ATTACHMENT 2
AGENDA #9.1

(7)

MEMORANDUM

TO: Mayor and Town Council

FROM: W. Calvin Horton, Town Manager

SUBJECT: Review of Durham-Chapel Hill-Carrboro 2025 Transportation Plan Alternatives

DATE: March 3, 2002

This memorandum reviews the analysis of 14 alternative transportation scenarios for the Durham-Chapel Hill-Carrboro Urban Area 2025 Transportation Plan. Adoption of the attached resolution would provide the Durham-Chapel Hill-Carrboro Transportation Advisory Committee with comments and recommendations on the alternatives.

PROCESS

The 2025 Regional Transportation Plan must be developed and adopted by the Durham-Chapel Hill-Carrboro Urban Area to meet federal transportation and air quality regulations. The 2025 Transportation Plan will include all roadway, transit, bicycle and pedestrian projects to be completed over the next 25 years and will include a financial plan designed to fund these improvements. Future State and Metropolitan Transportation Improvement Programs will be developed using the adopted 2025 Plan to evaluate projects for funding. The adopted Plan must also meet federal air quality standards. Development of the Plan was been underway since early 2000.

The Durham-Chapel Hill-Carrboro Transportation Advisory Committee has adopted a schedule for completing the final 2025 Regional Transportation Plan. That schedule proposes that a final draft Plan will be adopted by the Transportation Advisory Committee by May, 2002. Once a draft Plan is approved, it will be analyzed by State and federal agencies for compliance with federal clean air standards. The federal air quality conformity regulations require that the Durham-Chapel Hill-Carrboro Urban Area must adopt a final Plan meeting all federal air quality standards by December, 2002. Failure to adopt a Plan by that time may result in a cut-off of all federal transportation funding to the Urban Area.

The Durham-Chapel Hill-Carrboro Transportation Advisory Committee has identified 14 transportation alternatives as part of the Plan development. It is anticipated that the Transportation Advisory Committee will be asked to review the results of the alternatives analysis and recommend a final set of 3 alternatives on March 13, 2002. At that time the Committee will also be asked to approve a preliminary financing plan for the 2025 Plan.

We have attached several items for your information. Attachment 1 is the 2025 Transportation Plan Alternatives, which includes a description of the 14 alternatives and related assumptions. Also included is a set of maps showing the location of the highway facilities included in the various alternatives.

Attachment 2, Tier 2 Alternatives Evaluation, Performance Measures and Cost Estimates includes the results of the analysis of the 15 alternatives and related cost estimates.

Attachment 3, 2025 Transportation Plan Revenue Forecasts, includes information on revenue forecasts and options for developing new sources of revenue.

Attachment 4, the October 22, 2001 Council Memorandum, summarizes the schedule for completing the 2025 Plan.

KEY FINDINGS

We have identified the following key findings from our review of the 14 alternatives:

- The development of a system of fixed guideway transit corridors, coupled with expansions of local bus systems within the Durham-Chapel Hill-Carrboro Region will increase transit ridership and reduce overall levels of congestion.
- The implementation of high occupancy vehicle lanes or high occupancy toll lanes would reduce vehicle miles and hours traveled and reduce levels of congestion.
- The available data do not allow evaluation of specific impacts of any alternative on the Chapel Hill-Carrboro Area.
- Implementation of transportation alternatives that will reduce congestion and encourage greater use of alternative modes of transportation will exceed reasonable projections of future transportation revenue from current sources. The identification of additional transportation revenues is required.

We recommend that the alternatives that include expansion of the local bus systems, development of fixed guideway corridors and implementation of high occupancy vehicle lanes should be pursued in the next stage of analysis.

SUMMARY AND EVALUATION OF ALTERNATIVES

The regional staff has completed an analysis of 14 alternatives. These alternatives were developed from the evaluation of 62 previous alternatives. All alternatives were evaluated using the Triangle Regional Transportation Model. The Triangle Regional Model projected future travel demand for the region using land use projections for 2025. All alternatives used the same projections of 2025 housing and employment patterns. The

Regional Model transportation network also includes land use and transportation data for Wake County.

A list of the specific elements of each alternative is included in Attachment 1. Attachment 1 also includes maps showing the location of projects included in each highway alternative.

We note that each alternative includes an assumption that an extensive bicycle and sidewalk network will be developed within the region. It is assumed that bikelanes are implemented along principal transportation corridors and that an extensive system of sidewalks is developed. Details of the bicycle and pedestrian assumptions are included in Attachment 1. Each alternative was also evaluated with the assumption that the region had implemented a transportation demand management program that included the following elements:

- Carpool and vanpool programs
- Alternative work hour programs including compressed work weeks, staggered work hours and flextime programs.
- Employee parking fees for employers with 100 or more employees

We note that none of the alternatives includes the Chapel Hill Transit fare free policy.

We have summarized below each transportation alternative and provided comment. A summary of the impacts of each alternative is included in Table 1 below. We note that these results are for the Durham-Chapel Hill-Carrboro Urban area, although some results, such as rail ridership include the ridership on the Triangle Transit Authority Phase I rail system in Wake County. Table 1 also includes a cost estimate for each alternative.

2025 Base Network: The 2025 Base Network was developed to create a scenario against which all other scenarios could be compared. This scenario includes only those transportation projects currently under construction or included in the adopted 2002-2008 Transportation Improvement Program. The 2025 Base Highway network includes completion of the following Chapel Hill projects:

- Weaver Dairy Road: 5 lanes
- Weaver Dairy Extension: 4 lanes
- South Columbia: 2 lanes
- Homestead Road: 3 lanes
- Estes Drive, N. Greensboro to Airport Rd.: 3 lanes

The 2025 Base transit network also assumes that Phase I of the Triangle Transit Authority rail system is operational. The Base scenario assumes that local transit systems will continue to provide all current service and any service improvements anticipated in the 2003 fiscal year.

Comment: Without additional transportation investments the analysis of 2025 Base network shows a significant increase in vehicle miles traveled and vehicle hours traveled. Over 50% of the roadway network in the region would be congested, while transit mode splits (the proportion of all trips in the region made by transit) for daily and peak trips would remain less than 2%.

1. Base Highway and Moderate Transit: This alternative includes an expansion of the Base network local transit systems (Chapel Hill Transit, DATA and Triangle Transit Authority), while maintaining the roadway network from the Base alternative.

   Comment: The overall impact of the additional local transit services appears minimal, with an overall increase of approximately 1,000 boardings regionally. It is unclear why the percent of trips using transit in both the daily and peak periods has increased given the minimal increase in riders. The reductions in vehicle miles and hours traveled and network congestion may be explained by the introduction of an extensive pedestrian and bicycle system.

2. Moderate Highway and Base Transit: This alternative includes the Base 2025 public transit systems and the expansions of several roadways, including:

   - I-40, US 15-501 to I-85: 6 lanes
   - Fordham Boulevard, Manning Drive to NC54: 6 lanes
   - UNC access to Fordham Boulevard: 2 lanes

   Comment: This alternative reduces vehicles miles and hours traveled slightly, and reduces the percentage of the entire road network congested to 44%. The proportion of daily transit trips falls slightly from the Base network. Total cost for this alternative is significantly more than the 2025 Base network. We note that the Council has previously raised concerns about the widening of I-40 between US 15-501 and I-85 and has encouraged implementation of high occupancy vehicle lanes.

3. Moderate Highway and Moderate Transit: This alternative includes both an expansion of local transit systems and roadway improvements.

   Comment: This alternative reduced both vehicle miles and hours traveled and there is a slight increase in the proportion of daily and peak transit trips. We note the cost of this alternative is shown as the same as #2, which may be an error.

4. Moderate Highway, +1 and Moderate Transit: This alternative includes the moderate improvements to public transit and moderate roadway projects, but adds several new roadway projects in Durham, Orange and Chatham Counties. These new roadway projects, include:

   - I-40, I-85 to I-540: 8 lanes
   - Jack Bennett Road Extension, Northern Chatham County

Comment: The impact of adding these roadway projects reduces vehicle miles and hours traveled and the percent of the roadway network that is congested. The proportion of transit trips remains unchanged from Alternative #3.

