

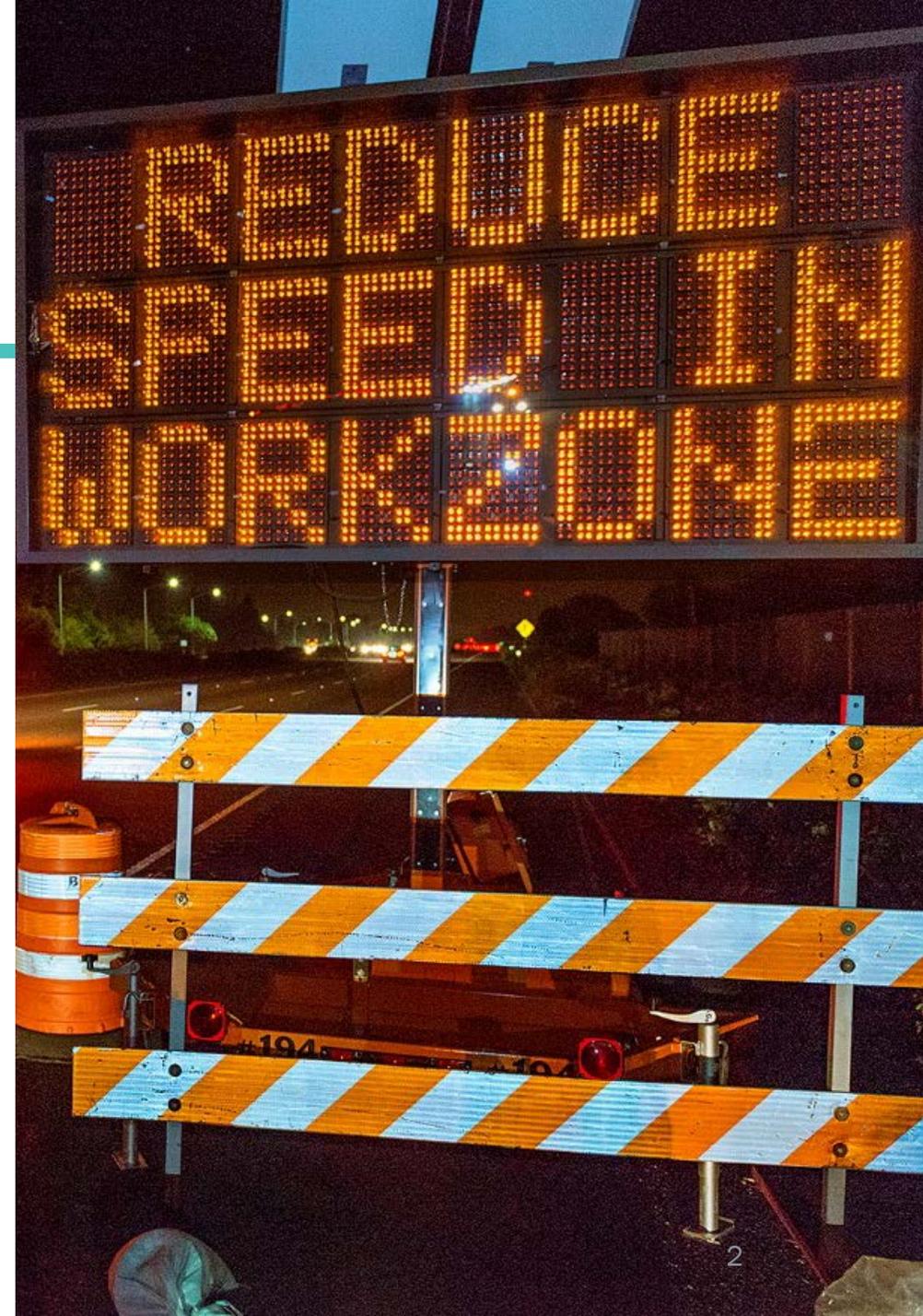
Identifying & Minimizing Temporary Mobility Impacts



ODOT Statewide Mobility Program

Agenda

1. Mobility: What is it & why it matters
2. Over-Dimension Permitting Basics
3. Identifying Temporary Restrictions
4. Planning & Coordinating to Minimize Impacts
5. Restriction Notification Requirements
6. Resources



1. Mobility:

What is it? Why does it matter to Oregon?



mo·bil·i·ty

/mō'bilədē/

noun

Refer to *Mobility Procedures Manual*:

- Chapter 1, Introduction

Mobility Procedures Manual:

Mobility can be defined as the ease with which



people

&

goods

**move throughout
their community,
state & the world.**

Mobility...

is a balance with **Work Zone Safety.**



Mobility...



protects our **infrastructure.**



Mobility...



is vital to Oregon's economy.





2. Over-Dimension Permitting Basics



Refer to *Mobility Procedures Manual*:

- Chapter 3, Freight Permitting Overview



Over-dimension permitting basics

- **Annual** — A continuous trip permit that allows for exceeding legal dimensions or weights. Valid for approved routes, dimensions, & weights.
- **Single Trip** — Primarily issued to exceed annual permit dimensions/weights or to authorize routes that are not covered by the annual permit. Also includes “Superload” permits.



