

Guide for completing the Project Mobility Considerations Checklist (Form# 735-9983)

May 2023

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BACKGROUND & PURPOSE

Why the Checklist is important

Potential impacts to freight and traffic must be considered when a project is early in the development phase. The <u>Mobility Considerations Checklist</u> (ODOT Form# 735-9983) is a fundamental part of this process for reviewing mobility impacts and, if necessary, providing for stakeholder input through the <u>Mobility Advisory Committee</u> (MAC).

The Checklist is used during both project development and project construction (e.g., with a change order request). Completion of the Checklist requires potential temporary construction impacts be assessed for:

- Critical Route Pairs;
- Delay;
- Road closures;
- Lane or ramp closures;
- Vertical clearance;
- Length restrictions;
- Width restrictions;
- Weight restrictions;
- Local/special events;
- Holiday travel days; and
- Detours/on-site diversions.

Completion of the Checklist is required for all state and federally funded projects on state highways, at the project development stage through construction, per the <u>Mobility Procedures Manual</u> and <u>Project Delivery Operational Notice PD-16</u>.

Who completes the Checklist and when

Per Note 1 at the top of the Checklist, Transportation Project Managers, Resident Engineers, Resident Engineers - Consultant Projects and Project Delivery Teams are responsible for completing this checklist initiated and signed by a Transportation Project Manager during the project development phase.¹

If a project has mobility impacts, the project team must provide the Checklist to the Mobility Services Team for review and, if necessary, provide for <u>MAC</u> input. The Project Review Criteria in <u>Appendix C</u> of the <u>Mobility Advisory Committee Charter</u> are used by the Mobility Services Team to determine which projects are shared with the committee, and how they are shared (e.g.

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¹ The Mobility Procedures Manual references the working titles 'Project Manager' and 'Project Leader' which have since been replaced the titles 'Resident Engineer' and 'Transportation Project Manager' respectively.

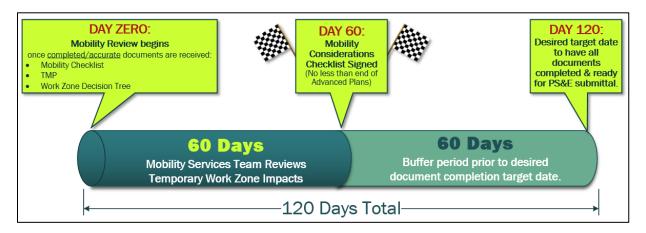
via formal presentation or via email). The Mobility Services Team facilitates conversations through email or meetings.

When submitting a Checklist to the Mobility Services Team for review, it must be accompanied by a Transportation Management Plan (TMP), Traffic Control Plan (included in the TMP) and Work Zone Decision Tree form (WZDT). The Mobility Services Team cannot review a Checklist without these required documents.

The Region Project Lead or designee should plan to submit complete and accurate documents at least 120 days before their Region target date for receiving a signed Checklist (and before the end of the Advanced Plans milestone). The 120-day period is derived from the following:

- At least 60 days are needed for the Mobility Services Team to conduct its review, share (if necessary) with the Mobility Advisory Committee and return a signed Checklist back to the Project Team.
- An additional 60 days are provided as a contingency buffer for the Region in the event there are design changes after the Checklist is signed or if the Region requires a final review by management prior to PS&E submittal.

Figure 1: Timeline showing the 120 day review process for Mobility Considerations Checklists.



Impacts Shared with the Mobility Advisory Committee

Depending on the severity of the temporary impacts in your Checklist, the Mobility Services Team will recommend one of the following actions based on the Project Review Criteria in <u>Appendix C</u> of the <u>MAC Charter</u>:

- Low Impact: These projects can be reviewed by the Mobility Services Team without sharing with the MAC and signed off directly by the Mobility Program Manager.
- **Moderate Impact:** These projects can be shared with the MAC via email and then signed off by the Mobility Program Manager once the committee provides its support.

• **High Impact:** These projects are required to be shared at a MAC meeting. If (after reviewing your Checklist) the Mobility Services Team recommends sharing your impacts at a MAC meeting, your project team will need to prepare a presentation using the <u>Temporary Impacts PowerPoint Presentation Template</u> and submit an <u>agenda request form</u> on the internal <u>Mobility SharePoint site</u> to schedule your presentation for an upcoming MAC meeting. Agenda presentation materials are due 3 weeks prior to the meeting date. (Templates and other resources for preparing for a MAC meeting are available <u>on this page</u> of the Mobility SharePoint site.).

Final Signed Checklist Included in PS&E Submittal Package

The Project Team includes the final, signed Checklist, TMP and WZDT in the PS&E Package that is submitted to the Office of Project Letting. The team also provides the signed Checklist to the Resident Engineer when transitioning the project to the construction phase. The finalized documents are eventually submitted to eBids for prospective bidders to understand the safety and mobility expectations for the project that were discussed during Project Development.

If there are any additional project changes made prior to PS&E that impact mobility (including Special Provisions to Standard Specifications), the project team must re-engage with the Mobility Services Team provide for stakeholder input (if necessary) on the changes and update the Checklist as appropriate.

Off-system projects that create a mobility impact on the state system must also comply with PD-16 and the Checklist. Transportation Project Managers with projects (both on-system and off-system) that have no mobility impacts should check the "No Mobility Impacts" box and sign the checklist (Mobility Program Manager signature is not required for a "no mobility impact" project) before submitting it with the PS&E package. (Refer to Section 1: Impact on Mobility for a definition of "no mobility impact.")

Using the Checklist during Construction

Prior to construction, the Resident Engineer and construction staff should familiarize themselves with the Checklist, TMP and WZDT.

During Construction, any Highway Restriction Notices submitted (or updated) for a project should be consistent with the restriction plans and stakeholder commitments documented in the project's Mobility Considerations Checklist and TMP.

Per the Mobility Procedures Manual, the Resident Engineer is responsible for reviewing and approving the adequacy of information contained in the <u>Highway Restriction Notice Form</u> #734-2357 as prepared by the contractor (at least 35 days prior to work beginning) and then forwarding the approved form to the <u>Restriction Notice Team</u> in the Commerce and Compliance Division's Over-Dimension Permits Unit. A <u>Highway Restriction Notice Review Checklist</u> is also available for Resident Engineers for additional guidance.