5. Moderate Highway, +1, +2 and Moderate Transit: This alternative analyzes the impact of adding several additional roadway projects to Alternative #4. The following new roadway project is included in the Chapel Hill/Carrboro area:

    - Seawell School Rd to Homestead Rd.: new 2 lane roadway

    Comment: Further roadway improvements result in reductions to the vehicle hours and miles traveled and degree of network congestion. Transit ridership remains largely unchanged.

6. Moderate Highway, +1, +2, Moderate Transit and High Occupancy Vehicle Lanes: This alternative includes all previously analyzed roadway improvements, a moderate transit network and high occupancy vehicle lanes along I-40 from I-85 in Orange County to the Johnson County line in Wake County and along NC 147 from I-85 to I-40.

    Comment: With the exception of Alternative #14, this alternative results in the lowest projected vehicle miles and hours traveled and degree of network congestion. Transit ridership increases slightly.

7. Moderate Highway, +1,+2, Moderate Transit and High Occupancy Toll Lanes: This alternative includes all previously analyzed roadway improvements, a moderate transit network and high occupancy toll lanes along I-40 from I-85 in Orange County to the Johnson County Line in Wake County and along NC 147 from I-85 to I-40. High occupancy toll lanes are similar to high occupancy vehicle lanes, providing a separate lane for vehicles with two or more occupants, but also allowing single occupant vehicles to pay a toll to use them during limited periods.

    Comment: Overall results of the high occupancy toll lanes in this alternative show somewhat less reduction in vehicle miles and hours traveled and network congestion than the high occupancy vehicle lanes in Alternative #6. The total cost of the Alternative 7 is somewhat higher than Alternative # 6. We note that the transportation modeling staff has had some difficulty in modeling the impacts of high occupancy vehicle lanes and high occupancy toll lanes. We believe additional refinements of the modeling should be implemented to more reasonably reflect the impacts of both high occupancy lanes and toll lanes.

8. Moderate Highway and Intensive Transit: This alternative includes the moderate highway options outlined in Alternative #2 but adds additional local transit routes to the moderate transit included in Alternative #1.

Comment: The impact of the additional local transit service in this alternative had very little impact on overall transit use.

9. Moderate Highway, Intense Transit and US-15-501 Fixed Guideway with Airport Connection: This alternative includes the highway and local transit options included in Alternative #8 and adds a fixed guideway transit corridor between the University of North Carolina and Duke University, along the alignment recommended in the US 15-501 Major Investment Study. The fixed guideway corridor is connected to the Phase I rail system. This alternative also includes a fixed guideway between the Southpark rail station in the Research Triangle Park and the RDU airport.

Comment: The implementation of a fixed guideway system between Durham and Chapel Hill and from the Southpark transit station to the RDU airport resulted in increased fixed guideway ridership. Local bus bus ridership also increased with the addition of the fixed guideway system. The data presented does not allow a determination of ridership by fixed guideway corridor. If the Phase I rail ridership remains constant at approximately 28,000 daily boardings, the impact of this alternative suggests an increase of only approximately 10,000 riders for the US 15-501 and RDU airport fixed guideway corridors. We note that the US 15-501 Major Investment Study projected approximately 15,000 riders for the US 15-501 fixed guideway corridor.

10. Moderate Highway, Intense Transit and NC 54 Fixed Guideway with Airport Connection: This alternative includes the highway and local transit options included in Alternative #9, and adds a fixed guideway transit corridor between the University of North Carolina and the Southpark rail station in the Research Triangle Park, along NC54. The alternative also includes a fixed guideway between the Southpark rail station and the RDU airport.

Comment: The impacts of a fixed guideway corridor along NC54 were very similar to the impacts of the US 15-501 corridor. Transit mode shares increased slightly for the NC54 alternative, while vehicle miles and hours traveled fell. Overall roadway network congestion increased slightly compared to Alternative #9 and overall costs were higher.

11. Moderate Highway, Intense Transit and I-40 Fixed Guideway with Airport Connection: This alternative includes the highway and local transit options included in Alternative #9 and adds a fixed guideway transit corridor between the University of North Carolina and the Southpark rail station in the Research Triangle Park. The alignment for this fixed guideway corridor follows NC54 to I-40 and then follows the I-40 corridor to Southpark station. The alternative also includes a fixed guideway between the Southpark rail station and the RDU airport.

(13)

Comment: Overall rail ridership was slightly lower for the I-40 fixed guideway alternative than the NC 54 option. Vehicle miles and hours and network congestion were higher than Alternative #10.

12. Moderate Highway, Intense Transit, US 15-501 and NC 54 Fixed Guideways: This Alternative includes moderate highway improvements, intensive local transit improvements and the implementation of a fixed guideway corridor along both US 15-501 between Durham and Chapel Hill and along NC54, between Chapel Hill and the Research Triangle Park.

Comment: The implementation of fixed guideway corridors along both US 15-501 and NC54 resulted in significant increases in rail ridership and local bus ridership. Transit mode shares also increased while the percent of roadway network congestion was lower than that produced by either fixed guideway corridor alone.

13. Moderate Highway, Intense Transit, US 15-501 and NC 54 Fixed Guideways: This alternative is similar to alternative #12, but substitutes moderate local bus improvements for intensive improvements.

Comment: While the overall transit impact of this alternative (substituting moderate bus improvements for the intensive improvements included in Alternative #12) was less, it seems that the impact of the moderate local bus improvements is more pronounced than comparisons in other alternatives. It also appears that the intensive local bus network also provides greater support to the fixed guideway systems.

14. Intensive Highway, High Occupancy Vehicle Lanes, Intense Transit and Intense Fixed Guideway: This alternative includes intensive highway and local bus improvements, high occupancy vehicle lanes along I-40 and NC 147 and the following fixed guideway corridors:

- US 15-501: Durham to Chapel Hill
- NC54: Chapel Hill to the Research Triangle Park
- University of North Carolina to Hillsborough
- Hillsborough to Durham
- Durham to Treyburn

Comment: By implementing all highway and local transit improvements and adding several fixed guideway corridors this alternative results in the most dramatic reductions in vehicle miles and hours traveled, highest transit mode shares and lowest percent of roadway network congestion. It also is projected to cost more to implement than any other alternative. Without detailed information on each fixed guideway corridor it is difficult to assess the impacts of those included in this alternative.

DETAILED EVALUATION OF ALTERNATIVES

Each of the 14 alternatives was analyzed using several criteria. The Table below summarizes the results of this evaluation and compares the performance of the alternatives to one another. For comparison purposes the results of the 1995 conditions and 2025 Base network are included. The complete summary of each alternative is included in Attachment 2.

The criteria used for evaluation include:

a. Vehicle Miles Traveled: the sum of daily vehicle miles on the roadway network.
b. Vehicle Hours Traveled: the sum of daily hours of travel on the roadway network
c. Average Speed: The average daily operating speed on the roadway network.
d. Network Congestion: the percentage of the roadway network experiencing traffic volumes.
e. Transit Mode Daily %: The percentage of all daily trips in the region taken on public transit.
f. Transit Mode Peak %: The percentage of all peak hour trips in the region taken on public transit.
g. Local bus riders: Daily ridership on Chapel Hill Transit, Durham Area Transit and Triangle Transit Authority local transit routes.
h. Rail Riders: Daily boardings on fixed guideway transit, including Phase I rail in Wake County.
i. Cost (millions): The estimated cost of implementing all transportation improvements in each alternative. This includes capital, operating and maintenance costs.

