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Megan Channell, AICP
Rose Quarter Project Director
Oregon Department of Transportation
123 NW Flanders Street
Portland, OR 97209
Re: Comments on I-5 Rose Quarter Supplemental Environmental Assessment

Dear Megan,

I am writing to respectfully submit the following comments regarding the revised Supplemental Environmental Assessment (EA) for the proposed Rose Quarter project. My comments pertain primarily to the case for additional lanes within the project area, which I believe ODOT has failed to make; I remain supportive of other elements of the project. My arguments to this effect are detailed within this letter.

Introduction & history

In late 2016 I was approached by members of *No More Freeways Portland* and asked to review traffic-related elements of the initial Environmental Assessment for the 1-5 Rose Quarter project. Possessing some level of expertise in this regard that was not otherwise present in the group, I agreed, hoping that I could provide some useful insights and explanations around the transportation analyses within the EA.

While I will admit to a predisposition against the freeway widening elements of the plan, I am first and foremost a believer in following the data and the science, so I was certainly curious and open to arguments establishing the necessity of the new lanes. I expected to see a serious and sober analysis of the project, albeit one perhaps with assumptions and explanations that I strongly disagreed with. However the original report was riddled with errors and omissions, and was wildly insufficient to foster a meaningful discussion on the impacts of the project.

I was disappointed that a Finding of No Significant Impact (FONSI) was issued on the basis of that initial document, but hopeful that ODOT would use the second chance provided by revisions to the project to produce the complete and respectful analysis that the community deserves. Unfortunately, the document provided continues to fall short of even the most basic standards and expectations, as detailed in the paragraphs that follow.

Missing input volumes and figures

As a "technical" document, ODOT's *Traffic Analysis Supplemental Technical Report* (TASTR) purports to be scientific in nature. Thus it must meet the basic standard of *repeatability*. As such, professionally prepared transportation studies invariably include the raw data used and calculations performed at each step of the way, typically with a combination of figures and infographics within the report body and supporting materials within appendices.

Critically, the TASTR deviates significantly from the requirements set forth for such documents within ODOT's *Analysis Procedures Manual* (APM). Text from the APM itself states a clear purpose and mandate:

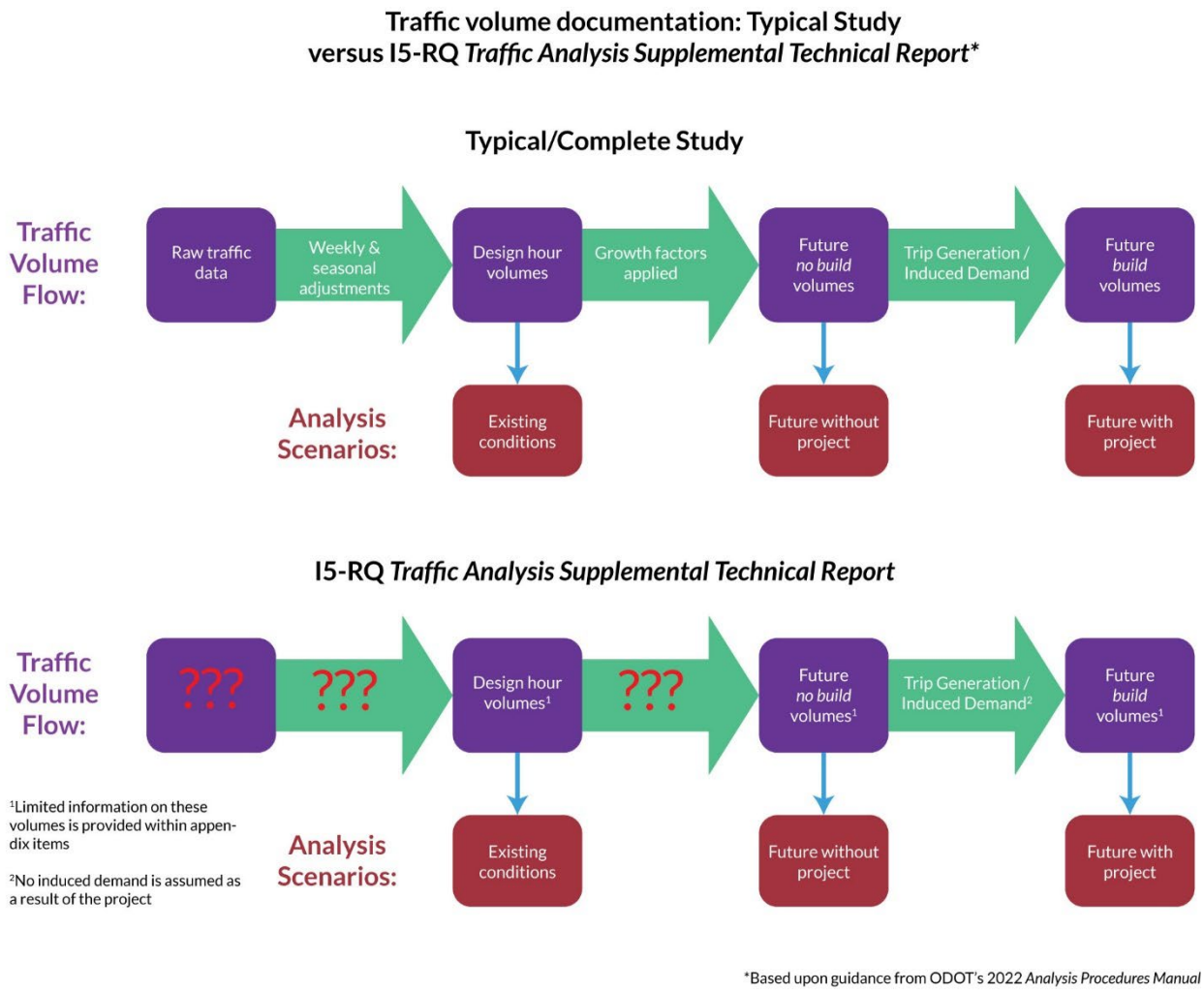
> "The Analysis Procedures Manual (APM) was created to provide a comprehensive source of information regarding current methodologies, practices and procedures for conducting analysis of Oregon Department of Transportation (ODOT) plans and projects…The APM shall be utilized by ODOT staff as well as external consultants and contractors conducting and reviewing plans, projects and/or studies for ODOT." (APM pg. v)

