

Date: December 1, 2020

To: Felix Nwoko, DCHC MPO Manager
Through: Bill Judge, Assistant Director, Department of Transportation
From: Evan Tenenbaum, MPO/Transportation Planner
Subject: US 70 East Access and Connectivity Study

The City of Durham would like to request that the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization consider the US 70 East Access and Connectivity Study as part of its FY 2021-2022 Unified Planning Work Program. This study would analyze the US 70 Corridor from the East End Connector in Durham to the future Aviation Parkway/Northern Durham Parkway interchange (Durham/Wake County Line), evaluating for multi-modal safety and access to and through the corridor, potential transit service and facilities, roadway connectivity and collector street plans in southeast Durham County, and planned and existing roads and interchanges in adopted plans. The participants for this project would be NCDOT Division 5, the MPO, the City of Durham, Durham County, GoDurham, and GoTriangle. Additionally, CAMPO and City of Raleigh will also be informed of the study and provided opportunity to comment/participate as needed. Stakeholders include residents and businesses in southeast Durham, PAC district 1 and PAC district 4. This study can be done over the course of 18 months, comparable to the NC 98 Corridor Study timeline. If included in the FY 2022 UPWP, it is anticipated the study can begin in late Fall 2021 and end Spring 2023.

Currently NCDOT STIP project U-5720, which converts the length of this corridor from a rural highway to a limited-access freeway, is in the very early planning stages, and likely will not be going into ROW until FY 2027. Connections for all modes of traffic across and along US 70 are not addressed in the work already done. The only direct access to the corridor proposed by the NCDOT project is an interchange at Miami Boulevard/Sherron Road, while the 2045 Metropolitan Transportation Plan and the Comprehensive Transportation Plan includes proposed interchanges at Angier Avenue and Glover Road Extension, and grade separations at Pleasant Drive and Page Road Extension. Given the length and potential for development in the corridor, providing only one interchange may not provide adequate multimodal access to the area and may result in high traffic volumes and auto oriented roadway cross-sections at the interchange.

The planning work done for this project has also not addressed a definitive plan for how traffic from local neighborhoods may access the corridor (from Lynn Road, Pleasant Road, Copper Leaf Parkway, Angier Avenue, Leesville Road, or Page Road Extension) and how businesses currently on US 70 can also be accessed after the conversion. Additionally, while there is not currently an emphasis on transit service in this corridor (there is one local GoDurham route that goes to Brier Creek), there are potential opportunities for transit improvements, along with an additional regional transit service to RDU or Raleigh, as a supplement to transit work done on NC 147 and I-40. The Durham County Transit Plan Update should be completed in Spring 2021, and recommendations included in it for transit improvements along the corridor can help inform the study.

A. TASK TITLE: What is the title of the task?
US 70 East Access and Connectivity Study

B. PROJECT LOCATION (name of roadway, intersection, geographic area, etc.):
(Attached maps if necessary)

- US 70 Corridor (See Below)
 - West Terminus: I-885 (East End Connector)
 - East Terminus: Durham/Wake County Line



C. OBJECTIVE/TASK DESCRIPTION (What is the purpose and scope of work for the task)? Please state whether this is a multi-year effort and identify each phase, and for which phase the applicant is requesting funding.

The area around US 70 will continue to experience very fast residential growth; Durham County grew in population by about 20% from 2010 to 2020, and similarly the City of Durham grew by over 22% in that timespan. That rate is not expected to decrease anytime soon. Durham City-County Planning has processed hundreds of residential planning applications in the last few years, a large number of which are in eastern Durham County. The Southeast Regional Lift Station is set to go online in spring 2021, opening up the potential of even more residential demand in southeastern Durham County. In addition, many low-income and minority populations are concentrated in or nearby the corridor, especially between the East End Connector and Miami Boulevard. The US 70 East Access and Connectivity Study will not only create a much needed transportation plan for a fast growing corridor with limited resources, but do so using a unified, coherent process for the City and County, coordination with NCDOT and DCHC MPO which has planning authority in the area.