Table 1: Regional Impacts

Alternative	a. Vehicle Miles Traveled	b.Vehicle Hours Traveled	c.Ave Speed	d.Network Congestion %	e.Transit Mode Daily %	f.Transit Mode Peak %	g.Local Bus Riders	h.Rail Riders	i.Cost (Millions)
1995 Base*	8,055,830	185,143	45.2	19.33			25,473		
2025 Base	20,180,440	465,920	33.8	53.3	1.8	1.96	119,560	28,844	1,413
1. Base Highway/Moderate Transit	18,666,503	434,871	33.9	49.8	3.28	2.59	120,530	28,844	1,747
2. Moderate Highway/Base Transit	18,069,279	422,100	33.9	44.4	1.78	1.96	120,311	27,414	2,623
3. Moderate Highway, Moderate Transit	16,133,858	371,608	34.4	41	2.14	2.59	124,055	28,900	2,623
4. . Moderate Highway, +1/	15,592,821	365,951	36.2	29.1	2.12	2.59	125,845	29,051	3743

Moderate Transit									
5. Moderate Highway, +1, +2/Moderate Transit	15,515,529	356,876	39.6	17.9	2.12	2.59	126,165	29,089	3,864
6. Moderate Highway, +1, +2/HOV/Moderate Transit	15,104,858	345,307 ..	40.3	12.4	2.13	2.7	126,951	29,385	4,125
Alternative	**Vehicle Miles Traveled**	**Vehicle Hours Traveled**	**Ave Speed**	**Network Congestion %**	**Transit Mode Daily %**	**Transit Mode Peak %**	**Local Bus Riders**	**Rail Riders**	**Cost (Millio**
7. Moderate Highway, +1, +2/HOT/Moderate Transit	15,117,168	348,937	39	15.5	2.11	2.43	126,546	29,173	4,155
8. Moderate Highway/Intensive Transit	15,992,191	357,007	35	33.1	4.35	5.38	130,335	29,884	2,828
9. Moderate Highway/Intensive Transit/US 15501 Fixed Guideway with Airport Connection	15,639,841	347,329	35.7	28.3	5.55	7.82	137,973	38,793	3,237
10. Moderate Highway/Intensive Transit/NC 54 Fixed Guideway with Airport Connection	15,603,113	347,916	35.7	29.2	6.41	8.44	138,831	38,700	3,253
11. Moderate Highway/Intensive Transit/I-40 Fixed Guideway with Airport Connection	15,651,142	349,137	35.2	31.7	4.86	7	132,977	36,286	3,249
12. Moderate Highway/Intensive Transit/US 15-501 and NC54 Fixed Guideway	15,550,442	332,522	35.7	22.9	7.74	10.26	143,005	51,035	3,662
13. Moderate Highway/Moderate Transit/US 15-501 and NC54 Fixed Guideway	16,014,995	367,084	34.6	34.5	3.09	3.35	128,564	29,957	3,484
14. Intensive Highway with HOV/Intensive Transit and Intensive Fixed Guideway	12,039,045	257,458	44.4	8.9	10.2	18.8	162,995	39,518	7,017

* Not all data are available for the 1995 network

Analysis of the 14 alternatives shows that improvements can be made in mobility within the region through the implementation of improvements designed to promote alternative modes of transportation. The analysis also suggests that those alternatives that focus on promoting alternative modes of transportation can produce similar improvements to regional mobility as those that include extensive roadway improvements, at the same or lower estimated cost. These improvements include expansions of the local bus systems, development of high occupancy vehicle lanes and the implementation of fixed guideway corridors. The results of the alternatives analysis also support the need to implement transportation demand management policies throughout the region and provide an extensive network of bicycle and pedestrian improvements.

We recommend that the 3 alternatives to be developed from the evaluation of the 14 alternatives under consideration be composite in nature, incorporating elements of the previously analyzed alternatives and introducing new options where necessary. We recommend that the 3 alternatives focus on improvements that include transit, fixed guideway and high occupancy vehicle lanes rather than extensive roadway widenings or new construction.

2025 FINANCIAL PLAN

In addition to assessing the impacts of each transportation alternative the Transportation Advisory Committee must develop and approve a financial plan to fund the projects selected. The adopted 2025 Regional Plan must include a financial plan that will provide adequate funding to implement the recommended improvements.

The Transportation Advisory Committee must select a model for projecting future anticipated transportation revenues. The cost of the transportation improvements selected for inclusion in the final Plan must be compared to the total anticipated revenue. If anticipated revenues cannot provide adequate funding for implementation of the Plan, additional revenue sources must be identified.

The table below compares the results of using several different revenue forecast models to predict future transportation revenues for the Durham-Chapel Hill-Carrboro Urban Area. These projections include all current federal, state and local funding sources for transportation. A detailed review of the funding options is included in Attachment 3.

Table 2: Revenue Forecasting Alternatives

Model	2025 Revenues ($000)
Linear: Assumes revenues will grow an equal amount for equal time period.	$ 4,475,000
Geometric: Assumes revenue growth will correspond to a constant growth rate.	$ 2,500,000
Parabolic: Assumes that revenue growth increases or decreases by a constant amount.	$ 5,016,000

Model	2025 Revenues ($000)
Modified Exponential: A non-linear model that assumes a constant rate of growth.	$ 3,180,000
Logistic: Assumes constant ratio of reciprocals of growth increments.	$ 3,888,000
Gompertz: Assumes a constant ratio of logarithims of growth increments.	$ 3,090,000

We note that most of the 14 alternatives evaluated would require additional funding under all but the Linear and Parabolic revenue models. Attachment 3, "2025 Transportation Plan Revenue Forecasts", also inclues a review of several possible new funding sources for the 2025 Transportation Plan.

The Table below summarizes those options:

Table 3: Annual Revenue Estimates (1999 Tax Data, Orange and Durham counties)

Sales Tax	½ Percent	1 Percent	
	$19,662,000	$39,325,000	
Motor Fuels	½ Cent	1 Cent	2 Cent
	$2,047,000	$4,095,000	$8,191,000
Property Tax	1 Cent per $100	3 Cents per $100	5 Cents per $100
	$2,058,000	$6,174,000	$10,290,000

We note that all new taxes to fund the 2025 Plan would need legislative approval. In order to get that approval there will have to be agreement with the Capital Area Urban Area to pursue similar tax revenues in Wake County.

NEXT STEPS

It is anticipated that the Durham-Chapel Hill-Carrboro Transportation Advisory Committee will review the results of the analysis of the 14 alternatives on March 13, 2002. They will also review the financial information at that time. In March or April, 2002 the Committee will be asked to identify 3 alternatives for further detailed analysis. The Committee may choose any of the 14 alternatives already identified or may create hybrid alternatives that incorporate the elements of several different alternatives. The Committee may also choose to add new elements to the 3 alternatives selected for further analysis.

We note that the Town Council has requested that the 2025 Regional Plan evaluate possible fixed guideway corridors between the Horace Williams property and the Gateway area and fixed guideway corridors along NC86 and Franklin Street. These fixed guideway options were not included in any alternatives that have been evaluated.

The analysis of the final three alternatives is expected to be completed in May 2002, and the Transportation Advisory Committee is anticipated to adopt a Recommended Plan at

that time. Attachment 5 is the October 22, 2001 Council memorandum outlining the schedule for the development of the 2025 Plan.

MANAGER'S RECOMMENDATION

Manager's Recommendation: That the Council adopt the attached resolution providing the Durham-Chapel Hill-Carrboro Transportation Advisory Committee with the following comments and recommendations on the 14 alternatives evaluated for the 2025 Transportation Plan:

1. Include expanded local bus systems, fixed guideway corridors and high occupancy vehicle/toll lanes in the alternatives to be developed for further evaluation. Extensive roadway improvements should be minimized. We believe that regional mobility can be improved by emphasizing transportation improvements that promote ridesharing/carpooling, public transit, bicycling and walking.

2. Provide more detailed information on the specific impacts of each of the 14 alternatives on the Chapel Hill-Carrboro area should be provided and evaluated prior to the development of the next set of alternatives. In order to fully evaluate the impact of any alternative on the Town it is necessary to review detailed information about individual transportation corridors.

3. Provide specific ridership information for each fixed guideway corridor evaluated in the 14 alternatives. In order to determine which proposed fixed guideway corridors provide the best opportunity for attracting ridership, more detailed information is necessary.

