

MEMORANDUM

TO: Roger L. Stancil, Town Manager

FROM: J.B. Culpepper, Planning Director
Steve Spade, Transit Director
David Bonk, Long Range and Transportation Manager

SUBJECT: Chapel Hill-Carrboro 2035 Long Range Transit Plan

DATE: February 15, 2010

PURPOSE

The purpose of this memorandum is to summarize the findings and recommendations of the draft Chapel Hill-Carrboro 2035 Long Range Transit Plan. Attachment 1 is the Executive Summary. The full draft Plan is available at <http://www.townofchapelhill.org/index.aspx?page=1284> The memorandum also includes a summary of comments and recommendations from the Town of Carrboro, various advisory boards and the public. Tonight's public forum is intended to provide the Town Council with an opportunity to review the Plan and receive public comment.

BACKGROUND

In September, 2006 Chapel Hill, Carrboro and the University of North Carolina at Chapel Hill initiated a process to prepare a long range transit plan for the Chapel Hill-Carrboro service area. At that time a Policy Committee was established, composed of elected officials from Chapel Hill and Carrboro and senior administrators from the University. The members of the Policy Committee included:

- Kevin Foy, Chapel Hill
- Bill Strom, Chapel Hill
- Jim Ward, Chapel Hill
- Ed Harrison, Chapel Hill
- Mark Chilton, Carrboro
- Dan Coleman, Carrboro
- Jack Evans, University of North Carolina
- Carolyn Elfland, University of North Carolina
- Jon Howes, University of North Carolina

The Policy Committee was intended to provide overall project oversight and direction to the project consultant in the development and evaluation of alternatives and preparation of final recommendations.

In July, 2009 the Policy Committee received the draft Plan and referred the Plan to Chapel Hill, Carrboro and the University for review and comment. On October 12, 2009 the Council approved a process for reviewing the draft Plan and scheduled tonight's public forum. (Attachment 2)

DISCUSSION

The objectives of the draft Chapel Hill-Carrboro 2035 Long Range Transit Plan were to:

- Define the Chapel Hill-Carrboro transit market through 2035
- Develop transit service concepts
- Identify high investment projects and recommend an implementation schedule
- Prepare transit supportive land use guidelines
- Develop a financial plan

We provide below a summary of the findings and recommendations of the draft Plan related to the project objectives. We have noted which sections of the report address these objectives.

Define the Chapel Hill-Carrboro transit market through 2035: (Section 3, page 3-1) At the same time as work was begun on the Long Range Transit Plan the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization was preparing the 2035 update to the regional Long Range Transportation Plan. In order to take advantage of the most recent socio economic information and ensure coordination with the development of the regional transportation plan the Chapel Hill-Carrboro Long Range Transit Plan utilized the metropolitan planning organization 2035 land use projections and the Triangle Regional Model to evaluate the impact of future growth and test alternative transit strategies. The Triangle Regional Model is a computer based travel simulation model designed to assess future travel behavior. It is used to develop all regional transportation plans.

The draft Long Range Transit Plan includes a detailed analysis of projected internal and external travel demand anticipated by 2035, identification of activity centers within the Chapel Hill-Carrboro transit service area and the development of service concepts.

Development of transit service concepts: (Section 4, page 4-1) The draft Plan includes the identification of two types of service concepts, gateway services and an internal local bus network. Gateway services are intended to serve those daily trips from outside the Chapel Hill-Carrboro area principally focused along existing transportation corridors. The goal of gateway services was to capture a high proportion of trips with expanded, high capacity transit services

and associated park ride facilities. Based on projected transit travel demand the Plan designates corridors as either high investment or enhanced express bus. Technologies evaluated for implementation in high investment corridors included light rail, streetcar and bus rapid transit.

The draft Plan identifies two types of enhanced local bus service concepts: enhancements to the existing service structure that include expanded weekend and evening service, and recommendations for expanded cross town services designed to accommodate travel outside the core area of the downtown and University main campus.

Gateway service concepts: Each of the identified gateway entrances were evaluated for potential transit ridership and possible implementation of transit technologies. This preliminary evaluation attempted to match projected transit ridership with appropriate transit technologies. During the course of the evaluation of gateway corridors the Policy Committee agreed that the draft Plan should focus on potential transit services within the existing Chapel Hill transit service area, with the exception of the proposed light rail corridor between the University of North Carolina and Durham. The Policy Committee also agreed with the consultant recommendation to focus on the development of gateway services rather than local service options.

