

# **Asbury Lane** **Traffic Impact Analysis**

Indian Land, SC

Residential Neighborhood

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## Executive Summary

A traffic impact analysis was conducted for a proposed development in Indian Land, South Carolina for the use of single-family residential land development. The proposed development will be located on the southwest quadrant of the intersection of Possum Hollow Road and Old Bailes Road. The proposed development is expected to generate approximately 210 AM trips, 281 PM trips, and 2,760 weekday trips. Access to the proposed development will be on Possum Hollow Road, Old Bailes Road, and Olin Yarborough Road. All proposed driveways located on Possum Hollow Road and Old Bailes Road will serve as a full access driveways. Olin Yarborough Road is planned to continue as an internal street within the proposed development. For the purposes of this study, the project's full build-out conditions are assumed to be the Year 2025. A future analysis, build plus one year, was conducted for Year 2026.

As part of the analysis, the traffic generated and growth rate from the approved Bailes Ridge Apartments TIA provided was included in the analysis. The traffic generated by the Bailes Ridge Apartments was included in the Year 2025 and Year 2026 conditions. The growth rate used was matched from the approved traffic impact analysis for the Bailes Ridge Apartments. The analysis also included the Highway 160 improvements as part of the existing and future analyses.

This traffic impact analysis provides an assessment of key traffic circulation impacts in order to identify the necessary transportation infrastructure needed to accommodate the proposed development generated travel demand. The analyses contained in this report focus on traffic operating conditions at the following study intersections under the existing and future conditions:

- Possum Hollow Road at Old Bailes Road
- Possum Hollow Road at Highway 160
- Highway 521 at Possum Hollow Road
- Old Bailes Road at Olin Yarborough Road
- Old Bailes Road at Highway 160
- Barberville Road at Highway 160
- Highway 521 at Highway 160
- Old Bailes Road at Local Street I
- Possum Hollow Road at Local Street A
- Old Bailes Road at Local Street B

Capacity analyses were conducted for the ten study intersections for the projected weekday AM peak hour and weekday PM peak hour. Analyses were completed with the aid of *Ofiss*, a trip generation software, and *Synchro II*, a traffic simulation and capacity software. Four future scenarios were analyzed as part of this study. The impacts of the proposed development were analyzed under the “Year 2025 Build” and “Year 2026 Build” conditions, which considers the increase in trips generated by the proposed development.

The mitigation considerations as a result of the development are as follows:

1. **Year 2025 Build out Condition:** No mitigation measures are recommended.
2. **Future Year Analysis (Build Out plus One Year):** No mitigation measures are recommended.