4. Refine the Moderate and Intensive Local Bus networks to produce greater differences. Include Chapel Hill fare free policy in all alternatives. The analysis suggests that the there is very little change in ridership between the base 2025 transit, moderate and intensive transit networks. Refinement of the moderate and intensive transit alternatives should result in improvements to regional transit ridership.

5. Include a more refined evaluation of the high occupancy vehicle and high occupancy toll alternatives. The evaluation of high occupancy vehicle and toll lanes is important to determining whether they should be implemented. The unique nature of both concepts requires a higher level of effort for incorporation into the regional model to ensure realistic results.

6. Incorporate the Council's request to evaluate following fixed guideway corridors in the Tier 3 alternatives:

   -Between the proposed fixed guideway station at the Gateway area and the Horace Williams property.

-Along NC 86, between I-40 and Southern Village.
-Along U.S. 15-501/Franklin Street, between I-40 and Carrboro.

The implementation of these fixed guideway corridors could further improve regional mobility and should be evaluated.

7. Coordinate the development of a financial plan for the 2025 Regional Transportation Plan with the Capital Area Transportation Advisory Committee. Any effort to identify and get approval for additional sources of transportation funding will have to include Wake County. Coordination between the Durham-Chapel Hill-Carrboro Urban Area and the Greater Raleigh Urban Area is important.

8. Allow more time for local governments to consider the options for additional funding sources prior to endorsement by the Transportation Advisory Committee. The approval of additional sources of transportation funding that may include increases in sales or property taxes will have an impact on local governments. In order to meet the proposed schedule for adopting a 2025 Plan the evaluation of alternatives must continue, but the schedule does allow some time for continued consideration of the financial plan.

ATTACHMENTS

1. 2025 Transportation Plan Alternative Descriptions and Maps (begin new page 1).
2. Tier 2 Alternatives Performance Evaluation and Cost Estimates (p. 41).
3. 2025 Transportation Plan Revenue Forecasts (p. 43).
4. October 22, 2001 Council Memorandum (p. 58).

A RESOLUTION PROVIDING THE DURHAM-CHAPEL HILL-CARRBORO TRANSPORTATION ADVISORY COMMITTEE WITH COMMENTS AND RECOMMENDATIONS ON THE ALTERNATIVES UNDER CONSIDERATION AS PART OF THE DEVELOPMENT OF THE DURHAM-CHAPEL HILL-CARRBORO 2025 REGIONAL TRANSPORTATION PLAN (2002-03-04/R-9.1)

WHEREAS, the Durham-Chapel Hill-Carrboro Transportation Advisory Committee is preparing a 2025 Transportation Plan; and

WHEREAS, as part of the development of the 2025 Plan the Transportation Advisory Committee is analyzing alternative transportation scenarios; and

WHEREAS, 14 alternative transportation scenarios have been identified and analyzed and;

WHEREAS, the Town Council has reviewed the analysis of the 14 alternatives;

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council submits the following comments and recommendations to the Transportation Advisory Committee.

1. Include expanded local bus systems, fixed guideway corridors and high occupancy vehicle/toll lanes in the alternatives to be developed for further evaluation. Extensive roadway improvements should be minimized.
2. Provide more detailed information on the specific impacts of each of the 14 alternatives on the Chapel Hill-Carrboro area should be provided and evaluated prior to the development of the next set of alternatives.
3. Provide specific ridership information for each fixed guideway corridor evaluated in the 14 alternatives.
4. Refine the Moderate and Intensive Local Bus networks to produce greater differences. Include Chapel Hill fare free policy in all alternatives.
5. Include a more refined evaluation of the high occupancy vehicle and high occupancy toll alternatives
6. Incorporate the Council's request to evaluate following fixed guideway corridors in the Tier 3 alternatives:

   -Between the proposed fixed guideway station at the Gateway area and the Horace Williams property.
   -Along NC 86, between I-40 and Southern Village.
   -Along U.S. 15-501/Franklin Street, between I-40 and Carrboro.

7. Coordinate the development of a financial plan for the 2025 Regional Transportation Plan with the Capital Area Transportation Advisory Committee.
8. Allow more time for local governments to consider the options for additional funding sources prior to endorsement by the Transportation Advisory Committee.

This the 4th day of March, 2001.

ATTACHMENT 1

A. Introduction

(21)

This report represents the documentation of the highway, transit, and bicycle alternatives to be tested in Tier-2 analysis. The alternatives are intended to represent the baseline conditions and reasonable options generated as a result of Teir-1 analysis. The next step in the process is the evaluation process, whereby alternatives will be tested using the Regional Travel Demand Model and the performance measures of the alternatives will be generated. The network alternatives presented below will be coded as a series of layers in the model. The layers will be overlaid on one another to create different alternative scenarios (i.e. 14 Tier-2 alternative scenarios).

The TAC at its October meeting endorsed a list of 15 alternatives to be evaluated in Tier-2 analysis phase. Subsequent to the TAC action, the Lead Planning Agency (LPA) staff, in cooperation with the transit agencies and other stakeholders started to review, in detail, each project within the 2025 baseline condition and the 15 alternatives. This review was necessary in order to update network coding and also to ensure that project descriptions, limits, and scope mesh with model networks.

During the review of the baseline condition and the 15 Tier-2 alternatives, it became apparent that the definition of "existing-plus-committed" used as a guideline in generating baseline condition was too liberal. Consequently, certain highway and transit projects included in the base are beyond what could reasonably be expected to be in place under baseline assumptions. Furthermore, including these projects in the base obviates the ability to evaluate their effectiveness and essentially masks the effectiveness of more intensive highway and transit improvements. This was evidenced in the US 15-501 Phase-2 MIS where assumptions of extensive transit improvements in the baseline condition resulted in more intensive transit improvements in the corridor generating few new transit riders (compared to an inflated base condition).

In view of the above, the TCC Transportation Plan Sub-committee met on November 13 to re-evaluate the guidelines for defining a true and realistic baseline (no-build or existing-plus-committed), and subsequently, recommended shifting some of the highway and transit projects from the baseline condition to either the moderate or intensive networks. The revised highway and transit base condition and moderate and intensive networks are presented below.

(2)

Highway Assumptions (Baseline)

The revised highway assumptions represent existing-plus-committed (E+C). Existing-Plus-Committed projects are essentially previously approved projects identified in the Transportation Improvement Program (TIP) which are fully funded and/or are deemed to have reasonable funding stream, future municipal bond or Capital Improvement Program (CIP) projects, or private developer projects that are on the horizon. The projects listed below will be tested with all alternatives and will be assumed as a given. Multi-jurisdictional projects are listed in all jurisdictions in which they extend, with the terminus shown as the county line.

The changes made to the base assumptions are as follows:

The following projects (I-40 from I-85 to US 15501; Alston Ave Ext; East-End Connector; Northern Durham Parkway; Briggs Avenue; US 70 from Cheek to Wake Co Line) were moved from base assumptions to Moderate highway.

