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MEMORANDUM

DATE: March 27, 2019
TO: Marion County Planning Commission
FROM: Lacy Brown, Ph.D., P.E. | DKS Associates
SUBJECT: Aurora Airport Rezone TIA – Response to Comments

This memorandum provides DKS Associates' responses to transportation comments provided by Marion County, City of Aurora, Clackamas County, City of Wilsonville, and the general public. These entities provided comments relating to the Aurora Airport Rezone Transportation Impact Analysis prepared by DKS Associates in January of 2019. Comments were received at various dates via phone calls, emails, and memorandums.

COMMENTS AND RESPONSES

Table 1 summarizes several of the concerns raised by the interested parties noted above as well as the project team's responses those concerns.

Table 1: Comments and Responses

	Comment	Response (DKS Associates)
1	General comments on study assumptions and analysis.	It is important to note that this TIA evaluated the impacts of a zone change per TPR requirements. The analysis is based on the reasonable worst case net increase in traffic that may occur as a result of the zone change (over a 20-year planning horizon). This is different than a traditional TIA which would typically only evaluate short-term impacts associated with trip generation from a specific development.



	Comment	Response (DKS Associates)
2	Road System is overloaded.	There are documented congestion issues at certain locations; the project team is working with the County to provide our fair share of the improvement funding. In addition to the applicant's contribution, ODOT has already identified \$7M in state funds to improve the intersection of OR-551/Ehlen Rd.
3	Airport/Arndt intersection fails to meet the Marion County operating standard in AM and PM peak hours.	All four of these intersections fail to meet mobility targets under background conditions (without any additional trips related to the proposed zone change). DKS has identified the infrastructure improvements needed to mitigate the impacts of the zone change on the transportation network. The project team is working with Marion County and ODOT to provide our fair share of the funding for those improvements.
4	The OR-551/Arndt Road and OR-551/Ehlen Road intersections exceed ODOT mobility targets for AM and PM peak hours.	
5	Airport/Ehlen Rd intersection fails to meet the Marion County operating standard in the PM peak hour.	
6	In Short term (2022) scenario and Long-term (2037) scenario, the same intersections fail to meet mobility targets or operating standards.	
7	Congestion will negatively affect emergency access to the property.	For the signalized intersections, which is where the congestion is concentrated, there are emergency vehicle pre-emption devices that provide priority at all times.
8	2015 counts were used.	Previous versions of this study utilized 2015 data. The current document, submitted with the zone change application, is based on updated counts collected in June 2017.

	Comment	Response (DKS Associates)
9	Potential 35% parking space discrepancy	The project team apologizes for this discrepancy. However, parking supply does not affect trip generation estimates (trip generation is based on building square footage and land use). The parking supply has no implications on the findings or recommendations of the study.
10	Office Space: Shop Space Ratio based on projections	Industrial areas, like that of the airport, typically include 10-15% office space. The reasonable worst-case scenario analyzed in the TPR/TIA assumed 44% office space.
11	Traffic study did not include increased traffic on Ehlen Rd due to Dundee Bypass and population growth in Canby.	The TPR/TIA included a background growth rate of 2% per year to account for regional growth in the area, including growth in and around Canby. The project team has no evidence that the Newberg-Dundee Bypass has substantially affected traffic patterns or volumes in the vicinity of the project beyond what is accounted for in our growth projections. ODOT and Marion County reviewed and approved our analysis approach. Subsequent discussions with ODOT have confirmed that the limited traffic volume data available since the bypass opened does not suggest significant increases in traffic volume in the area.
12	Traffic mitigation does not include a traffic signal on the Airport/Ehlen Roads	The recommended mitigations presented in the TPR/TIA represent the infrastructure improvements needed to mitigate the impacts of the zone change only (per TPR requirements). Based on feedback from Marion County and ODOT, as well as information in the City of Aurora TSP, we've accounted for the full project scope (including signalization) in our proportionate share evaluation for funding contributions.



