

April 1, 2019

Megan Channel, Project Manager
Oregon Department of Transportation
123 NW Flanders Street
Portland, OR 97209

Ms. Channel:

Thank you for the opportunity to comment on the I-5 Rose Quarter Environmental Assessment. While my comments below reflect the parts of the report I was able to review, I found the comment period to be too short to fully review the assessment and I request additional time for review and comment. I begin with general comments on the project and then share concerns and questions section-by-section.

I am very disappointed that the alternative of introducing value pricing before constructing the project is not considered in the EA. It is a reasonably foreseeable project that the Oregon Legislature has directed ODOT to undertake, and evidence suggests it is the most effective and most efficient way to address peak hour congestion. I join the many community groups calling for a full environmental impact statement, and I strongly support one that includes an analysis of value pricing implemented before construction.

I am dismayed to see that the EA apparently does not account for induced demand. This effect is so well established and documented that it has been dubbed, "The Fundamental Law of Road Congestion."¹ Our collective understanding of induced demand is informed by Anthony Downs' theory of triple convergence, articulating that travelers will alter the time of day, mode, or route to minimize their generalized travel cost.² As observed on projects across the country, the effect causes any improvement in travel time to be quickly eclipsed by increased traffic volume and congestion as people switch to routes, time of day, and mode. I request that ODOT explain why this project is different from all others. What is it about this project that exempts it from observed effects so foundational to transportation planning that they are referred to as a "law"?

¹ Duranton, G., & Turner, M. A. (2011). The fundamental law of road congestion: Evidence from US cities. *American Economic Review*, 101(6), 2616-52.

² Downs, A. (2000). *Stuck in traffic: Coping with peak-hour traffic congestion*. Brookings Institution Press.

Purpose and need

I dispute the stated need “I-5 safety”; the need is not adequately documented for the portion of the project on I-5. In comparing crash rates among segments of urban interstate, the EA makes a compelling case that there is a lot of personal property damage occurring on the stretch of I-5 in the Rose Quarter; there appear to be many crashes. However, the performance of this section of roadway in terms of safety is a success story. In terms of actual fatal and severe injury crashes, it performs well, especially compared to the most dangerous streets in the region. For example, SE Division St. saw 19 fatalities and 129 serious injuries in the past decade (<https://www.portlandoregon.gov/transportation/74204#whydivision>), making this stretch of I-5 look enviably safe, especially on a per-trip or per-mile traveled basis. I-5 in the Rose Quarter has nearly met Vision Zero, the highest aspiration for traffic safety that our regional and local governments have adopted.

Environmental Justice

I dispute the conclusion of the EA that there are no disproportionate impacts to people of color and low income groups. The census tract near the project, tract 23.03, is home to people who already experience disproportionate burdens from harmful environmental exposures. According to the 2014 National Air Toxics Assessment from the US EPA, this tract has an estimated cancer risk from air toxics of 40 cases per million, one of the highest in the City of Portland. Induced demand will result in a greater total quantity of fuel combusted in the area, further exposing low income households and people of color who live nearby. Most importantly, any benefits of this project will accrue to travelers from across the region who are whiter and wealthier than the local population, whereas nearly all of the burdens of this project will affect the nearby populations. This is, on its face, a disproportionate impact.

I dispute the conclusion that there will be improved local connectivity benefits or “enhanced pedestrian and bicycle facilities” benefitting groups of concern. The proposed changes are a mix of positive and detrimental changes to local streets that can be best characterized as neutral, and they do not mitigate any additional burdens to nearby residents. Among the detrimental changes that include: prohibitively steep grades, dangerously large turning radii, slower bus service, circuitous ramps, and exposure to fast moving traffic. The aggregate travel delay or travel time savings among people walking, cycling, and using transit was not presented in the EA; we do not have the information necessary to determine whether there is an improvement for these groups.

Air quality

I dispute the conclusion of the EA that “the Build Alternative is not expected to have air quality impacts.” The information presented in the EA is not sufficient to make this determination. No quantitative modeling of criteria pollutants was undertaken, precluding the ability to estimate localized impacts. Even if National Ambient Air Quality Standards are met for the airshed as a whole, it is possible that this project could affect pollutant concentrations in the project area, especially if structural elements such as sound walls or freeway covers affect the dispersion of pollutants. High localized concentrations of pollutants could result in significant impacts on

human health in the short term and long term. The safest assumption is that the build option will result in greater total pollution and higher concentrations of pollutants near the project, since induced demand is likely to result in a greater quantity of fuel combusted. These would be significant unmitigated impacts.