Legal Size vs. Oversize in Oregon

Legal Size	Oversize (Requiring a permit)*	
	Annual (Continuous Trip) Permit	Single-Trip Permit (incl. superloads)
<p>Width: Up to 8.5 feet</p> <p>Height: Up to 14 feet</p> <p>Length: Up to those allowed on Group Map 1</p>	<p>Width:</p> <ul style="list-style-type: none"> • Daytime: Up to 12 or 14 feet (depending on the route) • Nighttime: Up to 10 or 12 feet (depending on the load & route) <p>Height: Up to 14½ feet</p>	<p>Width: 14 – 22 feet wide (and sometimes wider)</p> <p>STPs over 12 feet can travel at night on any route, case-by-case with DM approval</p> <p>Height: Up to 17 feet (and sometimes higher)</p> <p>Length: Up to 199 feet (and sometimes longer)</p>
	<p><i>*These are general dimensions for each permit. There are exceptions & route-specific requirements.</i></p>	

Over-Dimension Permits in Oregon

In 2019, the Commerce and Compliance Division's Over-Dimension Permit Unit issued:

- **61,022 Annual Permits**
(allows for unlimited trips)
- **67,358 Single-Trip Permits**
(includes superloads)



5. Identifying Temporary Restrictions

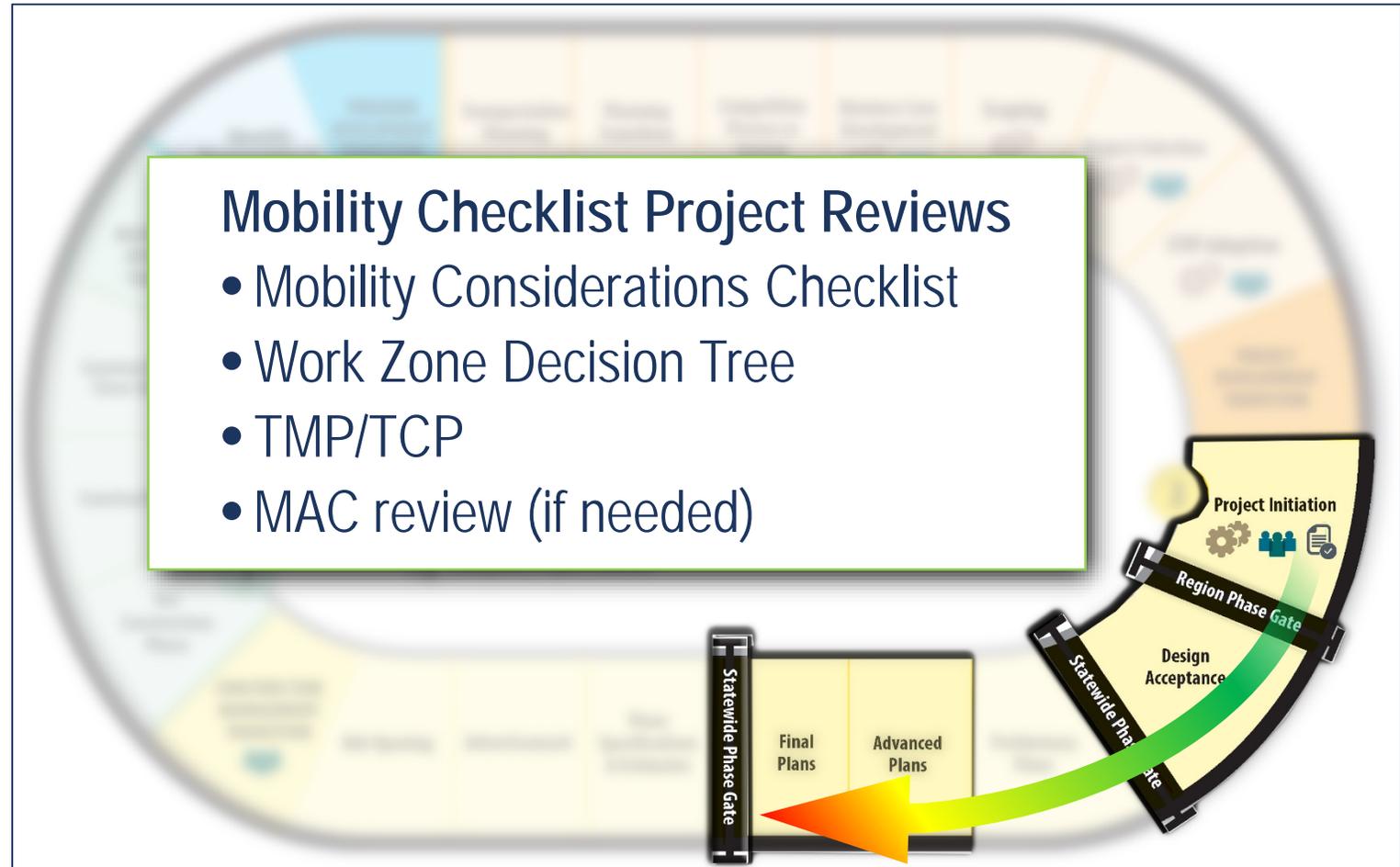


Refer to *Mobility Procedures Manual*:

- Chapter 4, Temporary Conditions

Identifying Impacts in Project Development

For Projects, the Mobility Considerations Checklist is used for documenting restriction impacts.



Any proposed temporary reduction in VC requires notification/coordination with the Mobility Team.

Temporary Vertical Clearance Restrictions



Examples include temporary bridge falsework, temporary traffic signals, & diverting traffic into lanes with less VC.

Width Restrictions & Industry Impact

Temporary Horizontal Restrictions

Overwidth loads up to 16 feet wide are commonly transported throughout the state.

Oregon issues annual permits for loads up to 14 feet wide for many two-lane highways throughout Oregon.