The principal study tasks will include:

- Analysis of existing conditions/Articulation of problem
 - Land use
 - State and local ordinances
 - Existing STIP, MTP, and CTP
 - Travel patterns and behaviors
 - ADT, VHT, VMT and hourly

- Historic trends
 - Origin/Destination
 - Local Priorities
 - Access/Corridor Connectivity
 - Speed Management
 - Utility relocation
 - Low-Income/Minorities/Environmental Justice
 - Environmental Impact
 - Historic Preservation and Climate Impact
 - Modes
 - Highway
 - Transit service
 - Bike/pedestrian
 - Freight/rail
- Future conditions
 - Land use/development potential
 - Travel patterns/behaviors – especially due to East End Connector
 - Economic Development
 - Residential Growth
 - Housing Trends/Impacts on Commuting
 - New transit/commute options
- Public Engagement
 - Website
 - 2 or 3 rounds of public meetings within CoD or DCo jurisdiction and MPO
- Alternatives evaluation (including potential for bike and ped facilities; impacts on land use, environment, historic properties; ripple effects on other commute routes)
 - No-build
 - STIP U-5720 build
 - Context sensitive
 - Capacity expansion (ultimate)
- Strategies
 - Short-term vs. long-term
 - Recommended Cross-Sections
 - Lighting and Landscaping
 - Implementation
- Action Plan

D. ALIGNMENT WITH NATIONAL PLANNING FACTORS AND TRANSPORTATION LONG RANGE PLANS: Describe which National Planning Factor this project aims to address. Is this project identified in the DCHC MPO 2045 Metropolitan Transportation Plan or Comprehensive Transportation Plan?

This project is identified in the 2045 MTP and CTP (see attached PDFs).

DCHC MPO 2045 MTP Goals

- Goal 1 – Protect Environment and Minimize Climate Change
 - Study will look at access management to mitigate potential congestion and high-traffic volumes
- Goal 2 – Connect People

- Regional corridor traversing multiple local jurisdictions and connecting to an outside MPO
- US 70 is a strategic regional corridor
- Goal 3 – Promote Multimodal and Affordable Travel Choices
 - Focus on multimodal accommodations for future transit, bike/ped, transit and auto
- Goal 4 – Manage Congestion and System Reliability
 - Study will look at access management along the corridor, both to locations and business along the corridor, and to access the corridor
- Goal 5 – Improve Infrastructure Condition
 - Study will provide recommendations on Future Conditions as listed above.
- Goal 6 – Ensure Equity and Participation
 - In the City of Durham, this corridor intersects to 2 Environmental Justice Communities of Concern and in Durham County, to 1 Community of Concern.
- Goal 7 – Promote Safety and Health
 - Study will delineate multi-modal transportation in the corridor and promote the safety of local travelers and residents through transportation choices

E. PARTICIPANTS: Who, besides the DCHC MPO, will take part in this task (i.e. other agencies, non-profits, consultants, community groups)?

- City of Durham
- Durham County
- GoTriangle
- GoDurham
- Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO)
- North Carolina Department of Transportation (NCDOT) Division 5
- (Optional) Capital Area Metropolitan Planning Organization (CAMPO)
- (Optional) City of Raleigh

F. BUDGET, SCOPE OF WORK AND PROJECT SCHEDULE: Please describe the tasks and anticipated schedule to complete the project. If you are able to estimate the budget for each task, please include that information. Requested funds should be expended by June 30, 2022. Add more rows if needed.

Task Month/Year Task Budget (if known)

Task	Month/Year	Task Budget
1: Project Management and Coordination	October 2021	
2: Existing Conditions Analysis	Spring 2022	
3: Public Engagement and Draft Plan	Fall 2022	
4: Final Plan	Spring 2023	

Requested UPWP Amount	\$100,000 DCHC MPO FY 2022 UPWP
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Non-Federal Cash Match	\$20,000 DCHC Local Funding via FY 2022 UPWP
Other Funding	\$80,000 State/Federal Funding via FY 2022 UPWP
Total Project Cost	\$100,000

G. EXPECTED DELIVERABLES: If this is a phased project spanning multiple fiscal years, identify deliverables for this specific phase and other phases where applicable.

- Public Engagement Website
- Draft Plan for US 70 East Access and Connectivity Study
- Final Plan for US 70 East Access and Connectivity Study

H. PROJECT MATCH REQUIREMENT: All municipal applications, including match amounts, must be presented to and approved by the governing body at an advertised public meeting (City/County Council, etc.). If matching funds are required, please attach a letter of support from your governing body to document the availability of the local match. Non-municipal partners would provide a letter from their Board or other governing body demonstrating knowledge and support of project request, ability and intent to provide matching funds, etc.

- City of Durham – Staff resources
- Durham County – Staff resources
- Wake County/City of Raleigh/CAMPO – optional staff resources
- DCHC MPO – Transportation Planning Staff manage project

Please consider this study as we hope to better inform the STIP Project U-5720 in planning the future of this corridor. We are fortunate to have the time before this project goes back into planning and design. We would like DCHC MPO to manage this project, in order to coordinate multi-jurisdictional problems and desired outcomes from the City of Durham, Durham County, and NCDOT. We can set up an additional meeting with the County to coordinate their desire in participating in this Study.

