

TECHNICAL MEMORANDUM

Project: Point Ruston FSEIS Addendum – Transportation Technical Report

Subject: Response to October 28, 2019 City of Tacoma Comments

Date: January 17, 2020

Author: Tod McBryan, P.E. – Principal 

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 The comments are numbered and re-stated followed by responses.

Comment:

1. *Table 1 does not list the pending open-air market in the column representing the “Current Proposal Evaluated for Addendum,” yet it is described in detail and included in the trip generation forecasting.*

Response: It was evaluated as retail (LU 820) and is part of retail floor area. A footnote (#4) was added to address this comment.

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.*

Response: The subtractions were made based on driveway counts which also provided reasonable information about traffic direction. This approach was completed to offer a relative comparison of project impacts. The full with-project condition is not affected by this comparison. The text was expanded to better explain the unusual nature of this analysis (being conducted when site is partially built), the purpose for extraction, and to note that existing conditions reflect partial occupancy as another means for comparison. The condition with the existing trips removed is presented as the “Baseline” condition.

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, October 28, 2019.

3. *P.7, last paragraph: The comparison of daily traffic volumes does not mention what time of year the 2006 counts were taken and therefore whether there is any seasonal factor that may need to be accounted for when comparing to the 2017 data taken in November. Apart from seasonal factoring, a more in-depth analysis of the traffic trends would be needed to support the speculation presented in the final sentence of the paragraph.*

Response: The FSEIS counts from 2006 were performed in September; text related to the month the new counts were performed was added and the speculative sentence was deleted.

4. *P.11, last paragraph, last sentence: In conjunction with Metro Parks Tacoma’s roundabout construction project, there was also a reconfiguration of the northbound lanes at North 51st Street and Pearl Street to add a right turn lane. (It appears this configuration was accounted for in the operational analyses).*

Response: The analysis of existing (2017) conditions was changed to remove the northbound right-turn lane that was added after 2017.

5. *The Existing LOS and Delay presented for the park entrance intersection that is now a roundabout is unrealistic at LOS B with 13.3 seconds of delay. The whole basis for the roundabout’s construction was to mitigate operational and safety concerns at the 5-way intersection controlled by Stop signs.*

Response: The results match the results from the Point Defiance Park TIA report. A footnote (#5) was added to explain that delays may have been higher than reported.

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?*

Response: The mid-block crosswalks were modeled as signalized intersections with crossings represented as individual actuated vehicle movements with 13-second phases for each actuation. The Harbor Lights crosswalk is node 57; the crosswalk between CI Shenanigans and The Ram is node 44. Since no pedestrian crossings were counted at the crosswalk south of Alder, that crosswalk was not specifically modeled. According to the software producer, “SimTraffic performs micro-simulation and animation of vehicular and pedestrian-related traffic. With SimTraffic, individual vehicles are modeled and displayed traversing a street network. SimTraffic models signalized and unsignalized intersections, as well as freeway sections with cars, trucks, pedestrians, and buses.” A paragraph was added explaining delay caused by crossings.

7. *In keeping with the study’s analysis methodology (as commented about in Comment #2), how were the influences of the site-associated traffic extracted from the collision histories and safety analysis for the period examined and described in Section 2.4 (Traffic Safety)?*

Response: No extractions of site traffic were made in the analysis of collision data. A footnote (#11) was added to explain.

8. *In the first paragraph in Section 2.5, where was the cited 0.6-mile distance measured to/from within the site? If a centroid of the site was used, it would be more accurate to list the range of distances to/from the nearest transit center based on the positions of the various land uses on-site.*

Response: It was measured from the intersection of Main/Grand Loop. Text was added to provide a range of distances measured from extents of Point Ruston site.

9. *In Section 3 (Project Impacts), the analysis is focused only on the full-build and occupancy of the Point Ruston development which affords no granularity to the analysis for associated any potential impacts with certain development milestones. This analysis approach was not vetted beforehand with the City of Tacoma.*

Response: The warrant analysis for the Ruston Way / N 49th Street intersection was provided by phase to determine when it was likely to be warranted. Text has been added to describe process.

10. *Table 5 should be clarified to present it as the summary of the development at a given point in time. For example, there are some stores listed (Pink Polish, Rebels & Lovers, etc.) that are currently open, but perhaps were not open at the intended “snapshot” of the summary.*

Response: The table and notes were updated to reflect conditions for data collection and current status.

11. *The trip generation representation for the outpatient specialty medical treatment center (Building 16) is proposed to be based on the expected employees for a “medical-dental office building.” The City had previously inquired (in a 4/19/19 email) about whether a “Clinic” land use category (or similar) would be a more appropriate (conservative) representation, but I do not believe there was any follow-up.*

Response: Yes, this was considered. The medical-office building description seems a better fit since the description for clinic states they have a “...wide range of services (compared to the medical office, which may only have specialized or individual physicians.)”. Since the results are comparable—the clinic rate is closest to data at the proposed size and results in slightly lower estimate versus the equation for medical-dental office (43 versus 49 PM peak hour trips). The text has been expanded text to explain decision.

