



U.S. Department of Transportation
Federal Highway Administration

Talking Freight Webinar Series - Innovative Intersections Session:

Oregon's Efforts to Advance Freight-friendly Innovative Intersections

Hermanus J Steyn, Pr.Eng., P.E.

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Acknowledgment of Oregon DOT Staff

- Christy Jordan
 - Motor Carrier Transportation Division (MCTD)
- Rich B. Crossler-Laird
 - Senior Urban Design Engineer
- Joel McCarroll
 - Region 4 Traffic Manager
- Tony Coleman
 - Region 1 Freight Mobility/Construction/Rail Liaison



Presentation overview

- History of collaboration
 - Statutes and Rules
- Intersection examples
- Roundabouts
- Future item(s) to address



KAI image

History of Collaboration

- Need to accommodate oversize loads is increasing

Water Filtration Equipment – Kerr Oil Fields
US 395 – Eastern Oregon – Dec. 2013



B1 Bomber – I-5 Nov. 2009



Partial Ferry Hull
Tooth Rock Tunnel
I-84 - March 2013

ODOT images

History of Collaboration

- Need to accommodate oversize loads is increasing



Wind Farm – On Going
I-84 - Arlington, Oregon



ODOT images

History of Collaboration: What is ORS 366.215?

- ORS 366.215 states that the Oregon Transportation Commission may not permanently reduce the vehicle-carrying capacity of an identified freight route
 - Exceptions allowed for safety or access considerations
 - Exception may also be granted if it's in Oregon's best interest and freight movement is not unreasonably impeded

ORS – Oregon Revised Statutes

History of Collaboration: Reduction in Vehicle-Carrying Capacity

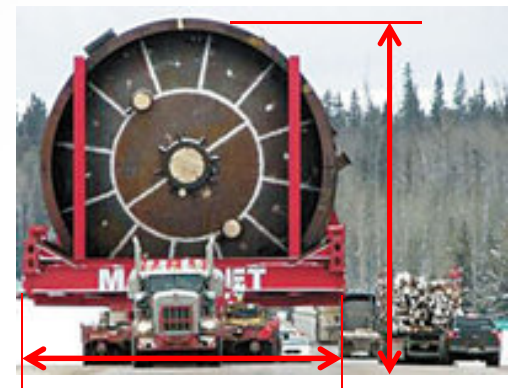
- Term “Vehicle-Carrying Capacity” was not defined in the ORS. However, the intent was:
 - The physical space a truck and its load require to move through a section of roadway ...
- or as some call it ... the “Hole in the Air”