Before agreeing to proposed changes from the Contractor that have the potential to adversely affect mobility or run counter to previous mobility agreements made during project development, the Resident Engineer must discuss the proposed changes 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:

- 1. Engage the Mobility Services Team to discuss and obtain concurrence with the potential changes before any agreements are made with the contractor
- 2. Document Mobility Program and Mobility Advisory Committee support of any potential new restrictions or other changes that impact mobility, and provide a copy of the documentation to the Region Mobility Liaison.²

These steps for communicating proposed changes must be followed before submitting restriction notices. The Highway Restriction Notice Form is <u>not</u> intended to be used to communicate proposed changes to the Mobility Services Team.

If the CCD Restriction Notice Team determines the Highway Restriction Notice Form to be incomplete or inconsistent with the Mobility Considerations Checklist and other supporting documentation, the restriction notice form will be returned to the Resident Engineer to rework with the Contractor.

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² Contact information for the Region Mobility Liaisons can be found on the Mobility Program Website.

SECTION 1: PROJECT INFORMATION

Project Information Fields

Complete all of the project information fields at the top of Section 1.

Figure 2: Project information fields

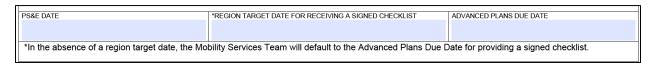
SECTION 1	
PROJECT NAME	KEY NUMBER
HIGHWAY NAME AND NUMBER	
ROUTE NUMBER	
MILE POST RANGE	
DESCRIBE "TYPE" OF PROJECT (E.G. ADA, CULVERT, BRIDGE DECK REPAIR, PRESERVATION, ETC.)	

For the **HIGHWAY NAME AND NUMBER** and **ROUTE** #, a <u>cross-reference table</u> of highway names, numbers, and route numbers is available.

Key Project Review Dates

The dates entered in this section are used to ensure the Mobility Services Team will meet its deadlines for providing a signed Checklist, and for tracking performance measures established for the program. As indicated in the instructions in this section, project teams should submit a complete and accurate Checklist (accompanied by a TMP and Work Zone Decision Tree) at least 120 days prior to the Region's target date for receiving a signed Checklist.

Figure 3: Key Project Review Dates on the Mobility Considerations Checklist



Provide a date in each of the three boxes as follows.

- **PS&E Date:** This refers to the date when the project documents (including the Checklist) are provided to the Office of Project Letting for processing of PS&E submittals (*Plans, Specifications, and Estimates*) in preparation for contracting by the ODOT Procurement Office. The other two dates provided in this section should be <u>earlier</u> than the PS&E date.
- Region Target Date for Receiving a Signed Checklist: This date should be 120-days
 after the date you submit your complete and accurate Checklist to the Mobility Team. If

no Region Target Date is provided, the Mobility Services Team will default to the Advanced Plans Due Date for providing a signed Checklist.

• Advanced Plans Due Date: A final (signed) Checklist is due no later than Advanced Plans phase. This date should not be earlier than the Region Target date and not later than the PS&E date.

Impact on Mobility

Indicate if there are mobility impacts, based on your responses to the questions on the form.

Keep in mind - impacts to mobility apply to both on-system projects, and off-system projects that could impact the state system. (An example of an "off-system" project would be a city/county road project that involves a ramp connecting to a state highway.)

"No Mobility Impacts" means all of the following:

- No permanent reductions in vehicle carrying capacity are planned on a reduction review route subject to review under Oregon Revised Statute 366.215.
- No vertical clearance reductions.
- No width restrictions, meaning the following minimum horizontal clearance will be maintained at all times³ (or all unannounced oversize loads can be safely accommodated by moving traffic control devices and equipment out of the way with minimal delay to provide the required horizontal clearance):
 - o 28-feet between barrier for two lanes (including any paved shoulder); or,
 - o 22-feet for a single lane.
- No full road closures or ramp closures.
- No lane shifts or lane closures underneath structures will divert traffic into a travel lane with less vertical clearance.
- No weight restrictions.
- No length restrictions.
- No detours or on-site diversions.

If your project has no mobility impacts, no signature is needed from the Mobility Program Manager. Contact the <u>Mobility Services Team</u> if you have any questions determining mobility impacts for your project.

Figure 4: Check boxes used to indicate if there are impacts to mobility.

Impact on Mobility			
No Mobility Impacts See mobility considerations below to determine. MCTD signature is <u>not</u> required for a project that has no mobility impacts.	Mobility Impacts Describe all mobility impacts on worksheet below.		

³ There are some routes where the existing roadway is narrower than the minimum horizontal width needed for there to be no restriction notification required. In situations like this, contact the Mobility Services Team so we can have a conversation about your project and confirm any impacts to mobility.

SECTION 2: PROJECT INFORMATION, DURATION & HOURS

Section 2, Questions 1 - 4

For questions one and two, provide the anticipated start/end date for the project, as well as the construction season and years. The start/end date should span the entire project and not just the duration of a single stage or anticipated highway restriction. This information is used to help determine if there are potential conflicts with other projects.

For question three, list all of the planned stages, and include the resulting restrictions, mile point range and expected duration. Staging options that provide for continuous free-flow conditions with minimal delays and no restrictions should be used whenever possible.

In question four, consider if windows of unrestricted freight movement can be provided between stages. Are there times when work will not be taking place that traffic control devices can be removed to allow unrestricted movement? Will there be times when a certain type of work is being done that doesn't require restrictions? Has the project team considered contracting methods to limit closures and restrictions so they can only take place during specific windows?

Unrestricted means:

- There are no restrictions on width, height, weight, or length;
- There are no ramp closures or full road closures
- There are no lane shifts or lane closures underneath structures will divert traffic into a travel lane with less vertical clearance.
- There are no detours or diversions.

Section 2, Question 5

Provide the closure days, hours and months for allowable full road closures, lane or ramp closures that will be specified in <u>Oregon Standard Specifications for Construction</u> - Number 00220.40(e). When closures are allowed, Section 00220.40(e) defines the time frames when traffic lanes can be closed, and when they must be kept open (such as for holidays and special events).