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.*

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 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.*

Response: Figures 10 and 11 from the Fehr & Peers report for the Point Defiance Park project show 1% of project traffic using N Baltimore Street. Data from that report (*Appendix D: Trip Generation Calculations*) were compiled to determine total weekday daily trip generation from the Point Defiance Park project. That showed 8,080 trips per day generated at full-build; thus the 1% of daily traffic results in 80 trips on N Baltimore Street.

Overall background volumes are relatively low, so the estimated proportional contribution by Point Ruston is relatively large; however, there are no adverse impacts identified, so no new mitigation is required or proposed. The City does not have mitigation requirements based on the percentage increase in traffic. Note that the FSEIS required mitigation based on expected usage and volume levels that have not yet materialized. The updated addendum report recommends monitoring traffic to determine if/when to implement those measures. Text has been added to explain further.

14. *Section 3.3.1 mentions the LOS results based on overall intersection delay, noting there are three study area intersections that are predicted to be at LOS E or F, but there needs to be a discussion of individual movements at all study area intersections (not just unsignalized)—that would potentially shoulder concentrated routing to/from the site. Individual movements predicted to operate poorly may then have specific resulting impacts apart from, and despite, the overall averaged delay for the intersection as a whole.*

Response: The results by movement and approach are provided in the LOS calculation appendices. City does not have standard or mitigation requirement based on impacts to individual movements; however, text was added to address movements operating at LOS D or worse.

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.*

Response: The Point Defiance Park analysis was prepared for year 2030 conditions; the Point Ruston TTR analysis reflects estimated year 2032 conditions. Volumes in both reports are nearly identical. The City approved the analysis for the Point Defiance Park project, which stated that the intersection does not meet even the least stringent traffic signal warrant (peak hour) under the high Saturday midday volumes. The Point Ruston FSEIS also noted that the intersection likely does not meet warrants for all-way stop control (its current configuration). Text was added to address an option for conversion to two-way stop control, if desired by Ruston.

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.*

Response: A new table was added to the updated report (Table 11) to provide more details.

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.*

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

18. *P.32, second paragraph (sentence): This statement needs to be amended to indicate the determination of warrants being met, and any associated data collection/analysis, is to be performed by/on behalf of the Point Ruston development.*

Response: Text was added as suggested.

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

Response: This comment appears to have been intended to refer to Comment #17. The analysis indicates that the full-build Point Ruston traffic would not cause the intersection to meet any signal warrants. The point of the contribution percentage is to offer a reasonable basis for cost sharing in the future if conditions or other development cause the intersection to meet warrants. With full-build traffic, the intersection only exceeds the Warrant 2 (Four Hour) threshold for three of four hours and does not meet Warrant 3 (Peak Hour) for any hour. Text was added to provide more information on warrant analysis.

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.*

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. See new sensitivity analysis Section 3.4.

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.*

Response: The FSEIS assumed the N Baltimore Street connection in developing the distribution and assignment of project traffic. Therefore, the sensitivity analysis only addressed the partial diversion of existing trips (since the forecast were based on actual counts conducted before the connection). For the updated Addendum TTR, 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 Section 3.4.

22. *Section 3.3.3 (Site Access) suggests that the left-turn from the site onto Ruston Way at Bayview Corridor access point is LOS F, but it does not appear that the traffic model analyzed considered that two-stage left-turns could store within the center/acceleration lane per the existing lane configuration/striping at this location. If after accounting for this, there is still a predicted poor LOS, then any suggestion of limiting possible turn movements at a location must be accompanied by an analysis of the resulting effects.*

Response: Yes, after correcting the coding, the turns from the site are forecast to operate at LOS D/E (depending on HCM methodology). Analysis of possible turn restrictions and alternative access was also added.

23. *Section 3.4 (Parking Supply) and 3.4.1. (Parking Supply and Code Requirements) – does the assessment described in these sections account for the parking supply that Point Ruston-related employees (and maybe visitors) are using on the south side of Ruston Way from North 49th Street westward?*

Response: The analysis is based on the full-build program and the proposed site plan. It does not count supply associated with the referenced off-site area that has been closed. The analysis determined that the proposed supply would accommodate the full-build demand.

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.*

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 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.*

Response: The Point Defiance Park transportation report does not indicate what mitigation would be implemented, but rather indicates measures should be implemented if a monitoring program determines they are necessary. For the Updated Addendum TTR, 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 Section 3.4.

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).*

Response: See response to Comment #24 above.

27. *Section 4 (Findings and Conclusions) presents a conclusion within the “Travel-time Benefits of FSEIS-Prescribed Mitigation” but the prescribed mitigation is never explicitly stated, and needs to be for clarity to the reader.*

Response: A new table was added (Table 11) to provide more details and is referenced in this section.

