

August 12,2021

Michael Daniels, AICP
Planning and Zoning Director
City of Green Cove Springs, FL
mdaniels@greencovesprings.com

RE: Ayrshire PUD Traffic Impact Study – Trip Distribution

Dear Michael:

This study, dated June 30, 2021, uses two trip distribution methods based on the phase of the project as provided below:

- Trip Distribution 1 - Phase 1 (2025) and Phase 2 (2027)
- Trip Distribution 2 - Phase 3 (2030) and Phase 4 (2035)

The Phase 1 and Phase 2 distribution is based on existing traffic patterns, according to page 3 of the study. I could not find any documentation of how the distribution was determined based on the existing traffic patterns.

The Phase 3 and Phase 4 trip distribution was obtained from the interim year 2030 model set of the Northeast Regional Planning Activity Based Model (NERPM_AB3v1), according to page 3 of the study. This distribution matches the Ayrshire PUD Comprehensive Plan Amendment Traffic Impact Study, dated March 19, 2021.

Based on review of the distributions, I have the following revision recommendations:

- 1) Overall, the model trip distribution appears to provide a reasonable distribution estimation of the project trips, with the exception noted in number 2. I recommend that the Phase 1 and Phase 2 trip distribution are revised based on model data instead of existing traffic patterns. If the developer's traffic engineer does not have access to an earlier year model without the First Coast Expressway (F.C.E.) using the 2030 model with adjustments is sufficient to estimate the Phase 1 and 2 trip distributions.
The trip distribution percentage of 35% for Phase 1 and 2 at US 17 to and from the north, appears to low. This route provides access to all attractions and employment on the west side of Jacksonville. Revising the distribution based on the model data, would provide more reasonable trip distributions at over 40% along US 17 to and from the north. The trip distribution percentage of 15% for Phase 1 and 2 at US 17 to and from the south, appears too high. This route provides access to and from Palatka which is not expected to draw significant project trips compared to the higher populated areas nearby. Revising the distribution based on the model data, would provide more reasonable trip distributions at approximately 4%.

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- 2) The model trip distribution estimates that 14.65% of the project trips will access the F.E.C. to and from the northwest, with all trips utilizing US 17 south of the site, to access the F.E.C. The 14.65% trip distribution is reasonable, however, many of the project trips, my estimate is ½, of these project trips would access the F.E.C. using Oakridge Avenue to SR 16 West. Therefore, I recommended revising the trip distribution accordingly.

Sincerely,

CHW



Brian Snyder
Project Manager

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