Temporary Horizontal Restrictions

Horizontal Clearance Standards

Standards for daytime hours*
to meet commitments to the freight industry
(*1/2 hour before sunrise until 1/2 hour after sunset)



Interstate/Multilane Highways:

- Maintain 28 for two lanes of one-way traffic.
- Maintain 19 feet for one lane of one-way traffic.*

Other Two-Lane Routes on NHS:

- Maintain 28 feet for two lanes of one-way traffic
(single lane each direction).
- Maintain 16 feet for one lane of one-way traffic.*

***NOTE:** These widths still require notification/
coordination with the Mobility Team



A “sunrise/sunset” exception can be requested for longer
hours (between April & August)

Temporary Horizontal Restrictions

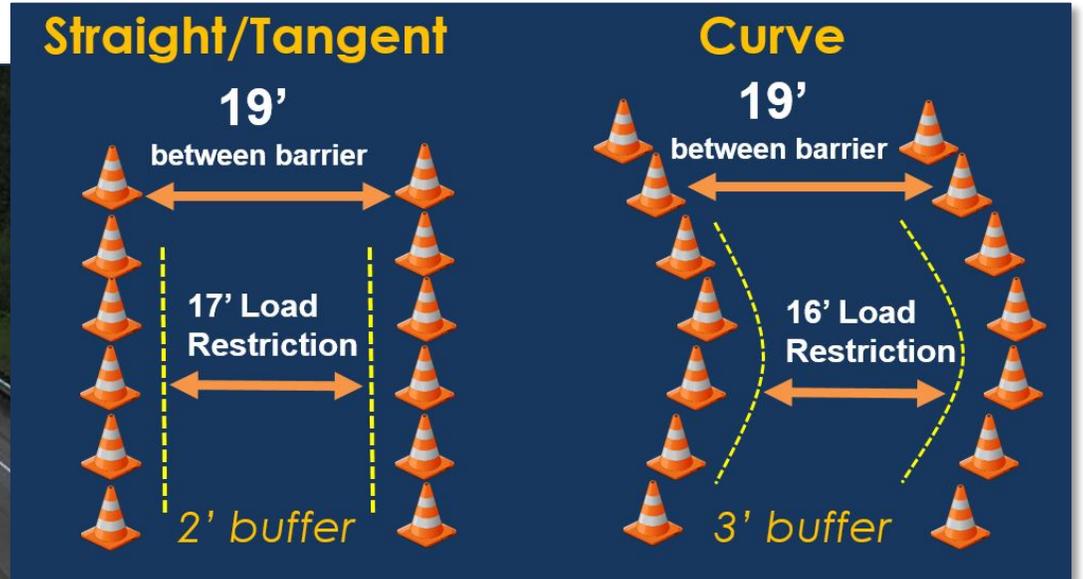
Horizontal clearance refers to the paved unobstructed width between barriers (soft or hard barrier, or equipment) including any usable shoulder.



Horizontal Clearance & Load Restrictions

The Mobility Team applies a buffer to the available horizontal width to determine the load restriction through the work zone:

Temporary Horizontal Restrictions



The buffer space depends on if the work zone is on a tangent and/or curve.

Temporary Weight Restrictions

Temporary Weight Restrictions

Example: Some bridges require heavy loads to straddle the center line. If bridge work requires a lane closure and heavy loads cannot straddle the center, a temporary weight restriction may be needed until the lane is reopened.



Temporary Closures

Full road closures and ramp closures require notification and coordination with the Mobility Team.



Closures impact the full spectrum of vehicles that use the route.

Temporary Lane Closures Under Structures

Temporary Lane shifts/Closures Underneath Structures

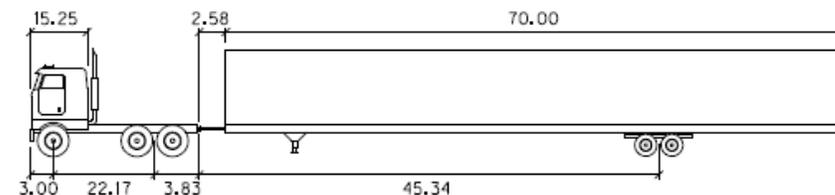
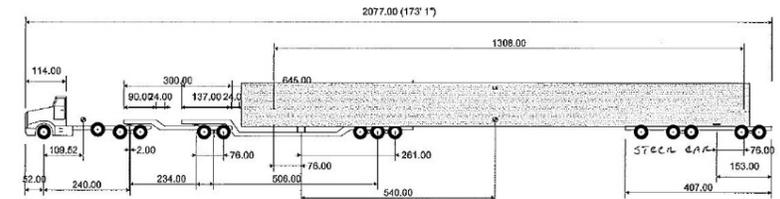
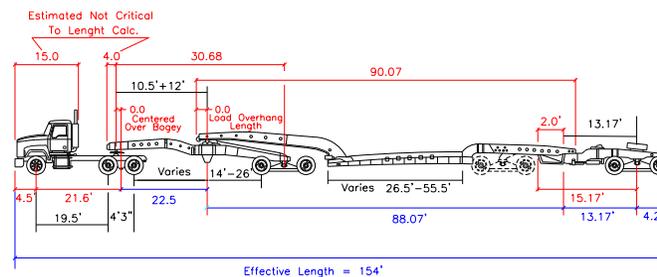
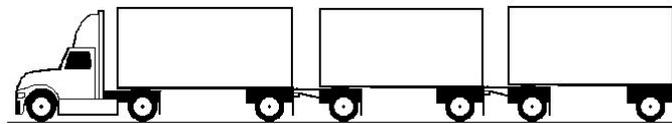


High loads may have specific lane usage required in their permits as bridges often have varying vertical clearances above different lanes or shoulders.

