#### SCOPING PROJECT DATA SHEET

Date: 11/09/17 Rev.: 12/5/2017

TIP No.: U-5754	County: Guilford
Federal-aid No.: NHP-0029(065)	WBS No.: 54034.1.1
NCDOT Division: 7	Scoping Meeting Date: December 13, 2017

### **Project Description:**

Length:	1.50	mile

- Termini (US Hwy / SR): US 29/70/220 (E. Florida Street) to I-40/I-85 Business just west of the Patton Avenue overpass
- MPO / RPO: Greensboro Urban Area Metropolitan Planning Organization
- ➤ NEPA / 404 Merger Candidate? ☐ Yes ☐ No ☐ Unknown
- General Description of Project:

Reconstruct/restripe the I-40/I-85 Business (East) to US 29/70/220 (North) ramps, to provide a total of three lanes under I-40/I-85 Business. Reconstruct/restripe US 29/70/220 (South) to I-40/I-85 Business (West) Ramps, to provide additional southbound lane, to Norfolk Southern Railway bridge (just west of Patton Avenue overpass).

#### <u>Design Data (Existing Conditions):</u>

- Functional Classification:
  - I-40/I-85 Business (Interstate)
  - US 29/70/220 (Freeway)
- Strategic Highway Corridor:
  - STC Corridor J US 29
  - STC Corridor Q I-40
- > CTP Designation (Facility Type): Date August 31, 2015
  - o US 29/70/220:
    - 4-lane Freeway
  - I-40/I-85 Business
    - 5-lane Freeway (3 lanes eastbound/2 lanes westbound)
- > Type of Access Control:
  - Existing: Full Access Control
  - Proposed: Full Access Control
- Typical Section:
  - o US 29/70/220
    - Existing: 4 through lanes (2 in each direction), 20-foot wide median with jersey barrier
    - Proposed: no-change
  - I-40/I-85 Business
    - Existing: 5-lane Freeway (3 EB/2 WB) w/ variable width median
    - Proposed: no-change

> Right of Way:

o Existing: 240-feet

o Proposed: 240-feet (mainline), plus y-line needs as designed (varies at

interchange areas)

➤ Posted Speed: 55 mph

> Structure Inventory (bridges, RCBC, Walls, etc):

o Bridges:

Bridge Number	Route Carried	Feature Crossed
400585	I-40/I-85 Business	Mile Run Creek
400285	SB US 29/70/220 to I-40/I-85 Business Ramp	Dr. Martin Luther King Drive
400291	WB I-40/I-85 Business ramp to Dr. Martin Luther	NB US 29/70/220
	King Drive	
400321	Norfolk Southern Railway	I-40/I-85 Business
400329	Patton Avenue	I-40/I-85 Business
400348	EB I-40/I-85 Business	NB US 29/70/220
400349	WB I-40/I-85 Business	NB US 29/70/220
400420	E. Florida Street	US 29/70/220

#### > Other TIP Projects in the Area

STIP Number	Description	Dates
I-5965	I-40: US 220/SR 1398 (Freeman Mill Road) to US 29/70/220, add lanes, improve SR 1007 (Randleman Road) and the Elm-Eugene Street interchanges, and replace the Norfolk Southern Railway Bridge east of Elm-Eugene Street.	R/W: FY 2022 Let: FY 2022
I-5964	I-40/I-85 Business/US 29/70/220, Elm-Eugene Street Interchange improvements	R/W: FY 2018 Let: FY 2018
B-5119	I-40/I-85 Business: Replace Bridges Number 291 and 349 over US 29/70/220,	Construction in-progress
B-5718	Patton Avenue: Replace Bridge Number 329 over I-40/I-85 Business/US 29/70/220	R/W: FY 2023 Let: FY 2024

## Long Range Plan History:

The proposed project is included in the Greensboro Urban Area MPO 2018 – 2027 MTIP as a component of SPOT ID Project # H150727. The description is as follows: Improve capacity, travel time, and safety by widening Interstate 40 through Greensboro and improve Elm-Eugene and Randleman Road interchanges.

## Traffic Data (AADT):

	2017	2040	
I-40/I-85 Business	134,000 vpd	151,000 vpd	
US 29/70/220	64,200 vpd	74,000 vpd	
Source of Traffic Data:	U-5754 Project Level Traffic Forecast (August 2017)		

# **Cost Estimates:**

	Construction	Right-of-Way	Utilities	Total
TIP Estimate	\$ 16,450,000	\$ 548,000	\$66,000	\$ 17,063,000
Current Estimate (20XX)	NA	NA		

# Project Schedule:

Environmental Document (Type III Categorical Exclusion)	June 2018
Right-of-Way	2019
Let	2020

#### Purpose and Need Data

The purpose of the project is to the address congestion-related issues along the I-40/I-85 Business - US 29/70/220 interchange area by adding ramp capacity.

The need for the proposed roadway improvements is based on the fact that two of Greensboro's busiest freeway corridors converge within the project study area; I-40/I-85 Business and US 29/70/220. On the western end of the overlap, traffic is funneled to and from Winston-Salem, High Point, and Charlotte. On the eastern end, traffic is funneled from Greensboro's northern suburbs, Danville, VA, and the Raleigh-Durham area.

