



BOARD OF COUNTY COMMISSIONERS

**Public Works Department  
Traffic Operations Program**

2725 Judge Fran Jamieson Way  
Building A, Room 211

February 26, 2026

Daniela S. Jurado, PE  
Bowman Consulting Group  
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Melbourne, FL 32934  
Email: [djurado@bowman.com](mailto:djurado@bowman.com)

**Re: Rangewater N Courtenay Pkwy Merritt Island – Traffic Impact Study**

Ms. Jurado:

Brevard County Traffic Engineering is in receipt of the Rangewater Traffic Impact Study (TIS), dated and received on February 20, 2026. In response to this submittal, County review comments are provided below:

- 02/12/2026  
Comment 1: *PDF Pg 14, Traffic Forecast and Background Traffic:* Use the FDOT Season Factor (SF) instead of the Peak Season Conversion Factor (PSCF) to seasonally adjust volumes. Per FDOT 2024 Project Traffic Forecasting Handbook, the PSCF is used to convert a “24-hour count, representing the average weekday daily traffic, to [Peak Season Weekday Average Daily Traffic].”
- 02/20/2026  
Response 1:** **The intersection capacity analyses have been updated to use the FDOT Season Factor (SF) instead of the Peak Season Conversion Factor (PSCF). The volumes are presented in Appendix D.**
- Comment 1  
Status:* *Comment closed.*
- 02/12/2026  
Comment 2: *PDF Pg 17, Table 3. Weekday Roadway Segment Analysis:* After coordinating with the Space Coast TPO, it was found that there was an error in the MAV for Segment ID 152, N Courtenay Pkwy (SR 3) from Pioneer Rd to S Ramps SR 528, in the Space Coast TPO Historical Traffic Volumes 2020-2024. Rather than the listed 38,430 vehicles per day (vpd), the MAV should be 34,770 vpd (base MAV of 36,600 vpd for a C3C, 4 lane roadway with LOS D, multiplied by an adjustment factor of 0.95 for “Multilane Undivided Roadway with an Exclusive Left Turn Lane” per FDOT 2023 Multimodal Quality/Level of Service Handbook). The Space Coast TPO is aware of this error and is working to update this information. Please revise accordingly.
- 02/20/2026  
Response 2:** **The Existing Conditions Roadway Analysis has been updated accordingly. The No Build and Build Conditions Roadway Analyses were not updated because of the inclusion of FDOT project # 453311-1 as a background project.**

**Comment 2 Status:** *The 1.05 adjustment factor applies to two-lane divided roadways with exclusive left or right turn lanes only and therefore should not be applied to the segments of N Courtenay Pkwy in the No Build or Build scenarios. Please revise.*

02/12/2026  
**Comment 3:** *PDF Pg 18, Table 4. Evening Peak Hour Roadway Segment Analysis:* Similar to Comment 2, the MAV for Segment ID 152 should be 3,126 vpd (3,290 vpd multiplied by 0.95). Please revise accordingly.

02/20/2026  
**Response 3:** **The Existing Conditions Roadway Analysis has been updated accordingly. The No Build and Build Conditions Roadway Analyses were not updated because of the inclusion of FDOT project # 453311-1 as a background project.**

**Please also note that following the same parameters and adjustments used for the daily capacity, the peak hour capacity is as follows:**  
**Existing: 3,130 vph**  
**No Build: 3,450 vph**  
**See calculations below:**

**Comment 3 Status:** *Comment remains open, please see response to Comment #2.*

02/12/2026  
**Comment 4:** *General Comment:* For any roadway segments where the volume of traffic added by the project accounts for 25% or greater of the segment's remaining capacity, coordinate with Brevard County Planning and Development for a concurrency evaluation.

02/20/2026  
**Response 4:** **Comment noted.**

**Comment 4 Status:** *Comment remains open pending the resolution of Comments #2 and #3.*

02/12/2026  
**Comment 5:** *PDF Pg 214, 2026 Existing Traffic Volumes:* The 2026 volumes shown for the intersection of Pioneer Rd and the Shared Driveway do not appear to match those included in the appendix. Please review.