Section 2, Question 6

Indicate if the project is on a route that is being used as a detour for another project, and if so, is coordination taking place to address conflicts?

Your Region Mobility Liaison can determine if your project is on a designated detour route for another project and can help with coordination. Per the Mobility Procedures Manual, the Region Mobility Liaison is responsible for collecting data on existing or proposed detour routes,

and identifying and developing resolution strategies for schedule and delay threshold conflicts that affect corridor mobility.

Section 2, Question 7

This question is intended to make sure that projects with permanent impacts that are subject to Oregon Revised Statute 366.215 have already gone through a Stakeholder Forum Review Process as required in Administrative Rule. The law states the Oregon Transportation Commission (OTC) may not permanently reduce the vehicle-carrying capacity of identified freight routes when altering, relocating, changing or realigning a state highway unless safety or access considerations require the reduction. Local governments can be granted an exemption by the OTC if it is in the best interest of the state and freight movement is not unreasonably impeded.

Reduction in vehicle-carrying capacity (RVC) is defined in <u>Oregon Administrative Rule (OAR)</u> 731-012-0010. RVC is "a permanent reduction in the horizontal or vertical clearance of a highway section, by a permanent physical obstruction to motor vehicles located on useable right-of-way subject to commission jurisdiction."

Examples of features that may reduce vehicle-carrying capacity of a highway include:

- Raised pedestrian islands.
- Bulb-outs.
- New sign or signal structures over the roadway.
- Raised medians/curbs and traffic separators.

Maps are available showing Reduction Review Routes subject to review under the statute:

- <u>ODOT TransGIS site</u> (select the Reduction Review Route layer in the Freight category)
- Statewide Map
- Eastern Oregon
- Western Oregon

- Bend-Medford
- Coos Bay-Astoria-Boardman
- Eugene-Springfield
- Portland
- Salem-Keizer-Corvallis

If your project is on one of these routes, any permanent features that have the potential to reduce the route's vehicle-carrying capacity are subject to a review process under OAR Chapter 731, Division 12, which includes a Stakeholder Forum review. The following guidance is available that further explains the statute and the process for review of proposed design concepts on Reduction Review Routes:

- ORS 366.215 Implementation Guidance
- Highway Leadership Team Implementation Letter
- Oregon Administrative Rule Chapter 731, Division 12- Reduction of Vehicle-Carrying Capacity

SECTION 3: WORK ZONE SAFETY CONSIDERATIONS

Section 3, Question 1

The <u>Work Zone Safety Guiding Principle</u> directs project design teams to use a full range of options for maintaining a balance between safety and mobility. Options include, but are not limited to:

- Separation of the traveling public from workers and work areas,
- Speed reductions
- Law enforcement
- Enhanced traffic control devices and signage
- Overall roadway and work zone design

The Work Zone Safety Guiding Principle has been incorporated into <u>Highway Directive TRA</u> <u>10-16</u>. The Directive also requires use of the associated <u>Work Zone Decision Tree</u> and <u>Transportation Management Plan</u> in the project delivery process.

Section 3, Question 2

The <u>Work Zone Decision Tree Form</u> is used to consider planning and design options for projects, including staging, traffic control, separation strategies, public involvement and communications.

The Work Zone Decision Tree becomes part of the project's Transportation Management Plan (TMP).

- Example of Work Zone Decision Tree
- Example of TMP with Work Zone Decision Tree

Section 3, Question 3

Work shifts and hours for paving projects are shared with Mobility Stakeholders to address concerns about the amount of time workers are exposed to moving traffic.

Provide the best estimate that you can, based on the information available at the time you complete the checklist.

The Mobility Services Team and Mobility Advisory Committee members understand that the answer provided is ODOT's anticipated work shift information, and that contactors may propose a different plan for completing the work.

SECTION 4: ROAD CLOSURE CONSIDERATIONS

Full road closures are addressed separately on the Checklist, due to the impact they have on the full spectrum of vehicles that use the affected route. Road closures can be particularly impactful if they are planned on interstates or Critical Route Pairs

Provide road closure information, including direction of travel and duration (including the allowable days and hours for the closure).

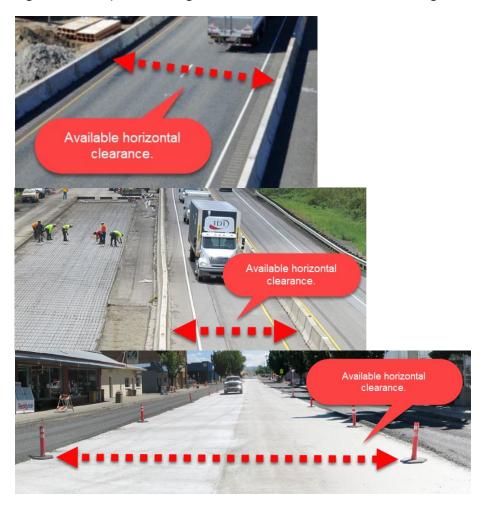
If you are planning a road closure, you will also need to provide detour information in Section 7 of the checklist. Any associated ramp closures must also be addressed separately in Section 6.

SECTION 5: LANE CLOSURE/WIDTH RESTRICTION CONSIDERATIONS

Section 5, Question 1

If lane closures are planned, indicate which lanes will be closed (including direction of travel), and how much total available width (total horizontal clearance and not travel lane width) will be available for the open travel lane(s). Horizontal clearance refers to the <u>entire</u> paved width of the open travel lane(s) between barrier (i.e. soft barrier, hard barrier or equipment) including any paved shoulder capable of supporting freight loads without failure (see examples below). If the available width will vary, depending on the project stage or phase, provide all of the widths (including mile point ranges and durations of each stage/phase).

Figure 5: Examples showing available horizontal clearance through work zones.



Also indicate if the work zone is on a curve or straight section, or both – and how much total width will be available for the open travel lane or lanes between barrier (such as cones, tubular markers, barrels or concrete barrier) – including any usable shoulder.

