

Memo

To: Tom Armstrong, Bureau of Planning and Sustainability

From: Ningsheng Zhou, Francesca Jones, PBOT

cc: Mauricio Leclerc

Date: Jun 1, 2022

Re: Fossil Fuel Terminal Truck Traffic Impact on Highways

In response to issues identified by LUBA, PBOT analyzed a speculative scenario in which the demand for fossil fuel exceeds the existing capacity of the Portland FFTs in the Critical Energy Infrastructure (CEI) Hub. Based on the information in the 2017 Oregon Fuel Action Plan, the increased demand for fuel is likely to be met through the following means:

1. Increased demand in Eastern Oregon could be met through increased truck deliveries from the fuel terminal in Pasco, Washington, which has a pipeline connection to refineries in Salt Lake City. This option would increase truck traffic in Eastern Oregon – which is beyond the jurisdiction of the City of Portland.
2. Increased demand in Southern Oregon could be met through increased deliveries from the fuel terminal in Chico, California. This option would increase truck traffic in Southern Oregon – which is beyond the jurisdiction of the City of Portland.
3. Increased demand in the Willamette Valley and the Northern and Central Oregon Coast are likely to be met either through increased deliveries to an Olympic Pipeline terminal in Vancouver, Washington; increased barge deliveries to another port on the Lower Columbia River or the Oregon Coast; or via rail. Deliveries to the Oregon Coast or via rail would not result in increased truck traffic in Portland because those deliveries could serve regional submarkets directly without having to pass through Portland FFTs.

This speculative scenario focuses on the potential impact of increased truck traffic between a new entry supply point in the region and the FFTs in Portland because once trucks arrive at the CEI Hub the trucks become part of the regional distribution system as if there were additional storage capacity in Portland. Without an accurate future forecast of the potential truck traffic increase from this scenario available, PBOT produced a high level traffic impact assessment.

There are two key points of entry that could result in increased truck traffic – 1) fuel deliveries to a Columbia River port in Oregon; 2) fuel deliveries to a Columbia River port or pipeline terminal in Washington.

Increased fossil fuel deliveries from Port Westward or Port of St. Helens in Oregon could result in increased truck traffic on Highway 30, which is designated as a Regional Truckway in the adopted 2035 Transportation System Plan. Regional truckways are the highest freight designation in Portland's freight system and are designed to facilitate interregional movement of freight and support industrial uses with high levels of truck activity. PBOT's RTP (2018/2040) traffic demand model projects the future traffic on Highway 30 at the Linnton terminals will grow about 30% over today to 3,420 vehicles in 2040 PM peak hour, but those volumes will still be lower than the roadway capacity. Increased truck traffic on this highway segment would have minimal impact because Highway 30 is part of the City's freight system and is not considered a congested facility, except at the interchange with the St. Johns Bridge. The St. Johns Bridge interchange is in the middle of the CEI Hub, therefore, this scenario would have similar transportation impacts as if the added fossil fuel storage tank capacity had been at a Portland FFT.

Increased deliveries from Vancouver, Washington (or other Washington ports) could result in increased truck traffic on Interstate 5, a designated Regional Truckway, which is the highest freight designation in Portland's freight system and is designed to facilitate interregional movement of freight and support industrial uses with high levels of truck activity. Increased truck traffic on this highway segment would have minimal impact because Interstate 5 is part of the City's freight system and currently is a congested route, which is the focus of planning and investment with the Interstate Bridge Replacement and I-5 Rose Quarter improvement projects.

Therefore, the FFT amendments are not expected to constrain the supply of fossil fuel in a way that will result in a change in transportation modes that could adversely impact the multimodal transportation system. To the extent there is a change in transportation modes, the impacts are expected to be limited to major truck routes that are designated for that type of traffic.