Temporary Length Restrictions

Curves In Excess of 5-Degrees Can Result in a Length Restriction

- Engage the Mobility Team EARLY if you believe your project will require a length restriction.
- There are many different vehicle configurations to consider, when planning for a temporary length restriction..

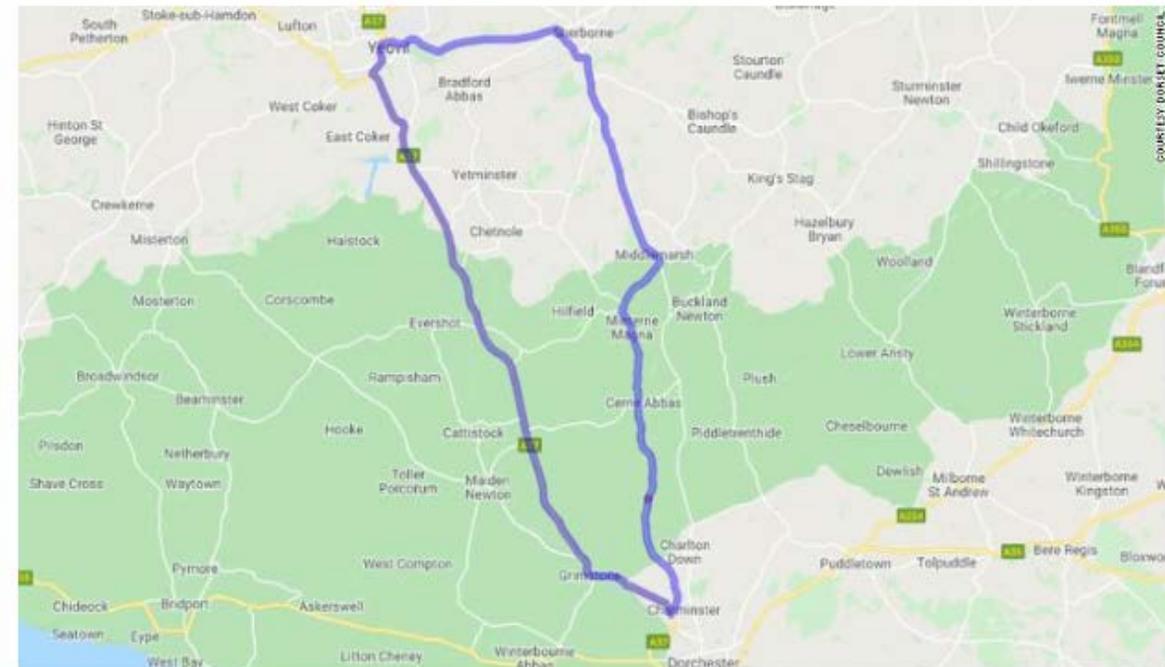


3. Planning & Coordinating to Minimize Impacts

Motorists sent on 41-mile detour to avoid 165 feet of roadworks

By Rory Sullivan, CNN

Updated 12:16 PM ET, Thu October 24, 2019



A map showing the 41-mile detour caused by roadworks on a 50 meter stretch of road in Dorset, England.

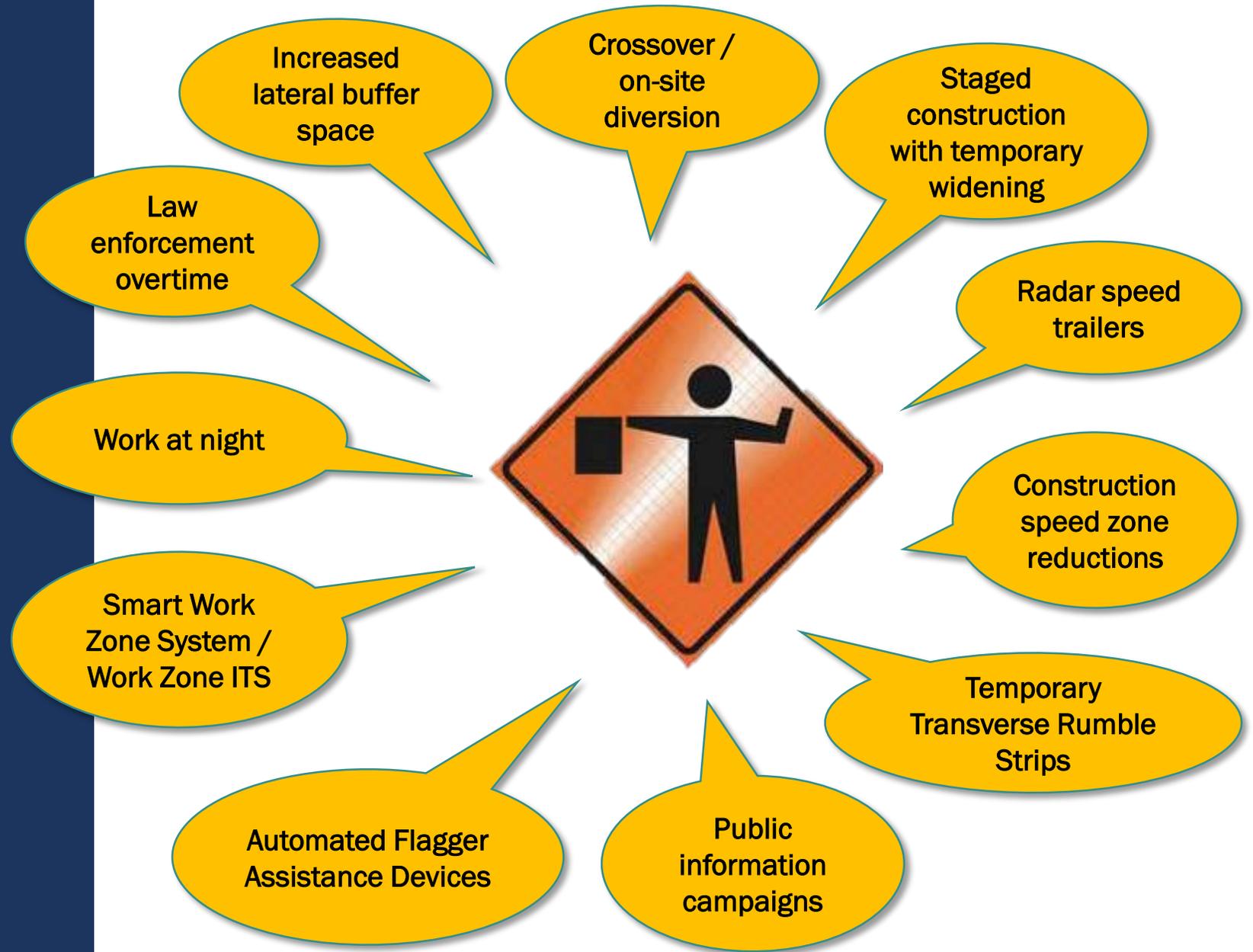
Refer to *Mobility Procedures Manual*:

- Chapter 4, Temporary Conditions

Mobility Factors to Consider



Work Zone Safety Factors to Consider



Critical Route Pairs

Avoid concurrent restrictions on critical route pairs:

If a route identified on the list of critical route pairs needs to be temporarily restricted, ODOT will take steps to make sure the paired critical route on the list is not restricted.

Highway	Paired With	Area
I-5	OR 212, US 26, US 97	Washington – California
I-84	OR 78, OR 212, US 26, US 95, US 97, US 20	Portland – Ontario
US 30	US 26	Portland – Coast
22 & OR 18	US 20	Willamette Valley – Coast
126	OR 38	Willamette Valley – Coast
38	OR 42	I-5 – Coast





Evaluating Staging Options

Consider all traffic that uses the route, including freight, over-dimension units, emergency services & hazardous material loads.

Staging Options



When practical, options with the least impact to mobility while maintaining worker safety should be used.

Delay Impacts

Managing Delay

- Work zone delay is defined as the additional average travel time experienced per vehicle per hour.
- Construction projects are evaluated for delay impacts to mobility and staging.
- A delay estimate must be prepared for projects on routes with delay thresholds.



Delay Impacts

Corridor Delay Thresholds

- Corridor delay thresholds are established for:
 - US 26/97/20
 - I-5 North/OR 58
 - I-5 South
 - I-84
 - Coastal Network



- Coordinate construction in corridors to ensure delay thresholds and statewide mobility goals are met.
- An exception may be developed if higher delays are unavoidable.

Detour Impacts



Detour planning: Take into account & provide for all traffic that is allowed to use the route, including freight and over-dimension units.

Detour Impacts

Detours need to be checked for:

- ✓ Size & weight restrictions.
- ✓ Overhead obstructions
- ✓ Safe turning movements & off tracking.
- ✓ Emergency services response times.
- ✓ Can vehicles transporting hazardous materials use the route?
- ✓ Are there other projects along the proposed detour that will restrict traffic?
- ✓ Are other projects using the existing route as a detour?



Other Mitigation Tools

Alternative Tools & Methods to Minimize Impacts

- ✓ Innovative Contracting Tools
- ✓ Alternative Design Materials
- ✓ Construction Methods



6. Restriction Notification Requirements

Refer to *Mobility Procedures Manual*:

- Chapter 5, Notification Requirements



How Much Notification is Required?

HIGHWAY RESTRICTION NOTICE - SIZE AND/OR WEIGHT

Instructions:

Non-ODOT Staff (contractors, etc.): Complete the fields below and submit at least 35 days prior to when the restriction begins per contract specifications 00220.03(a) Work Zone Notifications.

ODOT Staff: Complete the fields below and submit at least 14-28 days prior to when the restriction begins. Refer to the How Much Notice is Required section on the [Statewide Traffic Mobility](#) website for more information.

After submitting the form an email confirmation will be sent to you with a copy of the form attached for your records. When the project is complete and the restriction is no longer needed, update this form and select Lift or Cancel to clear this restriction. If you have questions, or the restriction needs to be extended or updated, contact the [MCTD Mobility Team](#).