This information is used to determine the actual load width restriction for freight travelling through the work zone. A buffer space is applied to the available width, depending on if the roadway is curved, straight or both. A two-foot buffer is applied for load restrictions on straight sections, and a three-foot buffer is applied to curves (or both straight and curved sections). For curved sections, the buffer assumes the curve is a 5-degree curve (1145'/350 m radius) or less.

For example, a travel lane with 16-feet of horizontal clearance between barriers would result in a 14-foot wide width restriction on a straight section of roadway, and a 13-foot wide width restriction on curve (or a section that is both curved and straight):

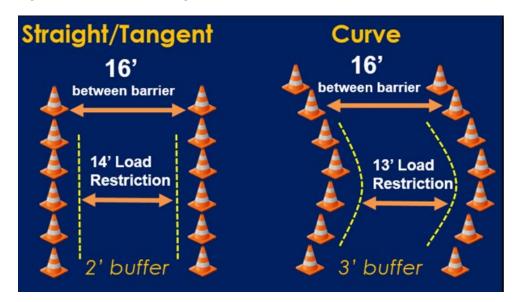


Figure 6: Example showing how a load width restriction is determined.

Section 5, Question 2

The Mobility Services Team needs to know if there are lane shifts or lane closures that will divert traffic into a travel lane with less vertical clearance underneath structures.

High loads have specific lane usage required in their permits, since bridges often have varying vertical clearances above different travel lanes (or shoulders).

If the lane closure results in less vertical clearance, and an "up and over" diversion is not available, Over-Dimension permit staff will need to route high loads onto alternate routes, which may include city/county roads.

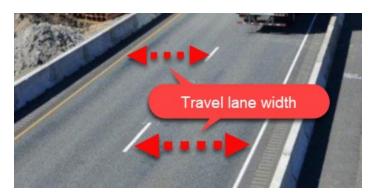
Figure 7: A lane closure/lane shift under a structure can result in lower vertical clearance



Section 5, Question 3

If travel lane widths will be reduced, provide the widths (e.g. distance between the skip line and shoulder line). This information helps determine impact on wide loads that may not fit within a travel lane.

Figure 8: Illustration showing travel lane width



Section 5, Question 4

This question helps the Mobility Services Team determine pilot car needs, bicycle lane impacts and other concerns. When a roadway is reduced to less than 28-feet of horizontal clearance for two lanes (one way or two opposing lanes), the reduced width could result in a pilot car being required for overwidth loads travelling through the work zone, or could create an unsafe condition for an adjacent bicycle lane. Horizontal clearance refers to the entire paved width of the open travel lane(s) between barrier (i.e. soft barrier, hard barrier or equipment) including any usable shoulder.

Section 5, Question 5

This question determines if annual over-dimension permit holders will need to be notified of width restrictions. The Commerce and Compliance Division's Over-Dimension Permit Unit issues about 60,000 annual permits each year. The permits are valid for one year and authorize unlimited trips. The Mobility Services Team requires a minimum 28-day notification period to provide sufficient time to send notification letters to annual permit holders (contractors and other non-ODOT staff are required to provide 35-day notification).

In general, annual permits allow loads during the daytime⁴ up to 14-feet wide on interstates and 12-feet wide on non-interstates. Nighttime movement is generally restricted to 12-feet wide on interstates and 10-feet wide on non-interstates. The following maps can also be used to help determine allowable daytime and nighttime widths for annual permits:

- <u>Daylight Width Map</u>: Allowable daytime widths for annual (continuous trip) permits
- Nighttime Width Map: Allowable nighttime widths for annual (continuous trip) permits

There are exceptions and route-specific requirements. Contact the <u>Mobility Services Team</u> for help in answering this question.

Section 5, Questions 6 & 7

Indicate if all unannounced over-sized loads can be safely accommodated through the work zone with minimal delay by moving cones and equipment out of the way.

Accommodating means:

- Able to "wave through" all loads with a slight delay, after moving equipment / traffic control devices to provide at least 22-feet of horizontal clearance.
- No lane shifts/closures beneath structures.
- No ramp closures.
- No vertical clearance reductions.
- No weight or length restrictions.

If these requirements cannot be met for unannounced loads, can they be accommodated on a case-by-case basis by providing advance notice?

Also, has the project team considered if the route is used by overwidth farm implements? (Farm implements are exempt from obtaining overwidth permits on non-interstate highways.)

Contact the <u>Mobility Services Team</u> for accommodating requirements for mainline interstate highways.

Refer to the following table of scenarios to help with answering questions 6 & 7 in this section.

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⁴ Oregon Administrative Rule 734-082-005(6) defines daytime hours as one-half hour before sunrise until one-half hour after sunset.

Section 5: Lane Closure/Width Restriction Considerations

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Scenario	Questions 6 & 7 Response	Notes	Resulting Notification to Motor Carriers
The project team determines <u>all</u> <u>unannounced</u> oversize loads can be accommodated through the work zone.	Question 6: Yes Question 7: N/A	Only answer "Yes" to question 6 if ALL unannounced oversize loads that show up at the work zone can be safely accommodated by moving cones or barriers out of the way, and waving them through with just a slight delay (e.g., under 20 minutes).	No notification is sent to motor carriers because there is no restriction if all loads can be accommodated through the work zone.
Annual permits are not restricted, but single trip permits are restricted. For example: A work zone allows loads up to 14-feet wide; and loads over 14-feet wide are restricted but can be accommodated case-by-case with advance notice.	Question 6: No Question 7: Yes	Answer "Yes" to question 7 whenever the project can accommodate some of the loads with advance notice.	The restriction is added to the Road and Bridge Restriction List that carriers and OD Permit Analysts use for routing.
Annual and Single Trip Permits (except superloads) are allowed; but superloads are restricted. For example, a work zone allows loads up to 16-feet wide; but loads over 16-feet can be accommodated case-by-case with advance notice.	Question 6: No Question 7: Yes	Answer "Yes" to question 7 whenever the project can accommodate some of the loads with advance notice.	The restriction is added to the Road and Bridge Restriction List that carriers and OD Permit Analysts use for routing.
The project team determines they can accommodate the rare oversize load that shows up unannounced because the driver wasn't aware of the restriction.	Question 6: No Question 7: No	Do not answer "Yes" to question 6 if your intent is to accommodate the rare loads that might show up because the driver missed the restriction; versus all loads that show up because there is no restriction that is published. Do communicate to the Mobility Services Team either by adding a note to question 7 (while still answering "No"), or by adding a comment at the end of the Checklist.	This information should be shared with the Mobility Services Team so it can be documented that there is a mitigation available to accommodate any loads that accidently show up at the work zone.