	Comment	Response (DKS Associates)
13	<p>Trip Generation. The TIS provides trip generation for the existing use on the parcel that is equivalent to a 100,000 square foot church, which is inappropriate. The previous use on the site, the Missionary Memorial Church Theological Center, was a modest church camp with parking for a couple dozen vehicles at best. Moreover, the church is no longer occupied so the number of trips generated by the site is effectively zero. While a church may be allowed in EFU land as a conditional use, the assumed trip generation of a 100,000 square foot church is not an accurate representation of the previous land use, nor of a worst case use of the existing EFU. Assuming a 100,000 sf church on this site inflates the "existing" site trips, which significantly understates the impacts associated with the proposed zoning.</p>	<p>It is correct that the church is no longer occupied, however it was occupied at the time that the traffic counts were collected. The 100KSF estimated size was originally based on a reasonable Floor Area Ratio (FAR) for a 16+ acre property with a church use. A church use is a permitted use subject to standards under EFU, not a conditional use. This supports the notion that a substantially larger church is a reasonable worst case scenario under EFU zoning. Subtracting the worst case existing (EFU zone) trip generation from the worst case proposed (Public zone) trip generation is an appropriate method to estimate the impacts of the proposed zone change.</p> <p>While the project team is confident that our approach is appropriate, we ran a sensitivity analysis of intersection operations to determine the impact of the full trip generation estimate without the reduction of the existing church land use. Without this reduction, the general findings of the TPR/TIA remain the same. No additional intersection improvements are warranted. Some improvements may be triggered in the short-term as opposed to long-term, but the recommended improvements remain the same and adequately mitigate the impacts of the zone change.</p>



	Comment	Response (DKS Associates)
14	<p>Trip Distribution. The volume of traffic using Airport Rd seems low (5%) relative to OR-551 (30%). We believe that a significantly higher percentage of drivers will use the Airport Rd route, based on the fact that the site access will be to Airport Rd, and that Airport Rd provides a direct route to and from I-5.</p>	<p>Airport Road does provide access to I-5 north of the study area, however using this route requires northbound drivers to make a left-turn at Miley Road, which is an unsignalized intersection with operations and safety concerns (as noted by Clackamas County in the subsequent comment). The project team does not anticipate a large percentage of drivers electing to make this seemingly difficult maneuver to get to I-5 when OR-551 provides an easily accessible alternative route with direct access to I-5. The 5% of traffic assumed to travel north on Airport Road represents the small percentage of traffic destined for the Charbonneau residential area.</p>

	Comment	Response (DKS Associates)
15	<p>Airport Rd & Miley Rd Intersection. The TIS did not evaluate this intersection. After accounting for comments #1 and #2 above, the proposed zone change may cause a significant effect at the intersection. Clackamas County is concerned about additional traffic on Airport Rd because of traffic operations and safety at the intersection, which is a top SPIS site. A traffic signal is planned at the intersection, and it is listed in the Clackamas County Transportation System Plan (#1093). No funding has been identified. Clackamas County recommends that the applicant's engineer evaluate impacts and potential mitigations at this intersection to address safety and efficiency.</p>	<p>The project team believes that our trip generation and trip distribution assumptions are sound, and that the resulting increase in traffic at the intersection of Airport Rd/Miley Road does not warrant evaluation.</p> <p>As documented in the TPR/TIA, the zone change is expected to add a maximum of 8 trips in the AM peak hour and 7 trips in the PM peak hour to the Airport Rd/Miley Rd intersection. If no reduction for the existing church land use is applied, these numbers would increase to 9 trips during both peak hours. This volume of traffic added to critical movements would result in only minor impacts to operations and safety. Additionally, it is less than the 20 vehicle trips in a peak hour that would typically trigger the need for evaluation on Clackamas County roadways (per Clackamas County Roadway Standards, Section 295.2). Even if the trip distribution were adjusted to double the amount of traffic utilizing Airport Road, the resulting volume (18 trips) would be below the threshold for capacity analysis. Further, our study area, trip generation, and trip distribution were all reviewed and approved by ODOT and at no time was it suggested that the intersection of Airport Road at Miley Road be evaluated.</p>
16	<p>Safety Improvements. Although the signalized intersections of Arndt Rd / Airport Rd and Arndt Rd / OR 551 are not under Clackamas County jurisdiction, we recommend that reflectorized signal head backplates are considered to improve signal visibility and overall safety.</p>	<p>Marion County and ODOT have reviewed and approved the mitigations outlined in the TPR/TIA and have not requested any additional improvements. Further, Marion County has a planned project to update the signal at Arndt Rd/Airport Rd for flashing yellow arrow (FYA) operations. Signal visibility improvements may be installed in conjunction with the planned signal enhancements.</p>