Background

VISION 2050 Work Program

<table>
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<tr>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td>Purple</td>
<td>Early work</td>
<td>Orange</td>
<td>SEPA review, draft plan</td>
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<td></td>
<td>Scoping, research, planning</td>
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2050 Forecast

Central Puget Sound Population and Employment 2000-2050

- **5.8 million people**
- **3.4 million jobs**

- **4.0 million people**
- **2.2 million jobs**

Actual vs. Forecast

2000 2010 2020 2030 2040 2050

Population: Purple Line
Employment: Orange Line

Note: Employment data marked with an asterisk (*)
Identify the impacts of goods movement on land use and vice versa, focusing on:

– How does freight fit into the picture as the region prepares for anticipated growth?
– What are the freight issues to consider and what are the associated land use implications?
– What are the freight consideration that stakeholders need to be aware when making land use decisions?
– What are the intended/unintended consequences of growth decisions?
– Best practices from other areas that might be relevant to our region?
What has been done so far?

- Identified an initial list of freight/land use issues
  - Changing Supply Chain & Urban Deliveries
  - Technology
  - Regional Truck Parking
- Engaged with stakeholders to better understand the context, review issues in greater detail and identify other concerns that need to highlighted
- Incorporated stakeholder feedback to develop a preliminary approach to the briefing paper
What we asked

• Initial list of issues: Changing Supply Chain & Urban Deliveries, Technology, Regional Truck Parking
  • Does our understanding of the issues align with what is happening across the region?
  • Are the issues consistent in and across the four county region?
• Considering the diverse four county region, are there any sub-regional issues that we need to focus in this effort?
• Are we missing anything else that should be highlighted in this paper?
What we heard

Educate, simplify and personalize the concept of freight

Freight issues vary among jurisdictions

Critical to protect, preserve and enhance freight corridors when planning for growth

Jurisdictions face challenges in maintaining freight land use without adequate tax incentives

Flexibility in approaches and understanding local context is needed to address delivery challenges

How we define freight is changing

Understand regional vs. local aspect of freight movement

Protect lands near airfields

Increasing number of deliveries is impacting local traffic

Right-of-way/design changes impact freight movement

Optimizing the freight system is needed to handle expected growth in goods movement

New developments near rail-road crossings should consider mobility impacts

Balancing competing land uses/providing adequate buffers is needed in planning for growth

Jurisdictions vary in their ability to provide supporting technology infrastructure

Engagement with the private sector needed to tackle parking issues

Other..
Categorizing Freight/Land Use Issues

- Where growth occurs?
- How growth occurs?
- Operational
- Other
Where Growth Occurs
Preservation of Industrial Lands and Freight Corridors

What are the considerations to highlight?

- Critical to ensure that freight needs are recognized and preserved
  - Need to ensure non-freight related land uses are kept out of industrial areas (or) ensuring appropriate buffers to protect industrial lands
  - Balancing different type of land uses/development types is important due to traffic and associated impacts
Preservation of Industrial Lands and Freight Corridors

What are the considerations to highlight?

• Consider freight needs when cities design for livability and provide more walkable/bikeable neighborhoods
  • Understand and acknowledge the impacts of these decisions on freight movement
  • Freight friendly roadway design is needed along corridors where we want to encourage/preserve freight movement (ex. designing signal/bridge heights, designing appropriate medians)
Preservation of Industrial Lands and Freight Corridors

What are the considerations to highlight?

• How do we encourage/support local jurisdictions to protect/maintain warehouses when there aren’t adequate incentives in the current tax framework?

