Oregon Commercial Truck Parking Study

April 14, 2020 TAC Meeting
Today’s Agenda

- Welcome and Introductions
- Study Status
- Summary of Needs
- Toolbox of Potential Solutions
- Prioritization of Potential Strategies and Recommendations
- Recommended Actions
- Wrap-up & Next Steps
Study Status

• Finalized Current and Future Parking Demand Analysis Memos
• Revised 2019 and 2040 Parking Space Availability Maps
• OFAC Meeting – January
• Draft Strategies and Recommendations
• Schedule
2019 Availability Update

Colored rectangles were placed at segment junctions where there is designated parking within 2.5 miles and segments have different color breaks (E/F, J/K, K/L/N, and N/O). These are colored by the average values of the segments that meet to indicate the different choices drivers may have in these locations.
2040 Availability

**Update**

Colored rectangles were placed at segment junctions where there is designated parking within 2.5 miles and segments have different color breaks (E/F, J/K, K/L/N, and N/O). These are colored by the average values of the segments that meet to indicate the different choices drivers may have in these locations.
Summary of Needs

*Designated Truck Parking 2019*

- The segments with the highest average occupancy are:
  - Segment G (I-5 between Salem and Portland/I-205)
  - Segment E (I-5 between Eugene and Albany)
  - Segment B (I-5 between Grants Pass and Roseburg)
  - Segment J (I-84 between Portland/I-5 and Troutdale)

- The whole I-5 corridor is approaching or above capacity for truck parking

- Finding parking is the hardest in Segment G
Needs

Designated Truck Parking 2019

Colored rectangles were placed at segment junctions where there is designated parking within 2.5 miles and segments have different color breaks (EF, JK, KL, and N/O). These are colored by the average values of the segments that meet to indicate the different choices drivers may have in these locations.
Summary of Needs

*Designated Truck Parking 2040*

- Segments S, L and G are expected to see
- the most increase in truck parking from 2019
- On average, there is a projected, significant shortfall of spaces in the following segments:
  - Segment G
  - Segment J
  - Segment C
Needs

Designated Truck Parking 2040

Oregon Commercial Truck Parking Study

2040 Average Number of Spaces Available

-49 to -25
-24 to 0
1 to 25
26 to 50
51 to 100
> 100

Colored rectangles were placed at segment junctions where there is designated parking within 2.5 miles and segments have different color breaks (E/F, J/K, K/L/N, and N/O). These are colored by the average values of the segments that meet to indicate the different choices drivers may have in these locations.
Summary of Needs

Undesignated Truck Parking

• Locations of undesignated parking were identified from:
  • ODOT staff
  • Stakeholders (survey, interviews, and TAC)
  • cluster analysis of GPS data

• A total of 108 areas were identified throughout the state along the study corridors

• Truck parking related to commercial or industrial establishments excluded
Needs

Undesignated Parking

- Top 20 locations
Detailed Needs Analysis

• Based on
  • Supply/demand analysis
  • Location and geographic context
  • Stakeholder input (interviews, survey and TAC)

• Four categories of need
  • Capacity
  • Undesignated parking
  • Safety and security
  • Amenities and services
Statewide Needs

Primary:
• Difficulty finding truck parking/Lack of availability

Secondary:
• Inadequate amenities
• Rest area and truck stop design
• Undesignated parking
Needs analysis by segment

• Primary needs much higher than the rest of segments - require attention
  • capacity shortfalls
  • accumulating more than 100 hours of undesignated parking per day
  • one of the top 3 undesignated parking locations
  • ranking exceptionally poorly in survey questions

• Secondary needs are important and should be addressed after primary needs
  • being at or near capacity in 2040
  • significant accumulation of undesignated parking
  • one of the top 10 undesignated parking locations
  • ranking poorly in any of the key survey questions

• Tertiary needs represent potential needs that have been identified from analysis but need further study.
### Summary of Segment Needs

<table>
<thead>
<tr>
<th>Segment</th>
<th>Capacity</th>
<th>Undesignated Parking</th>
<th>Safety and Security</th>
<th>Amenities and Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment A (I-5 between California border and Grants Pass)</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segment B (I-5 between Grants Pass and Roseburg)</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>Segment C (I-5 between Roseburg and Eugene)</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>Segment D (OR58 between Eugene and US97)</td>
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<td>3</td>
<td>3</td>
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<tr>
<td>Segment E (I-5 between Eugene and Albany)</td>
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<td>1</td>
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<td></td>
</tr>
<tr>
<td>Segment F (I-5 between Albany and Salem)</td>
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<td>1</td>
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<tr>
<td>Segment G (I-5 between Salem and Portland/I-205)</td>
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<td></td>
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<tr>
<td>Segment H (I-5 between Portland/I-205 and Vancouver)</td>
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<td>3</td>
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<tr>
<td>Segment I (I-205 between Portland/I-5 and Washington border)</td>
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<tr>
<td>Segment J (I-84 between Portland/I-5 and Troutdale)</td>
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<tr>
<td>Segment K (I-84 between Troutdale and US97)</td>
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<td>3</td>
<td></td>
</tr>
<tr>
<td>Segment L (I-84 between US97 and Pendleton)</td>
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<tr>
<td>Segment M (OR22/US20 between Salem and Bend)</td>
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<td>3</td>
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<tr>
<td>Segment P (US20 between US97 and US395)</td>
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<td>Segment Q (US20 between US395 and Idaho border)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Segment N (US97 between I-84 and Madras)</td>
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<td></td>
<td></td>
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<tr>
<td>Segment O (US97 between Madras and Bend)</td>
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<tr>
<td>Segment T (US97 between Bend and OR58)</td>
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<tr>
<td>Segment S (I-84 between Pendleton and Idaho border)</td>
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<tr>
<td>Segment R (US97 between OR58 and California border)</td>
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</tbody>
</table>