Normal



Large



Extreme

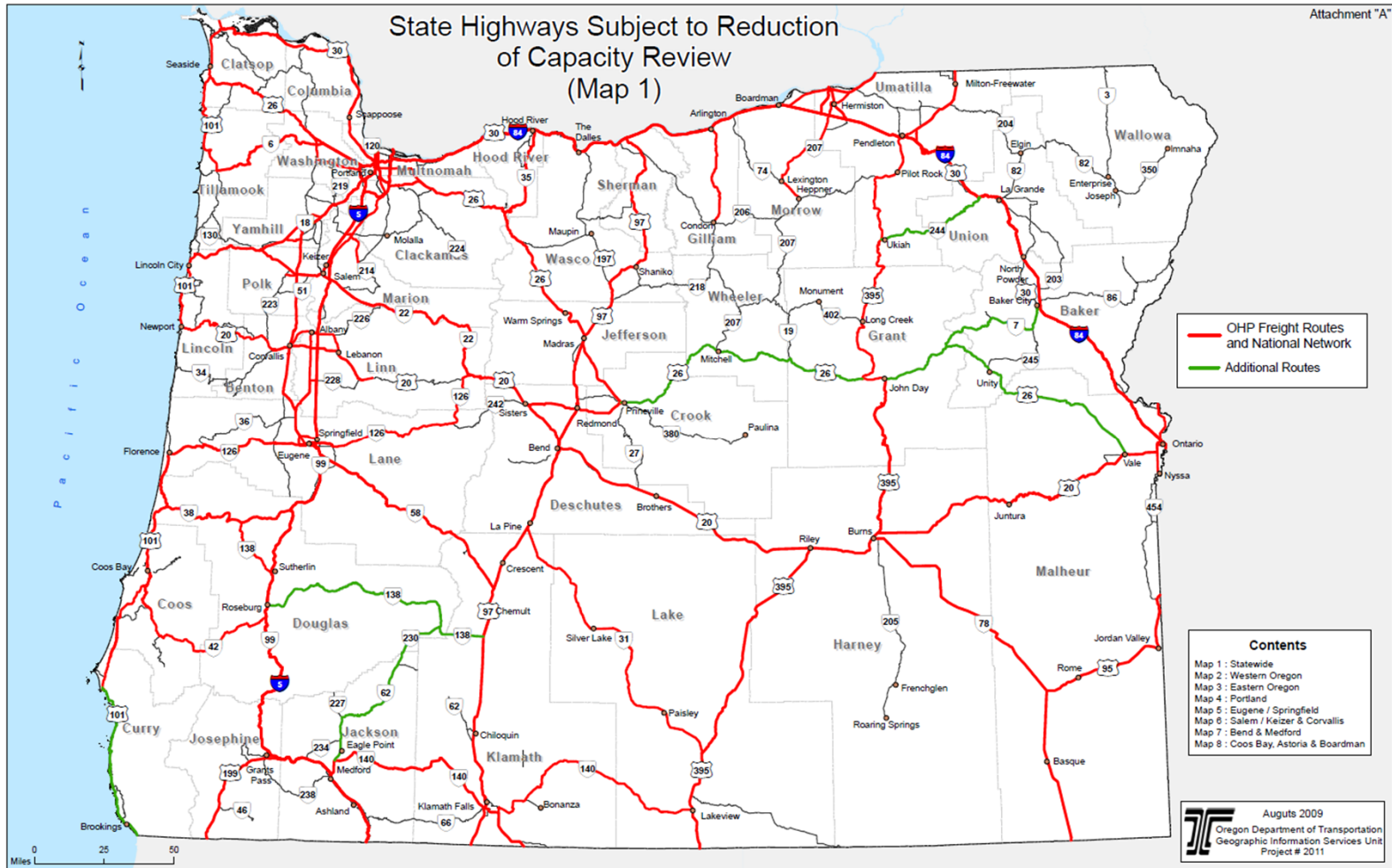
ODOT images

History of Collaboration: Potential Reduction in Capacity Features

ODOT images



History of Collaboration: ODOT Map of Highways Applicable to ORS 366.215 Requirements



ODOT image

Key aspects that are important for Freight

- Keeping freight moving on the critical route pairs and accommodating throughout construction phases and staging
- Collaboration and communication of final designs that meets the needs of all modes (bike, pedestrian, transit, and freight)
- Not reducing vertical clearance on the established High Routes



ODOT image

Intersection Examples: Removable Median

- When loads exceed 19 feet MCTD Permit Analysts will work with local District office to determine whether or not the median needs to be removed



ODOT image



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Intersection Examples: Truck Aprons



Google Earth image

Intersection Examples: Truck Aprons



Google Earth image

Intersection Examples: Channelized Right-Turn



Google Earth images

Intersection Examples: Truck Aprons



ODOT images

Intersection Examples: Truck Aprons



Google Earth image

Roundabouts: Sideswipe Crashes at Multi-lane



Passing Problem



2011 Oregon Legislature Revises ORS 811.292
"Failure to Yield Right of Way Within Roundabout"



Class C Violation to Pass or Drive Beside
a Commercial Vehicle in a Roundabout



Multi-Lane Roundabout
Sideswipe Crashes
Between Cars and Trucks

ODOT images

Roundabouts: Designing for Freight

- Full-scale test in two locations
- Tested 18 truck/trailer combinations
 - Up to 130' in length
- All test vehicles made it through the roundabout