Chatham County

No. Project	*X-Section*	*Project Limits*	*TIP #*
1 US 15-501	4-lane divided	Pittsboro Bpass to Orange Co. line	R-942

Durham County

No. Project	*X-Section*	*Project Limits*	*TIP #*
2 Alexander Dr	4-lane divided	Cornwallis Rd to Miami Blvd	U-3309
*3 Carver Street Ext	3-lane	Armfield St to Old Oxford Rd	
4 Davis Dr	4-lane divided	NC 55 to Cornwallis Rd	U-2405
5 Fayetteville Rd	5-lane	Woodcroft Pkwy to South Point	CIP/Bond
6 Garrett Rd/Chapel Hill Rd	Upgrade	Intersection Improvements	U-3105
7 Guess Rd	5-lane/4-lane divided	Carver St to Umstead Rd	U-2102
8 Holloway Street	5-lane	US 70 to east of Junction Rd	U-4010
9 Hopson-Page Rd Ext	5-lane	NC 54 to Page Rd	U-3853
10 I-40	8-lane freeway	NC 147 to Wake Co line	I-2204
11 I-40	6-lane freeway	US 15-501 to NC 147	I-3306
12 I-85	8-lane freeway	US 15-501 Bypass N to US 70	I-306
13 I-85 N/US 70 E	Upgrade	Interchange	I-306
14 Miami Blvd.	5-lane	Methodist Dr to Angier Ave	U-4011
*15 MLK Parkway	4-lane divided	Old Chapel Hill Rd to NC 55	CIP/Bond
16 NC 54	6-lane divided	Burning Tree to Barbee Chapel	Private
17 NC 54/Page Rd	4-lane divided	Davis Dr to Miami Blvd	R-2904
18 NC 55	4-lane divided	Cornwallis Rd to Wake Co.	R-2906
19 NC 55	5-lane	NC 147 to NC 98	
20 NE Durham Pkwy	4-lane divided	I-85 N to US 70 E	R-2631
*21 Northeast Creek Pkwy	2- lane	Cornwallis Rd to Ellis Rd	U-2831
22 Roxboro St Extension	4-lane divided	Hope Valley Farms to MLK Pkwy	Private
*23 South Point Pkwy	4-lane divided	NC 751 to Fayetteville Rd	Private

*24 Stadium Drive Ext	3-lane curb & gutter	Shaftsbury Dr to Kirkwood Dr	CIP/Bond
25 SW Durham Pkwy	2-lane	Farrington Rd fm I-40 to Chape	existing
*26 SW Durham Pkwy	5-lane	Watkins Rd to US 15-501	Private
27 SW Durham Pkwy	4-lane divided	NC 54 to Rizzo Conf. Driveway	Private
28 US 15-501	6-lane arterial	Mt Moriah Rd to Garrett Rd	U-4012
29 US 70	6-lane	E of Cheek Rd to I-85 (incl. C	I-30
30 US 70/Miami Blvd/Mineral		Intersection Upgrade	U-2808
*31 Woodcroft Pkwy	2-lane divided	Barbee Rd to Carpenter-Fletch	Private

Orange County

No. Project	*X-Section*	*Project Limits*	*TIP #*
*32 **Elizabeth Brady Rd Ext**	4-lane divided	US 70 Business to St Mary's Rd	U-3808
33 Estes Dr	3-lane	Greensboro Rd to NC 86	U-2909
34 Hillsborough Rd	2-lane	Lorraine St to Old Fayettevill	U-3100
35 Homestead Rd	3-lane	High School Rd to NC 86	U-2805
36 Horace Williams Rd Network	2-lane	Horace Williams Campus	
37 Old NC 86	4-lane divided	I-40 to Oakdale Dr	Private
38 Carrboro N-S new facility	2-lane	Old NC 86 to NC 86 : 85/new hope ch	Private
*39 Portion of Western Bypass	2-lane	NC 86 to NC 57	R-3438/Private
40 Smith Level Rd	4-lane divided	Rock Haven Rd to NC 54 bypass	U-2803
41 South Columbia St	2-lane	turn lanes	U-624
42 US 15-501	4-lane divided	I-40 to Franklin St	U-2807
43 US 15-501	4-lane divided	Orange Co line to Chapel Hill	R-942
44 Weaver Dairy Rd	5-lane/4-lane divide	NC 86 to Erwin Rd	U-3306
45 Weaver Dairy Rd Ext	4-lane	Horace Williams property to N	Private
46 NC 86	4-lane divided	Homestead Rd to Whitfield Rd	U-2302

* on new location (alignment)

Bold projects in original **Moderate hwy.**

(23)

Moderate Highway

The moderate highway alternative builds on the base highway assumptions. This alternative was developed by staff, TCC, and CAC using the deficiency analysis and their knowledge of the area to identify needed projects.

Chatham County

No. Project	*Cross-Section*	*Project Limits*	*TIP #*
1 NC 751	4-lane divided	US 64 to Durham Co line	

Durham County

No. Project	*Cross-Section*	*Project Limits*	*TIP #*
2 Alexander Dr	4-lane divided	NC 147 to NC 55	
3 *Alston Ave Ext*	*3-lane*	*Holloway St to Old Oxford/Roxoboro*	*CIP/Bond*
4 *Briggs Ave Ext*	*2-lane*	*So-Hi Dr to Riddle Rd*	
5 Cornwallis Rd	4-lane divided	NC 55 to Alexander Dr	
6 *East End Connector*	*4-lane divided*	*NC 147 to US 70 E*	
7 Fayetteville Rd	5-lane	Woodcroft Pkwy to Cornwallis Rd	
8 Glover Rd	Interchg/4-lane divided	Glover Rd/NC 147 interchange; 147 to US 70	
9 Hillandale Rd	5-lane	I-85 to Horton Rd	
10 Hillandale Rd Ext	4-lane divided	Horton Rd to Guess Rd	
11 Midland Terrace	2-lane	NC 98 to Geer St	
12 MLK Pkwy	4-lane divided	NC 55 to Cornwallis Rd connector	U-2405
13 NC 147	4-lane divided	I-540 to I-40	
14 NC 54	4-lane divided	Miami Blvd to Wake Co line	
15 NC 54	4-lane divided	I-40 Interchange to NC 55	
16 NC 54/NC 751/Garrett Rd	Upgrade	Intersection	
17 NC 751	4-lane divided	Chatham Co line to S Roxboro St	
18 *NW Durham Pkwy*	*4-lane divided*	*Roxboro Rd to I-85 North*	*R-2630*
19 Old Oxford Rd	5-lane	Roxboro St to International Dr	
20 S Roxboro St Ext	4-lane divided	end to Cornwallis Rd	
21 Scott King Rd	2-lane	Grandale Dr to NC 55	
22 SW Durham Dr	2-lane	Rizzo Conf. Dr to I-40	Private
23 US 70	6-lane freeway	Lynn Rd to west of NC 98	U-71

Orange County

No. Project	*Cross-Section*	*Project Limits*	*TIP #*
24 Homestead Rd	3-lane	Old NC 86 to High School Rd	
25 *I-40*	*6-lane*	*I-85 to US 15-501*	*I-3306*
26 I-85	6-lane	I-40 to the Durham Co line	
27 Mason Farm Rd	Realignment	Near S Columbia St	
28 NC 54 Bypass	6-lane	Manning Dr to NC 54	
29 NC 86	4-lane divided	Old NC 10 to US 70 Business	
30 Old NC 86	4-lane divided	Oakdale Dr to US 70 Business	
31 UNC Access to the Bypass	2-lane	Btwn Manning Dr & S Columbia St	
32 Western Bypass	2-lane	US 70 to NC 86	

* On new location

(25)

Moderate + 1 Highway

The moderate highway alternative builds on the base highway assumptions. This alternative was developed by staff, TCC, and CAC using the deficiency analysis and their knowledge of the area to identify needed projects.

Chatham County

No. Project	*Cross-Section*	*Project Limits*	*TIP #*
1 Farrington Mill Rd	4-lane	Mt Carmel Church Rd to Durham Co line	
2 Jack Bennett Connector	2-lane	US 15-501 to Farrington to Durham Co	

Orange County

No. Project	*Cross-Section*	*Project Limits*	*TIP #*
3 Alexander Dr	4-lane divided	NC 55 to Cornwallis Rd	
4 Cornwallis Rd	4-lane divided	Alexander Dr to S Miami Blvd	
5 Cornwallis Rd Ext	4-lane divided	S Miami Blvd to Page Rd	
6 Farrington Mill Rd	4-lane	Barbee Chapel Rd to Chatham Co line	
7 Farrington Rd	4-lane	Barbee Chapel Rd to NC 54	
8 Garrett Rd	3-lane	NC 54 to US 15-501	
9 Hillandale Rd	5-lane	Sprunt Ave to I-85	
10 I-40	8-lane freeway	US 15-501 to I-540 in Wake Co	
11 Infinity Rd	3-lane	Roxboro Rd to Snow Hill Rd	
12 Latta Rd	3-lane	Guess Rd to Roxboro Rd	
13 NC 147	6-lane	Alston Ave to I-40	
14 NC 54	6-lane	I-40 to Barbee Chapel Rd	
15 NC 98	4-lane divided	Nichols Farm Rd to Sherron Rd	
16 North-South Bypass	2-lane	W of Carrboro	
17 Page Rd	4-lane divided	I-40 to Page Rd Ext	
18 Snow Hill Rd	3-lane	Old Oxford Rd to Infinity Rd	
19 Stagecoach Rd	4-lane	Farrington Mill Rd to NC 751	
20 US 15-501 By-Pass	6-lane freeway	Pickett Rd to Morreene Rd	
21 US 70	6-lane divided	Lynn Rd to Wake Co line	
22 Woodcroft Pkwy Ext	2-lane divided	Garrett Rd to Hope Valley Rd	
23			

