



CITY OF DURHAM | NORTH CAROLINA

Date: February 16, 2012

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Through: Theodore L. Voorhees, Deputy City Manager
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Subject: NC 54/I-40 Corridor Study

Executive Summary

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) in 2009 designated federal funds be used toward a study for the NC 54/I-40 corridor between Durham and Chapel Hill. The purpose of the study is to analyze land use and transportation issues, evaluate opportunities and challenges for future development in the corridor, and recommend short and long-range solutions and strategies. The study process included (1) data collection and analysis; (2) development and analysis of multi-modal transportation and land use scenarios; and (3) development of a final transportation-land use master plan for the corridor.

August 2010 marked the beginning of a six-month public review process for the draft report and recommendations. The outcome of that public review process was a second phase of analysis to address the key concerns raised by citizens and public officials. The draft report documenting the revised recommendations is now available for public review and comment. A technical steering committee provided oversight and guidance for the study. Focus groups, three public workshops, two open house meetings, a project website, and several citizen committee and policy board meetings provided venues for obtaining public input. The executive summary of the study is Attachment A.

Recommendation

Receive the presentation. This material is provided for information and to receive comments.

Background

The NC 54/I-40 corridor provides principal access to major activity centers in Southwest Durham, Chapel Hill, and the University of North Carolina at Chapel Hill, in addition to serving many trips that pass through the area. This accessibility has fueled tremendous growth within and around the study area. Due to this explosion of growth, the NC 54 and I-40 interchange has consistently ranked as one of the most congested locations in the region. The proximity of the Farrington Road intersection to the I-40 interchange further complicates operational and safety issues. Development pressures within the corridor, coupled with mobility and capacity issues, have illuminated the concern that the existing and planned

transportation infrastructure in this area is insufficient to address existing land use and transportation problems, much less accommodate future growth.

The study area in question includes the proposed Durham-Orange Transit Corridor. The NC 54/I-40 corridor study does not directly evaluate the C-1 and C-2 alternatives, leaving that level of detail to the Durham-Orange Transit Corridor Alternatives Analysis. However, the land use and transportation analysis conducted and strategies recommended in the NC 54/I-40 corridor study capture the benefits of light rail transit in this corridor.

Issues and Analysis

The draft NC 54/I-40 corridor study analyzed and articulated the land use challenges and related transportation problems within the corridor, evaluated mitigating measures, and identified a recommended transportation-land use master plan for addressing future growth.

Feedback from the public during the Phase I public review process associated with the draft report highlighted the following areas of concern:

- Concerns that the proposed superstreet design restricts access, generates confusion, and encourages neighborhood cut through traffic;
- The proposed flyover ramps are incompatible with surrounding land uses;
- The proposed 2000 space parking deck is out of scale for the area creating additional traffic and visual impacts;
- The proposed park and ride facilities within the corridor are not sufficient, more effort should be made to get people out of their cars before they ever enter the corridor;
- Growth projections are unrealistic and the development patterns are too dense;
- Collector street connections need to be revisited in order to minimize the impacts to existing neighborhoods; and
- While not as significant as the I-40 interchange, Fordham Boulevard (US 15-501) is a major bottleneck in the system and the study should include an evaluation of this location.

These areas of concern were subsequently considered further under the technical guidance of a steering committee made up of representatives from the North Carolina Department of Transportation, Triangle Transit, DCHC MPO, City of Durham, Durham County, Town of Chapel Hill, and the University of North Carolina.

The final package of strategies recommended by this study includes:

- High density, mixed-use development that follows a nodal development pattern designed to capture shorter trips and provide a focal point for transit. Phase II recommended densities are more in line with adopted comprehensive plans.
- Provide strategically placed park-and-ride facilities with high frequency, reliable transit service to convert auto trips to transit trips prior to entering the corridor. Include a 500-space park and ride facility at the proposed Leigh Village area to support the proposed light rail system.
- Expand local transit service, improve regional connections, provide efficient bus rapid transit, construct the light rail system, and implement flex route service in lower density areas.
- Improve pedestrian and bicycle facilities by providing critical linkages, safety improvements, and developing pedestrian emphasis areas that are integrated into existing regionally planned facilities.

- Maintain safe and efficient operations on NC 54 and I-40 through geometric and connectivity improvements, implementation of a superstreet concept, and major roadway investments to include ramp improvements to the I-40/NC 54 interchange, grade separation of NC 54/Farrington Road, and full movement urban interchanges at NC 54/Falconbridge Road and NC 54/Barbee Chapel Road. Improve the safety and efficiency of the US 15-501/NC 54 interchange through geometric improvements.

Given the timing of this study in parallel with the Alternatives Analysis for the Durham-Orange Transit Corridor, close coordination was maintained between both study teams to assure compatibility of the recommendations. The final report and executive summary document the study's findings and recommendations. These documents are available for public review on the project website: www.nc54-i40corridorstudy.com. The public comment period extends through March 2012 as documented in the attached schedule (Attachment B).

Alternatives

1. Receive presentation and offer comments.
2. Receive presentation but defer comments to a later date.

Financial Impact

This agenda item does not have an immediate impact on the City budget. However, depending upon the implementation of some of the recommendations from the study, there could be a financial impact to the City in the future.

SDBE Summary

This item does not require review by the Office of Equal Opportunity/Equity Assurance. No SDBE goals were set for this project.

Attachments

Attachment A, NC 54/I-40 Corridor Study Executive Summary

Attachment B, NC 54 Corridor Study Review and Approval Process – version January 12, 2012