

October 19, 2010

TO: Durham Board of County Commissioners
Durham City Council

FROM: Alan Dippy, Chair, Durham Bicycle and Pedestrian Advisory Commission

Subj: NC54 Corridor Study- Draft Report

The Durham Bicycle and Pedestrian Advisory Commission (BPAC) is keenly interested in improved pedestrian and bicycle mobility within the NC54 corridor between Durham and Chapel Hill and has reviewed the draft report of the corridor study. We are in agreement with the consultants who state that it is crucial to encourage more walking and biking in the corridor in order to minimize single-occupancy vehicle trips and to complement transit use.

One of the key duties of BPAC is to advise governing bodies on matters affecting pedestrian and bicycle transportation. After reviewing the draft report, we believe that there are bicycle/pedestrian elements of the report that should be expanded or improved. Additionally, certain items of the adopted 2001 Durham Trails & Greenways Master Plan (Trails Plan) and the 2006 Durham Comprehensive Bicycle Transportation Plan (Bike Plan) are not incorporated into the report.

We will address these elements in the following sections: Multi-use Paths & Bike Lanes, Connections to the East & West, Crossing NC54.

Multi-Use Paths & Bike Lanes

The report indicates that side paths will facilitate pedestrian and bicycle movement along the NC54 corridor. As stated in the report, it is currently difficult for pedestrians and most cyclists to move between Meadowmont and areas to the east. These facilities will become more important as NC54 is widened to 6 lanes in this section and becomes less accommodating to cyclists. BPAC has the following recommendations concerning multi-use trails and bike lanes:

- Multi-use trails should be provided along both the north and south sides of NC54 within the study area. Ideally these should be 15' wide to accommodate both pedestrians and cyclists. This will improve mobility along the corridor and also facilitate crossing of NC54 (see Crossing NC54 section);
- The Trails Plan calls for a side path along any future transit corridor in this area (Southwest Rail-Trail, page I-20). This side path should be mentioned in the report and depicted in the maps;

- In connection with this, any grade-separated transit crossings (including the one mentioned in the vicinity of Meadowmont) should include a facility that will allow full use by both pedestrians and cyclists.
- Sections 5.4, 5.5 and 7.8 of the Bike Plan recommend the types of on-road bicycle facilities that should be implemented on roads, depending on traffic speed, volume and on-street parking. Please mention these in the report as a guide for existing and planned collector roads in the corridor area.

Connections to the East & West

BPAC have some concerns about how these multi-use trails would connect to destinations and planned facilities east and west of the study area. Below are our concerns and recommended solutions.

Concerns:

- Currently the proposed multi-use trail on the north side of NC54 ends at Farrington, and cyclists/pedestrians would be required to cross both NC54 and Farrington road to access the proposed I-40 side bridge, which is a confusing configuration.
- The report shows a multi-use facility along the south side of a future widened I-40 bridge. It is not clear how this facility would connect to planned pedestrian and trail facilities to the east of I-40.
- There is no specific mention in the report of where bus stops would be placed along NC54 between I-40 and Friday Center Drive.

Recommendations:

- The Bike Plan shows a connection on the north side of NC54 between the Third Fork Creek Trail and the project area. This connection would likely be achieved by installing a side path along NC54 between Biscayne and Leigh Farm Park Road as part of a future widening. This planned facility and existing Third Fork Creek Trail should be mentioned in the report and shown in its maps, as was done with the Bolin and Battle Creek greenways in Chapel Hill. Please refer to Figure 1 below.
- A pedestrian bridge north of the I-40 interchange is mentioned in the report, but we believe there should be a more concrete recommendation, as this will serve as a critical link between the NC54 multi-use trails and the connection to Third Fork Creek Trail. Please refer to Figure 1 below.
- Trails on both sides of I-40 should arc northward to meet this bridge and to avoid the complicated I-40/Farrington interchange [figure 1].
- We would like to see a detailed plan for how pedestrians and bicyclists can safely access the bus stops and how the stops would be made ADA-accessible. Considerations should be made for accessible pathways to the bus stops themselves from nearby sidewalks/multi-use paths, providing safe crossings across NC-54 (most transit passengers board the bus across the street from the stop they alight), and providing safe and comfortable locations for the passenger to wait for and board the vehicles.