It was also agreed that the analysis should include transit service along Martin Luther King Jr. Blvd, serving Gateway 1 and the proposed development at Carolina North rather than the existing rail corridor. The Policy Committee expressed concern about the potential conflicts of transit services along the rail corridor with existing freight service to the University power plant, disruption of traffic along Main Street in Carrboro and a desire to focus the anticipated development of Carolina North towards Martin Luther King Jr. Blvd.

Alternative investment scenarios: Two separate transit scenarios were evaluated using the Triangle Regional Model, a high investment and low investment network. The principle difference between the two scenarios was the inclusion of the light rail corridor between Chapel Hill and Durham, which connects Gateway 3, US 15-501 at I-40, with Gateway 4, NC54 and then the UNC campus in the high investment scenario. In the low investment scenario bus rapid transit services are proposed for the NC54 corridor linking to the University main campus and Carolina North. The high investment scenario assumes that transit travel between Gateway 4 and the UNC campus would be accommodated by the light rail corridor, eliminating the need for investment in bus rapid transit along NC54.

During their evaluation of the adequacy of the Triangle Regional Model to analyze future transit demand the consultant identified limitations in the ability of the model to accurately reflect the impacts of restrictive parking policies, particularly on the University campus. In order to address this issue the consultant prepared an off model assessment of the impact of those policies on transit ridership. This off model procedure was combined with the estimates from the model to produce a final projection of transit ridership.

The analysis of the two network scenarios was used by the consultant to develop a final proposed transit network. (Attachment 3) The Plan projects that if all elements of the Modified High investment Service Concept were implemented by 2035 total daily boardings on Chapel Hill Transit would be increase to approximately 99,000, compared to about 30,000 in 2009. The

Modified Concept also estimates the need for approximately 20,000 park and ride spaces distributed among the 6 gateways.

Identify high investment projects and recommend an implementation schedule: (Section 6, page 6-1) After reviewing the analysis of each of the gateway service corridors the Policy Committee selected Gateways 1 (Martin Luther King Jr. Blvd) and 3 (US 15-501/Fordham Blvd/Franklin Street and Estes Drive) as candidates for higher capacity transit investment and for the development of more detailed conceptual operating plans. Estimated daily ridership for Gateway 1 and related service along Martin Luther King Jr. Blvd was approximately 9,000. By comparison the Carolina North Transportation Impact Analysis projected approximately 6,400 daily transit trips to Carolina North and approximately 4,000 daily park and ride trips along the Martin Luther King Jr. Blvd corridor by 2030. The draft Long Range Transit Plan projected daily 2035 ridership from Gateway 3 and along its segments, Franklin Street, Fordham Blvd and Estes Drive, of approximately 15,900.

The draft Plan includes an assessment of the feasibility of implementing bus rapid transit along Martin Luther King Jr. Blvd and US 15-501/Franklin Street/Fordham Blvd. Bus rapid transit systems can incorporate a range of transit improvements including:

- High capacity buses
- Grade separation through exclusive lanes
- Intersection and signal priority upgrades
- Enhanced shelters and real time passenger information systems
- Expanded operating periods with high frequency service
- Unique service identity or branding

The draft Plan recommends that bus rapid transit services be implemented in the Gateway 1, Martin Luther King Jr. Blvd corridor. While bus rapid transit service is recommended from I-40 to the University main campus grade separation is only feasible between I-40 and Estes Drive. BRT service between Estes Drive and the University would operate in mixed traffic, with improved stations and traffic signal priority treatments.

The Plan also recommends that bus rapid transit service from Gateway 3, US 15-501 Blvd, is warranted. The service between I-40 and Franklin Street would include a separate lane for buses. The service along Franklin Street to the Town center and University campus and along Estes Drive to Carolina North would be in mixed traffic.

