



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

November 15, 2022

MEMORANDUM TO: Tierre Peterson  
Structures Management Unit

FROM: Chris McKoy  
Traffic Forecasting Group

SUBJECT: Traffic Forecast for Project B-5674  
Durham County  
Replace Bridge #80 on US 15/US 501 over NBL SR 1308 (W.  
Cornwallis Road).

Please find attached the 2022/2050 Traffic Forecast for Project B-5674 in Durham County.

The forecast includes the following scenarios:

- Base Year (2022) Project No-Build/Build Estimate
- Future Year (2050) 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 Durham Chapel Hill Carrboro (DCHC) Metropolitan Planning Organization 2050 MTP adopted February 9, 2022. This forecast also assumes that all projects listed within the NCDOT 2020-2029 STIP are constructed and open to traffic by 2050.

**Development Activity:**

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

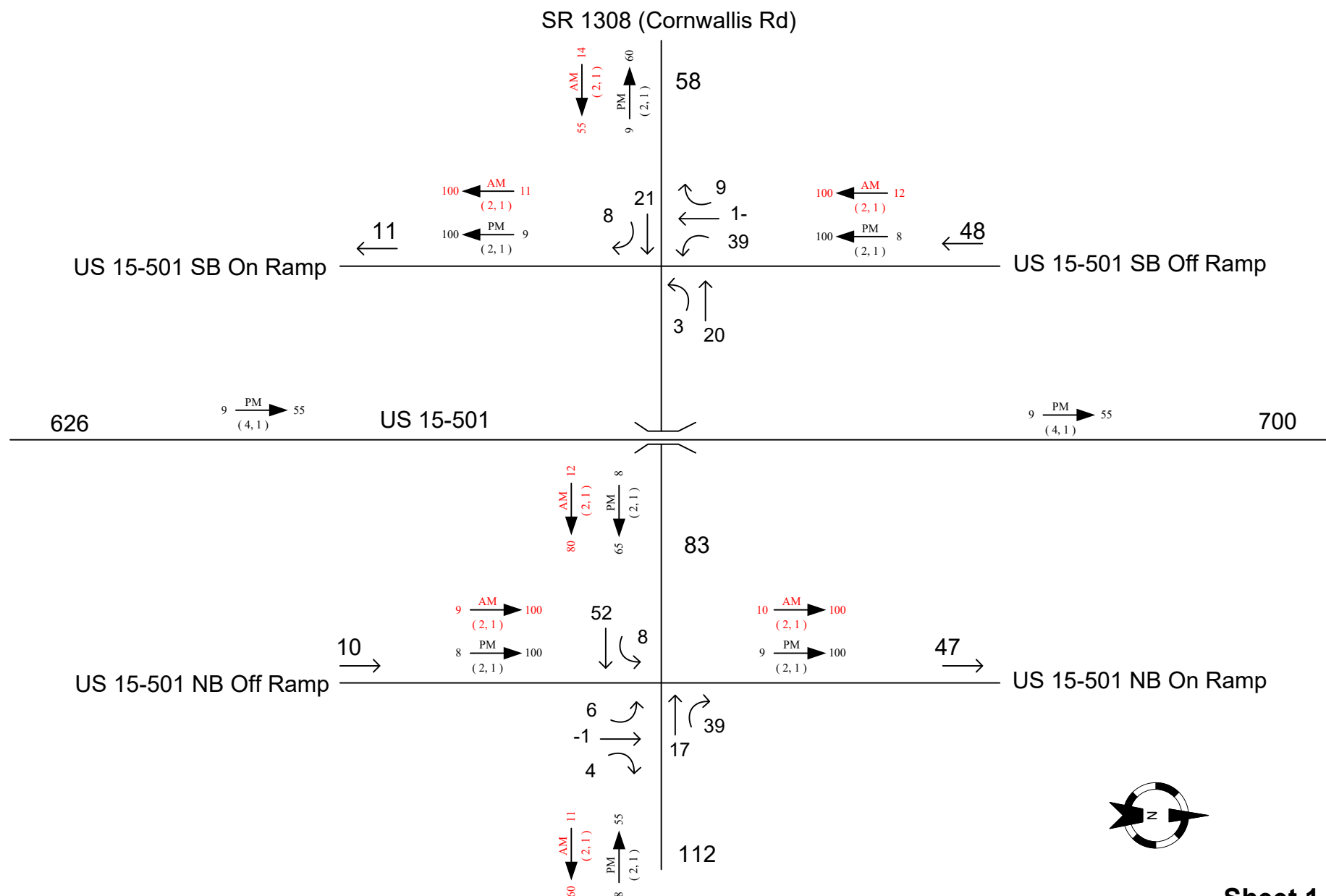
**Forecast Methodology:**

The 2022 Estimate is based upon current traffic counts validated by historical AADT trends and a review of the previous forecast completed in 2016.

The 2050 forecast was developed based upon consideration of output from the Triangle Regional Model (TRMv6.2) and review of population projections for Durham County prepared by the State Demographers Office.

