

Traffic Forecast Cover Letter

TO: Daniel Adams, PE, Project Manager
Division Project Team Lead
NCDOT – Division 11

FROM: Craig Singer, PE, PTOE, RSP1
Kisinger Campo & Associates, Corp

DATE: August 21, 2024

RE: Traffic Forecast for HB-0069
Wilkes County, North Carolina
Replace Bridge 960012 on US 421 Business over Reddies River

The proposed growth rate for the subject forecast for HB-0069 was reviewed and approved by the NCDOT Division 11 Project Manager and the General Engineering Consultant on July 24 and July 25, 2024, respectively.

Please find attached the 2024/2047 Traffic Forecast of project HB-0069 in Wilkes County. This project studies the replacement of Bridge 960012 and improvements to the adjacent roadway segment of US 421 Business (West D Street). The project is not anticipated to add through lanes along US 421 Business (West D Street) or substantially impact travel demand. As such, the traffic forecasts for the No Build and Build Conditions are the same.

The forecast includes the following scenarios:

- Base Year (2024) Project No-Build/Build Estimate
- Future Year (2047) Project No-Build/Build Forecast

Fiscal Constraint: Travel demand forecasts outside a Metropolitan Planning Organization (MPO) area assume that the projects listed within the State Transportation Improvement Program (STIP) will be constructed. This forecast is consistent with the current STIP. No other projects within the STIP affect travel demand within the area of the project.

Development Activity: There is no substantial development currently under construction or planned to be constructed. According to input from the Town of North Wilkesboro Planning Director, recent developments have increased traffic within the project area. Such developments include the reopening of the North Wilkesboro Speedway and the opening of a new medical center at the intersection of West D Street and Independence Avenue. Additionally, the south side of North Wilkesboro is forecasted to grow in accordance with Wilkes County's Outdoor Economy Action Plan.

Forecast Methodology: The 2024 Estimate is based on current traffic counts validated by historical AADT trends. The 2047 forecast was developed with consideration of North Carolina Statewide Travel Model (NCSTMv4.5) outputs, Wilkes County Travel Demand Model (TDM) outputs, population projections for Wilkes County prepared by the North Carolina Office of State Budget and Management (OSBM), population projections from



the Wilkes County Comprehensive Transportation Plan (CTP), and available historical AADT volumes. The use of straight-line interpolation to estimate AADT for years between 2024 and 2047 is acceptable. AADT volumes may be extrapolated for up to two years immediately following 2047.

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 further assistance, please do not hesitate to contact me at 919-882-7839, email: csinger@kcaeng.com.

cc: (with Attachments) Keith Dixon, State Traffic Forecast Engineer, Laura Sutton, Deputy PM, Christopher Brown, HNTB (GEC), Rhonda Early, HNTB (GEC), and Sam Cullum, PM