Step 1: Complete the request form Step 2: Review Step 3: Confirmation Help: [User Guide](#)

Status: New Restriction

[\(Free Adobe reader for print\)](#)

* = required Fields

Section 1 - (Location/Project/Event Name) Help: [Video](#) / [User Guide](#)

Route Number: * **Restriction Notice Number:** NEW

Beginning Mile Point: * **Ending Mile Point:** *

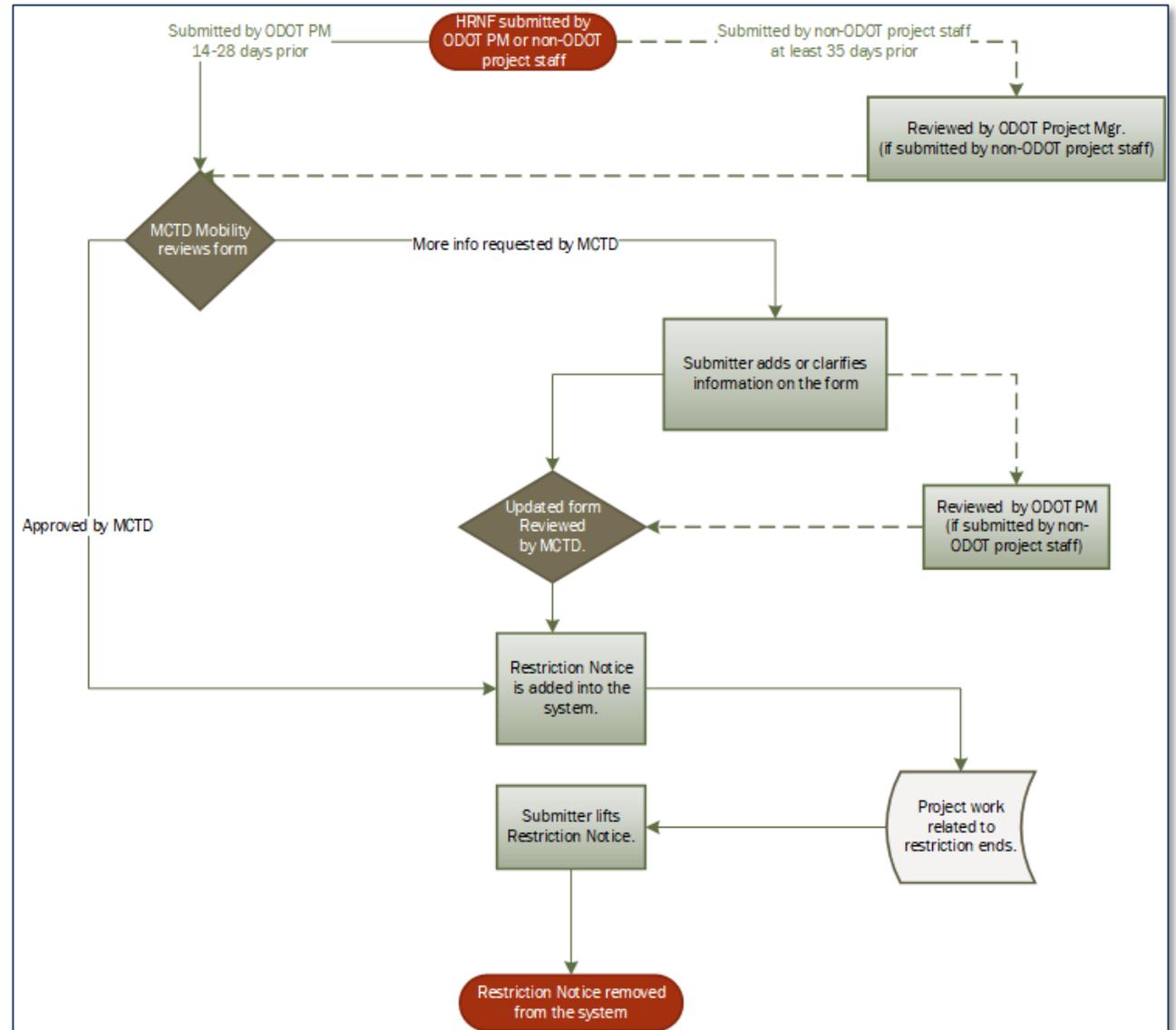
Direction: Northbound Southbound Eastbound Westbound *

- Non ODOT staff (e.g. contractors, special event coordinators): At least **35 days**.
- ODOT staff (who review restrictions submitted by contractors, or submit them directly): At least **14 or 28 days**.



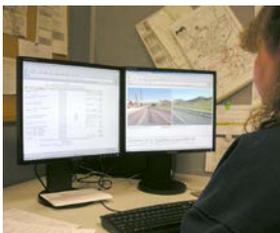
How Restriction Notice Forms are Processed

Every Restriction Notice Goes Through a Review Process



How Restriction Information is Published

1 
**OREGON TRUCKING
ONLINE**
Road Restrictions List

2 
Over-Dimension
Permit Analysts

3 Incident Maps
Road Cameras
Road Conditions 
T TripCheck
Commercial Vehicle
Information Advisories

4 
Letters to
Annual
Permit
holders

5 
GovDelivery advisories

6 
Commerce and
Compliance
Division Web site

When Notification Is Required (Construction Projects)

Construction Projects - Notification is required for any of these temporary conditions:

- Any time width is reduced to less than
 - 28 feet for two lanes of one-way traffic,
 - 28 feet for two lanes of 2-way traffic (single lane each way)
 - 22 feet for one lane of one-way traffic.
- Any time a state facility is fully closed or traffic is detoured for any period of time (regardless of whether or not a detour is available).
- Any time a ramp is closed for any period of time (regardless of whether or not a detour is available).
- Any time vertical clearance is reduced.
- Any time weight or length restrictions are imposed.

Notification Exceptions (Construction Projects)

Construction Project Work - Notification Exceptions

Notification is not required if all of the following can be met for accommodating all unannounced loads:

1. Able to wave through unannounced wide loads & provide at least 22-feet of clear distance by moving cones/equipment out of the way with a slight delay.
2. No vertical clearance restrictions, including no lane shifts/lane closures beneath structures.
3. No ramp closures.
4. No weight restrictions.
5. No length restrictions.