02/20/2026  
**Response 5:** **The Exhibits in Appendix D have been updated to remove driveways not being analyzed under the specified Alternatives.**

**Comment 5 Status:** *The AM Peak Hour volumes shown for the intersection of Pioneer Rd & the Shared Driveway (Exhibits 1, 2, 5-0, 5-1, and 5-2) do not appear to match the volumes shown in the counts (PDF pg 173).*

02/12/2026  
**Comment 6:** *PDF Pg 215, 2027 No Build Traffic Volumes:* It appears that the growth rates used to determine the background volumes at the SR 528 EB and WB ramps were switched. The EB approach of SR 528 is Segment 128 (1.77% annual growth rate) and the WB approach of SR 528 is Segment 129 (3.79% annual growth rate).

02/20/2026  
**Response 6:** **The growth rates have been updated accordingly. All affected traffic volumes have also been updated, see Exhibit 2 in Appendix D.**



*Comment 6*      *Comment closed.*  
*Status:*

02/12/2026      PDF Pg 227, Synchro Analysis: Courtenay Pkwy & Pioneer Rd (AM and PM Peak  
Comment 7:      Hours): Please set recall mode to Min for phases 2 and 6.

**02/20/2026**      **The synchro files have been updated accordingly. See the submitted synchro**  
**Response 7:**      **files and the synchro reports presented in Appendix E.**

*Comment 7*      *Comment closed.*  
*Status:*

02/12/2026      PDF Pg 230, Synchro Analysis: Courtenay Pkwy & SR 528 EB Ramps (AM and PM  
Comment 8:      Peak Hours):

- a. Please set recall mode to Min for phases 2 and 6.
- b. Please set the yellow time to 4.1 sec and all red time to 3.0 sec for the EB phase.

**02/20/2026**      **a. Note that per the signal phasing and timing information received,**  
**Response 8:**      **phases 2 and 6 use max recall during coordination, see below.**  
                      **b. The yellow time for the EB phase has been updated accordingly, see to**  
                      **Appendix E and attached synchro files.**

*Comment 8*      *Comment closed.*  
*Status:*

02/12/2026      PDF Pg 233, Synchro Analysis: Courtenay Pkwy & SR 528 WB Ramps (AM and PM  
Comment 9:      Peak Hours): Please set recall mode to Min for phases 2 and 6, and Off for phase 1.

**02/20/2026**      **Per the signal phasing and timing information received, phases 2 and 6 use**  
**Response 9:**      **max recall during coordination. Similarly, phase 1 uses min recall during**  
                      **patterns 1 and 3, see below.**

*Comment 9*      *Comment closed.*  
*Status:*

02/12/2026      General Comment: Please provide the Synchro files with the next submittal.  
Comment 10:

**02/20/2026**      **Comment noted, the synchro files have been provided.**  
**Response 10:**

*Comment 10*      *Comment closed.*  
*Status:*

02/12/2026      General Comment: Following the coordination meeting with Bowman Consulting  
Comment 11:      Group on 2/11/2026, a new access configuration was presented to Staff. Please  
                      revise the TIS to include this alternative (analysis and proposed concept). Ensure  
                      that this alternative satisfies all turn lane concerns and future needs at the  
                      intersection of N Courtenay Pkwy (SR 3) and Pioneer Rd.



**02/20/2026**  
**Response 11:** The exhibits in Appendix D have been updated to remove driveways not being analyzed under the specified condition. The synchro reports presented in Appendix E have also been updated to remove driveways not being analyzed under the specified condition.

*Comment 11 Status:* Running the intersection of N Courtenay Pkwy (SR 3) and Pioneer Rd in SimTraffic revealed WBL queuing concerns with regard to the new proposed driveway location on Pioneer Rd. Please be advised that the final driveway configuration will not be reviewed and approved until there is a formal site plan submittal.

02/12/2026  
Comment 12: General Comment: The Background and Buildout scenario analyses will be reviewed in further detail upon resolution of the comments above.

**02/20/2026**  
**Response 12:** Comment noted.

*Comment 12 Status:* Comment closed.

02/12/2026  
Comment 13: General Comment: The turn lane analysis and queuing analysis will be reviewed upon resolution of the comments above.

**02/20/2026**  
**Response 13:** Comment noted.

*Comment 13 Status:* Comment closed.

Should you have any questions, please contact us at 321-633-2077.

Best regards,



Sean Smith, EI  
Engineer I

Cc: Corrina Gumm, PE, Traffic Operations Manager  
Trina Gilliam, MSURP, Planning and Zoning Manager  
Peter Nguyen, PE, Engineer II  
William Johnson, PE, Engineer III

