

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

November 10, 2021

MEMORANDUM TO: Shane York

Feasibility Studies Unit

FROM: Chris McKoy

Traffic Forecasting Group

SUBJECT: Traffic Forecast for Project R-5948

**Onslow County** 

Three lane, SR 1509 (Queens Creek Road) from Jones Road to

SR 1565 (Smallwood Road)

Please find attached the 2021/2045 Traffic Forecast for R-5948 in Onslow County.

The forecast includes the following scenarios:

- Base Year (2021) Project No-Build/Build Estimate
- Future Year (2045) Project No-Build/Build 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 Jacksonville Urban Area Metropolitan Planning Organization 2045 MTP adopted June 20, 2020. This forecast also assumes that all projects listed within the NCDOT 2020-2029 STIP are constructed and open to traffic by 2045.

### **Development Activity:**

There is currently no major development under construction nor is any substantial development expected within the vicinity of the project.

#### **Forecast Methodology:**

The 2021 Estimate is based upon current traffic counts validated by historical AADT trends.

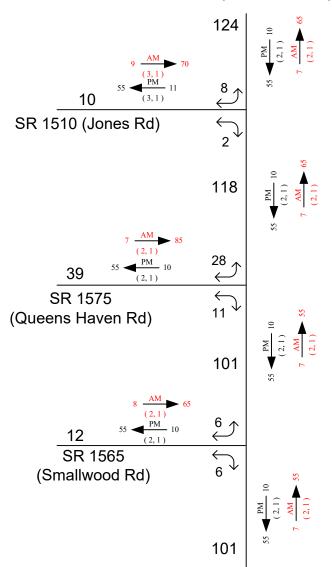
The 2045 forecast was developed based upon consideration of the Jacksonville Travel Demand Model and historic AADT trends.

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 707-0939, email: cdmckoy@ncdot.gov.

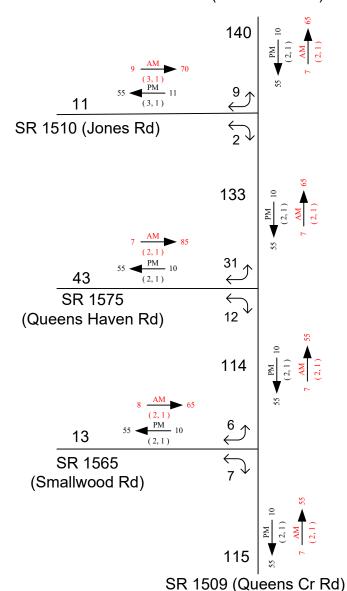
## 2021 NB/B

SR 1509 (Queens Cr Rd)



## 2045 NB/B

SR 1509 (Queens Cr Rd)



### Sheet 1 of 1



## 2021 & 2045 No Build-Build

### AVERAGE ANNUAL DAILY TRAFFIC

L E G E N D  $K \xrightarrow{AM/PM} D$ 

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

SR 1509 (Queens Cr Rd)

K Design Hour Factor(%)

PM/AM PM Peak Period

1- Less than 50 VPD D Peak Hour

Directional Split (%)

Movement Prohibited →

D Peak Hour
Directional Split (%)
→ Indicates Direction
of D

TIP#: R-5948 WBS: 34263.1.1

COUNTY: Onslow DIVISION: 3

**DATE:** 11-10-2021

PREPARED BY: Chris McKoy

LOCATION: SR 1509-Queens Cr Rd

**PROJECT:** Three Laning from SR 1510 to SR 1565

(d,t) Duals, TT-STs (%)