Prepare transit supportive land use guidelines: (Section 7, page 7-1) Utilizing information from the 2035 Durham-Chapel Hill-Carrboro Long Range Transportation Plan and the Northern Small Area Plan the consultant identified 18 areas located along previously identified transit service corridors that could be developed or redeveloped. Developable acreage for each site was determined and a schematic transit supportive development scenario was developed. For several

of the sites conceptual development designs were also prepared. The draft Long Range Transit Plan also includes a set of recommended transit supportive design guidelines.

Develop a financial plan: (Section 8, page 8-1) The draft Plan includes an estimate of capital and operating cost to implement the recommended levels of transit investment in each gateway corridor. It also includes identification of potential federal, State and local funding options, including development impact fees and special service districts. The implementation plan recommends a series of actions intended to provide bus rapid transit service in the Gateway 1 Martin Luther King Jr. Blvd corridor, including applying for federal New Starts formula funding.

Public Input Process: In October the Council approved a process to review the draft Long Range Transit Plan including tonight's public forum.

Since October Town staff has sought comment from advisory boards, policy bodies and the public. Below is a list of public presentations of the draft plan.

October 18, 2009	Sustainable Community Visioning Task Force
October 20, 2009	Joint Presentation to Chapel Hill Planning Board, Transportation Board and Bike/Pedestrian Board
November 18, 2009	UNC Alternative Transportation Committee
November 19, 2009	Carrboro Transportation Advisory Board
November 24, 2009	Carrboro Board of Aldermen
December 8, 2009	Chapel Hill Public Input Session
January 12, 2010	Chapel Hill Public Input Session
February 8, 2010	Chapel Hill Sustainability Committee

All sessions included a staff presentation of the draft Plan and time for public discussion. In addition, public comment was sought via email and mail. The draft Plan was available for review on the Town website.

NEXT STEPS

We recommend that the Council refer the comments received on the draft Long Range Transit Plan to the Manager. We will respond to the comments received and return to the Council with recommendations on how best to move forward with the adoption of a final Plan.

RECOMMENDATIONS

Chapel Hill Planning Board: (Attachment 4) The Chapel Hill Planning Board voted to recommend the Council adopt the draft Plan.

Chapel Hill Transportation Board: (Attachment 5) The Chapel Hill Transportation Board supported the proposed implementation of bus rapid transit as recommended in the draft Plan. The Board also recommended that the existing rail corridor be considered as an alternative corridor to serve Carolina North. The Board identified the need to consider bicycle and pedestrian improvements in conjunction with light rail and bus rapid transit investment. The Board also proposed that high quality bus service continue to be a priority.

Chapel Hill Bicycle and Pedestrian Board: (Attachment 6) The Board supported the draft Chapel Hill/Carrboro 2035 Long Range Transit Plan. The Board also recommended that in accordance with the Complete Streets concepts, the 2035 Long Range Transit Plan and the Bicycle and Pedestrian Plan should be coordinated to optimize public transit ridership.

Chapel Hill Sustainability Committee: To be provided.

Carrboro Board of Aldermen: (Attachment 7a and 7b) The Carrboro Board of Aldermen approved a set of recommended modifications to the draft Plan. These included:

- Light rail or another higher-order transit service to Carrboro should continue to be analyzed in future transportation planning. Specific service options might include:
 - Service as described by Corridor 5A in the Long Range Transit Plan;
 - Service that serves only downtown Carrboro as part of a regional light rail line and does not extend to Carolina North;
 - Service through Carrboro as a part of wider commuter rail service
- In its technology evaluation, the Plan should include information and basic data on energy use, fuel consumption, and greenhouse gas emissions associated with various transit technologies.
- The Plan should include additional language that compares the feasibility of regional transit service originating at more distant locations with the currently-recommended gateway node “intercept” park-and-rides.

Public Input Sessions: (Attachment 8) The public commented on various elements of the draft Plan including the proposed implementation of light rail and bus rapid transit corridors, the adequacy of the local bus network and financial feasibility.

ATTACHMENTS

1. Executive Summary (p. 8).
2. October 12, 2009 Memorandum and Resolution (p. 27).
3. Modified Service Concept Map (p. 30).
4. Planning Board Recommendation (p. 31).
5. Transportation Board Recommendation (p. 32).
6. Bicycle and Pedestrian Board Recommendation (p. 33).
7. Carrboro Aldermen Resolution and Carrboro Staff Review (p. 34).
8. Comments from Public Forums (p. 51).