If you have any questions regarding the information contained herein, please contact Evan Tenenbaum at evan.tenenbaum@durhamnc.gov

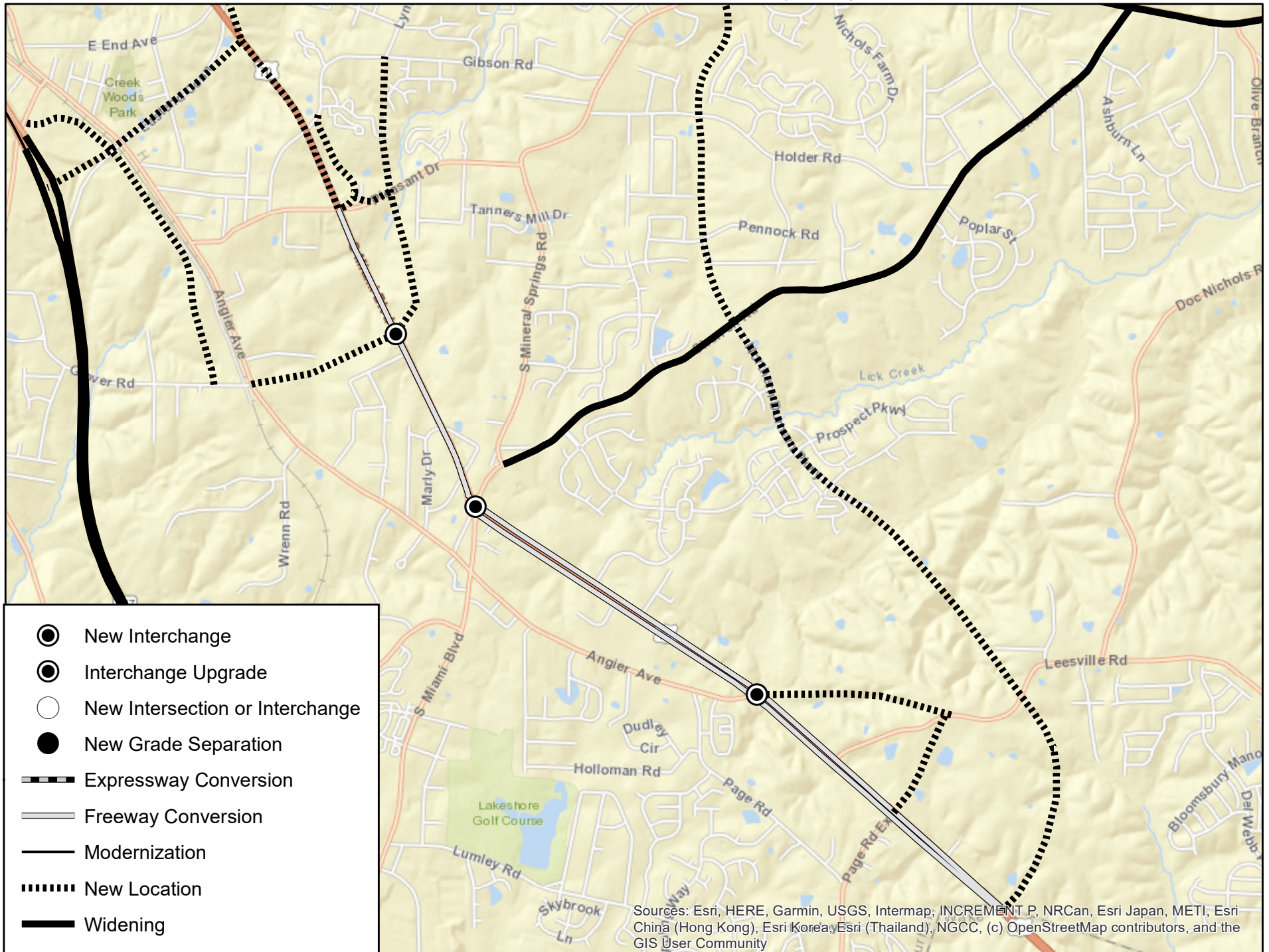
Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Evan Tenenbaum', written in a cursive style.

Evan Tenenbaum, MPO/Transportation Planner

Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) Metropolitan Transportation Plan (MTP)



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Comprehensive Transportation Plan (CTP)