Orange County

No. Project	*Cross-Section*	*Project Limits*	*TIP #*
24 Lawrence Rd Bypass	2-lane	NC 86 to Old NC 10 to NC 57	
25 I-40	8-lane freeway	US 15-501 to I-85	
26 US 70 Bypass	4-lane divided	I-85 to Durham Co line	
27 US 70 Bypass	4-lane divided	Exit 161 to I-85 at Durham Co line	
28 NC 86	4-lane divided	Old NC 10 to New Hope Church Rd	
29 NC 86	4-lane	US 70 Bypass to UAB	

Moderate +2 Highway

(26)

Durham County

Project	*Facility Type*	*Project Limits*	*TIP #*
Duke St.	7-lane	I-85 to Roxboro Rd.	
Roxboro Rd.	7-lane	Duke St. to Orange Factory Rd.	

Orange County

Project	*Facility Type*	*Project Limits*	*TIP #*
King Edward Rd. Ext.	2-lane	Dimmocks Mill Rd. to US 70 connecting to the Western Bypass	
New Facility (OC-2)	2-lane	NC 54 to Bethel Hickory Grove Church Rd.	Private
New Facility (OC-3)	2-lane	Sewell School Rd. to Homestead Rd.	

Intensive highway

The highway intensive scenario reflects a substantially greater investment in highway facilities that the current trend. This alternative allows us to test the addition or improvement of a wide variety of facilities that have been recommended by staff and members of the public to see the impact of substantial investment in highway facilities. The highway intensive alternative has a number of iterations including several different termini for the Northern Freeway and the Durham Northwest Loop. A high occupancy vehicle (HOV) alternative is also included in one of the highway intensive alternatives. The differences between the highway intensive alternatives are shown in bold/italics.

Chatham County

No. Project	*Cross-Section*	*Project Limits*	*TIP #*
1 Cole Mill Rd	4-lane divided	Kimball Dr to Umstead Rd	
2 Garrett Rd	5-lane	NC 54 to US 15-501	
3 Hillandale Rd	4-lane divided	Club Blvd to I-85	U-2708
4 Infinity Rd	5-lane	Roxboro Rd to Snow Hill Rd	
5 Latta Rd	5-lane divided	Umstead Rd to Roxboro Rd	
6 Lawrence Rd Bypass	2-lane	NC 86 to Old NC 10 to NC 57	
7 NC 98	4-lane divided	Nichols Farm Rd to Sherron Rd	
8 Northern Freeway	4-lane divided	Durham Co line to I-85	
9 Northern Freeway	4-lane divided	Orange Co line to N Wake Expressway	
10 North-South Bypass	2-lane	West of Carrboro	
11 Page Rd	4-lane divided	I-40 to Page Rd Ext	
12 Sherron Rd	4-lane divided	US 70 to Hwy 98	
13 Snow Hill Rd	5-lane	Old Oxford Rd to Infinity Rd	
14 Stagecoach Rd	4-lane divided	Farrington Mill Rd to NC 751	
15 Umstead Rd	4-lane divided	Cole Mill Rd to Guess Rd	
16 US 15-501	6-lane freeway	I-40 to US 15-501 Bypass	
17 US 15-501	6-lane divided	I-40 to US 15-501 Bypass	

(27)

Minor Widening/Transportation System Management (TSM)

This alternative layer focuses on maintenance and improvement of existing facilities. Spot improvement widening for facilities with transit routes and intersection improvements are included in this layer.

Chatham County

	Project	Facility Type	Project Limits	TIP #
1	Farrington Mill Rd.		Mt. Carmel Church Rd. to Durham Co. Line	

Durham County

	Project	Facility Type	Project Limits	TIP #
2	Mineral Springs Rd.		US 70 to NC 98	
3	Pleasant Dr.		Angier Ave. to Mineral Springs Rd.	
4	Angier Ave.		Alston Ave to S. Miami Blvd.	
5	Cornwallis Rd.		NC 55 to Riddle Rd.	
6	Fayetteville Rd.		Riddle Rd. to NC 147	
7	Riddle Rd.		Fayetteville Rd to Alston Ave.	
8	Alston Ave.		Hopson Rd. to Riddle Rd.	
9	Holloway St.		Roxboro St. to US 70 Bypass	
10	Roxboro St.		Cheek Rd. to Duke St.	
11	Infinity Rd.		Roxboro Rd. to west of Snow Hill Rd.	
12	Latta Rd.		Guess Rd. to Roxboro Rd.	
13	Duke St.		I-85 to Infinity Rd.	
14	Club Blvd.		Hillandale Rd. to Roxboro St.	
15	Hillandale Rd.		NC 147 to Carver St.	
16	Chapel Hill St.		Kent St. to NC 147	
17	Kent St.		Chapel Hill Rd. to Chapel Hill St.	
18	Chapel Hill Rd.		University Dr. to Kent St.	
19	Lakewood Ave.		Duke St. to Roxboro St.	
20	University Dr.		MLK Pkwy to Duke St.	
21	Garrett Rd.		US 15-501 to Pickett Rd.	
22	Pickett Rd.		Orange Co. Line to US 15-501 Bypass	
23	Farrington Mill Rd.		Chatham Co. Line to Barbee Chapel Rd.	
24	Farrington Rd.		Barbee Chapel Rd. to I-40	

Orange County

	Project	Facility Type	Project Limits	TIP #
25	US 15-501		Franklin St. to I-40	
26	NC 86		Old NC 10 to Bus. 70	
27	Erwin Rd.		US 15-501 to I-40	
28	South Rd.		S. Columbia St. to Fordham Blvd.	
29	Manning Dr.		S. Columbia to Fordham Blvd.	
30	Mason Farm Rd.		S. Columbia St. to NC 54 Bypass	
31	Hibbard Dr.		Mason Farm Rd. to Manning Dr.	
32	Ephesus Church Rd.		US 15-501 to Frances St.	
33	Pickett Rd.		Erwin Rd to the Durham Co. Line	

(28)

Travel Demand Management (TDM-1)

Travel Demand Management (TDM) measures will be analyzed by two different methods: the Regional Travel Demand Model and the FHWA TDM Model. The TDM Model links and communicates directly with the Regional Model through trip tables which are fed back and forth as necessary. The following are a list of TDM strategies that will be evaluated individually and as a group. Some of the strategies are evaluated on an area-wide basis while some will be sub-area or employer-based (targeted).

A. Commute Strategies

1. Alternative Modes

1.1 Carpool and Vanpool

- Preferential parking for vanpool/carpool
- Remote telephone rideshare matching

1.2 Bus Transit Projects

- Commuter express bus
- Transit service restructuring/improvements (to base 2025 transit network)
- Commuter rail feeder shuttle
- Noon-time shuttle
- All day circulator

1.3 Commuter Bicycling and Walking

- Bike racks at major destination end
- Bike loan program
- Bike on Buses
- Racks and showers at destination end

2 Alternative Hours

2.1 Compressed Work week

- "4/40" schedule: 4 ten hour days/week
- '3/36" schedule: 3 twelve hour days/week
- "9/80" schedule: 8 nine hour days and 1 eight hour day over two weeks

2.2 Staggered Work Hours

2.3 Flextime

3 Alternative Location

3.1 Telecommuting

3.2 Telecenter

B Pricing/Travel Cost Strategies

I Employee Parking Fee

Region-wide employee parking charge of $3/day per employee. This will be above and beyond the current parking assumption in the model. Worker driving alone in the region would pay a minimum of $3.00 (1999) per day for parking at the workplace. However, only Traffic Analysis Zones with major employment establishment - i.e. establishment with 500 or more employee will be affected.