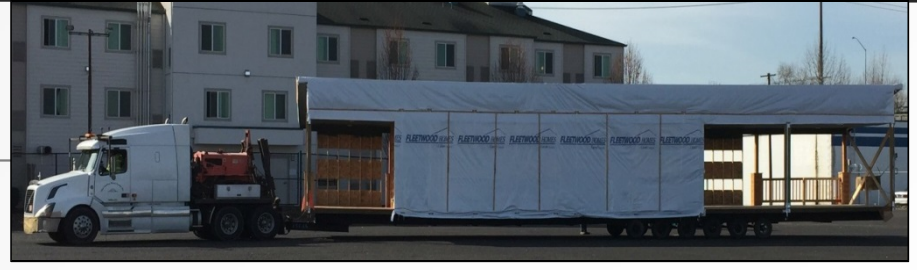
KAI image



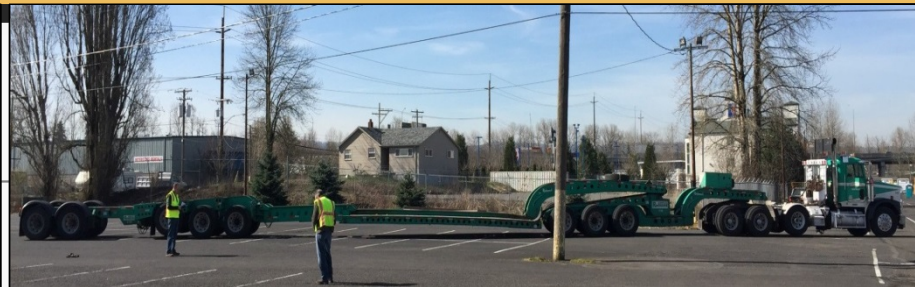
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ODOT images: Total Length 113', Booster Trailer Length 90', Axle Width – 13.5'; & Tractor with 75' trailer and manufactured home load, Total Length=101', Load Width=14'



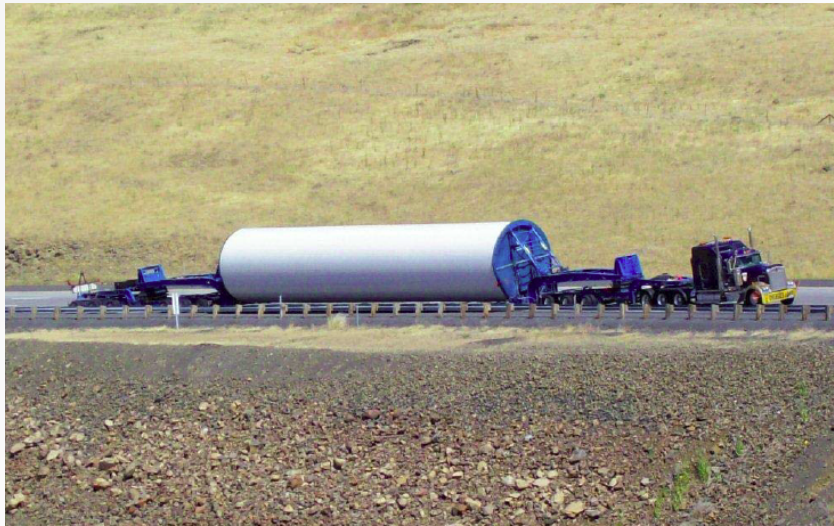
ODOT images: Tractor with 70' logging trailer and 102' long load, Total Length=112' and Tractor with 101' booster trailer, Total Length=125'



KAI image

Future item(s) to address

- The lack of coordination with manufacturers
 - Equipment is less assembled on site
 - Requires larger truck to convey precast units



ODOT images

Thank You! Any Questions?

- Reference:
 - Oregon Department of Transportation (ODOT) Mobility Procedures Manual
 - <http://www.oregon.gov/ODOT/MCT/docs/MobilityProcedureManual.pdf>
- Hermanus Steyn
Tel. No.: (503) 535-7455
Email: hsteyn@kittelso.com