

TECHNICAL MEMORANDUM

Project: Point Ruston FSEIS Addendum – Transportation Technical Report

Subject: Response to December 6, 2019 City of Tacoma Comments

Date: January 17, 2020

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The following presents responses and additional information to address questions and comments on the *Point Ruston FSEIS Addendum Draft Transportation Technical Report*¹ (TTR) from the City of Tacoma’s transportation review staff.² This second round of comments from the City requested additional explanations and/or analysis for some of the comments in its prior comment memorandum (October 28, 2019) after a meeting and discussions with City staff on November 13, 2019. Based on discussions at that meeting, City staff noted that for many of the comments the “*Applicant provided satisfactory response and/or intends to carry out edits to address this previous comment.*” For those, no additional response is provided. However, for several comments, additional edits and/or responses were requested and are represented with bullets after each of the affected comments. The responses and approach were coordinated with City staff in a conference call (December 11, 2019) and via email communications (January 2, 8, and 9, 2020). The original comments and the bullets with requests for more information are re-stated below and are followed by responses.

Comments:

2. *P.4, 1st paragraph: The analysis approach to subtract “existing” traffic associated with the site in order to have a base condition reflect no site influences introduces some potential inaccuracies. Either the site-associated traffic being subtracted is based on actual count data that does not reflect the current state of the site, or it relies on the trip generation estimation methodology (and its inherent limitations, accepted as they are) at two points in the overall analysis process—once to estimate the base conditions and another to generate future conditions; and it presumes to know the routing of site-associated traffic throughout the study area (with example of this reflected in the next to last sentence of Section 2.2.3 on p.11). To counteract this bias, the existing conditions—including whatever site-associated influences are included—could be considered the base conditions and then future conditions—with and without the additional site-associated traffic—could be analyzed and compared relatively. The methodology employed in the study was not vetted with the City prior to commencing the work.*

 - *Although the applicant explained the methodology employed, the concern expressed in the original comment and concern remains unresolved.*

Response: Text has been expanded to better explain unusual nature of analysis timing, purpose for extraction, and to note that the reported existing conditions reflect partial occupancy and can be used as means for comparison.

¹ Heffron Transportation, Inc., July 30, 2019.

² Memorandum from Brennan Kidd, PE, PTOE, City of Tacoma Public Works Department / Engineering Division to Lisa Spadoni, City of Tacoma Planning and Development Services, December 6, 2019.

6. *Based on the technical support data provided, it is difficult to determine the effects of the mid-block crosswalks modeled within the SimTraffic environment. The output is not clear as to which “cross streets” represent each of the mid-block crosswalks (for example, there are entries with values but no label to describe them). Also, how did SimTraffic account for pedestrian use of crosswalks (marked or not) at unsignalized intersections?*

- *With additional information pertaining to this previous comment to assist with interpreting the traffic modeling output, it does not appear the representation of often used pedestrian crosswalks along the Ruston Way corridor (“Node 44” [at The Ram Restaurant] and “Node 57” [at Harbor Lights]) accurately represented the amount of delay that can be incurred during the peak periods at this locations based on the pedestrian demands, frequency of beacon activations, and/or walking speed of pedestrians.*

Response: Added new text providing more detail about video observations of the number and actual crossing time as well as the time cars were observed delayed by crossings. Text was also added to note that higher pedestrian volumes in summer and peak season likely cause more delay.

12. *Overall comment regarding the information presented in Section 3.2.5 (Trip Distribution & Assignment): the analysis basis of presuming the continued use of routes by current/future site traffic based on origin-destination data gathered from a previous state (mix) of development and the current roadway network (and associated configurations/conditions) is not robust, and was a point of expectation conveyed by the City in advance of the study. Additionally, the City expressed an expectation that additional data/study was needed to support any proposed site traffic distribution and/or assignment and that a pre-approval step was expected before commencing the study.*

- *A forecasted distribution of where site trips would originate from/be destined to should be developed using typical methods based on available roadway network/access routes and land use concentrations within the influence area of the site at its full buildout. As stated previously, the Bluetooth-based data was a “snapshot” of the site’s development and travel patterns at that point in time.*

Response: Text has been added to provide further support for this basis. In addition, an alternative project-trip distribution and assignment was developed in coordination with City review staff to test conditions with higher levels of use for N Baltimore Street. See new sensitivity analysis presented in Section 3.4.

