



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

December 17, 2018

MEMORANDUM TO: Jacquelyn Bowles
Structures Management Unit

FROM: Michael Orr
Supervisor, Traffic Forecasting Group

SUBJECT: Traffic Forecast for BR-0012
Cleveland County
Replace Bridge Nos. 48-49 on US 74 over Sandy Run

Please find attached the 2018/2045 traffic forecast for BR-0012 in Cleveland County.

The forecast represents project No-Build and Build conditions. Replacing Bridge Nos. 48 and 49 is not expected to substantially affect travel demand along US 74. US 74 is assumed to have four lanes of travel in 2045.

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 the MPO's Metropolitan Transportation Plan (MTP). This forecast is consistent with the 2045 MTP of the Gaston-Cleveland-Lincoln MPO. Other projects within the STIP and MTP (i.e., R-2707 and R-4045) are expected to affect travel demand on US 74 within the area of this project.

Development Activity:

There is no substantial land development currently under construction, nor is any substantial future development within the immediate area of the project assumed within the traffic forecast.

Forecast Methodology:

The 2018 estimates are based upon historic AADT trends and published traffic data.

The 2045 forecast was developed based upon predictions of the Metrolina Regional Travel Demand Model 18v1.0.

The use of straight-line interpolation to estimate AADT for years between 2018 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.

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If we can be of any further assistance please do not hesitate to contact me at 919-707-0982, email: mlorr@ncdot.gov.

cc (with Attachments):

Brenda Moore, PE, Highway Design Branch
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Traffic Forecasting GIS Support
John Williams, RK&K

Project BR-0012 Traffic Forecast

Replace Cleveland County bridges 220048 & -49 – US 74 over Sandy Run Creek

| Year | Lanes US 74 | AADT | D | K | Duals | TTSTs |
|------|-------------|--------|-----|----|-------|-------|
| 2018 | 4 | 21,000 | 55% | 8% | 4% | 9% |
| 2045 | 4 | 32,000 | 55% | 8% | 4% | 9% |

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