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
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In this section, we’ll explain what mobility is, and why it is important to Oregon.
This is the definition provided by the Mobility Procedures Manual:

Mobility is the ease with which people and goods move throughout their community, state and world.

Central to mobility coordination – is stakeholder engagement.

Project delivery teams and maintenance staff provide a crucial link in communicating impacts to the Mobility Team,

so that stakeholders can be engaged in planning and coordination as well as notification of the trucking industry and traveling public.
Mobility is about balancing work zone safety –

providing work zone separation to keep workers safe,

while allowing traffic to safely move through the work zone.
Maintaining mobility also helps us protect our infrastructure.

Coordinating temporary restrictions keeps oversize and overweight loads from causing damage in a work zone ---

or damaging structures when trying to go around work zones.
Our state economy relies on our ability to keep people and freight on the move – from ordinary moves to extraordinary moves, such as giant power transformers or wind mill turbine blades.
Next, we’ll review some over-dimension permitting basics.

Understanding how permits are issued and the types of movement they allow helps with understanding and planning for temporary work zone restrictions.
Oregon issues two types of permits for the movement of over-dimension freight:

**Annual permit:** These allow for unlimited trips that are valid for approved routes, dimensions and weights.

- Annual permit holders might travel one time - a 100 times – maybe a thousand trips in a year. We don’t necessarily know when, where or how often each permit holder will be operating.

- Restrictions impacting these permit holders require at least 28-day notification, which allows time for the Mobility Team to review submitted restrictions and then mail restriction notice letters and issue Gov Delivery notifications prior to the work beginning.

**Single trip:** These are issued primarily to exceed the dimensions/weights allowed under an annual permit or to authorize specific routes that aren’t covered by an annual permit.

- These permits are route specific, allowing them to move on their prescribed route within a 10-day timeframe.

- It is difficult recall or re-issue a permit to ensure work zone safety, if a new restriction on their prescribed route suddenly starts within their travel window.

- For these permits, at least 14 days is needed to ensure single trip permits for the affected route and date are cleared from the permit queue.
This chart shows a very summarized view of legal sizes allowed in Oregon, versus those that require an over-dimension permit.

Understanding the types of permitted loads that can travel our state system is key to evaluating plans to maximize safety and minimize temporary work zone impacts.

As you can see from this slide, oversize loads can move at any time, depending on their dimensions and their route.
These statistics give an idea of how much over-dimension movement takes place on our highways.

MCTD’s Over-Dimension Permit Unit issued over 60-thousand annual permits (each one allows for unlimited trips on certain routes); and more than 66-thousand single-trip permits (which includes superloads).

These numbers represent pieces of paper, and not necessarily the number of permitted vehicles or the number of trips taken.
5. Identifying Temporary Restrictions

Refer to Mobility Procedures Manual:
- Chapter 4, Temporary Conditions
For Project Planning and Development, the Mobility Considerations Checklist is used to identify and document temporary restrictions and other mobility impacts related to a project.

Projects with mobility impacts are required to submit a Checklist to the Mobility Team, accompanied by a Transportation Management Plan and Work Zone Decision Tree.

If there are impacts, the form must be signed off by the Mobility Program Manager prior to PS&E.

Projects with significant impacts are shared and reviewed by the Mobility Advisory Committee for their input prior to signing.

The Checklist review process is typically started around initiation, and then signed off by the Advanced Plans stage.
Any time vertical clearance is temporarily reduced, notification and coordination with the Mobility Team is required.

Often times these clearances are unknown – you can reach out to the Mobility Team provide the most up-to-date VC data.

Temporary VC reductions can be caused by temporary traffic signals, bridge falsework, and lane closures/lane shifts underneath structures.
When considering horizontal width restrictions, it’s important to note that overwidth loads are commonly transported throughout the state, including manufactured homes.

In fact, our over-dimension permit analysts routinely route loads over 16 feet wide.
To meet commitments to the freight industry, the Mobility Procedures Manual specifies horizontal clearance standards for **daytime** hours which are required to be maintained through work zones for construction projects.

**NOTE:** The widths indicated with asterisks for single-lane traffic still require notification and coordination through the Mobility Team.

**Sunrise/Sunset Exceptions:** If longer work hours are needed beyond nighttime hours, and daytime horizontal width standards cannot be maintained, project teams can seek an exception to encroach into daytime hours to allow for a longer work window.
When planning width restrictions, horizontal clearance refers to the unobstructed paved width of the open travel lane(s) between any type of barrier (such as cones, barrels, candlesticks, equipment, etc.), and includes any usable shoulder.
When the freight industry is notified of width restrictions, the Mobility Team applies a buffer space to the available horizontal width to determine the restricted load width for freight in the work zone.

The amount of buffer depends on if the work zone is on a straight and/or curved section of roadway.

In this example, an open lane reduced to 19 feet of horizontal clearance would result in a 17 foot wide load restriction on a straight section, and a 16 foot wide load restriction on a curve (or a work zone that’s both straight and curved).
Temporary weight restrictions can be needed when a closed lane can prevent heavy loads from straddling the center line when required on certain bridges.