13. *Bottom section of Table 10 shows Two Way Daily Volumes for various corridors and particularly shows 80 Point Defiance-related trips using N. Baltimore Street (north of N. 46th Street); please explain basis for this. This same table, and for the same roadway segment, shows that Point Ruston-related traffic is forecasted to make up almost 40% of the traffic using this segment of Baltimore Street, yet no mitigation is proposed for the roadway.*

- *Despite a short-sighted assumption of site traffic travel routing (per Comment #12 above), Table 10 of the report documents that nearly 38% of the forecasted daily use of Baltimore Street (north of N 46th Street) is site-related—this is almost the same percentage of site traffic that is forecast to make up the Ruston Way traffic (40%) and more than the forecasted site portion of the future demand on North 51st Street west of Baltimore Street roundabout (34%) and Ferdinand Street south of Ruston Way (30%). Even though the overall traffic demands on the roadways are different, this comparison clearly indicates that Baltimore Street is a viable route to/from the site,*

especially given the future continued buildout which will be focused on parcels aligned with the roadway/western portion of the overall site (in fact, an original project overview mentions a portion of the site would be referred to as the “Baltimore District”). As such, and as documented in the FSEIS, there shall be mitigation of the roadway to ensure its continued viability as one of three to four directional routes serving the site. Moreover, Baltimore Street may end up being a critical route—for either site traffic, background traffic displaced by site traffic using the North 51st Street/Ruston Way routes, and/or emergency services access routing relating to a potentially intensified development--based on capacity/physical limitations of the other three routes.

Response: An alternative project-trip distribution and assignment was developed in coordination with City review staff to test conditions with higher levels of use for N Baltimore Street. See new sensitivity analysis presented in Section 3.4.

15. *Section 3.3.1 suggests a “wait-and-see” approach to the realized operation/delays at the North 51st Street/Winnifred intersection (within the City of Ruston), taking their cue from the Point Defiance Park traffic study focused on a different horizon year and incorporating an approximation of the expected buildout of the Point Ruston site. A more appropriate, and City expected, assessment of mitigation options would be a traffic signal warrant analysis and the consideration of how to mitigate the routing of Point Ruston-generated traffic through the intersection.*

- *Although this “wait-and-see” conclusion was exercised in the Point Defiance Park TIA, its study was not forecasting poor intersection levels of service during a weekday PM peak period as the Point Ruston study is showing (i.e., LOS D/31 sec of delay vs LOS E/39 sec of delay). With the City of Ruston unlikely to change from all-way stop control at the intersection and with the studies’ conclusions that forecasted traffic demands would not meet signal warranting criteria, the only remaining mitigation is to reduce the site-generated demand using this route/intersection. Unlike Point Defiance Park, this mitigation strategy is possible with Point Ruston given the alternative arterial routes of Ferdinand (49th) Street and Baltimore Street that provide direct or nearly direct access to/from the site (which is a critical factor in emergency services routing). Ferdinand/49th Street’s continued viability is preserved with the study’s confirmation of meeting signal warranting criteria by a certain phase of the site buildout, and Baltimore Street’s status would be similarly confirmed with carrying out the planned improvements as described in the FSEIS.*

Response: The text in the TTR was expanded text to address weekday versus Saturday operations and also outlined an option for conversion of the intersection to two-way stop control. It is noted that the City’s preference has been for all-way-stop control. An alternative project-trip distribution and assignment was developed in coordination with City review staff to test conditions with higher levels of use for N Baltimore Street, which could reduce impacts and delays to the N 51st Street / N Winnifred Street intersection. See new sensitivity analysis presented in Section 3.4.

16. *In support of Table 11 and its “With Proj. & Mitigation” columns of data, there needs to be a delineation of what the actual mitigation, as outlined in the FSEIS (per the table’s footnote), was applied/assumed for the shown results.*

- *Although some of the FSEIS-based mitigations are spelled out on p.33 (para 3) of the report, they are not comprehensive for what is presented in the FSEIS and would have bearing on the intersections analyzed and results presented in Table 11. For example, turn lanes were required*

at the North 46th Street and Baltimore Street intersection, but the analysis output does not indicate that this configuration was analyzed.

Response: As discussed with staff, this comment is in error. Turn lanes were included in the mitigated case analysis (see LOS calculation sheets). They are comprehensive to what is remaining in the FSEIS.