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

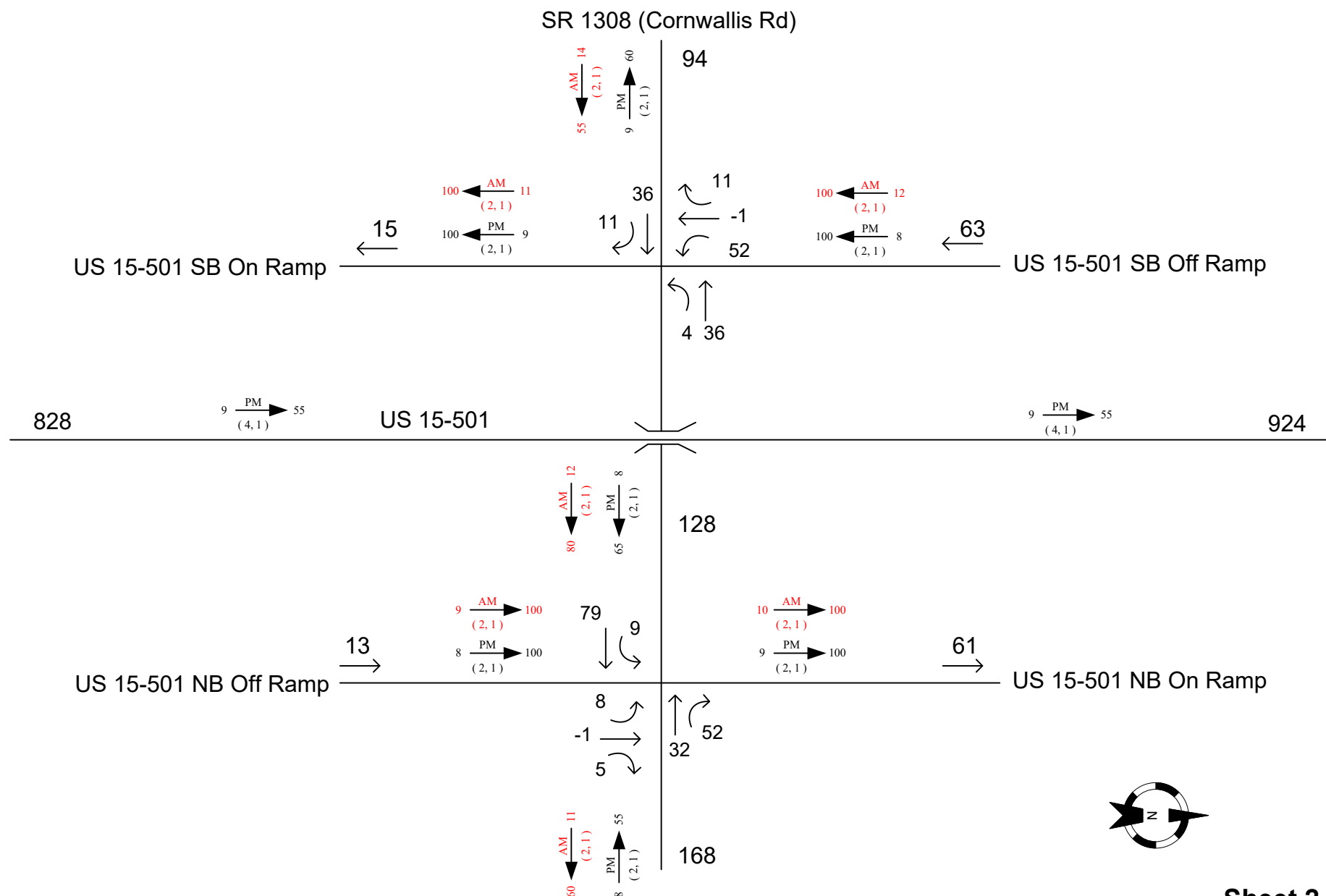
If we can be of any further assistance, please do not hesitate to contact me at 707-0939, email: [cdmckoy@ncdot.gov](mailto:cdmckoy@ncdot.gov).



## 2022 No Build/Build

AVERAGE ANNUAL DAILY TRAFFIC

<b>LEGEND</b>		<b>TIP:</b> B-5674	<b>WBS:</b> 45629.1.1
<p><b>###</b> No. of Vehicles Per Day (VPD) in 100s</p> <p><b>1-</b> Less than 50 VPD</p> <p><b>X</b> Movement Prohibited</p> <p><b>(d,t)</b> Duals, TT-STs (%)</p>		<b>COUNTY:</b> Durham	<b>DIVISION:</b> 5
<p><b>K</b> Design Hour Factor(%)</p> <p><b>AM/PM</b> Peak Period</p> <p><b>D</b> Peak Hour Directional Split (%)</p> <p><b>→</b> Indicates Direction of D</p>		<b>DATE:</b> 11-15-2022	
		<b>PREPARED BY:</b> Chris McKoy	
		<b>LOCATION:</b> US 15-501 over SR 1308	
		<b>PROJECT:</b> Replace Bridge No.80 NBL	



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## 2050 No Build/Build AVERAGE ANNUAL DAILY TRAFFIC

L E G E N D		
<p><b>###</b> No. of Vehicles Per Day (VPD) in 100s</p> <p><b>1-</b> Less than 50 VPD</p> <p><b>X</b> Movement Prohibited</p> <p>(d,t) Duals, TT-STs (%)</p>		
<p><b>K</b> Design Hour Factor(%)</p> <p><b>D</b> Peak Hour Directional Split (%)</p> <p><b>→</b> Indicates Direction of D</p>		
<p><b>TIP:</b> B-5674</p>		<p><b>WBS:</b> 45629.1.1</p>
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