Section 5: Lane Closure/Width Restriction Considerations

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Scenario	Questions 6 & 7 Response	Notes	Resulting Notification to Motor Carriers
The project team determines both Annual and Single Trip Permits are restricted and cannot be accommodated.	Question 6: No Question 7: No	Answer "No" to both questions if oversize loads cannot be accommodated with or without advance notice.	Notification letters are sent to Annual Permit holders; and the restriction is added to the Road and Bridge Restriction List that motor carriers and OD Permit Analysts use for routing.

SECTION 6: RAMP CLOSURES/WIDTH RESTRICTIONS CONSIDERATIONS

Ramp restrictions must be addressed separately from lane and road closures so the Mobility Services Team can determine if the work affecting the ramp will end sooner than the duration of the work affecting the lane or road closure. This information also helps Mobility Stakeholders understand the actual duration times of each type of project work.

If the project involves ramp closures, you will also need to provide detour information in Section 7 of the checklist.

Section 6, Question 1

Be sure to provide specific ramp numbers and/or names to clearly identify them on the checklist. Single Trip Over-Dimension Permits are issued for over-dimension loads with specific routes the carrier must follow, including which exit to take or ramp to enter from, based on the dimensions of the load. Many ramps are also used as "up and over" detours to avoid low structures on the highway. Closure of an on or off ramp that removes the "up and over" option for high loads and may result in a hit to a structure or cause other loads to be routed onto unauthorized routes that have not been reviewed for the size/weight of the load.

Section 6, Question 2

The Mobility Services Team needs to know the anticipated days and hours of the ramp closures to help with managing highway restriction notices.

Section 6, Question 3

Provide ramp width restriction information (if applicable). Most ramp work results in a closure, but there are some occasions when a ramp only needs to be width restricted. As with lane width restrictions (see <u>Section 5</u>), this information is used to determine what the actual load width restriction will be for the ramp.

SECTION 7: DETOUR ROUTE CONSIDERATIONS

The questions in this section are intended to ensure that any planned detours take into account and provide for all traffic that is legally allowed to use the route that will be closed, including freight and over-dimension units.

Communication and engagement of industry stakeholders are an integral part of freight mobility during the development of detours. During project development, the Mobility Services Team needs to be notified about any planned off-site detour routes.

The Mobility Services Team will work the Region Mobility Liaison and project team leader/manager to engage industry stakeholders for the development of detours. The Mobility Services Team can also provide over-dimension routing data to help identify suitable detour routes. The Mobility Services Team can also work with trucking industry stakeholders to arrange for a freight vehicle to drive the proposed route to check for any issues.

Section 7, Question 1

If a road closure is planned, describe the approved detour route in this question. Approval information will need to be provided for Questions 7 or 8 (depending on the detour route).

Section 7, Questions 2 & 3

If over-dimension units use the existing route but cannot use the detour route, then either a different detour route is needed, or a second detour route specifically for over-dimension units is needed.

Section 7, Question 4

Detour routes need to be checked for any overhead obstructions that will impact vertical clearance. This can include structures, wires, traffic signal heads, and overhanging trees.

Legal height is 14-feet. Annual over-dimension permits allow loads up to 14-feet, 6-inches high on approved routes (see the <u>Freight Mobility Over-Height Map</u>). Single-trip over-dimension permits allow loads even higher on routes specified in their permit.

Section 7, Question 5

Structures on detour routes need to be checked for weight restrictions.

A list of bridge restrictions on state systems can be found on the Commerce and Compliance Division's <u>Oregon Trucking Online website</u>.

Weight restrictions over non-state structures should be verified through the local jurisdiction.

Section 7, Question 6

Detour routes need to be checked for length restrictions. Length restrictions are often caused by roadway curvature. Turning movements need to be evaluated to see if they safely provide for turning movements and off-tracking.

Section 7, Question 7

Detours that use local city/county roads must be approved by the local jurisdiction.

Section 7, Question 8

On state detour routes, some oversize loads (such as triple trailers) might be authorized for the route that will be closed, but not authorized for the state route that is planned for the detour.

In those cases, approval from the appropriate ODOT District Road Authority is required. Contact the <u>Mobility Services Team</u> for help determining if District approval will be needed.

Section 7, Question 9

Indicate if the detour route will be signed, and if so, provide any signing plans if available.

Section 7, Questions 10 & 11

If ramp closures are planned, provide the detour routes in Question 10. For "next exit" detours, indicate how this will be communicated to drivers.

For Question 11, detours that instruct to reverse direction need to be checked to ensure overheight loads are not routed under structures with lower vertical clearance. Vertical clearance can vary underneath structures, depending on the lane (and shoulder) that will be used by overheight loads.

SECTION 8: SPECIAL DETOUR ROUTE CONSIDERATIONS

Special detour route considerations include emergency services response times, vehicles transporting hazardous materials, and if there other projects along the detour route that will restrict traffic.

If out-of-distance travel or detour delay times are excessive, then special coordination with emergency services must be made. If hazardous material is transported along the existing route, then the detour route must be evaluated to see if it can accommodate it as well. If there is a conflict with other projects, then the work should be rescheduled to eliminate the conflict.

A back-up detour route should always be identified in case of a natural disaster or unplanned restriction on the proposed detour route.

SECTION 9: CRITICAL ROUTE PAIR CONSIDERATIONS

ODOT is committed to keeping freight moving safely and efficiently throughout Oregon in support of the State's economy. If a route needs to be restricted, ODOT will collaborate closely with the freight industry to minimize the impact of construction projects on mobility.

