

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER

GOVERNOR

SECRETARY

July 30, 2019

MEMORANDUM TO: Tierre Peterson

Structures Management Unit

FROM: Chris McKoy

**Traffic Forecasting Group** 

SUBJECT: Traffic Forecast for B-5954

Alexander County

Replace Bridge No. 1 on NC 127 over Middle Little River

Please find attached the 2019/2045 traffic forecast for B-5954 in Alexander County.

The forecast represents project No-Build and Build conditions. Replacing Bridge No. 1 is not expected to substantially affect travel demand along NC 127.

### 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 Greater Hickory Area Metropolitan Planning Organization (GHMPO) adopted in July of 2018.

### **Development Activity:**

There is no substantial current development under construction and future planned development within the immediate area of the project.

### **Forecast Methodology:**

The 2019 estimates are based upon current traffic counts and historic trends.

The 2045 forecast was developed based upon travel demand predictions of the Greater Hickory Metropolitan Planning Organization Travel Demand Model adopted July 25, 2018.

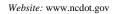
The use of straight-line interpolation to estimate AADT for years between 2019 and 2045 is acceptable.

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: <a href="mailto:cdmckoy@ncdot.gov">cdmckoy@ncdot.gov</a>, or Michael Orr at 919-707-0982, email mlorr@ncdot.gov.

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## cc (with Attachments):

Brenda Moore, PE, Roadway Design Unit
James Upchurch, Transportation Planning Division
Keith Dixon, Transportation Planning Division
Michael Reese, PE, Congestion Management Section
Traffic Forecasting GIS Support

Project B-5954 Traffic Forecast

Alexander County bridge 010001 replacement – NC 127 over Middle Little River

Year	Lanes NC 127	AADT	D*	K	Duals	TTSTs
2019	2	4,400	55%	12%	3%	1%
2045	2	5,400	55%	12%	3%	1%

<sup>\*</sup>The observed Peak Hour is in the AM

July 30, 2019