17. P.32, first paragraph (towards the end): *Signalization of the intersection of Ruston Way and North 49th Street is presented as a supported mitigation that would need to occur prior to Phase 10 of the development generating site traffic (and likely prior to any permitting of Phase 10-related activity). What is significance of the next statement that says, “(w)ith Phase 10, the Point Ruston site is projected to generate about 80% of its total full-build traffic.”? I could see this being a threshold of development, whether per the planned phases/subphases or otherwise, to associate this signalization mitigation.*

- *The report content could stand to clarify that the significance of the “80% of buildout” threshold is a back-calculated value that corresponds with the level of site-generated traffic that would likely meet the traffic signal warranting criteria levels, and that per current site development plans/phasing, that 80% threshold would correspond with Phase (Building/Parcel?) 10.*

Response: Yes, since the Point Ruston project has a history of opening buildings out of order from numbering, this was provided in case development and occupancy happened differently than predicted. Text has been added to explain the “80%” threshold further.

19. P.32, third paragraph: *This paragraph ends with a similar statement as referenced in Comment #16 [sic], indicating what percentage of forecasted demand is associated with the Point Ruston development, but what is the associated conclusion?*

- *Appendix D of the report provides support for the signal warrant analyses conducted for the Ruston Way/N 49th Street and Ruston Way/Alder Way intersections, but only presents information pertaining to Warrant 1 from the MUTCD. Why were other warrants from the MUTCD not evaluated/documentated, particularly Warrant 2 (Four-Hour Vehicular Volume), which the projected conditions at Ruston Way/Alder Way may preliminary meet or nearly meet its criteria?*

Response: The warrant analysis in the TTR has been expanded to include information and results for Warrant 2 (Four Hour) and Warrant 3 (Peak Hour). With full-build traffic, the Ruston Way / Alder Street intersection exceeds the Warrant 2 threshold for three of four hours and does not meet Warrant 3 thresholds.

20. P.32, last paragraph: *There is a sentence that states, “In addition, the proportion of Point Ruston-generated traffic using that route [Baltimore Street south of Ruston Way] was observed to be lower than predicted in the FSEIS,” but it does not also mention that the data basis for this conclusion was taken a time when the state of the development was different and more importantly, the condition/configuration of Baltimore Street was not improved to the requirements of the FSEIS, which would support its increased use by all modes of traffic.*

- *See updated comment/response to Comment #13 above.*

Response: See Response to Comment #13 above.

21. P.32, last paragraph: *The sensitivity analysis being described in this paragraph suggest that only a portion of the existing traffic demand using North 51st Street was hypothetically redirected to use North Baltimore Street, but it is unclear if a different proportion of site-generated traffic was also redirected, or if not, then what the sensitivity analysis results would be if more site-generated traffic was assumed to use North Baltimore Street—such as if the corridor was improved as envisioned in the mitigation from the FSEIS. Also, there was no mention of any benefits realized at the North 51st Street intersections as a result of more traffic (of any type) using North Baltimore Street.*

- *Per Page 1-14 of the FSEIS, the mitigation measures listed associated with the Point Ruston development's "Proposed Action" would "provide a more balanced distribution between inbound/outbound volumes... [and] is based on the impact of these project generated trips on the local road network." Listed with these mitigation measures were the Baltimore Street specific improvements, including but not limited to the following:*
 - *Provide curb, gutter, and sidewalk between N. 49th Street and N. 46th Street where needed.*
 - *Upgrade existing or add new street lighting to meet current arterial street standards.*
 - *Develop a channelization plan for the segment of Baltimore between N. 49th Street and N. 46th Street that provides for a single travel lane in each direction, additional road width for bicycles, and accommodates parallel parking within the usable right-of-way. The plan should minimize impacts to existing land uses. Review and refine plan with City staff and construction improvements.*
 - *N. 46th Street & N. Baltimore Street - Provide eastbound and northbound left turn lanes and a southbound right turn lane. Reconstruct the sidewalks/curb ramps at the corners of the intersection to meet current road standards. Provide a marked pedestrian crossing on N. 46th Street with warning signs and beacons as per City street standards.*
 - *A bicycle route will be included with improvements to the segment of N. Baltimore Street between Ruston Way and N. 46th Street.*
- *Per the FSEIS (p.2-34), commuter bicycle access was expected “along Ruston Way, Baltimore Street from the reconnection to 46th Street...” and would be supportive of the underlying neighborhood/land use visioning as presented on p.3.1-15: “Also support completion of the Scott Pierson Trail located along State Route 16; Develop sidewalks, bicycle lanes, curb cuts and other street-related improvements to enhance pedestrian safety and circulation in this older neighborhood especially along streets such as Orchard, Baltimore, Ferdinand and North 46th Streets*

Response: Comments noted. See new sensitivity analysis presented in Section 3.4.