The limited ramp capacity results in considerable congestion and congestion-related safety issues within and beyond the study area,

- ➤ The project study area forms the eastern end of the 2½ mile long I-40/I-85 Business US 29/70/220 overlap.
- ➤ The current interchange configuration provides inadequate lane capacity for traffic to and from US 29/70/220.
  - Southbound traffic from US 29/70/220 onto I-40/I-85 Business (westbound) is quickly forced to merger down to a one-lane ramp.
  - In the eastbound direction, all traffic headed to US 29/70/220 (northbound) from I-40/I-85 Business is only allotted a one-lane exit. The northbound traffic combines with traffic from Dr. Martin Luther King, Jr. Boulevard as it passes under I-40/I-85 Business.

Figures 1 and 2 present the existing (2017) and 2040 projected traffic volumes.

Figure 1: 2017 Volumes

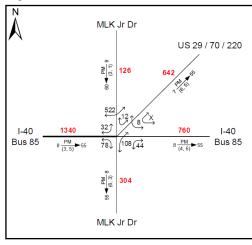
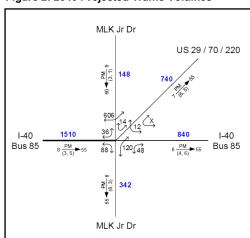


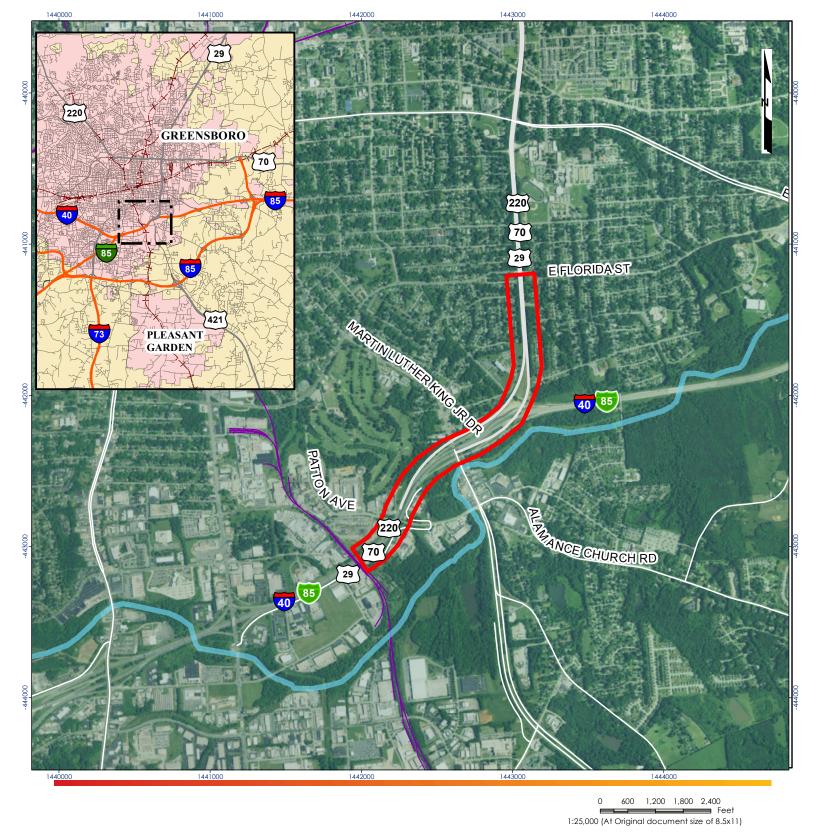
Figure 2: 2040 Projected Traffic Volumes

