



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

February 20, 2019

MEMORANDUM TO: Lisa Gilchrist
Division 5 Bridge Program Manager

FROM: Chris McKoy
Traffic Forecasting Group

SUBJECT: Traffic Forecast for B-5321
Wake County
Replace Bridge No. 374 on SR 1153 (Old Holly Springs Apex
Road) over Little Branch.

Please find attached the 2019/2045 traffic forecast for B-5321 in Wake County.

The forecast represents project No-Build and Build conditions. Replacing Bridge No. 374 is not expected to substantially affect travel demand along SR 1153.

Certain Assumptions were made during the development of this forecast.

Fiscal Constraint:

Within an MPO area travel demand forecasts assume the construction of projects listed within an MPO's Metropolitan Transportation Plan (MTP). This forecast is consistent with the 2045 MTP of the Capital Area Metropolitan Planning Area (CAMPO) adopted in February of 2018.

Projects listed in the MTP which are expected to affect travel demand along SR 1153 at Bridge No. 374 include:

- SR 1153 4-lanes from Holly Springs Apex Road to Jessie Drive (including bridge 374).
- Avent Ferry Connector from SR 1153 to Holly Springs Road.
- Interchange at NC 540 and Old Holly Springs Apex Road.

Development Activity:

633 homes are currently under construction in the 12 Oaks development along SR 1154 (Woods Creek Road) and near its intersection with Old Holly Springs Apex Road. Traffic generated by this development is accounted for in the 2045 traffic forecast.

Forecast Methodology:

The 2019 estimate is based upon current traffic counts. The 2045 forecast is based upon travel demand predictions of the Triangle Regional Model (v6).

The use of straight-line interpolation to estimate AADT for years between 2019 and 2045 is acceptable.

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If it is determined that any of these assumptions have become inconsistent with the project and surrounding area activity, please request an updated forecast.

If we can be of any further assistance please do not hesitate to contact me at 919-707-0939, email: cdmckoy@ncdot.gov.

cc (with Attachments):

Brenda Moore, PE, Highway Design Branch
Scott Walston, PE, Transportation Planning Division
Keith Dixon, Transportation Planning Division
Doumit Y. Ishak, Congestion Management
Clark Morrison, PhD, PE, Pavement Management
Traffic Forecasting GIS Support

Project B-5321 Traffic Forecast

Wake County bridge No. 374 replacement

SR 1153 (Old Holly Springs Apex Road) over Little Branch

Year	Lanes SR 1153	AADT	D	K	Duals	TTSTs
2019	2	6,900	85%	16%	2%	1%
2045	4*	19,000	65%	12%	2%	1%

* MTP Project A218a

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