28. *P.41, 1st paragraph (3rd/4th lines): See previous comment about City’s position regarding consideration of signal control when warrants are shown to be met, and study should forecast site development and traffic demands to predict a milestone when a signal warrant may be met (such as was done for the signal warrant analysis at North 49th Street/Ruston Way).*

Response: Milestones are provided for the signalization at N 49th Street / Ruston Way and for the possible degradation of N 51st Street / N Winnifred Street. Since warrants are not met with the full-build (or not applicable) to other remaining mitigation measures, no milestones are provided.

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

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 Section 3.4.

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.*

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. 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 Section 3.4.

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

- i) *The City of Tacoma does not control Pierce Transit routing and associated business strategies, so how would the development carry out the “remaining measures” involving a re-routing of Route 11 and bus stops along Ruston Way/near or at the Point Ruston site.*

Response: As noted in the updated TTR on page 18, Pierce Transit is working to implement a new on-demand Microtransit service (beginning Q1 2020) in a zone along Ruston Way connecting to Tacoma Dome Station, 10th & Commerce, and bus stops near the N 51st Street / N Pearl Street intersection. Signage may be placed within at Point Ruston to designate locations for riders to meet vehicles. Pierce Transit hopes to display partner logos on vehicles to showcase the

local partnerships (examples include Point Ruston, Silver Cloud Hotel, GenCare, and Century Point Ruston Cinema).

- 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.*

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. 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 Section 3.4.

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.*

Response: Text and analysis were added to address daily capacity questions.

- ii) *There was no travel time analysis for the purpose of examining likely routing/distribution of traffic to/from the site, in the surrounding areas, and/or within the study area.*

Response: Text was also added to note that the results are consistent with the predictive travel time component from Google Maps. Sensitivity analysis was added to assess effects of more traffic using N Baltimore Street.

- iii) *The parking assessment did not mention the now current application of site users having to pay for parking (or have it validated through on-site land uses).*

Response: Text was added noting that validated paid parking has been implemented at the site and that, while this practice could influence customer and visitor behavior, it is unlikely to result in higher demand than predicted.

- iv) *Despite having an active site, there was no survey of site users (for mode of travel, routing, parking choice, etc.) to better inform the study’s assumptions and/or the trip generation model for the site.*

Response: The site counts and origin-destination results provided strong evidence of expected trip making and routing to/from the area and is better than what was available for the FSEIS, better than that used for Point Defiance Park project, and better than that typically available to any other new development.

Editorial:

- P.1: In listing of study intersections, “St” in the first bullet is cut off
Response: This has been corrected.
- *Figure 1 should include a map with legible building numbers (and potential phasing outlines) since at least some portions of the report use this information as identifiers.*
Response: Figure 1 has been revised as requested.
- *Figure 2 would benefit from a stated (or graphical) scale.*
Response: Added note “not to scale.”
- *Figure 4 shows a difference in eastbound/southbound through volume on Ruston Way within the “Location A” inset—338 to 322. It appears it may be a typo and 322 should show 340.*
Response: This has been corrected ✓
- *Table 2 should have number 4 footnotes for the roundabout intersection-related entries (the number 3 footnote is already used to explain “Delay”)*
Response: Has been corrected ✓
- *P.16, paragraph under Table 3: “All of the intersections had collision rates of 0.7 million entering vehicles (MEV)” is incorrect.*
Response: Yes, the text was missing “...or less” and has been corrected.
- *Table 8 has an “a” footnote marker, but no footnote identifier.*
Response: Marker was deleted.
- *P.25, within Section 3.2.5: sentence references “39% of inbound and outbound use...” what is the percentage referring to...trips? Next sentence then references “(3% in and out),” but is this intended to be 3% of the total in and out, or 3% in and 3% out?*
Response: Revised to clarify that the 39% referred to Point Ruston generated trips and clarified remaining references to distribution percentages.
- *P.32, first paragraph: “Based on discussions with City of Tacoma Public Works staff,¹⁶ signalization would only occur if/when the intersection meets one or more of the applicable warrants published...” Please revise this statement to reflect that the City’s intent, as conveyed in a 6/1/18 email, which stated, “a signal would need to be warranted, or have a sound expectation of future traffic demands meeting a warrant, before the City would consider approval and installation of signal control. If that were not the case, there could still be a scenario where improvements could be required in the form of initiating infrastructure for potential future signal control.”*
Response: Text was added as suggested.
- *P.36, first sentence: The intent of the sentence is ambiguous as written since it is uncertain whether “may not be” is a choice by the development versus a possibility to change in the future. If the parking supply in question is truly only to be used by the residents, then a more definitive term/description should be used.*
Response: Text was corrected to clarify.

TSM/tsm