If a route that is identified on the list of Critical Route Pairs (see below) needs to be temporarily restricted, ODOT will take steps to make sure that the paired critical route on the list is not restricted. A <u>Critical Route Pair Interactive Map</u> is also available to view the location of the paired routes, and a <u>Critical Route Pair GIS map</u> is available to view projects with planned restrictions on these routes.

Table 1: Critical Route Pairs

Highway	Paired With	Area
I-5	OR 212, US 26, US 97	Washington - California
I-84	OR 212, US 26, US 97, US 20 (Sometimes includes OR 78 and US 95)	Portland - Ontario
US 30	US 26	Portland - Coast
OR 22 & OR 18	US 20	Willamette Valley – Coast
OR 126	OR 38	Willamette Valley – Coast
OR 38	OR 42	I-5 - Coast
OR 126	OR 58	I-5 – Central Oregon

It is essential to communicate within a region, between regions, and statewide in development, construction, and maintenance to ensure an identified alternate critical route pair will not be concurrently restricted.

A local detour is acceptable if it provides the shortest practical distance and will accommodate vehicles of the same weight and dimensions that are normally allowed on the route under construction.

If your project takes place on a Critical Route Pair, work with the appropriate Region Mobility Liaison to confirm that there are no conflicts with other projects taking place on the paired route. Contact information for the Region Mobility Liaisons can be found on the Mobility Program web site.

SECTION 10: HEIGHT, LENGTH & WEIGHT CONSIDERATIONS

Section 10, Question 1

ODOT's <u>Size and Weight Restrictions Policy (PMT 06-01)</u> provides specific guidelines for weight restrictions that must be followed when load rating factors show insufficient load capacity for unrestricted use by permit vehicles.

Some examples of temporary weight restrictions:

- Some weight restricted bridges require overweight loads to straddle the center line. If a
 lane on a bridge needs to be restricted preventing overweight loads from straddling the
 centerline, a temporary weight restriction may be needed until the lane restriction is
 lifted.
- Bridge containment systems can sometimes add significant load to a bridge, requiring a temporary weight restriction until the containment system can be removed.

Describe the weight restriction that will be needed and indicate the impact on annual or single trip over-dimension permits.

Contact the Mobility Services Team if you are not sure of the impacts.

Section 10, Question 2

If your work zone will have curves of more than 5-degrees, oversize loads may need to be restricted to prevent off tracking.

Section 10, Question 3

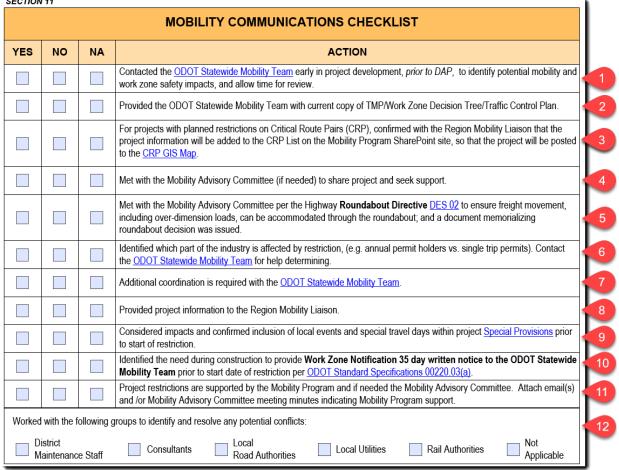
Indicate if the vertical clearance for traffic will be reduced due to temporary structures, equipment or obstructions over the roadway. However, do not use this section to report vertical Any temporary reduction in vertical clearance requires coordination with the Mobility Services Team to determine impacts to freight and (if necessary) share with the Mobility Advisory Committee for stakeholder input.

Examples include temporary traffic signals, bridge false work and bridge containment systems.

SECTION 11: MOBILITY COMMUNICATIONS CHECKLIST

The purpose of the Communications Checklist is to ensure mobility-related coordination and stakeholder engagement steps have taken place, as appropriate, for the project.

Figure 9: Mobility Communications Checklist



- 1. If your project has mobility impacts or if you are not sure of potential impacts, early communication with the Mobility Services Team prior to DAP is essential to identify issues and engage with stakeholders to seek options and solutions.
- 2. Current copies of the Transportation Management Plan (TMP), Work Zone Decision Tree and Traffic Control Plan must accompany the Mobility Considerations Checklist when submitting to the <u>Mobility Services Team</u>. If changes are made to any of these

- documents that impact mobility, make sure the changes are also reflected in the Checklist and shared with the Mobility Services Team.
- 3. Projects with planned restrictions on Critical Route Pairs are published to the <u>CRP GIS Map</u>, so that Region Mobility Liaisons and Mobility Advisory Committee members can identify and prevent potential conflicts. The Region Mobility Liaisons enter project information into a list on the Mobility SharePoint site, which is imported into the map. Region Mobility Liaison contact information can be found on the <u>internal Mobility SharePoint site</u>, and in the <u>external Mobility Program web page</u>.
 - Per the <u>Mobility Procedures Manual</u>, if a route on the list of Critical Route Pairs (CRP) needs to be temporarily restricted, ODOT will take steps to make sure that the paired critical route on the list is not restricted.
- 4. When you submit your Mobility Considerations Checklist to the <u>Mobility Services Team</u> for review, a Mobility Program Analyst will review the impacts to see if and how the project should be shared with the Mobility Advisory Committee (per the Project Review Criteria in <u>Appendix C</u> of the MAC Charter).
 - If your project is required to be shared at a MAC meeting, the <u>Mobility SharePoint Site</u> lists upcoming MAC meeting dates, and <u>Mobility Meeting Guidelines</u> are available in Appendix D of the Mobility Advisory Committee Charter with additional information. Complete a <u>Meeting Material Submittal Form</u> to schedule your project for an upcoming meeting and upload meeting materials. Submittals and presentation documents must be received at least 3 weeks prior to the meeting date.
- 5. <u>Highway Roundabout Directive DES 02</u> establishes the expectation and processes concerning freight mobility to be followed whenever a roundabout is proposed to be installed on the state highway system. This includes engagement with the trucking industry (via the Mobility Advisory Committee) which is coordinated through the Mobility Services Team.
- 6. The <u>Mobility Procedures Manual</u> provides information on the over-dimension permitting process. The types of loads that travel through a project area can vary, depending on the specific route, time of day and the type of permit. If you are not sure of the impacts, contact the <u>Mobility Services Team</u> for help.
- 7. Occasionally, a project may require additional follow up on mobility-related issues and concerns. This might include scheduling a work session with the MAC or a follow-up presentation at a later MAC meeting. Contact the Mobility Services Team for help with this coordination.
- 8. Per the <u>Mobility Procedures Manual</u>, Transportation Project Managers/Resident Engineers/Resident Engineers Consultant Projects are responsible for involving the