**Check with the Mobility Team for accommodating on mainline interstate hwy's.*

Changes during Construction

Notify the Mobility Team ***before*** making changes that affect restrictions or stakeholder agreements.

This is required by the Mobility Procedures Manual, Operational Notice PD-16, Work Zone Guiding Principle, and the Mobility Considerations Checklist:



Before making changes during construction that have the potential to adversely affect mobility (i.e. additional restrictions) or run counter to previous mobility agreements made during preliminary design, you must discuss proposed restriction revisions with the Contractor, Region Mobility Liaison, and any relevant region resources to determine if the change is warranted and supported by the Region. *If supported by Region, Resident Engineers must:*

- Engage the ODOT Statewide Mobility Team to discuss and obtain concurrence with the potential changes **before** any agreements are made with the contractor.
- Document the Mobility Program and Mobility Advisory Committee support of any potential new restrictions and **provide a copy of the documentation to the Region Mobility Liaison.**

Maintenance Activity Requirements

Maintenance Activity Notification Requirements

*Refer to the “Maintenance Mobility Requirements” document at:
<https://www.oregon.gov/ODOT/MCT/Documents/MaintenanceMobilityRequirements.pdf>*

Notification is not required if all of the following can be met:

1. For interstates & multilane divided hwys: If minimum available horizontal clear distance, after moving equipment/barriers, is 22 feet.
2. For two lane highways or other highways: If minimum available horizontal clear distance, after moving equipment/barriers, is 19 feet.
3. Able to accommodate all unannounced loads by moving barrier & equipment to provide the clear distance with a slight delay.
4. No lane shifts or lane closures beneath structures.
5. No ramp closures.
6. No weight restrictions.

Emergency Declarations

Notification requirements are waived during emergency events declared by the governor, the state maintenance & operations manager, or a district manager.



District managers or their representatives must notify the Mobility Team of restrictions and/or closures caused by the emergency.

Updating Restrictions

Update Restrictions if there are Changes

- Notify the Mobility Team if a change is needed, (e.g. extending the anticipated work completion date.)
- Any new restrictions should be submitted separately, and not added to an existing notice that has already been approved.

US30 EB off-ramp to I-405 SB (Portland) -- UPDATE --

Effective **October 25, 2019**, the US30 eastbound off-ramp to I-405 southbound will be closed Fridays at 8 PM through Mondays at 5 AM. The estimated completion date for this project is **November 4, 2019**.

Lifting Restrictions

If not lifted, a restriction will remain published.

When the work related to the restriction is over, don't forget to  lift the restriction.

ROAD RESTRICTIONS	
Interstate Routes	
I-5 SB MP 29 to MP 28 (Medford)	Effective October 27, 2019, this section of I-5 southbound will be restricted to 10 feet 00 inches in width Sunday through Thursday nights between the hours of 8 PM & 6 AM. Loads over 10 feet 00 inches in width may be accommodated on a case-by-case basis. Contact the Over Dimension Permit Unit for information. Estimated date of completion date is November 8, 2019.
I-5 NB MP 213.63 to MP 214.63 (Halsey)	Effective November 17, 2019, this section of I-5 northbound will be intermittently restricted to 12 feet 00 inches in width Sunday through Thursday nights between the hours of 9 PM & 5 AM. Loads wider than 12 feet 00 inches in width may be accommodated on a case-by-case basis. Contact the Over-Dimension Permit Unit for information. The estimated completion date for this project is November 22, 2019.
I-5 NB MP 214.53 to MP 214.56 (Halsey)	Effective November 17, 2019, this section of I-5 northbound will be intermittently restricted to 17 feet 1 inch in height Sunday through Thursday nights between the hours of 9 PM & 5 AM. Loads higher than 12 feet 00 inches in height may be accommodated on a case-by-case basis. Contact the Over-Dimension Permit Unit for information. The estimated completion date for this project is November 22, 2019.
I-5 NB MP 221.50 to MP 222.00 (Tangent) -- UPDATE --	Effective October 14, 2019, this section of I-5 northbound will be restricted to 17 feet 00 inches in width Monday through Thursday nights between the hours of 9 PM & 5:30 AM. Loads wider than 17 feet 00 inches in width may be accommodated on a case-by-case basis. Contact the Over-Dimension Permit Unit for information. The estimated completion date for this project is November 1, 2019.

