

Memorandum

To: Margaret Haynes, PE, Assistant Traffic Engineer NMDOT D-3
From: Philip A. Gallegos, PE, Senior Transportation Engineer
CC: Robert Luna, PE, PTOE, Traffic Engineering Practice Lead, SW Region
Date: 3/12/2025
Re: Project Chase TIS Comments

Wilson and Company has reviewed the DRAFT TIS dated January 8, 2025 for the Project Chase Development and has the following comments. Please let me know if you have any questions or require further information.

GENERAL COMMENTS

1. Where the report recommends signal optimization by either the developer or the Westpointe 40 Development, signal optimization and phasing needs to be consistent throughout the corridor. Project Chase and Westpointe 40 are the same development and should be considered an update to the Westpointe 40 Development.
2. An Interstate Segment Analysis is included in Appendix I with aerial photographs with a number of intersections. The developer should elaborate on the findings of this analysis in the report.
3. The developer needs to include an inventory of all existing signal equipment in order to evaluate if signal optimization is possible or if advanced signal detection is required.
4. 95th percentile queues need to be used throughout the report. If the 95th percentile queues were used this needs to be reflected throughout the report including tables, descriptions and calculations.
5. All queues need to be rounded to integers. There is no such thing as a 0.3 vehicle length.
6. All LOS E's and F's in the build scenarios should be mitigated to LOS D or better.
7. The mitigated calculations cannot assume that any future improvements will be completed by the 2026 Build or the 2036 Horizon Years as no other projects have been programmed or funded for any of the intersections reviewed in this memo.
8. Auxiliary lane lengths: The developer needs to indicate where an auxiliary lane is required that it complies with the SAMM and COA requirements and include any appropriate tables to show how the need and length were determined in the body of the report. For NMDOT owned facilities the SAMM and MUTCD shall govern.
9. Roadway improvements may require PCCP, depending on truck percentages.
10. The developer shall include a mitigated conceptual drawing for all mitigations.

COMMENT LEGEND

Is or can be addressed in the study
Outside the scope of this study
Existing deficiency
Non-project deficiency
Project deficiency

REPORT COMMENTS (PDF page ranges Existing 22-24, 2026 No Build, 36-38, 2026 Build 42-45, 2036 Horizon No Build 49-51, 2036 Build 55-58, Mitigated 63-66)

Intersection 1: Unser Blvd. And Bluewater Road For the Horizon Year 2036 the WBR is shown to improve to LOS D although no improvements are recommended. Developer needs to correct this or justify it.

Recommendations: The developer needs to correct or explain why the LOS improves for the WBR in the Horizon Year Build Condition.

Intersection 2: Unser Blvd. and Los Volcanes Road

A dual left EBL turning lane is recommended at the signalized intersection. An additional NB lane is needed but it states that the development contributes 0 AM and PM peak volumes to this movement. Although there are no through movements generated there is some NBL and SBR traffic at this intersection. The traffic is about 26 vehicles.

The intersection operates at an overall LOS E am and D pm for both the 2026 Build and No Build Conditions the EBL delay is increased by 23.3 seconds with an increase in queue of 116 feet.

In the 2026 Build Condition:

The No Build and Build numbers show that the no build condition is slightly worse than the build condition. This needs to be corrected and explained as the report may be using mitigated numbers which is not correct as improvements to add an additional lane have been programmed or funded.

PM

Not significantly adverse in the build condition

Horizon Year 2036 the same movements as the Build and No Build continue to deteriorate for the Build and No Build condition. Several movements go to LOS F with an overall build of LOS F in the am and LOS E in the pm. The mitigated LOS remains F for the NBT but improved from the 2026 build condition.

Recommendations

1. Besides the recommended dual EBL the developer shall build NBL improvements for this intersection. All LOS E's should be mitigated to LOS D or better in the build scenarios. This would require the additional NBL and any associated improvements to improve the EBTR am, NBL am/pm and the SBL am/pm LOS's to an acceptable LOS.
2. The EBTR should also be mitigated by the developer to improve the LOS.
3. Since the NBT approach delay doubles in the build horizon year this should be mitigated as well.
4. The developer shall include a mitigated conceptual drawing for all mitigations.

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Intersection 3: Unser Blvd. and I40 WB Ramp

The developer proposes a Cost sharing for the I-40 WB Ramp and Unser Blvd. A 2.7% contribution to the addition of the WB left turn lane with a 200 foot storage length is recommended. However, this does not meet SAMM requirements and needs to be revised to be SAMM compliant. The report states that the Phase 2 Westpointe 40 development contributes to this requirement as well which is the same development.

The report shows that the ramp operates at an Overall Existing LOS C am, and LOS E pm. The overall Build condition operates at LOS D AM and LOS E pm.

Horizon Year 2036 is overall LOS E am and LOS F pm. The mitigated LOS shows LOS C in am and pm assuming the additional WBTL is built. The NBT shows a LOS F in mitigated condition.

Recommendations

1. The WBL should be built by the developer to improve the LOS to an acceptable LOS since the build conditions significantly increase the delay times.
2. Since delays are increased by the development the developer needs to mitigate these delays utilizing a Transportation Model or the V/C Ratio.
3. The developer shall include a mitigated conceptual drawing for all mitigations

Intersection 4: 1-40 EB Ramp and Unser Blvd.

The report states that an interchange study is required as the need for a signal was justified and to address unforeseen growth in the area to alleviate traffic on Unser. It states that the signalization need is identified in the Unser and Los Volcanes TIA. Therefore, it makes no recommendations for Project Chase or Westpointe 40 which are the same development.