29

II Tolls on high occupancy lanes (HOT)
This strategy will evaluate the impact of charging average of $3.75 (1999) on High Occupancy Vehicle (HOV) lanes.

III VMT Fee (Pay As You Drive)
A mileage based fee of $0.05 (5 cents) per mile would be paid in proportion to miles driven, in a manner that links auto use to price. This strategy essentially allows for examination of the impact of highway or auto operating cost on travel demand and commute patterns.

IV Fuel Tax Increase
Fuel tax increase of $0.05 (5 cents) per gallon.

V Congestion Pricing
region-wide congestion pricing (LOS E/F and excess delay) - average of $0.08 per mile during peak period. Utilizing an Automatic Vehicle Identification (AVI) equipment, motorists using the freeways and selected major thoroughfares in the region would pay a fee during the peak period. Generally. Price would vary among links according to volume and capacity.

Note and Assumptions

Employee participation rate of 15% is assumed for alternative work hours strategies.

The following participation rate is also assumed for compressed schedule and telecommuting:

Telecommute	2% -regionally (major employment centers - 10%)
4/40	5%
3/36	3%
9/80	1%

Auto Operating Cost assumed in the model =

$$\frac{\text{fuel cost (cent/gallon)}}{\text{average on-road mpg}} + \frac{\text{annual cost of maintenance}}{\text{avg. miles driven vehicle per year}}$$

(30)

Transit Assumptions (T-A)

The Background Transit Network was developed projecting out the current trend in bus service. The assumptions also include Phase I Regional Rail System, extending from N. Raleigh to Downtown Durham and the feeder bus routes associated with the Phase I Rail. The background 2025 transit network for the Capital Area Transit (CAT) routes are included as well. Please note that the transit assumptions and the Intensive Transit Alternative are the same for Chapel Hill Transit.

Chapel Hill Transit

1. Carrboro Northern Transition - UNC up S. Columbia St. to Homestead Rd. to Rogers Rd. to Eubanks Rd. to Old NC 86 south to Homestead to S. Columbia and back to Campus.
2. I-40/US 15-501 Interchange Service- UNC to Franklin St. to US 15-501 to past I-40 and back
3. Carrboro-Chapel Hill Estes Loop - Franklin St. to Estes Dr. to Greensboro St. to Shelton St. to Hillsborough Rd. to Main St. and back to Franklin St.
4. NC 54/Farrington Rd./Barbee Chapel Loop - S. Columbia St. to Mason Farm Rd. to NC 54 to Barbee Chapel Rd to Farrington Rd. to NC 54 to South Rd. and back to S. Columbia
5. SW Durham Dr.. Loop - Old Durham-Chapel Hill Rd. to Pope Rd. to Pinehurst Dr. back into Meadowmont.
6. Horace Williams Northern Loop - Estes Dr. to Willow Dr. to Elliot Rd. to Lake Shore Dr. to Weaver Dairy
7. Horace Williams-UNC Loop - UNC up S. Columbia St. to the Horace Williams Campus
8. UNC-Mason Farm Service - UNC to NC 54 Bypass to NC 54 to Mason Farm and back to UNC
9. Southern Village-UNC - UNC down S. Columbia St. to US 15-501 S to Southern Village and back
10. NC 54 to US 15-501 - NC 54 to Pinehurst to Ephesus Church Rd. to Pope Rd. to Old Durham-Chapel Hill Rd to US 15-501 and back
11. Downtown Loop - Franklin St. to Rosemary St. to Weaver St. to Hillsborough Rd. to Main St. to Franklin St. to Carver St. to Raleigh St. and back to Rosemary St.
12. UNC to Governor's Village - UNC south on Mt. Carmel Church Rd. to the Governor's Village and back to Campus
13. Starpoint to UNC along US 15-501 S.
14. Carrboro Northern Transition II - UNC, Cameron Ave. to Main St. to Hillsborough Rd. to Old NC 86 to Homestead and loops back to NC 86 and back to UNC
15. Chapel Hill Express to RDU/Airport, NC 54 to Davis Dr., Davis Dr. to I-40, follow I-40 to Airport Blvd. to RDU and back the same route.
16. Pittsboro Express, Downtown Pittsboro follow US 15-501 S. to Jack Bennett Rd. to Farrington Mill Rd., Farrington Mill Rd. to Stagecoach Rd. to NC 751, NC 751 to Southpoint Mall to South RTP Station
17. UNC/Manning Dr. to S. Columbia St., follow S. Columbia St. to Mt. Carmel Church Rd. to Farrington Mill Rd., Jack Bennett Rd. to US 15-501 S. back to Pittsboro rd. to S. Columbia St. to Manning Dr./UNC
18. UNC Hospital to Downtown Pittsboro along US 15-501 S. and back
19. Downtown Chapel Hill along Airport Rd./NC 86 to Downtown Hillsborough and back

Park & Ride Stations

20. North of Hillsborough. 12 mile catchment area and 500 spaces. (existing)
21. Mason Farms. 12 mile catchment area and 500 spaces. (existing) 500 more spaces planned.
22. Southern Village. 5 mile catchment area and 500 spaces. (existing)
23. Starpoint. 12 mile catchment area and 500 spaces. (existing)

(31)

24. Pittsboro. 12 mile catchment area and 500 spaces. (existing)
25. Governer's Village. 12 mile catchment area and 500 spaces. (future)
26. Eubanks Road. 12 mile catchment area and 500 spaces. (existing)
27. Carrboro Plaza. 12 mile catchment area and 200 spaces. (existing)
28. UNC Lake. 12 mile catchment area and 500 spaces. (future)
29. US 15-501. 5 mile catchment area and 500 spaces. (future)
30. Horace Williams North. 5 mile catchment area and 500 spaces. (future)
31. Horace Williams South
    - P1 5 mile catchment area and 250 spaces. (existing)
    - P2 5 mile catchment area and 500 spaces. (existing)
32. US 15-501 / I40. 5 mile catchment area and 500 spaces. (future)

DATA

1. DATA Transfer Station to Denfield & Roxboro
2. DATA Transfer Station to Carver & Front
3. Alston Ave. Station to Holder & Sherron
4. DATA Transfer Station to Holloway St./ The Village
5. DATA Transfer Station to N. Duke Mall
6. DATA Transfer Station to S. Square Mall
7. DATA Transfer Station to Neal & Meadowbrook
8. Downtown Transfer to S. Roxboro St.
9. DATA Transfer Station to Holmes Recreation Center
10. DATA Transfer Station to Durham Regional Hospital
11. 9th Street to Duke/VA Hospital
12. DATA Transfer Station to S. Park Station
13. NCCU to Holloway & Lynn
14. Fayetteville & Cornwallis to NC 54 & Alston
15. Hinson to Horton & Hillandale
16. Scarlett to Academy & Pickett
17. Bethesda: N. Park to Wake Forest & Sherron
18. Treyburn: DATA Transfer to Toredge & Snowhill
19. Durham Crosstown: S. Square Mall to N. Park Station
20. DATA Transfer to Roxboro & Snow Hill
21. Hinson to Infinity & Roxboro
22. Duke East-West Campus
23. Duke East-Central-West
24. Duke Science Dr. Loop
25. Duke Med 1 to Greystone
26. Duke Med 2 to Duke Hospital N.