*Oregon Commercial Truck Parking Study*
Summary of Segment Needs
Committee Discussion

• Did we capture the statewide needs?
• Do you generally agree with the segment needs?
• Is there something we missed?
Toolbox of Truck Parking Solutions

• Reviewed recommendations from federal, state, and regional truck parking plans

• Six main types of strategies
  • Data and Technology Deployment
  • Creative use of ROW
  • Capacity expansion through public-private partnerships
  • Policy and Regulations
  • Coalitions and Institutional Oversight
  • Public and Private Outreach
Data and Technology Deployment

• Real-time information on availability of parking
• Includes sensing technologies to determine utilization and availability of parking spaces
• Dynamic message signs, smartphone and web apps and in-cab navigation
• For a lower cost, some states installing static truck parking signage on highways and distributing visor card trucking maps
• Interoperability with neighboring states should be considered
Creative use of ROW

• For public truck parking capacity expansion
• Primarily on interstate or other roads with significant parking needs
• Excess ROW at rest areas, weigh stations, wide areas parallel to the highways, chain up areas, access roads to viewpoints and other locations
• Improving geometrics and better access at existing rest areas
• GIS analyses may be completed on urban land parcels to determine viability of conversion into truck parking areas
Capacity expansion through public-private partnerships

• Partnering with private businesses and truck stops to expand parking facilities and coordinate signage

• Cost-sharing agreements for construction and maintenance of public parking areas with private partner may be useful. 
  • Private partners may set up convenience and food stalls to provide revenue for truck parking expansion

• Partnering with shippers to explore warehouse and distribution center parking
Policy and Regulations

- Review local, state, and regional policies on truck parking and staging requirements
- Confirm whether parking expansion is being hampered by regulations.
Coalitions and Institutional Oversight

• Designate truck parking champions and/or establish truck parking committees to champion truck parking goals and oversee implementation of plans

• Participate in a cohesive regional multi-state truck parking coalition to standardize the system and:
  • match supply and demand
  • increase roadway safety
  • reduces the time required by drivers to find safe parking spaces.
Public and Private Outreach

• To counteract public perception that leads communities to restrict truck parking
• Coordinate with MPOs and local governments to develop guidelines and mitigation strategies aimed at easing such public opposition.
Prioritization of Potential Strategies

Type of Strategy
- Site-Specific
- Statewide

Four criteria
- Effectiveness at addressing identified goal(s)
- Cost
- Private resource utilization
- Ease of implementation/previous success
Scoring

<table>
<thead>
<tr>
<th>Score</th>
<th>Effectiveness in achieving goal</th>
<th>Cost</th>
<th>Private resource utilization</th>
<th>Ease of implementation</th>
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</thead>
<tbody>
<tr>
<td>Low</td>
<td>3</td>
<td>9</td>
<td>3</td>
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<tr>
<td>Medium</td>
<td>6</td>
<td>6</td>
<td>6</td>
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<tr>
<td>High</td>
<td>9</td>
<td>3</td>
<td>9</td>
<td>9</td>
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</table>
### Top Solutions for Oregon

<table>
<thead>
<tr>
<th>Tool / Solution</th>
<th>Effective in addressing Oregon goal</th>
<th>Cost</th>
<th>Private resource utilization</th>
<th>Ease of implementation</th>
<th>Solution score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-time parking availability communication utilizing web or smartphone app - ODOT to push availability data to private apps such as Park My Truck</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>36</td>
</tr>
<tr>
<td>Camera sensors to determine parking space usage</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>33</td>
</tr>
<tr>
<td>Explore warehouse parking partnerships and/or requirements with private vendors for end-of-trip parking and staging</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
<td>33</td>
</tr>
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<th>Tool / Solution</th>
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</thead>
<tbody>
<tr>
<td>Develop revised design standards for rest areas</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Identify alternate truck parking locations such as waysides, closed weigh stations, chain-up areas, excess shoulders and safety pullouts</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Improved/expanded truck parking areas using excess ROW, rest areas and other locations on interstates, improved geometrics and capacity expansion</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>30</td>
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<tr>
<td>Investigate expanding parking via public private partnerships - utilizing excess ROW owned by state and entering cost-sharing agreements</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>30</td>
</tr>
<tr>
<td>Surveillance cameras, improved lighting and/or night-time surveillance patrol by Oregon State Police to enhance security onsite</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>30</td>
</tr>
<tr>
<td>Coordinate with MPOs and RPOs to develop guidelines and mitigation strategies to ease public opposition</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>30</td>
</tr>
</tbody>
</table>
Committee Discussion

• Are there any solutions we missed?
• Do you agree with the prioritization?
15 Minute Break
Recommended Actions

Review Matrix
Committee Discussion

• Did we get the solutions right for the primary segment needs?
• For primary need segments, what actions should the state take first?
Wrap-up & Next Steps

• Comments from TAC due Friday April 17
• Finalize Strategies and Recommendations – April 24
• Develop Final Report - May
Appendix Slides

If needed
Undesignated Parking Locations

Central Oregon

Slide 35
Undesignated Parking Locations

North Central Oregon

Oregon Commercial Truck Parking Study
Undesignated Parking Locations

Northeast Oregon

Oregon Commercial Truck Parking Study
Undesignated Parking Locations
Northwest Oregon

Oregon Commercial Truck Parking Study
Undesignated Parking Locations

Southeast Oregon

Oregon Commercial Truck Parking Study
Undesignated Parking Locations

Southwest Oregon