Bridge containment systems can also add additional load to a bridge, requiring a temporary weight restriction.

Also, the procedures prescribed in ODOT Policy PMT 06-01 must be followed any time load rating factors show insufficient load capacity.
Any planned road and ramp closures require notification and coordination through the Mobility Team to determine impacts on affected industry stakeholders and identify a suitable detour or alternate route.

Full road closures and ramp closures impact the full spectrum of vehicles – from motorcycles and cars to the largest of permitted over-dimension vehicles that use the route.
The Mobility Team needs to be notified of planned lane shifts or lane closures underneath structures.

These can result in a lower vertical clearance for high loads that may have specific lane assignments required in their permits (e.g. use right lane, use left lane, etc).
Curves of more than 5-degrees can result in a length restriction.

Temporary length restrictions aren’t needed often – but when they are necessary, they require significant coordination and engagement with the trucking industry, as these restrictions can impact many different vehicle configurations – depending on the nature of the work zone and curve.

Engage the Mobility Team early if your project anticipates a length restriction.
Effectively managing schedules, staging, delay and detours is key to maintaining mobility.
There are many factors and options to consider when looking at mobility impacts.

Many of these questions often come up in Mobility Advisory Committee meetings, and are included in the Mobility Considerations Checklist.
Likewise, there are work zone safety separation opportunities, concepts and devices to consider.

These are a few that are included on the Work Zone Decision Tree Form, which is required (along with a TMP) for all projects under the Work Zone Safety Guiding Principle Directive.
An important concept that affects mobility coordination with temporary restrictions is critical route pairs.

Coordination is essential to ensure a critical route pair will not be concurrently restricted.

If a route identified on this list needs to be temporarily restricted, the region should take steps to make sure the entire paired route on the list is not concurrently restricted.

A local detour can be acceptable, if it provides the shortest practical distance and will accommodate vehicles of the same size and weight dimensions that are normally allowed on the route under construction.
In reviewing staging options, it’s important to compare what the overall impacts to stakeholders will be with each option.

In some cases, a complete route closure with a detour over a shorter period will have a smaller overall impact than an expensive, prolonged staging plan that strives to keep the route open.

During project development discussions, some stakeholders prefer a project with a shorter duration and severe impacts, over a project with a prolonged duration and minor impacts.
Construction projects are evaluated for delay impacts.

Options should be carefully reviewed to minimize duration and severity of delay impacts.

Corridor-level TMPs, which include delay thresholds, have been developed for each of these corridors.

Construction activity in these corridors needs to be coordinated to ensure delay thresholds and mobility goals are met.

In other words, if simultaneous projects are planned on a corridor, the total estimated delay for all of them shouldn’t exceed the threshold for the corridor.

It’s up to the regions to decide if estimates are prepared for less-restrictive maintenance activities.

Exceptions can be requested through the MCTD Administrator if higher delays are unavoidable. There is an example of a request provided in the Mobility Procedures Manual.
During project development, the Mobility Team needs to be notified about planned off-site detour routes.

All traffic that uses the existing route must be provided for on the detour route.

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 route for over-dimension units is needed.

The Mobility Team can help determine what types of freight traffic that currently use the route that will be closed. We can also help determine if detour approvals will be needed.

- If a planned detour uses local city or county roads, local jurisdiction approval will be needed.

- In some circumstances, a detour route might need to accommodate larger load dimensions that are normally allowed on the route to be closed (Triple-Trailers, for example).

  In these cases, the appropriate District Road Authority approval will need to be documented.
When evaluating a detour route, the route should be checked for these issues.

In some cases, a detour route may have already been recently vetted and used by another project.

However, the route should at least be checked for conflicts with other projects to make sure there’s no work planned on the route or plans to use the detour route at the same time.
And finally, the use of alternative contracting methods, design materials and construction methods – used separately or combined – can significantly reduce construction time and minimize impacts.

The Mobility Procedures Manual goes over these options in detail, including case studies where ODOT has successfully used them in previous projects.
Providing a safe and reliable transportation system, means providing the public with reliable information about restrictions and closures.

To that extent, restriction notification requirements are in place so that ODOT can meet its commitments to notify the freight industry and traveling public about planned restrictions.

Unlike the example in this sign – we want to provide as much specific information as possible, so that road users can reliably plan their trips.
Restriction notifications are submitted to our team using the online form displayed here, which can be accessed from either our SharePoint site or public website.

For ODOT staff, the amount of notice depends on the type of restriction.

• **At least 14 days** are required for restrictions that only impact Single Trip Over-Dimension Permits. The 14-day period allows MCTD to finish processing permits that have already been requested, stop issuing permits for the period during which the highway will be restricted, and allow STP’s that have already been issued to expire.

• **At least 28 days** are required for restrictions that impact annual permit holders. Annual permits are valid for unlimited trips on specified routes around the state. This is accomplished with a letter announcing the nature of the restriction and its associated duration and authorized detour (if one exists). The letters are mailed (and emailed via Gov Delivery) to thousands of annual permit holders.