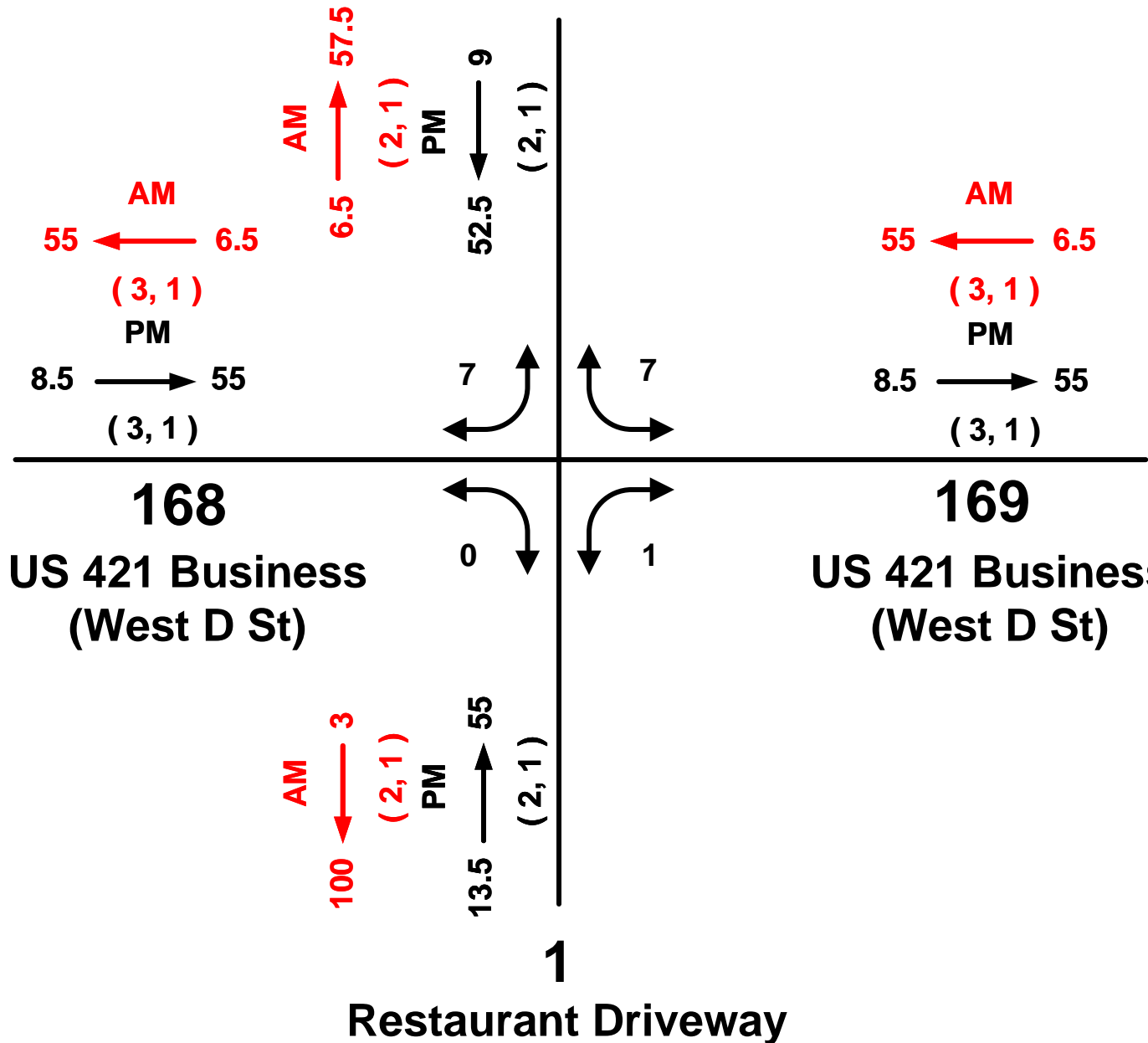
- kgdixon@ncdot.gov
- TrafficForecast@ncdot.gov
- lsutton@kcaeng.com
- chrisbrown@hntb.com
- rearly@hntb.com