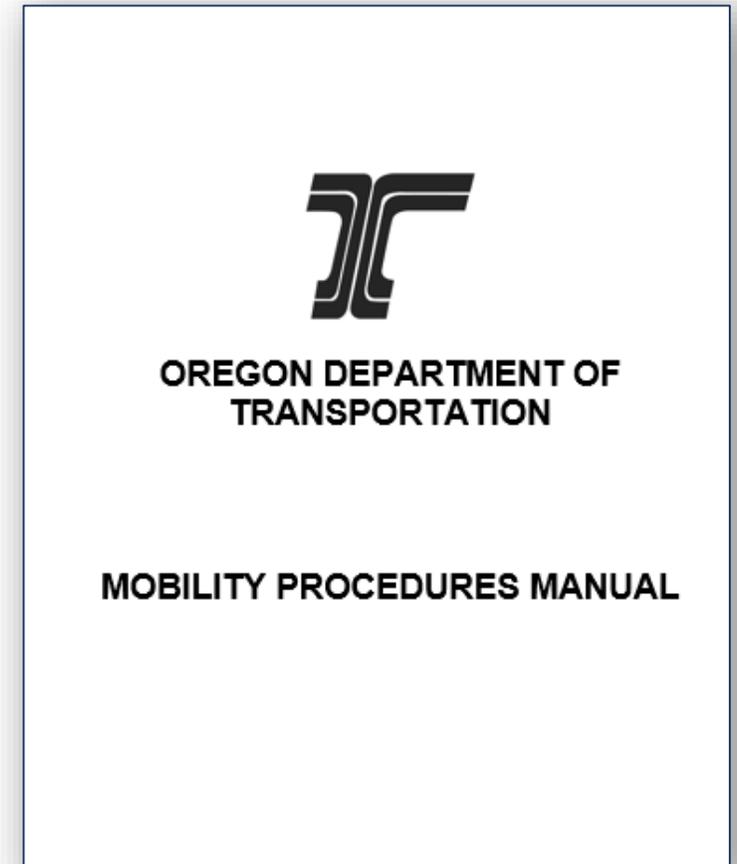
7. Resources



Resources

Mobility Procedures Manual

The MPM is the accepted authority for mobility policy for the Agency



The MPM is available at:

<https://www.oregon.gov/ODOT/MCT/Documents/MobilityProcedureManual.pdf>



Internal SharePoint Site

Resources



ODOT Statewide Mobility Program

The Mobility Program ensures that traffic delays and freight restrictions are minimized while work zone safety is emphasized at all levels of planning and implementation.

Announcements | **Mobility Meetings** | **Mobility Contact Info** | **Guidance & Forms** | **Training** | **Reports**

Includes links to manuals, guidance, training and contact information.

Also includes a form for uploading presentation materials for upcoming Mobility Meetings.

SharePoint link:

<http://transact.odot.state.or.us/mc/Mobility/SitePages/Home.aspx>



Mobility Website

Resources

Statewide Mobility Program

The Oregon Department of Transportation's most essential function is to provide safe mobility for people and goods. Mobility can be defined as the ease with which people and goods move throughout their community, state and the world.

- Oregon Trucking Online
- Weight Receipt Elimination
- Fee Changes 2020
- Over-Dimension Operations
- Statewide Mobility Program**
- Registration Services
- Enforcement and Scale Operations

- Why Mobility is Important to All Oregonians +
- About Mobility Partnerships +
- ODOT Mobility Procedures Manual +
- Reduction of Vehicle Carrying Capacity — ORS 366.215 +

Contact Us

Oregon Department of Transportation
Commerce and Compliance Division
3930 Fairview Industrial Drive SE
Salem OR 97302-1166

- Mobility Team Contacts +
- ODOT Region Mobility Liaisons +

A Statewide Traffic Mobility web page on Oregon.gov also includes manuals, forms, contact information. This site also includes agendas and minutes for Mobility Advisory Committee Meetings.

Website link:

<https://www.oregon.gov/ODOT/MCT/Pages/StatewideTrafficMobility.aspx>





Mobility Considerations Checklist

Resources

MOBILITY CONSIDERATIONS CHECKLIST		
SECTION 1		
PROJECT NAME	KEY NUMBER	PS&E DATE
HIGHWAY NAME AND NUMBER		
ROUTE NUMBER		
MILE POST RANGE		
DESCRIBE "TYPE" OF PROJECT (E.G. ADA, CULVERT, BRIDGE DECK REPAIR, PRESERVATION, ETC.)		

The Mobility Considerations Checklist is initiated by a transportation project manager and completed by project teams.

The form is used to identify potential impacts to freight and traffic mobility in the development phase of a project, and should be reviewed during pre-construction.

Checklist Form Link:

<https://www.oregon.gov/ODOT/Forms/Motcarr/9983fill.pdf>



Highway Restriction Notice Form

Resources

Section 1 - (Location/Project/Event Name) Help: [Video](#) / [User Guide](#)

Route Number: * **Restriction Notice Number:** NEW

Beginning Mile Point: * **Ending Mile Point:** *

Direction: Northbound Southbound Eastbound Westbound *

Highway Local Name:

City/Town Nearby: *

Project Name: **Project Key:**

An online web form (#734-2357) is used for submitting temporary Highway Restriction Notices to the Mobility Team. The form also includes a User Guide and Tutorial Videos.

Restriction Notice Form link:

<https://www.oregontruckingonline.com/cf/MCAD/pubMetaEntry/restriction/>

Resources

Useful Links:

- Mobility Considerations Checklist (Form 9983)
<https://www.oregon.gov/ODOT/Forms/Motcarr/9983fill.pdf>
- Work Zone Decision Tree (Form 734-5042)
<https://www.oregon.gov/ODOT/Forms/20DOT/7345042.pdf>
- Mobility Meeting Guidelines:
<https://www.oregon.gov/ODOT/MCT/Documents/MobilityMeetingGuidelines.pdf>
- Mobility Meeting PowerPoint Presentation Template
https://www.oregon.gov/ODOT/MCT/Documents/MAC_PowerPoint_Template.PPTX
- Work Zone Traffic Analysis Mapping Tool:
https://www.oregon.gov/ODOT/Engineering/Docs_TrafficEng/WZTA-Tool.zip

THANK YOU!

Bill Gross

Mobility Training Coordinator

503-934-1624

william.p.gross@odot.state.or.us

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Please provide us your feedback about this training:
<https://www.surveymonkey.com/r/MobilityTrainingFeedback>