In the Horizon Year 2036 the EBL further deteriorates from the 2026 scenarios.

The report states that the outcome of an Interchange Study is needed to address the queues in the 2026 and 2036 scenarios and is to be performed by the Westpointe 40 Development which is the same as Project Chase. No such interchange study is planned by the NMDOT and should not be referred to.

Intersection 7: 98th Street and Bluewater Rd (Avalon Rd)

The developer recommends Signal optimization of the splits to allocate more time for the SB Left approach at the intersection of 98th and the Bluewater/Avalon Rd. to maintain an acceptable LOS. The report states that Westpointe Phase 2 requires extending the existing SBL from 300 ft including transition to a 450 feet lane including transition and install a NB right deceleration lane. It States that Westpointe Phase 2 reevaluate the need for the SB lane requirements. Westpointe Phase 2 is the same Development as Project Chase therefore any recommendations shall be part of this development.

The 98th and Bluewater/Avalon operates at an Overall Existing LOS C am and a pm LOS of C overall the 2026 build LOS is D am and C pm

The mitigated Overall LOS is C for both am and pm with the am EBL LOS F and PM LOS F the same as in the build year. This needs to be verified by the developer since no projects have been programmed or funded for this intersection. Mitigated results shall be outlined and the responsibility of the developer.

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Recommendations

1. The developer shall buildout the intersection of 98th street and Bluewater/Avalon since the development adversely impacts the delays and LOS for this intersection. The improvements should include as the report recommends that the SBL be extended by 150 feet from 300 feet long to 450 feet long and install a NBR deceleration lane.
2. The developer needs to show that signal timing adjustments are feasible with a coordinated system.
3. The developer shall include a mitigated conceptual drawing for all mitigations

Intersection 8: I40 WB Ramp and 98th Street

The report recommends Signal optimization for WB ramp to allocate more time for the NB Left turn approach. The report also states that an additional NB through lane is needed and that Chase contributes 4 am and 1 pm volumes and not required to add this lane. The report states that Project Chase's Cost share is 1.7% and should be shared with Phase 2 of the Westpointe 40. The Westpointe 40 development is the same development as Project Chase so cost sharing should not be broken out as separate developments. It also recommends Signal optimization to allocate more time to the NB left turn approach. Report states that the Cost share for Westpointe should be 7.6%

Horizon Year 2036 build and no build conditions show the intersection operating at an Overall LOS F in both the am and pm condition with several failing movements. The data seems to reflect that the mitigations are in place for the horizon build year.

The NBT mitigated shows the additional NBL with revised LOS and v/c values as being acceptable. This would not be accurate if the additional lane isn't built.

Recommendations

1. The developer shall build out the intersection of I40 and WB Ramp since the development adversely impacts the delays and LOS for this intersection with significant delays in the horizon build year. The build out should include as recommended in the report a 3rd NBL on 98th St. at the I-40 Ramp and signal optimization to allocate more time to the NBL approach.
2. The developer needs to show that signal timing adjustments are feasible with a coordinated system.
3. The developer shall include a mitigated conceptual drawing for all mitigations.

Intersection 9: I-40 EB Ramp and 98th Street

In the report it states that a signal warrant analysis identifies a signal and that it resolves the WB approach issue but exacerbates queuing along 98th leading to further congestion. So the report makes no recommendations. The report states that Westpointe phase 2 should conduct an interchange study. The Westpointe 40 and Project Chase are the same development. Any recommendations for Westpointe 40 need to be included in the recommendations for Project Chase.

PM Build/No Build existing LOS F v/c ratio 1.18 to 1.18, delay 369.2 to 370.3, queue 4.5 to 4.5 feet 0 to 113

The above may need to be mitigated, or the data is incorrect. The developer needs to clarify this data since the queue is shown as zero feet.

Horizon year build and seems to be assuming the signalization.

Recommendations

1. The Developer needs to include the findings of a Signal Warrant Analysis for this intersection showing what warrants are met and compare with the existing and build conditions. A si

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analysis was completed for the existing condition where Warrant 2 (4hr), Warrant 3 (peak hour) and Warrant 6(Coordinated Signal System) are met. The developer shall conduct signal warrant analyses for the build conditions also for comparison and if additional signal warrants are met by the development the developer shall install the signal or wait until the signal is installed by others.

2. The developer shall include a mitigated conceptual drawing for all mitigations

Summary of Recommend Off-Site Improvement by the Developer

Intersection 2: Unser Blvd. and Los Volcanes Road

1. Besides the recommended dual EBL, the developer shall build NBL improvements for this intersection. All LOS E's should be mitigated to LOS D or better in the build scenarios. This would require the additional NBL and any associated improvements to improve the EBTR am, NBL am/pm and the SBL am/pm LOS's to an acceptable LOS.
2. The EBTR should also be mitigated by the developer to improve the LOS.
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Intersection 7: 98th Street and Bluewater Rd (Avalon Rd)

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2. The developer needs to show that signal timing adjustments are feasible with a coordinated system.
3. The developer shall include a mitigated conceptual drawing for all mitigations.

Intersection 9: I-40 EB Ramp and 98th Street

4. The Developer needs to include the findings of a Signal Warrant Analysis for this intersection showing what warrants are met and compare with the existing and build conditions. A signal warrant analysis was completed for the existing condition where Warrant 2 (4hr), Warrant 3 (peak hour) and Warrant 6(Coordinated Signal System) are met. The developer shall conduct signal warrant analyses

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Sincerely,

Philip A. Gallegos, PE
Senior Transportation Engineer

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