redesign.
• Goal: eliminate deaths and serious injuries on Division, even when people break traffic laws or make mistakes.

People may still crash on outer Division Street, but they will not die as a result.

Learn more about the internationally adopted Vision Zero approach and Portland's plan at visionzeroportland.com.
Safety Action Plan for Outer SE Division Street
A Vision Zero Corridor Project

Outer Division Needs Help

• Division is one of the most dangerous corridors in the city for all modes, ranking #1 for total motor vehicle crashes, #2 for total bicycle crashes and #1 for pedestrian serious injuries and deaths.

• 18 people have been killed and 117 have been seriously injured on Division in the last decade.

• In 2016 alone, five people died in crashes (four walking and one person driving).

PBOT Must Act Now to Make Division Safer for Everyone

• Since 2011, PBOT has invested $2.9 million and is currently working to install an additional $7 million in safety fixes proven to prevent deaths and serious injuries between 82nd and city limits.

• Focus on urgency means that most of PBOT’s safety projects will be completed in 2017 and 2018.
Crashes on Division – Sample Area 122\textsuperscript{nd}-125\textsuperscript{th} (2010-2015)

On Division between 80\textsuperscript{th} and 174\textsuperscript{th}, nearly 1,000 people are involved in crashes every year (driving, walking, or biking). That's almost three people every day whose lives are changed as a result of this dangerous street.

If you lined up all the cars that have been crashed on Division (from 80\textsuperscript{th} to 174\textsuperscript{th}) in the past five years, they'd stretch from Portland City Hall to downtown Gresham.
Proven Safety Tools to Make Division Street Safer for all People

- **SPEED SAFETY CAMERAS**
  Safe speeds save lives

- **MORE STREET LIGHTS**
  Easier to see other people

- **COMPLETE SIDEWALKS**
  All gaps filled

- **SAFER CROSSWALKS**
  More flashing lights, stop lights, and median islands

- **RAISED CENTER MEDIAN**
  Safer turns for people driving

- **PROTECTED BIKE LINES**
  Physical separation where possible

- **SHORTER CROSSING DISTANCES AT CROSSWALKS**
  Crossing distances shortened by center median and protected bike lanes

- **MORE MARKED CROSSWALKS**
  Shorter distances between safe crossings

PBOT thanks the community for their leadership in identifying needed safety changes on outer Division Street. Special thanks to the Jade District, the Division Midway Alliance, the East Portland Land Use and Transportation Committee, and others who contributed to the East Portland Action Plan and East Portland In Motion, planning efforts that began in 2009.

Image is for illustrative purposes only; the location and design of specific street safety elements may change. PBOT is paying for these changes in part through Fixing Our Streets, the gas tax increase that Portland voters approved in 2016. Other sources include federal funding and state gas taxes.
Note: additional pedestrian crossings are also being constructed through other projects and may not be shown on the map above, including ones included in the Division Transit Project (TriMet) and East Portland Access to Transit (PBOT).
New and Enhanced Crossings for People Walking

New and enhanced crossings shown here will be constructed through multiple projects, including the Outer Division Safety Action Plan, East Portland Access to Transit, and TriMet’s Division Transit Project.
Safety Improvements for People Biking

Division’s bike lanes will have safety enhancements between 82nd and 174th

1. Access Management – Median islands will reduce turning movements across bike lanes (2018)

   Separating bike lane and providing buffer between travel land and bike lane

3. Physically separated bike lanes (installed as part of DTP starting 2019) in non-station areas

4. Protected bike lane – Mountable curb
   Exploring more options to accommodate freight

Note: PBOT is still working with freight and waste haulers to ensure that services can be accommodated as part of this project. In addition, PBOT is continuing to work with area businesses to determine on-street parking needs and methods to accommodate areas with high demand.
What is Center Median Access Management?

Medians are proposed from 82nd-92nd and 101st-142nd

Center medians are one type of access management that promotes safety by limiting potential conflict points for people driving, biking, and walking. Streets with access management experience significantly lower crash rates, injuries, and deaths.
How do Center Medians Improve Safety?

Medians make streets safer

47% reduction in total crashes

(38% reduction of deaths and serious injuries)

Figure 1. Deadly & serious injury crash rates, Portland OR

- Provides predictable turning movements and reduces conflict points
- Provide people walking with a safe refuge at crossings
- Enhance crosswalk visibility
- Support safe driving speeds

Before Access Management

22 conflict points before median

After Access Management

8 conflict points after median
Business Corridors and Center Medians

A sample of case studies from around the United States (photos from Tacoma)

University Place: Study of Bridgeport Way near Tacoma WA
- Sales revenue increased by 7% on the corridor after medians were built, compared to 5% citywide.
- 60% decline in average annual crashes in the first year after the redesign.