However, there are many instances of specific guidance within the APM that are followed only loosely or ignored outright within the TASTR, typically without explanation, particularly with regard to reporting traffic volumes. The best summary of the APM's guidance in this regard is likely contained within the opening of Section 5.6.3, *Documentation.*

> "It is critical that after every step in the 30HV volume development process that all of the assumptions and factors are carefully documented, preferably on the graphical figures themselves." (APM pg. 5-36)

Unfortunately, not only does the document fail to disclose all assumptions and calculations at each step, but *almost no information is provided whatsoever regarding volumes and assumptions.* Indeed, there are no figures nor are any volume data provided within the body of the report. Volumes can be found for some scenarios within modeling outputs provided in the appendix, but this is of limited utility. Based upon the information provided, there is no way to check any calculations, claims, or assumptions regarding volumes, despite the APM's clear and repeated statements on the importance of documentation and repeatability.

Figure 1 illustrates the extent of the missing and/or ill-documented traffic volume information within the TASTR. A well-prepared study will include documentation of raw volumes, volumes for all analysis scenarios, and exhaustive information of the calculations and assumptions leading from one stage of the process to the next, as shown in the figure. By contrast, the TASTR includes missing data and calculations at many steps and unclear or incomplete information at all others.



Key results reported erroneously

Tables 5 and 6 of the TASTR are arguably the most important pieces of the document, as these tables contain the top-level results of the proposed freeway expansion including differences in levels-of-service and volume-to-capacity ratios of I-5 between *build* and *no-build* scenarios for the first (Table 5) and second (Table 6) set of morning and evening peak hours. However these results are clearly reported in error, with identical results reported for both the first and second morning peak hours. It is unclear which (if either) peak hour the reported results correspond to.

It is my understanding that *No More Freeways* asked ODOT to provide a correction, with ODOT responding that the issue would be addressed following the public comment period.

I do not want to belabor what is almost certainly a transcription error of the sort that I've made a hundred times myself…*but* this is an error that simply has to be corrected before asking an audience

to take the document seriously. The fact that the errant results still stand not only deprives the public of an opportunity to understand the impacts of the project in aggregate, but call into question all other results reported and claims made within the document. Was the report subjected to any sort of scrutiny or internal review? If this clear error went unnoticed, what other harder-to-spot errors were not caught?

It is noted that if the report met the repeatability standard, this would be a far less significant error. One could simply retrace the steps within the report to determine which (if either) morning peak hour the reported results correspond to, and even fill in the missing results if one were so inclined. But in providing so little information regarding volumes, this report essentially asks readers to take its findings on faith. That obviously becomes a lot harder to do when an error this obvious, and of this magnitude, remains within the document of record.

IBR construction assumed; tolling not assumed

I appreciate that the updated study included an appendix item detailing *Reasonably Foreseeable Future Actions* upon which assumptions on future volumes are based (though of course no actual quantitative information on these assumptions is provided). Based upon this, future volumes assume new demand induced from the Interstate Bridge Replacement (IBR), presumably as currently proposed, but no reduction based upon tolling.