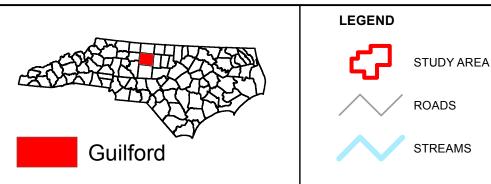


# **Study Area Resources Inventory Table**

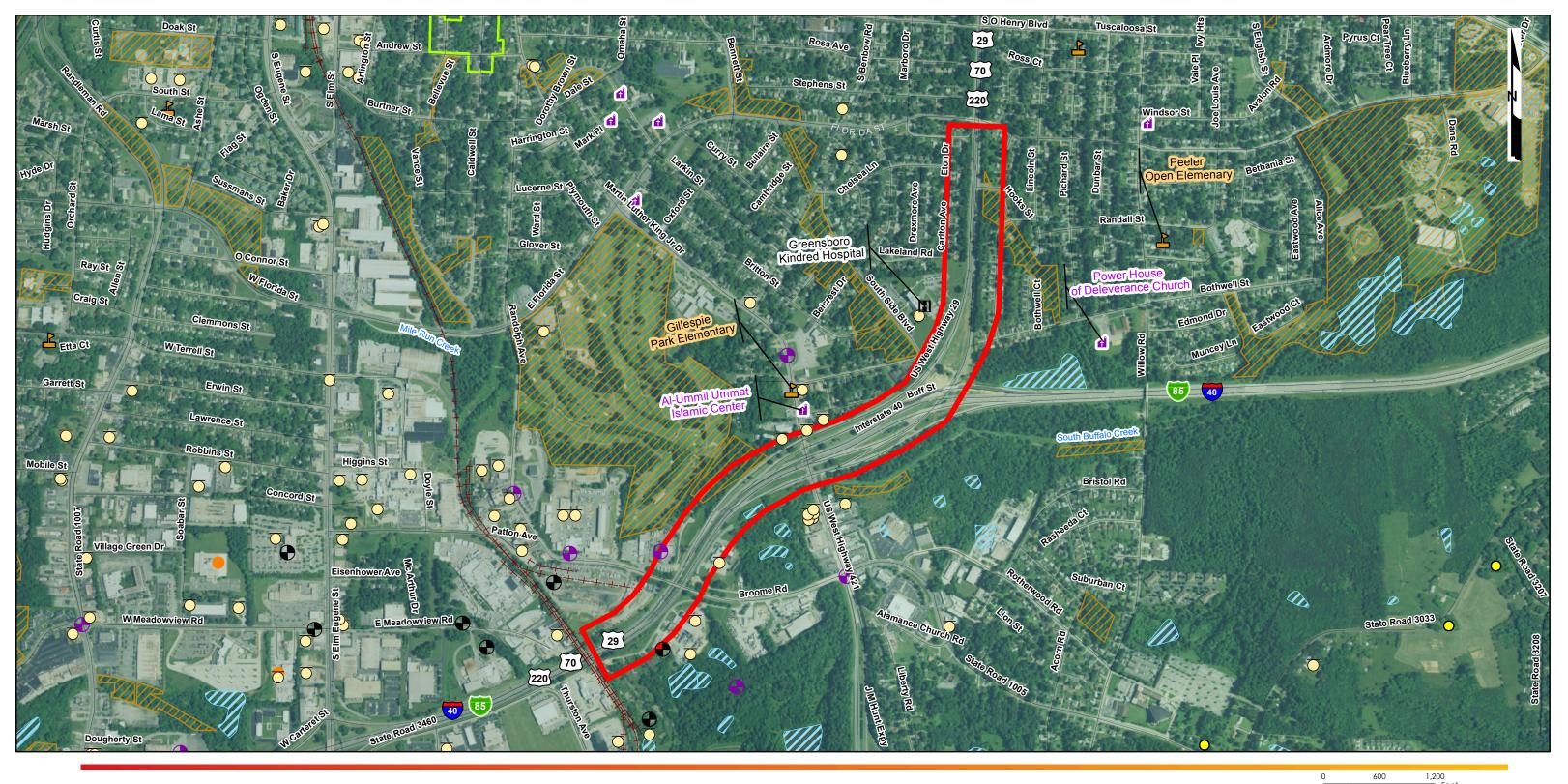
Resource/Measure	Resources in Study Area
Length of project (to tenth of miles)	1.5 miles
Potential for Interchanges or RR crossings (#)	Existing I-40/I-85 Business/US 29/70/220 interchange
Other Infrastructure (# of Wastewater treatment plants, transmission pipelines, etc.)	None
Suspected/known Hazardous Material sites (#)	UST Sites - 10 Hazardous Waste Site - 1
National Register or eligible sites, districts, or other historic properties (#)	None
Community facilities such and hospitals, nursing homes,	Hospital - 1
churches, schools, cemeteries, etc.) (#)	Mosque - 1
	Elementary school - 1
Potentially Affected Residential Properties	None
Potentially Affected Business Properties	None
Wetlands (est. acres rounded to whole acre)	None
Streams (# of streams and number of linear feet)	Mile Run Creek – 600 feet within the study area
	South Buffalo Creek (South of Study area)
Critical Water Supply Watersheds (rounded to nearest acre)	None
Riparian Buffer rules apply (yes/no/part)	No
Area in active agriculture (nearest acre)	None
Parks, Greenways, Game Lands, Land and Water Conservation Fund Properties, etc.) (#)	None
Identified Critical habitat/species under ESA (yes/no/part)	None
FEMA Buyout Properties	None *Note: Floodzone AE along S. Buffalo Creek and Mile Run Creek
Other known/suspected resources or issues: (identify; e.g. Low-income or minority community) (#)	EJ Screening identified Minority and Low income populations.

NOTE: This table is to be used in conjunction with the Environmental Features Map for the purposes of evaluating the feasibility of potential corridors. Use of the table without the aid of mapping may lead to misinformed decisions.











# Legend

d Church

Schools

Hospital -+-- Railroad Underground Storage Tanks

Inactive hazardous Sites

Hazardous Waste Sites

Brown Field

**Determined Eligible** 

National Register

Study List

**Guilford County** 

Tax Parcel

Wetlands







Greensboro NC Guilford County, NC

Client/Project
US 29-70-220
I-40/ I-85 BUSINESS TO SOUTH OF FLORIDA STREET
STIP PROJECT # U-5754

**ENVIRONMENTAL FEATURES MAP**