2024

CVS Driveway

14



168
US 421 Business
(West D St)

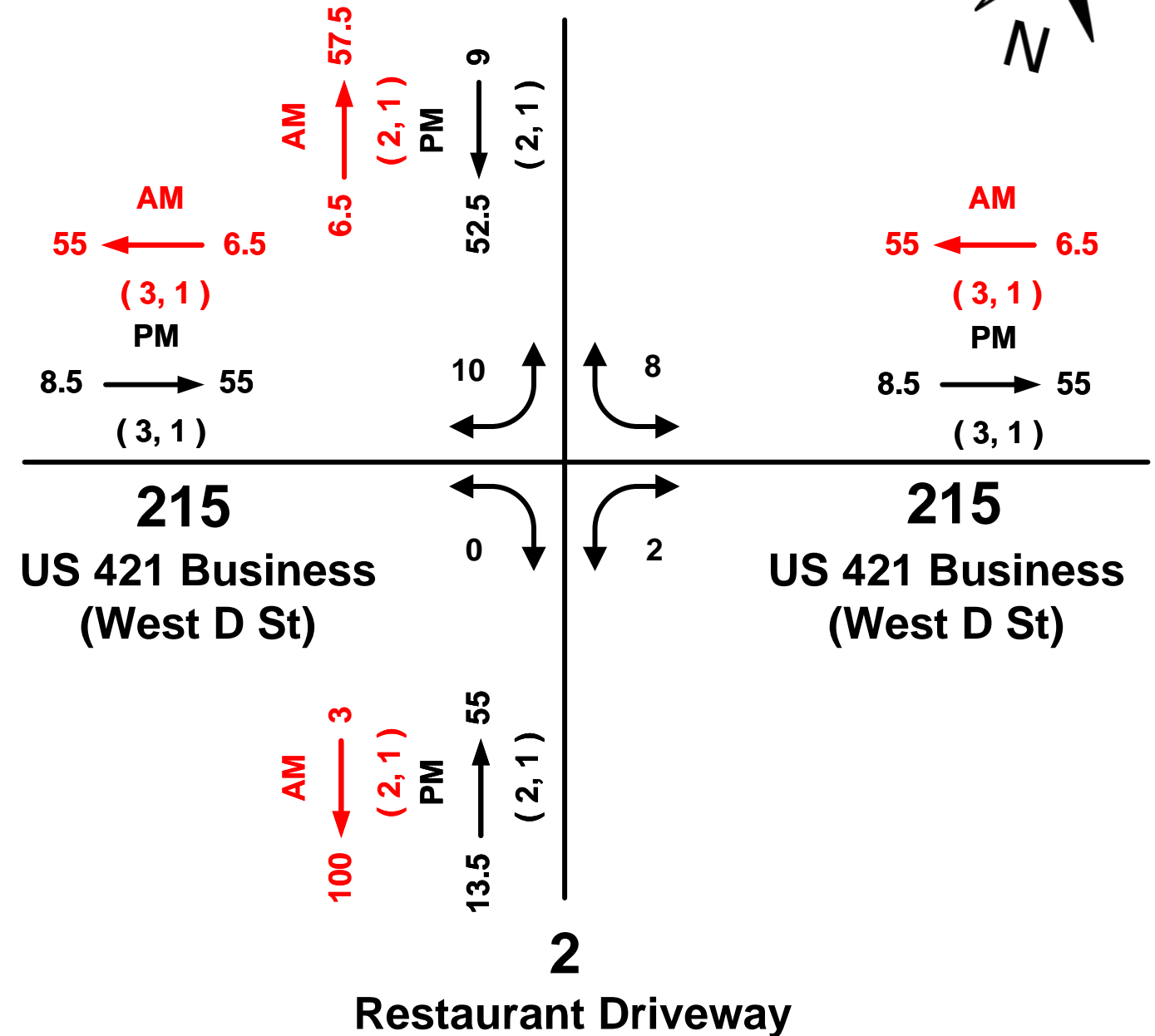
169
US 421 Business
(West D St)

Restaurant Driveway

2047

CVS Driveway

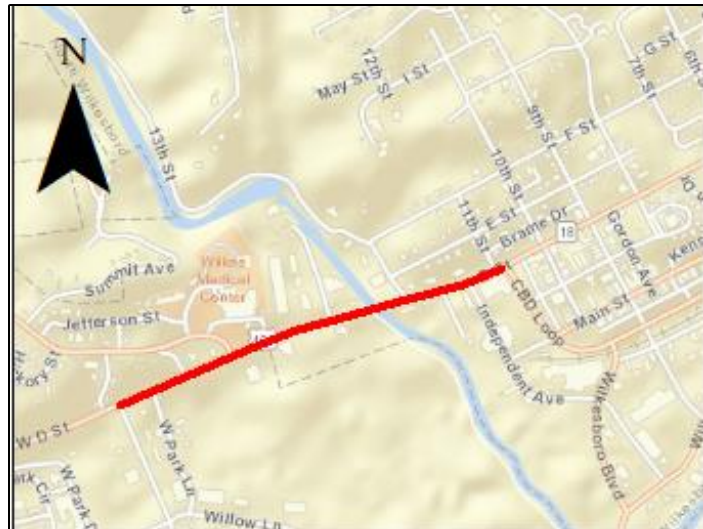
18



215
US 421 Business
(West D St)

215
US 421 Business
(West D St)

Restaurant Driveway



2024 - 2047

AVERAGE ANNUAL DAILY TRAFFIC

No-Build-Build

SHEET 1 OF 1

LEGEND

- ### No. of Vehicles Per Day (VPD) in 100s
- 1- Less than 50 VPD
- X Movement Prohibited
- Proposed Roadway
- K Design Hour Factor (%)
- AM/PM Peak Period
- D Peak Hour Directional Split (%)
- Indicates Direction of D
- (d, t) Duals, TT-STs (%)

TIP: HB-0069

WBS: 50739.1.1

COUNTY: Wilkes

DIVISION: 11

DATE: 08-21-2024

PREPARED BY: KCA

LOCATION: US 421 Business at Commercial Driveway

PROJECT: Replace Bridge 960012 on US 421 Business over Reddies River