While the factor upon which this decision is based—inclusion in Metro's Regional Transportation Plan—may be as good as any, it certainly seems to be one that is fortuitous for anyone hoping to make a case for additional capacity. If not for the other omissions and errors I've detailed this might be a bit easier to swallow, but given the context it is certainly reasonable to question whether this assumption constitutes a "thumb on the scale," so to speak. This appearance is compounded by the fact that the IBR project is assumed to induce demand which is subsequently considered here (at least that's what we assume; with the volume data provided it's impossible to know!), but no induced demand is assumed for the Rose Quarter freeway expansion and other project elements.

Regardless, the community would be better served by an analysis scenario that includes the possibility that no freeway expansion is included when the Interstate Bridge is replaced, and an analysis scenario that includes the possibility of volume reductions based on tolling. The necessity of these additional scenarios and analyses of alternatives helps underscore the need for an Environmental Impact Statement (EIS).

Unexplained detrimental(?) neighborhood impacts

The TASTR provides a comparison between *build* and *no-build* operations for a number of key intersections impacted by the project for the morning and evening peak hours. Twelve intersections are analyzed for two peak hours each (a thirteenth intersection, which is created by the project is

also included). In eleven of the 24 instances (per Tables 7 & 8), the proposed project results in a *degraded* level-of-service (LOS) at a neighborhood intersection, and in seven others the project results in the same level-of-service. Only in six of the 24 instances does the project improve level-of-service.

I hasten to point out that this isn't necessarily a bad thing. It is appropriate for peak hour conditions in many urban settings to entail some delay for drivers, and level-of-service is certainly an imperfect and incomplete metric for measuring impacts. I suspect that the degradation of LOS at several intersections is likely due to planned improvements to the bike and/or pedestrian infrastructure, which I wholeheartedly support.

However, the lack of explanation combines with the lack of figures here to keep everyone guessing as to the causes. My fear is that, without explanation, these reductions LOS for drivers may be used as a cudgel to weaken or eliminate the active transportation infrastructure proposed. Ideally, this section of the analysis would include an exhaustive explanation of *what* was causing the LOS and volume-to-capacity (v/c) differences between the scenarios so that the relative pros and cons could be debated.

Unexplained nonstandard modeling assumptions

The work detailed within the TASTR includes several other modeling inputs and assumptions that differ, without explanation, from guidance offered by the APM. Two examples are that a saturation flow rate of 1,900 vehicles per lane per hour throughout the study area (APM guidance indicates that 1,750 vplph is more appropriate in most urban conditions) and a peak hour factor of 0.95 is uniformly assumed throughout the study area (peak hour factors are typically calculated from volume data).

Such assumptions likely do not significantly impact the reported results, but they are certainly nonstandard and as such should be justified. In a vacuum these factors are relatively minor considerations, but combined with the other problems within this report serve to underscore the need for further analysis and explanation.

Effectiveness of Tolling

The appendix of the TASTR includes a brief memorandum dated July 21, 2022 with the subject line of *RMPP/RQ Regional Travel Demand Model Sensitivity Test Results Summary*. While this document too fails to reveal much in the way of volumes, calculations, or assumptions, it shows *exceedingly* promising initial results for tolling as a mechanism to reduce traffic congestion, far outstripping the minor impact resulting from the proposed lane expansion.

While the language within the summary rather hilariously attempts to understate the relative impacts of tolling versus lane expansion that the analysis found, the analysis itself is clear that

tolling is a potential game changer. It absolutely must be looked at a strategy that could complement or even replace the lane expansion.

Conclusion and Necessity of an EIS

The TASTR as currently written fails utterly to provide a sufficient basis for a finding of no significant impact. There are obvious errors and omissions within the document, and the document roundly fails to meet ODOT's own requirements as set forth in the analysis procedures manuals.

It appears that there is a win/win/win within plain sight here: Build the freeway caps and neighborhood improvements, address congestion via tolling and alternatives, and value-engineer out the lane expansion. This is unquestionably the project that the community wants, and to the extent that this process has produced useful analysis, the preponderance of evidence point clearly to this as the best solution.

The previous environmental assessment was prominently referred to as a "shortcut" as the public and electeds began to come to grips with the associated process and findings. It remains a shortcut, and one that continues to ill-serve the public. If a freeway expansion *must* be constructed then it *must* undergo the requisite level of environmental review, which is an Environmental Impact Statement based on any reasonable reading of the National Environmental Policy Act.

ODOT should pivot to an EIS without further ado. The case for a finding of no significant impact has not been made, and such a finding would be specious at best without an EIS given the likelihood of significant impacts resulting from this project.

With Best Regards,

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