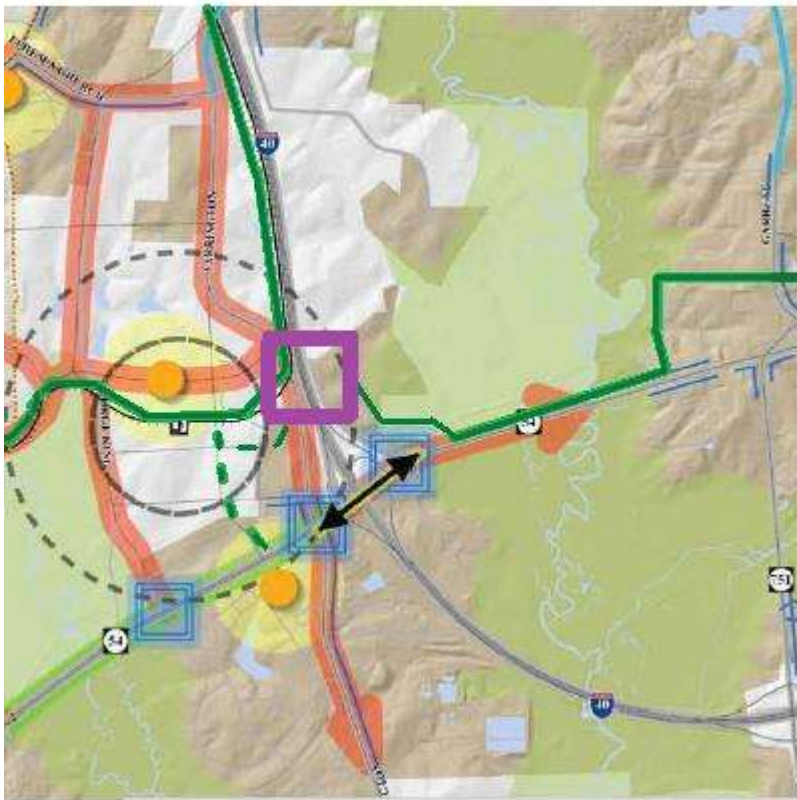


Figure 1

Dark Green lines- Greenways proposed by Trails and Bike Plans

Purple Box- Approximate location of bicycle/pedestrian bridge

Crossing NC54

As the report states, there are currently only two signalized pedestrian crossings for NC54. Though crossing facilities are mentioned as part of planned widening and superstreets, we believe that these enhancements (as currently shown) will still provide barriers to bicycle/pedestrian crossing. Below are our concerns and recommended solutions.

Concerns:

- Though the primary superstreets shown in the report provide diagonal pedestrian crossing through the facility, this will provide for an awkward crossing for cyclists entering the intersection from side streets. As an example, a cyclist entering the corridor from Friday Center Drive would have to dismount, cross Friday Center Drive, and then walk across the pedestrian way to access Meadowmont. Some cyclists will have the ability to ride in the superstreet along with motor vehicles, but many will elect not to do this.
- The report indicates that pedestrian crossing facilities are less feasible at reverse superstreets, and that pedestrians and cyclists would have to move down to the next pedestrian crossing. It appears that a reverse superstreet is recommended for Barbee Chapel Road, which is slated to have expanded shoulders and sidewalks. How would a cyclist or pedestrian on Barbee Chapel connect to Meadowmont on the other side of NC54?

- Some pedestrians may elect to cross the superstreet outside the approved diagonal pedestrian crossing. Installing traditional crosswalks as a short-term solution, and then replacing them as a mid-term solution would be confusing for pedestrians.

Recommendations:

- We strongly recommend incorporation of grade separated facilities near most of the superstreets, especially those with trip generators on both sides of NC54 (i.e. Barbee Chapel & Falconbridge Roads). Installation of multi-use paths on both sides of NC54 would facilitate access to these crossings.
- Where grade separated facilities cannot be incorporated, an alternate treatment would be to install at-grade crossings at the ‘U-turn bulb’ of some of the superstreets. See figure 2 below.



Figure 2

Blue Line- Location of an at-grade crossing at a ‘U-turn bulb’

Anticipating the future transportation demands on this corridor, the report contains thoughtful and bold proposals for transit and roadway improvements. The report’s proposals for pedestrian and bicycle enhancements should be equally as bold and forward-thinking. We believe that if our recommendations are incorporated into the corridor study, the goals of minimizing single-occupancy vehicle trips and supporting transit use in the corridor will be achieved. Our recommendations will also improve the ability to travel between Durham and Chapel Hill without the use of a motor vehicle.

Please do not hesitate to contact us if you have any questions or concerns about the recommendations of this memo.

cc: Mark Ahrendsen, Director, Durham Department of Transportation
 Leta Huntsinger, DCHC MPO
 Aaron Cain, Durham City-County Planning Department
 Town of Chapel Hill Bicycle & Pedestrian Advisory Board