24. Section 4 (Findings and Conclusions) presents a conclusion within the “Traffic Distribution” heading highlighting that more site traffic uses North 51st Street than predicted in the FSEIS, but the FSEIS also presumed that an improved North Baltimore Street would allow for/attract more use by all types of roadway users.

- *The intent of the FSEIS mitigation measures pertaining to improving Baltimore Street was to provide overall traffic and circulation capacity within the influence area of the Point Ruston site, so the study’s conclusion that more site traffic is using North 51st Street is indicative of reserved*

capacity that will not be available to the remainder of the traveling public. This is another characterization of the importance of ensuring all viable routes to and from the site are available to site-related traffic and all have equivalent accommodations to attract a balanced distribution and routing of traffic within the influence area.

Response: An alternative project-trip distribution and assignment was developed in coordination with City review staff to test conditions with higher levels of use for N Baltimore Street. Increased pedestrian and bicycle movements were also assumed. The new analysis addressed the potential that such a shift could improve operations for the N 51st Street corridor, especially at N Winnifred Street and N Pearl Street. See new sensitivity analysis presented in Section 3.4.

25. *Section 4 (Findings and Conclusions) presents a conclusion within the “Impacts to Intersection Operations” suggesting that the intersection of North 51st Street and Winnifred Street is intended to be mitigated by the Point Defiance Park master plan development, but Table 11 shows that the projected intersection level of service drops from LOS B to LOS E when comparing the conditions without and with the Point Ruston site-generated trips.*

- *See updated comment/response to Comment #15 above.*

Response: See response to Comment 15 above.

26. *Section 4 (Findings and Conclusions) presents a conclusion within the “Limited Utility of N Baltimore Street / N 46th Street Mitigation” that relates to Comment #24 (see above).*

- *See updated comment/response to Comment #24 above.*

Response: See response to Comment 24 above. As noted, an alternative project-trip distribution and assignment was developed in coordination with City review staff to test conditions with higher levels of use for N Baltimore Street. That analysis addressed increased background and project traffic at the N Baltimore Street / N 46th Street intersection as well as the benefit created by the prescribed mitigation elements (turn lanes) at that intersection). See the new sensitivity analysis presented in Section 3.4.

- *As evident from the projected impacts at the N 51st Street/Winnifred Street intersection, which would also likely manifest at North 51st Street/Pearl Street if it were not already controlled by a signal, although the public perception of the actual operation of this intersection belies the modeled level of service.*

Response: See various responses presented above.

29. *P.41, 1st paragraph (7th line): See previous comments concerning the use of North Baltimore Street.*

- *See various updated comments/responses as presented above.*

Response: See various responses presented above.

30. P.41, 1st paragraph (10th/11th lines): *See previous comments concerning the use of North Baltimore Street, but there is also no mention of benefits to North 51st Street-related intersections that comes with increased use of an improved/configured North Baltimore Street corridor.*

- *See various updated comments/responses as presented above.*

Response: See various responses presented above.

31. Various comments/statements based on the information presented in the “Completed Measures” heading of Section 4:

ii. *As discussed in other comments, Baltimore Street would require improvements—such as prescribed in the FSEIS—to likely attract an appreciable amount of road users and site traffic use, which would be a viable means of mitigating the level of demand (site traffic and other) along the North 51st Street corridor—as evident from the study’s forecast of deteriorating intersection operations at North 51st Street and Winnifred Street (and North 51st Street and Pearl Street to some degree, which shows nearly a 100% increase in average delay). Monitoring of projected use without the corresponding improvements is not a reasonable means of determining whether the improvements are needed or not; instead, the question should be how the North 51st Street corridor’s traffic demands, intersection operations, and delays are being mitigated.*

- *See various updated comments/responses as presented above.*

Response: See various responses presented above.

32. General comments based on correspondence provided prior to the start of the study:

i) *There did not appear to be any daily capacity of the study area roadways, especially for the segment of North 51st Street between North Baltimore Street and Pearl Street.*

- *Although the City of Tacoma does not have a prescriptive threshold for roadway capacity, the expectation of requiring it be addressed in the study is for the applicant to reference current industry data and practices as part of providing an assessment of whether roadway capacity is expected to be overburdened with the site-generated traffic demands.*

Response: Text and analysis has been added to the TTR address the questions raised about the daily traffic volume capacity of study-area roadways.

TSM/tsm