**So why 35 days for contractors and other non-ODOT submitters?**
The extra 7 days allows time for the appropriate resident engineer or other ODOT designated staff overseeing the work to review the information in the notification form before forwarding it to the Mobility Team for final review.
When Highway Restriction Notices are submitted to the Mobility Team, the form goes through a review and approval process.

Restrictions that are associated with construction projects are compared with the Mobility Considerations Checklist that was signed off during project development.

Once a restriction is reviewed and approved by the Mobility Team, they start the process of notifying the trucking industry, MCTD Permit Analysts and the traveling public.
The Mobility Team distributes restriction information in several ways:

1. The Road and Bridge Restriction List on MCTD’s Oregon Trucking Online website.

2. MCTD’s over-dimension permit analysts use restriction information when issuing single-trip permits.

3. ODOT’s TripCheck website publishes advisories with restriction information affecting commercial vehicles with a “T” icon on their interactive map.

4. Letters are mailed to thousands of annual over-dimension permit holders.

5. GovDelivery Trucking Advisories are also sent to permit holders and the trucking industry.

6. And restrictions are also published on MCTD’s Oregon.gov public web page.
For construction project work, a Highway Restriction Notification is required for any of these temporary conditions.

(Maintenance will be addressed in a later slide)
Notification is **not** required for construction project work if all of these requirements for accommodating **all** unannounced oversize loads can be met.

*Note*: Check with the Mobility Team for accommodating unannounced wide loads on mainline interstate highways.

It is extremely rare that ODOT would accommodate oversize loads on the interstates, and if considered would need to be coordinated with MCTD early during project development.
During transition to the Construction Stage – it’s possible that the contractor might propose changes to the traffic control plans that can adversely affect proposed restrictions or commitments made to stakeholders during the project development stage.

When this happens, the Mobility Team and the Region Mobility Liaison needs to be engaged early – **before** restriction notices are submitted -- so the team can determine if the change is warranted and supported by the Region, and if necessary, re-vetted before the Mobility Advisory Committee.
For maintenance activity, notification is not required if all of these requirements can be met.

More detailed information is available in the Maintenance Mobility Requirements document available on the Statewide Traffic Mobility SharePoint and Internet websites at: https://www.oregon.gov/ODOT/MCT/Documents/MaintenanceMobilityRequirements.pdf
Mobility notification requirements are waived for emergency events that require immediate and temporary traffic controls.

These emergency declarations can be declared by the governor, the state maintenance and operations manager or the appropriate district manager.

However, the district manager or designee must notify the Mobility Team of the emergency-related restrictions so that they can be published to the trucking industry and traveling public.
Notify the Mobility Team when a change needs to be made to the restriction notice.

Updating is usually done for extending the anticipated work completion date.

But a separate form should be submitted if any new restrictions need to be added.
Just as important as providing restriction notification – is lifting them when they’re done.

Our Restriction Notification System does send out automated email reminders at the end of the scheduled timeframe, but sometimes they get overlooked.

Keep in mind, as long as the restriction is not lifted from the system – it remains published (e.g. TripCheck) and appears to still be restricted.
7. Resources
The Mobility Procedures Manual is the accepted authority for mobility.
An internal SharePoint site is available for ODOT staff that includes news and information about the Mobility Program, and provides links to policies, standards, manuals, forms, and templates.
A public facing web page is also available on ODOT’s Oregon.gov website with much of the same information as the SharePoint site.

This site also includes meeting agendas and minutes for Mobility Advisory Committee Meetings.
The Mobility Considerations Checklist is initiated by a transportation project manager (or project leader). The form is a tool to help identify potential impacts to freight and traffic mobility in the development phase of a project.

Prior to PS&E, the Mobility Team must sign all mobility consideration checklists for highway projects that impact freight and traffic mobility.

Mobility Team sign-off is not required for a “no mobility impact” project before submitting it with the PS&E package.

Once the form is signed off and the project transitions to construction, the form should be reviewed with the contractor during pre-construction to see if any changes are identified which will need to be shared with the region and Mobility Team before implementing.
Highway Restriction Notices are submitted for temporary restrictions via an online web form (form# 734-2357). The form assigns a unique ID number to each submittal for easy tracking, and the system sends automatic reminders for reviewing and lifting restriction notices.
Useful Links:

- Mobility Considerations Checklist (Form 9963)
  https://www.oregon.gov/ODOT/Ports/MtHandy/9963.pdf
- Work Zone Decision Tree (Form 734-5042)
  https://www.oregon.gov/ODOT/Forms/734/734-5042.pdf
- Mobility Meeting Guidelines:
- Mobility Meeting PowerPoint Presentation Template:
  https://www.oregon.gov/ODOT/MCT/Documents/MCT_PowerPoint_Templates.PPTx
- Work Zone Traffic Analysis Mapping Tool:
  https://www.oregon.gov/ODOT/Engineering/Divs_TrafficEng/WZT%
  Tool-2.xls
THANK YOU!

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