Region Mobility Liaison early in the planning process when mobility issues are identified, including potential reduction in capacity (ORS 366.215) design conflicts, potential detour routes, delays and planned restrictions. Region Mobility Liaison contact information can be found on the <u>internal Mobility SharePoint site</u>, and in the <u>external Mobility Program web page</u>.

- 9. Holidays and special events must be considered when planning restrictions. Oregon Standard Specifications for Construction Number 00220.40(e)(2) defines the time frames when traffic lanes must be kept open for holidays and special events. Boilerplate Special Provisions to the Standard Specifications are available online.
- 10. Per the Mobility Procedures Manual, contractors and other non-ODOT submitters must submit the online Highway Restriction Notice Form# 734-2357 at least 35 days prior to work beginning for Resident Engineer review. Once the resident engineer has reviewed the notice for accuracy, they will forward it to the Restriction Notice Team in the Commerce and Compliance Division's Over-Dimension Permits Unit at least 28 or 14 days prior to work beginning (depending on the type of restriction). The notice must be reviewed and approved by the CCD Restriction Notice Team prior to work beginning.
- 11. The Mobility Program and mobility stakeholder support for proposed restrictions must be documented with the Mobility Considerations Checklist. Attach copies of emails and/or meeting minutes with your completed Checklist.
- 12. Depending on the mobility impacts in your project, different groups may need to be consulted to identify and resolve issues. Check the groups as appropriate for your project.

SECTION 12: ADDITIONAL COMMENTS/NOTES

Use this section to provide any additional mobility-related information or comments about your project that may not have been addressed in the other sections of the Checklist.

SECTION 13: SUBMITTAL INSTRUCTIONS

Transportation Project Managers/Resident Engineers:

Check each box to confirm completion of each item in the Submittal Instructions.

Transportation Project Managers, Resident Engineers and Resident Engineers - Consultant Projects:

It is essential to communicate any changes to restriction plans and mobility impacts that are documented in the signed Mobility Checklist. If changes occur that have the potential to affect mobility, follow the steps in this section before submitting a Highway Restriction Notice for the proposed restriction revisions.

SECTION 14: SIGNATURES

The Region Project Lead must sign and date the completed form (digital signatures are acceptable). The Mobility Program Manager signature is only required if your project has mobility impacts (see <u>Section 1</u>). Refer to <u>these instructions</u> for digitally signing the Checklist.

FAQs

1. When considering if a project has "No Mobility Impacts:" what if we have an existing highway where the existing width already falls within the threshold for requiring a restriction notification before any work begins (e.g. a tunnel with less than 28-feet of horizontal clearance for two lanes of one-way traffic)?





We recognize there are some routes where the existing roadway is narrower than the minimum width needed for there to be no restriction notification required.

In situations like this, contact the <u>Mobility Services Team</u> so we can have a conversation about your project and confirm any impacts to mobility.

2. When answering the paving work question in Section 3, is it ok to guess how many shifts and hours per shift that are planned for the project?

Provide the best estimate that you can, based on the information available at the time you complete the checklist. The Mobility Services Team understands that the answer provided is ODOT's anticipated work shift information and that contactors may propose a different plan for completing the work.

3. Do you have a definition of a curve that could cause a length restriction?

In general, work zones and detours that have a high degree of curvature (more than 5-degrees) may require a length restriction to prevent off-tracking.

4. Regarding accommodating oversize loads (Section 5, Questions 6 & 7), shouldn't we wait for the contractor to answer these questions since they may not agree with our response?

The Checklist is intended to be ODOT's anticipated plan for addressing work zone safety and mobility impacts so that we can provide for stakeholder input before a project goes out to bid. The Mobility Services Team understands that contactors may propose a different approach when bidding a project, and that proposed changes will be brought back to the Mobility Services Team for review before any agreements are made with the contractor. Proposed changes that have the potential to adversely affect mobility or run counter to previous stakeholder agreements must be shared with the Mobility Services Team and possibly with the Mobility Advisory Committee to discuss and obtain support for the proposed changes.

5. If submitting a draft Checklist to the Mobility Service Team to get initial feedback (e.g. early communication, prior to DAP), are we required to attach supporting documents?

If you are seeking early input from the Mobility Services Team about a particular mobility issue, you can <u>email the team</u> with your questions without providing the Checklist and supporting documents if they are not quite ready to share.

The Mobility Services Team can help identify oversize load permit impacts and detour route information and can seek feedback from stakeholders on potential staging options as the TMP is being developed. A current copy of the TMP, TCP and Work Zone Decision Tree will need to be submitted with the Checklist (for projects with Mobility impacts), before the Checklist can be reviewed and signed off.

6. Where can I find a blank copy of the Mobility Considerations Checklist?

The Checklist is available to download at the following link: https://www.oregon.gov/ODOT/Forms/Motcarr/9983fill.pdf. A link to the form is also available at:

- The external <u>Statewide Mobility Program website</u> on Oregon.gov.
- The Mobility Program <u>Internal SharePoint site</u>.
- The internal <u>Project Delivery Portal SharePoint site</u>.
- 7. For large or complex projects, can I attach documents to the Checklist if there is too much information to enter for some of the questions?

The Checklist has expandable fields that allow for unlimited text to be entered. The fields expand as text is entered so that all of the information will display and print on the form.

The intent of the Checklist is to summarize all of the mobility impacts from your project so that the Mobility Services Team can efficiently review and share with stakeholders without having to sort through multiple documents. It is ok to attach additional documents to the form, provided there is enough information entered on the Checklist to determine the mobility impacts.

