Freight and Land Use Briefing

Paper: VISION 2050

FAST Freight Advisory Committee
February 13, 2018
Purpose

• Identify intersections between freight and land use decisions

• Serve as a resource to
  ▪ Elaborate on how decisions on accommodating future growth can impact, support or enhance freight mobility
  ▪ Clarify the importance of incorporating freight into policy discussions

• Included as part of Vision 2050 background papers

• Feeds into the broader PSRC freight work program
What has been done so far?

• Engaged with freight partners across the region to
  • Understand their perspectives
  • Obtain inputs on freight concerns that should be considered as part of local growth/land use decision-making
• Reviewed responses to understand common themes and organize into relevant categories
• Incorporated feedback to develop a preliminary draft of the briefing paper
Introduction

Setting the stage

• Overview of VISION 2050, process and timeline
• Clarify purpose of briefing paper
• Identify key issues and considerations
• Explain/simplify the concept of freight
How does freight move in a region?

Supply chain example of a commonly used product

Question:
- Are there better ways to show the movement of freight?
- Are there other common products that can be used as examples of complex supply chain?
Freight Transportation System & Recent Trends

Provide context on the freight system, as local jurisdictions plan for growth

• Highlight different components of freight movement

• Elaborate on recent trends in freight
  o Growing goods movement: regional growth, increase in international trade
  o E-commerce: growth, changing consumer preferences, reconfiguration of retailer supply chain networks, increase in deliveries, shifts in the last mile segment
  o Growth in technology: sharing of vehicles/platforms, independent contractors, advances in vehicle technology
Understanding Freight Considerations in Planning for Growth

• Detailed review of freight issues relevant to discussions on growth:
  ▪ Issues related to where growth occurs
  ▪ Issues related to how growth occurs
  ▪ Operational Issues
  ▪ Other

• Briefing paper elaborates on each of the issues providing the context and describing concerns raised during engagement with freight partners
Issues related to where growth occurs

- Protect and Preserve Industrial Lands
- Preserve and Enhance Freight Corridors
- Congested Freight Areas
- Protection of Air Cargo Supportive Land Uses
Protect and Preserve Industrial Lands

• Expand on key concerns raised by stakeholders
  – Prevent encroachment of other uses
  – Provide supportive infrastructure and services
  – Ensure current and future users of the land operate efficiently and can respond to changing trends in manufacturing/industrial uses

• Mention common strategies used to protect and preserve industrial lands in regions across the U.S.
Preserve and Enhance Freight Corridors

• Elaborate on impacts of policy decisions on goods movement, such as:
  – Traffic issues, parking challenges, access restrictions, safety and enforcement concerns, etc.

• Emphasize need for continued preservation and enhancements of corridors, identified as critical to freight mobility
  – Ensure provision of appropriate infrastructure investments and freight friendly design along designated corridors to accommodate freight as a priority user
  – Mention differences in roadway design requirements for freight vs. other modes along corridors
Congested Freight Areas

• Stress the importance of properly examining the impacts on freight movement before jurisdictions identify locations for anticipated growth.

• Locating growth near congested freight locations such as at-grade rail crossings and existing trucks bottlenecks adds to challenges
  – Exacerbating traffic and safety challenges; increase in the number of freight and passenger trips on already congested highways; mobility, delay and reliability challenges.
  – Mention the trend of increasing train lengths adds to existing safety/mobility challenges at at-grade rail-road crossings
Protection of Air Cargo Supportive Land Uses

• Brief description of air cargo activity in the state
• Mention facilities required (on-airport, off-airport, transportation access) to handle anticipated growth
• Elaborate on feedback from stakeholders
  — Protection of land near airports from encroachment or rezoning to non-industrial land uses to accommodate growing air cargo volumes
  — Locating non-industrial land uses near airports could have impacts on freight traffic and also disrupt local streets
Issues related to how growth occurs

- Changing Urban Deliveries
Changing Urban Deliveries

• Describe why urban deliveries are changing
  – Growing e-commerce, changing consumer preferences, retailers’ response to the underlying shifts

• Highlight traffic challenges due to these shifts in urban deliveries and the “last-mile” segment, especially in dense urban areas
  – Increasing congestion on local streets, rising competition for access to curb space, inadequate parking availability, rising modal conflicts, and growing enforcement challenges

• Mention common strategies implemented in cities to address urban freight challenges
Changing Urban Deliveries

- Elaborate on stakeholder concerns
  - Urban freight movement is influenced by factors such as the diversity of land uses, density, development patterns, building codes within a jurisdiction
  - Involvement of a range of public and private stakeholders, each with specific roles and responsibilities, makes it critical to engage/develop partnerships in implementing strategies
  - Provision of supportive infrastructure (e.g. load/unload zones, delivery bays, etc.) should be factored in as jurisdictions work to provide new infrastructure or redesign existing infrastructure to accommodate growth.
Operational Issues

- Technology
- Regional Truck Parking
Technology

• Focus on advancements in freight technology*
  – Increasing data availability and connectivity; advancements in information and communication technologies (ICT); growth of electric and alternative powertrain technologies; innovations in connected and autonomous vehicle (CAV) technology
  – Note how freight technology spans the spectrum from established to emerging nascent technologies which vary in terms of impacts, benefits, timelines, etc.

• Mention private sector taking the lead on some aspects of technology (e.g. shift to electric trucks and provision of charging infrastructure)

*Refer to the ongoing broader technology briefing paper effort
Technology

• Explain the (changing) role of infrastructure
  – Supporting infrastructure (e.g. roadside systems – sensors, lights, meters; fiber optic infrastructure; wireless infrastructure) required to handle the advancements in technologies
  – Shift in the way jurisdictions use/value public infrastructure, e.g., utility poles

• Expand on stakeholder concerns
  – Jurisdictions around the region vary in terms of capacity of existing infrastructure, capability to upgrade or provide new infrastructure, and ensure system resiliency
  – Ability to respond to demands of technology and availability of space to locate new infrastructure within a jurisdiction matter as well.
Regional Truck Parking

• Brief description of the issue
  – Driver access to safe parking is essential for the efficient/reliable movement of goods
  – Factors influencing truck parking demand (source: WSDOT’s Truck Parking Study)
    ▪ Growing economy, increasing congestion/delays, hours-of-service regulations, industry changes, insurance, etc.

• Challenges with expanding truck parking
  – Cost of land, competing demands for best use of available land, community concerns, ban on parking facilities
Regional Truck Parking

• Highlight stakeholder concerns
  – Truck parking is currently concentrated in certain locations around the region
  – Discussions on accommodating growth should consider how policies on land use, zoning, and development patterns can exacerbate truck parking challenges
  – Need for continued focus on this topic
    • Understanding the underlying causes for inadequate parking, researching best practices from other regions, and exploring solutions that can be applied in our region

• Mention strategies identified at various levels to address parking challenges
Other

• Several issues were identified by stakeholders for the larger PSRC freight work program that are outside the scope of this paper, including:
  – Streamlined Sales and Use Tax Agreement (SSUTA)
  – Continue to address freight bottlenecks
  – Refinement of analytical tools and improvement of data availability to better model freight movement
What’s next

• Finalize briefing paper
  – Will be available for review and feedback on PSRC VISION 2050 website
  – Include as a background paper in VISION 2050, after addressing any stakeholder comments.