



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

May 11, 2015

MEMORANDUM TO: Tamara Makhoulf
Project Development and Environmental Analysis
Project Development Eastern Region

FROM: Darryl Austin
Traffic Forecast East Unit
Transportation Planning Branch

SUBJECT: Traffic Forecast for B-4414
Replacement of Bridge # 43 on US 264
Beaufort County

Please find attached the 2015 / 2040 traffic forecast for B-4414 in Beaufort County. B-4414 is described as the replacement of Bridge # 43 on US 264 over the Pungo Creek. This is the first forecast for this project. This project lies within the Mid-East RPO planning area.

Several individuals were consulted during the development of this traffic forecast request. The individuals consulted represent various NCDOT preconstruction engineers from various departments in addition to employees from Beaufort County and NCDOT Division 2. These individuals are listed as follows:

Behshad Norowzi, Northeast Planning Group Supervisor
Woody Jarvis, Division 2 District 1 Engineer
Seth Laughlin, Planning Director, Beaufort County
Steven J. Hamilton, PE, Division 2 Deputy Traffic Engineer
Bryant Buck, Mid East RPO Planner
Carlos Moya-Astudillo, EI, NCDOT Mid-East RPO Engineer

The following scenarios are provided:

- 2015 Base Year No Build
- 2040 Future Year Build

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PLANNING BRANCH
1554 MAIL SERVICE CENTER
RALEIGH NC 27699-1554



LOCATION:
TRANSPORTATION BUILDING
1 SOUTH WILMINGTON STREET
RALEIGH, NC 27601
Phone: 919-707-0900
Fax: 919-733-9794

Certain Assumptions were made during the development of this forecast:

Fiscal Constraint:

For projects falling within an RPO, forecasts are fiscally constrained to match the assumptions of the State TIP. There are currently no TIP projects in the vicinity of this bridge that have funding and will be completed prior to 2040.

Development Activity:

There are currently no plans for development of the land adjacent to Bridge # 43 or along US 264 in the vicinity of the bridge. The primary land use in the vicinity of the bridge is agricultural and the current land use is expected to remain unchanged. This information was based on conversations with Bryant Buck, Transportation Planner III with the Mid East RPO.

Methodology for Projecting Future Year Traffic (2040):

The 2015 Base Year No-Build was based upon the latest traffic counts and historic AADT trends. A growth rate of 1.7% was used to project the base year volumes to 2040. An exponential growth formula was used to forecast 2015 Base Year to the future AADT volumes.

Interpolation:

To determine any intermediate years, straight-line interpolation may be used. AADT volumes may be extrapolated for up to two years immediately following 2040. If it is determined that any of these assumptions have become inconsistent with the project and surrounding area activity, please request updated projections at this location.

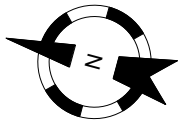
For future reference this forecast will be saved in Project Store in the Long Range Planning\ Traffic Forecasts folder, under project B4414. If I can be of any further assistance on this project please do not hesitate to contact me at (919)707-0935, or email me at kroberson@ncdot.gov.

Attachments:

CC: FILE (Beaufort County, TIP Project B4414)

CC (via e-mail as PDF Attachments):

Glenn W. Mumford, PE, Roadway Design Unit
Behshad Norowzi, Transportation Planning Branch
Brian Wert, PE, Transportation Planning Branch
BenJetta L. Johnson, PE, Congestion Management Section
Clark S. Morrison, Ph.D., PE, Pavement Management Unit
Jeff Cabaniss, PE, Division 2 Planning Engineer
Bryant Buck, Interim Mid-East RPO Executive Director



US 264

52

PM
55
(4,3)

Bridge # 43

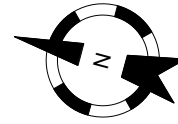
Pungo Creek



2015

52

Drawing not to scale



US 264

78

PM
55
(4,3)

Bridge # 43

Pungo Creek



2040

78

Drawing not to scale



2015/2040

ANNUAL AVERAGE
DAILY TRAFFIC

SHEET 1 OF 1

LEGEND

No. of Vehicles Per Day (VPD) in 100s

1- Less than 50 VPD

X Movement Prohibited

----- Roadway

K Design Hourly Factor

PM PM Peak Period

D Peak Hour Directional Split

(d,t) Indicates Direction of D
Duals, TT-STs (%)

K $\frac{PM}{(d,t)}$ \rightarrow D

TIP: B-4414

WBS: 38358.1.2

COUNTY: Beaufort

DIVISION: 2

DATE: 5/11/2015

PREPARED BY: Karen Roberson

LOCATION: US 264

PROJECT: Replace Bridge No.43 over Pungo Creek