Iowa: Statewide Study on Access Management
- Corridors with completed access management projects performed better in terms of retail sales than the surrounding communities. Business failure rates along access managed corridors were at or below the statewide average for Iowa.
- 80% of businesses along corridors that received AM reported sales at least a high after the project was in place. Very few reported negative effects caused by AM.

North Carolina: Economic Impact Analysis
- No difference in self-reported revenue numbers before and after medians were built, between comparison (no median) and treatment (median) sites.
- Surveyed business owners and managers did not believe that roadway modifications improved safety. However, data from median sites showed that medians did improve safety.

Texas: Statewide Study on Left Turn Restrictions
- Business owners surveyed before and after access management reported that actual negative impacts were much smaller or nonexistent than were anticipated beforehand.
- 94% of business owners reported that their regular customers were at least as likely or more likely to continue patronizing their business after the median installation.

Florida: Before and After Data & Surveys on Medians
- 70% of merchants indicated no adverse effect on truck deliveries
- 60% of merchants perceived no change in business activity
- 80% of those using the corridor favored the street improvements

Reference Studies about Access Management
- Matt Riffkin, Charles Allen, Michael Baker, Christine Richman, Jonathan Dorsett, Raised median economic impact study, Utah DOT, February 2013
- William Frawley, William Eskele, Raised medians and economic impact on adjacent businesses, 2000
- Priyanka Alluri, Albert Gan, Kristine Haleem, Stephanie Miranda, Erik Schosbach, Andrew Diaz, Shanghong Ding, Before-and-after safety study of roadways where new medians have been added, 2012
- Christopher M. Cunningham, Mike Miller, Daniel Finley, Bastian Schneider, Donald Katz, Robert. S. Ingel, Economic effects of access management techniques in North Carolina, 2010
- Hongjun Chen, Aids Fabregas, Pei-Sung Lin, Landscaping of highway medians and roadway safety at unsignalized intersections, Accident Analysis & Prevention, Volume 90, May 2016, Pages 63-72
- Mark E. Hallenbeck, Peter M. Brighi Jr., Zachary N. Howard, Anna St. Martin, In-Service Evaluation of Major Urban Arterials with Landscaped Medians—Phase III, June 2013

Photo: City of University Place
FAQ: Center Medians

How do medians improve safety?
By reducing conflict points, center medians reduce crashes, injuries, and deaths.

What do I do if I need to turn left or get somewhere on the other side of Division?
The median will have openings for left turns and U-turns at a maximum spacing of every 1/4 to 1/3 mile. You’ll turn right from an intersection or private driveway, and then make a left turn or U-turn at a designated safe, signed location.

Won’t these medians cause even more traffic on Division?
Access management and median islands can help improve traffic flow by reducing crashes, which cause major delays. Upgrades are also being planned for Division’s traffic signals, which will coordinate green lights to improve traffic flow. The length of turn pockets will vary by anticipated future demand of each segment to ensure enough space for turning vehicles.

Do medians keep customers away from businesses?
Access management does not impact the demand for goods and services. Research shows that customers feel safer and that traffic flows better with access management.

Have medians hurt business in other places?
Most businesses see no loss in business and many report higher sales.

What do businesses think about medians after they’re constructed?
Surveyed business owners report that the actual impacts to their properties were much smaller than they anticipated.

Will businesses still be able to receive freight deliveries?
Yes, large trucks will still be able to access properties; routes may need to change, and PBOT will continue working with businesses on routing options.

What will happen if medians are not built?
Division will remain one of Portland’s deadliest streets. Businesses may be hurt by increased congestion and crashes.

I want PBOT to construct the medians (and other safety tools), what can I do to help?
Fill out a comment card and/or email divisionstreet@portlandoregon.gov saying that you support safety improvements on Division.

Data sources and more info:
portlandoregon.gov/transportation/article/651310
Lighting Improvements Along Division

Lighting Infill Plan – 82\textsuperscript{nd} to 92\textsuperscript{nd}

New pedestrian scale lighting will be added at 87\textsuperscript{th}, 107\textsuperscript{th}, and 127\textsuperscript{th}. PBOT is also evaluating lighting at all new crossings.

(Example pedestrian scale light)

Lighting Infill Plan – 122\textsuperscript{nd} to 130\textsuperscript{th}

(Overhead light)

- Overhead light (existing)
- Overhead light (new)
- Ped scale light (new)