• With the passage of the Streamlined Sales and Use Tax Agreement (SSUTA) and its associated impacts on revenues, what can we do to ensure that agencies retain their freight land uses?
Congested Freight Areas

• Rail-road crossings typically have safety related or mobility related issues
  • Train lengths are increasing due to the growth in freight movement, impacting traffic and emergency vehicle movements
  • New developments planned near rail-road crossings can exacerbate existing bottlenecks
• Developments planned near existing freight bottlenecks can add to the traffic congestion and delay

What are the considerations to highlight?
• Location of new developments should consider areas already congested such as rail-road crossings, truck bottlenecks
Air Cargo

- Land near airfields is required for staging/loading of cargo and needs to be protected.
- Trucks are a component of air cargo movement since they are needed to move cargo from the warehouse to the airports and vice versa.
  - Truck movements impact adjacent/local streets.

What are the considerations to highlight?
- How do we protect freight land uses near airports?
- How do we ensure truck corridors are preserved if non-industrial land uses (ex. residential) are planned nearby to accommodate growth?
How Growth Occurs?
Changing Urban Deliveries

What are the considerations to highlight?

• Overall agreement with the trend of changing urban deliveries and the associated impacts

• In addition, more retailers are developing their own delivery networks. This will increase the number of delivery trucks and the associated traffic on local streets

• Commonly suggested solutions (ex. overnight deliveries, enforcement) might not have the desired result due to tightly woven nature of supply chain.
  — Freight companies view enforcement charges as the cost of doing business

• How buildings are developed can impact deliveries – e.g., no alleys, no or restricted load/unload, etc.
# Changing Urban Deliveries

A tiered approach to urban deliveries might be essential

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<th>Cities</th>
<th>Developers</th>
<th>Freight Companies</th>
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| • Consider the needs of freight when redesigning current infrastructure or providing new infrastructure to accommodate growth  
  • Ensure provision of supportive elements such as adequate load/unload zones, delivery, parking, etc. *(Applies to developers as well)* | • Ensure that new developments have the ability to handle deliveries rather than use the public right of way  
  • Retrofit old buildings to optimize deliveries  
  • Partnerships with freight companies to ensure freight access to private facilities | • Right size vehicles to fit the streets  
• Ensure that the trucks remain on the streets that are designed to handle them (ex. wayfinding)  
• Work with businesses to ensure truck movement within the site doesn’t impact the right-of-way |
Technology

What are the considerations to highlight

- Many components to decision to shift to electric/alternative fuel vehicles – e.g., costs, company policy, government incentives, etc.
- Some stakeholders view providing supporting infrastructure for electric/alternate fuel freight vehicles as being driven by the freight companies and not necessarily by public agencies
- Suggestion is to expand the focus beyond electric/fuel vehicles to include technologies that enhance efficiency of freight (ITS, communications, electronic ground support equipment, non-road technology, etc.)
- Important to consider the capacity of supporting infrastructure (bandwidth/wi-fi) for technology and the ability of all jurisdictions in the region to handle the demand/loads on the infrastructure.
Regional Truck Parking

What are the considerations to highlight?

• Acknowledgment that truck parking is a known ongoing issue
  • Consider viewing it through the lens of basic needs (ex. food, shower, rest, driver safety)
• Partnership with the private sector and continued involvement of the state/local agencies is critical
• Technology/ITS investments would be useful in providing advance information (~2 hours) on available parking to help drivers plan accordingly
• Consider revisiting long haul infrastructure keeping driver service log and electronic log requirements in mind
• Is there a land use connection?
Other issues that extend beyond land use

- Continue to address conventional freight bottlenecks
- Meet MAP-21/FAST Act performance requirements
- Better data availability
  - Difficulty in obtaining data from the private sector
  - Freight and Good Transportation System (FGTS)
- Refine analytical tools to better model freight movement
  - Improve ways to measure freight patterns, delays, etc.
- Ensure better regional connections between cities in terms of jobs and housing locations due to the impacts on freight
- Increasing trend of oversized trucks/trains loads causing traffic impacts, permitting challenges and structural issues
What’s next

• Expand on the issues and draft a preliminary version of the briefing paper
• Incorporate stakeholder review and feedback to finalize the briefing paper
• Integrate the paper into the VISION 2050 plan
  – Potential action items in VISION 2050 calling for continued work on the freight program