8. In Section 2, Question 2, why does the form ask for the number of construction seasons?

This information is needed in order to coordinate Critical Route Pair restrictions (if needed) as well as allow industry stakeholders to determine feasibility of moving loads.

9. For Section 7, what are the expectations for checking and evaluating detour information?

If a detour cannot accommodate all freight traffic that normally uses the route that will be restricted, an alternate route needs to be identified for the affected vehicles.

The Mobility Services Team can provide over-dimension routing data to help identify suitable detour routes. The Mobility Procedures Manual also recommends testing the route with a truck for potential problems. The Mobility Services Team can help coordinate a test with industry stakeholders, if necessary.

10. If my project does not go through the Project Controls Office, do I need to submit a Mobility Considerations Checklist to the Mobility Services Team?

Completion of the Checklist is required for all state and federally funded projects on state highways. A Checklist is not required, for maintenance projects, but is strongly recommended.

LINKS TO OTHER DOCUMENTS & WEBSITES

Below is a list of hyperlinks to documents and websites referenced in this guide:

- Cross Reference Table of Highway Route Number to State Highway Number: https://www.oregon.gov/ODOT/Data/Documents/Routes-to-Highway-Cross-Reference-Table.pdf
- Freight Mobility Daylight Width Map: https://www.oregon.gov/odot/ProjectDel/Mobility/DaylightWidthMap.pdf
- Freight Mobility Nighttime Width Map: <u>https://www.oregon.gov/odot/ProjectDel/Mobility/NighttimeWidthMap.pdf</u>
- Freight Mobility Over-Height Map: https://www.oregon.gov/odot/ProjectDel/Mobility/OverHeightMap.pdf
- ORS 366.215 Implementation Guidance: https://www.oregon.gov/odot/Planning/Documents/ORS 366.215 Implementation Guidance.pdf
- Highway Directive TRA 10-16 (Guiding Principle for Work Zone Safety): https://www.oregon.gov/ODOT/Engineering/Doc TechnicalGuidance/TRA10-16d.pdf
- Highway Restriction Notice Form #734-2357:
 https://www.oregontruckingonline.com/cf/MCAD/pubMetaEntry/restriction/
- Highway Restriction Notice Review Checklist for Resident Engineers: https://www.oregon.gov/ODOT/MCT/Documents/Mobility-Restriction-Notice-RE Review-Checklist.pdf
- Highway Roundabout Directive DES 02: https://www.oregon.gov/ODOT/Engineering/Doc_TechnicalGuidance/DES_02.pdf
- Mobility Considerations Checklist Form (blank form): https://www.oregon.gov/ODOT/Forms/Motcarr/9983fill.pdf
- Mobility Advisory Committee Charter: https://www.oregon.gov/odot/Get-Involved/MAC/MACCharterandAppendices.pdf
- Mobility Advisory Committee Agenda Submittal Form and other MAC meeting preparation resources:
 https://ordot.sharepoint.com/sites/Mobility/SitePages/PrepareForMACMeeting.aspx
- Mobility Meeting Guidelines (Mobility Advisory Committee Charter, Appendix D): https://www.oregon.gov/odot/Get-Involved/MAC/MACCharterAppendixD.pdf
- Mobility Procedures Manual: https://www.oregon.gov/ODOT/MCT/Documents/MobilityProcedureManual.pdf

- Mobility Project Review Criteria (Mobility Advisory Committee Charter, Appendix C): https://www.oregon.gov/odot/Get-Involved/MAC/MACCharterAppendixC.pdf
- Mobility SharePoint Site (ODOT intranet): https://ordot.sharepoint.com/sites/Mobility
- Mobility Services Team E-Mail Address: <u>PDS-MobilityServices@odot.oregon.gov</u>
- Project Delivery Operational Notice PD-16:
 https://www.oregon.gov/ODOT/Engineering/Doc TechnicalGuidance/PDLTNotice 16.pdf
- ODOT Construction Manual: https://www.oregon.gov/ODOT/Construction/Doc ConstructionManual/cm11.pdf
- Oregon Standard Specifications for Construction: https://www.oregon.gov/odot/Business/Pages/Standard Specifications.aspx
- Oregon Revised Statute 366.215: https://www.oregonlegislature.gov/bills-laws/ors/ors366.html
- Project Delivery Portal Internal SharePoint Site: https://ordot.sharepoint.com/sites/ProjectDelivery
- Road and Bridge Restriction List on CCD's Oregon Trucking Online website: https://www.oregontruckingonline.com/cf/MCAD/pubMetaEntry/restrictionsList/index.cfm
- Size and Weight Restrictions Policy (PMT 06-01): https://www.oregon.gov/odot/ProjectDel/Mobility/PMT06-01.pdf
- Statewide Mobility Program Website on Oregon.gov: https://www.oregon.gov/odot/ProjectDel/Pages/Mobility.aspx
- Statewide Mobility Program Internal SharePoint Site: https://ordot.sharepoint.com/sites/Mobility
- Temporary Work Zone Impacts Presentation Template (for sharing temporary mobility impacts, if necessary, with the Mobility Advisory Committee):
 https://www.oregon.gov/odot/ProjectDel/Mobility/MAC Temp Impacts Template.pptx
- TMP with Work Zone Decision Tree Example: https://www.oregon.gov/ODOT/MCT/Mobility%20Document%20Retention/1-15-19/K18791 TMP and DT.pdf
- Transportation Management Plan Guidance Manual: https://www.oregon.gov/ODOT/Engineering/Docs_TrafficEng/TMP-Manual.pdf

Hyperlinks to other documents & websites

Mobility Considerations Checklist Guide

- Work Zone Decision Tree form: https://www.oregon.gov/ODOT/Forms/2ODOT/7345042.pdf
- Work Zone Decision Tree Example: https://www.oregon.gov/ODOT/MCT/Mobility%20Document%20Retention/12-13-18/K18683 DT.pdf
- Work Zone Safety Guiding Principle: https://www.oregon.gov/ODOT/Engineering/Docs-TrafficEng/Work-Zone Guiding-Principle.pdf