I dispute the EA conclusion, “Although the area is still considered a maintenance area, it is recognized that it is not likely to revert to nonattainment.” The EA does not elaborate on who recognizes this, but the statement conflicts with parts of the most recent Annual Air Quality report from the Oregon Department of Environmental Quality (Oregon Air Quality Annual Report 2017, available from: <https://www.oregon.gov/deq/FilterDocs/2017aqannualreport.pdf>). That report includes data indicating that Portland exceeded ozone standards 9 times in 2017, and expressed the concern about the likelihood of an increasing trend in ozone days, stating, “With global warming we expect more fires in the Northwest and higher temperature days; this will result in more elevated ozone days.” Whether these days result in nonattainment or not, health effects will occur. This is a crucial trend in criteria pollutants that was evident from real time monitor data in 2017 and formally published more than 4 months before the EA, so it is puzzling that it is not presented. At a minimum it warrants discussion in the EA, but it also should temper our confidence in statements such as the one above and prompt more detailed analysis of the project.

I dispute the EA conclusion that construction impacts “would be temporary and limited to the immediate area surrounding the construction site and are not expected to exceed ambient air quality standards.” The proposed mitigation, essentially meeting the standards that are adopted current policy, is inadequate to mitigate the significant impacts to the human environment likely to result from construction. The evidence that diesel particulate is harmful is plentiful, as recognized by various city, county, and state level efforts to increase regulation of off-road equipment. For example, the City of Portland and Multnomah County adopted cleaner diesel contracting requirements in recognition of the inadequacy of current state standards. The impacts of construction on air quality could significantly impact human health; a localized spike in particulate matter or other pollutant could lead to acute respiratory disease.

I request responses to the concerns related to air quality enumerated below:

1. Please explain whether any dispersion modeling was undertaken. If not, why? What are the likely effects of structural changes and topography on pollutant concentrations in the area?
2. Were estimates of changes in criteria pollutants calculated as part of the MOVES runs for the EA? If not, why? If so, why weren't they published as part of the EA?
3. Please explain why the EA does not include the most recent (2017) published data from DEQ on trends in criteria air pollutants, especially ozone. Would inclusion of this data change the conclusions of the EA? Why?
4. Why is value pricing not considered part of the list of reasonably foreseeable future actions in Appendix D?

5. For how many hours does ODOT anticipate heavy diesel equipment emitting pollution in the area during construction? What types of engines would be used, and how many?
6. What are the names of pollutants that correspond to the pollutant ID numbers listed in the tables in Appendix C?
7. Section 3.2 lists compounds that are contributors to cancer and non cancer risks identified in the 2011 National Air Toxics Assessment. Are these the same compounds identified in the 2014 National Air Toxics Assessment? What is the justification for citing the older of the two studies?

Climate change

I dispute the EA conclusion that greenhouse gas (GHG) emissions will be slightly lower under the build alternative. The information presented in the EA is not adequate to make this determination. Although no confidence interval or margin of error is provided, the difference between the two scenarios appears to be so small as to be attributable to error in modeling. The safest assumption is that with induced demand, a greater total quantity of fuel will be combusted, leading to higher GHG emissions in the build scenario.

I request responses to the following questions regarding greenhouse gas emissions:

1. What confidence interval or range can be estimated for the estimates of GHG emissions for each alternative?
2. Please explain the justification for the threshold of a +/- 5% change in traffic volume, travel time, or delay for including links in the model. Does "traffic" and "travel delay" include all modes?
3. Why is the City of Portland's resolution to use 100% renewable energy by 2050 (<https://www.portlandoregon.gov/auditor/article/642811>) not included in the discussion in section 3.3.2?
4. Please explain the justification for the assumption of a 30 year life span for a highway project. Does this mean that the highway will be entirely rebuilt after 30 years? Is that typical in Oregon? Are there highways in Oregon that have been decommissioned after 30 years?
5. Please explain the decision not to include land use changes associated with either alternative in estimates of indirect GHG impacts.
6. In section 6.3.2, why is value pricing not included in the list of reasonably foreseeable actions?
7. In the same section, why is the 2014 Regional Transportation Plan referenced instead of the adopted 2018 plan?
8. The 2018 Regional Transportation Plan estimates that the Columbia River Crossing would be built in the 2028-2040 time period. Is that consistent with the modeling used for greenhouse gas emissions?

The estimated benefits of this project are based on tenuous modeling assumptions. In all aspects of the project except for travel times on I-5, the estimated difference between the two scenarios in the EA is very small. In comparison to small and questionable benefits, the costs

are certain and large. This dynamic calls for greater certainty about the benefits, and the highest level of scrutiny regarding any additional or disproportionate harms. I therefore request a full Environmental Impact Statement.

Regards,
Bendon Haggerty
1720 SE 36th Avenue
Portland, OR 97214