

## NC 54 Corridor Study Phase II Work Plan – February 21, 2011

<b>Public Concern</b>	<b>Task*</b>	<b>Status</b>
<p><i>The superstreet design, intended to create safer and more efficient traffic operations by restricting turn movements at major intersections has generated concerns over restricted access and confusion with the permitted turn movements. There is also concern that this design will encourage neighborhood cut through traffic and impede bus operations.</i></p>	<p>The consultant will conduct additional operational analysis to evaluate whether more closely spaced crossover opportunities exist. The consultant will more closely evaluate and report on the intersection delay and travel distance required by such a design.</p>	<p>Funded</p>
<p><i>Innovative solutions, such as a DC style elevated roundabout, need to be explored for the NC 54/Farrington Road intersection and I-40 interchange area. The proposed superstreet recommendation has negative impacts to surrounding landowners and business operators.</i></p>	<p>The consultant will review and evaluate functional designs and traffic analysis for grade separation in the Farrington Road area and the Friday Center and/or Barbee Chapel Road intersections. The consultant will revisit interchange designs for I-40 and NC 54 with the addition of a grade separated intersection at Farrington Road.</p>	<p>Funded</p>
<p><i>Improvements to NC 54 and the I-40 interchange could result in negative impacts to traffic operations and safety along I-40 near the NC 54 interchange.</i></p>	<p>The consultant will update the analysis to address potential traffic and safety impacts on I-40 from projected growth and transportation system modifications.</p>	<p>Funded</p>
<p><i>The proposed flyover ramps are incompatible with surrounding land use and development.</i></p>	<p>The consultant will perform additional traffic analysis and trade-off analysis related to the need for the proposed flyover ramps from I-40 into the proposed Leigh Village development area. In particular, the need for this improvement will be evaluated in conjunction with a reduced park and ride presence at Leigh Village and a grade separated intersection at Farrington Road and NC 54.</p>	<p>Funded</p>
<p><i>A potential structured parking deck in the proposed Leigh Village Station Area development has brought up concerns regarding traffic impacts, visual impacts, and changes to the rural nature of Farrington Road. Alternative locations that keep traffic out of the corridor need to be further explored.</i></p>	<p>The consultant will evaluate the impacts of reducing the size of parking at Leigh Village in favor of increasing lot sizes at other locations. A minimum number of park and ride spaces will be identified, in addition to other development related parking, and opportunities for accommodated the extra demand elsewhere will be examined.</p>	<p>Funded</p>

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<p><i>The proposed park and ride facilities in the corridor are not sufficient to handle the anticipated growth in park and ride demand in the future. The cost of providing “remote” park and ride facilities needs to be further investigated from the standpoint of demand and cost to provide high frequency service.</i></p>	<p>The consultant will conduct a travel time contour analysis of identified potential park and ride lots for their suitability to serve potential destinations within and outside of the NC 54 corridor, including locations elsewhere in Durham and the Research Triangle Park.</p>	<p>Funded</p>
<p><i>Growth projections are unrealistic and proposed development is too dense and does not fit with the character of existing land development within the corridor. There needs to be an evaluation of the impact that this level of development will have on the Jordan Lake Watershed.</i></p>	<p>The consultant will coordinate further with local planners and officials to review and assess land use changes that are likely to occur by 2035. The Consultant will incorporate changes in the Glen Lennox site plan as available from the Town of Chapel Hill, and will review and potentially adjust development projections for the Leigh Village site as appropriate to determine the threshold of future growth that will not require major highway capacity improvements into the site from I-40.</p>	<p>Funded</p>
<p><i>The specifics of the collector street recommendations require additional analysis to minimize the impact to neighborhoods and to take advantage of existing intersections, especially in light of the revised residential land use designation of Eastwood Park.</i></p>	<p>The consultant will assess the relative benefits and impacts of George King Road vs. Crossland Drive, considering both traffic impacts/operations and potential impacts on the US Army Corps of Engineer’s property.</p>	<p>Funded</p>
<p><i>In addition to the specific areas of public concern noted above, public comments also highlighted a need for additional analysis related to the following:</i></p> <ul style="list-style-type: none"> <li>▪ <i>bicycle and pedestrian improvements;</i></li> <li>▪ <i>a better evaluation of through traffic and eastbound traffic on NC 54;</i></li> <li>▪ <i>travel through the corridor for other major employment centers such as Duke University, and North Carolina Central University;</i></li> <li>▪ <i>hardscaping and landscaping to provide a better buffer between NC 54 and existing development along the corridor; and</i></li> </ul> <p><i>a greater focus on the cost effectiveness of the recommendations.</i></p>	<p>The consultant will conduct additional analysis as necessary and will more thoroughly document these areas in the final report.</p>	<p>Funded</p>

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<p><i>While not as significant an impact as the I-40 interchange, the interchange with Fordham Boulevard is a major bottleneck in the system. The study should include and evaluation of this interchange.</i></p>	<p>The consultant will conduct operational analysis on current operations and document existing deficiencies and safety problems. The consultant will also evaluate future year deficiencies and will identify operational solutions to achieve an acceptable level of service and to resolve any safety problems. Finally, the consultant will develop a recommended functional design concept of interchange modifications that will achieve an acceptable level of service with 2035 traffic.</p>	<p>Currently Unfunded; the study team is investigating options for funding</p>
<p><i>Triangle Transit is currently conducting alternatives analysis for the light rail transit (LRT) proposed for this corridor, including an option for running the LRT down George King Road and then along NC 54. The selection of this alternative may require additional analysis to evaluate the impact of LRT operations on the other proposed improvements within the corridor.</i></p>	<p>The consultant will coordinate with TTA and appropriate agencies on the LRT Alternatives Analysis (AA) to address changes from that process that will influence recommendations within the NC 54 Corridor Study.</p>	<p>Currently Unfunded; the study team is investigating options for funding</p>

\* Anticipated completion date for funded activities is six to eight months.