(32)

27. Duke Med 3 – Stop Entry/No Stop Entry
28. Duke Med 4 to Duke Hospital N. to Erwin Square
29. Duke Student Parking
30. Duke Manor/ Chapel Tower

TTA

Express

1. Carrboro-Chapel Hill RTP Express, NC 54/I-40 into S. Park Station
2. UNC Hospital to Duke/Durham Express along US 15-501 (30 minute headways)
3. Green Line, NC 54 through Woodcroft to UNC Hospital , Downtown Chapel Hill, US 15-501 to New Hope Commons, Old Durham-Chapel Hill Rd to S. Square Mall, US 15-501 Bypass to Duke, to Downtown Durham
4. Hillsborough to Durham Express
5. N. Chapel Hill to RTP Express, from Park & Ride along US 15-501 to S. Park Station

Shuttles

1. S. Square to S. RTP along MLK
2. N. RTP to Bethesda
3. North Shuttle connecting rail stations in RTP
4. West Shuttle connecting rail stations in RTP

RDU Shuttle

(33)

Moderate Transit

This layer represents an expansion of bus service throughout the urban area. Bus technology will be used to serve the needs of the area and the demand for service. The Town of Chapel Hill's trend-line scenario is the same as the moderate transit alternative; therefore, the routes have not been listed again. For the Durham Area Transit Authority, Orange Public Transportation, and the Triangle Transit Authority, this layer represents a substantial increase in transit service provided.

Express Bus/Shuttle Routes:

1. South Square/University Dr. to MLK Pkwy, runs along MLK to NC 55, NC 55 to Cornwallis Rd to Davis Dr. to NC 54., follows NC 54 to South RTP Station.
2. Duke University from Erwin Rd. to NC 147 to NC 55 to NC 54, follows NC 54 to South RTP Station
3. Downtown Durham on Holloway St. to NC 98 to Stallings Rd. and back on the same route.
4. Duke University, NC 147 to I-85 to US 70 to Downtown Hillsborough and back.
5. UNC Hospital to Duke/Durham Express along US 15-501 (15 minute headways)

Standard Service:

1. Downtown Durham - Holloway St. (E.) to US 70 E. Bypass to S. Miami Blvd. to Hopson - Page Road (W) to NC 55 N. to NC 54 and back to downtown Durham
2. Downtown Durham - Fayetteville Rd. (S.) to Scott King Rd. Extension to NC55 N. to NC 54 and back to downtown Durham
3. South Square Mall - University Dr. (S.) to MLK Jr. Pkwy. (E.) to Hope Valley Rd. (S.) to Garrett Rd. (N.) to Pickett Rd. (E.) to Erwin Rd. (N.) to Corwallis Rd. (E.) to University Dr. (W.) to South Square Mall
4. Duke Hospital - Fulton St. (N.) to Hillandale Rd. (N.) to Horton Rd. (E.) to Duke St. (S.) to Gregson Rd. (S.) to Chapel Hill St. (E.) to Downtown Station
5. Durham Regional Hospital - Roxboro Rd. (N.) to Snow Hill Rd. (E.) to Old Oxford Rd. (N.) to Red Mill Rd. (S.) to Hamlin Rd. (W.) to Old Oxford Rd. (S.) to Roxboro Rd. (N.) to Durham Regional Hospital
6. Oxford Commons - Old Oxford Rd. (N.) to Dearborn Dr. (E.) to Midland Terr. (S.) to Midland terr. Extension (S.) to NC 98 E to Lynn Rd. (S.) to Miami Blvd. back to Oxford Commons
7. Downtown Hillsborough to West Hillsborough to Dimmocks Mill Rd. back to downtown
8. Downtown Hillsborough to NC 86 N to proposed Western Bypass (E.) to St. Mary Rd. (S.) to downtown Hillsborough to King St. (W.) to Dimmocks Mill Rd. to proposed Western Bypass to NC 86 to downtown
9. Downtown Hillsborough to US 70 E to Old NC 10 W to NC 86 N to downtown
10. Downtown Hillsborough to Old NC 86 S to Eubanks Rd. (E.) to Rogers Rd. (S.) to Homestead Rd. (E.) to NC 86 N to Whitfield Rd. (E.) to Turkey Farm Rd. (N.) to Mt. Sinai Rd. (W.) to University Station Rd. (N.) to US 70 W to downtown
11. Duke Hospital, Erwin Rd. to NC 751 to Woodcroft Pkwy (E) to NC 55 to NC 54 to South RTP Station

(34)

Intensive Fixed Guideway

The following rail/busway corridors along with their associated feeder bus service will be analyzed. Each rail corridor has been coded as a separate layer so that the impact of both the individual rail line and the cumulative system can be evaluated. The fixed guideway transit layer does not build upon the moderate transit. Fixed guideway requires a feeder bus network to serve the stations. The routes have been revised to serve this purpose. Therefore, there is a reorientation of routes in this alternative which differs from the moderate transit.

1. Phase I Regional Rail, Raleigh to Downtown Durham (this is represented on the map but is assumed as a given for the analysis)

2a. Phase II Regional Rail, US 15-501 **Rail & Busway** Corridor, from Durham to Chapel Hill: Corridor A heading south from Duke crossing US 15-501 at S. Square heading south of US 15-501 across I-40 veering south through Meadowmont along NC 54 to NC 54 Bypass west to Manning Drive.

2b. Phase II Regional Rail, US 15-501 Rail Corridor, from Durham to Chapel Hill: Corridor B following the US 15-501

Station Locations
US 15-501 Line (2A & 2B)

- From Duke Medical Center, alignments should follow Erwin Road
- Other station locations from Phase I MIS and UNC Master Plan

3. Phase III Regional Rail, North Durham Rail Corridor, Downtown Durham north to Moores Mill Rd. along existing rail corridor

Station Locations
North Durham Line (3)

- Downtown Multimodal Center
- Holloway Street / NC 98
- Club Boulevard
- Eno Drive (Hebron Road)
- Treyburn (East of Vintage Hill Parkway)
- Bahama Road
- Rougemont (Red Mountain Road)

4a. Chapel Hill to the RTP Corridor, from Chapel Hill to RTP/Airport via NC 54 Corridor. This corridor would also serve the airport **(Rail & Busway)**

Station Locations
NC 54 Line (4A)

- UNC Hospital
- Intersection with Mason Farm & 15-501 Line (Smith Center for special events)
- Farrington Road
- NC 751
- Fayetteville Road
- NC 55 (Intersection with NC 55 Line)
- T.W. Alexander Drive
- South Park (Intersection with Phase 1)
- RDU Airport

4b. Chapel Hill to the RTP Corridor, from Chapel Hill to RTP/Airport via I-40 Corridor. This corridor would also serve the airport **(Rail & Busway)**

Station Locations
I-40 Line (4B)

- UNC Hospital
- Intersection with Mason Farm & 15-501 Line (Smith Center for special events)
- Farrington Road
- Southpoint Mall
- Meridian Business Campus (Intersection with NC 55 Line)
- T. W. Alexander Drive @ Cornwallis Road
- North Park (Intersection with Phase 1)
- RDU Airport

5. Hillsborough Rail Extension, Duke University to Hillsborough along existing rail corridor which represents a continuation of the TTA Phase I

Station Locations
Hillsborough Line (5)

- Downtown Durham Multimodal Center
- 9th Street
- Lasalle Street
- NC 751 (Orange/Durham County Line)
- Intersection with Chapel Hill Line
- Near Interchange of I-85 and NC 86
- Downtown Hillsborough (Churton Street)
- Efland (Mount Willing Road)
- Mebane

6. Hillsborough to Chapel Hill Rail Corridor, using the existing rail corridor from Hillsborough south to Chapel Hill/Carrboro

Station Locations
Chapel Hill to Hillsborough Line (6)

- Rail Junction (NC10)
- Eubanks Road
- Horace Williams North
- Horace Williams South
- Downtown Carrboro
- Cameron Avenue
- South Road

7. Durham to Apex Rail Corridor, Downtown Durham along existing rail corridor parallel to NC 55/ Alston Ave. to Apex

Station Locations
NC 55 Line (7)

Downtown Multimodal Center
Alston Avenue
West of Ellis Road near Glover Road
Cornwallis Road
Intersection with I-40 / NC 54 Line
T. W. Alexander Drive

(36)

In Wake County
Outer Loop (I-540)
Morrisville Parkway Extension
High House Road
Downtown Apex

8. Airport Connection from the Phase I Regional Rail Corridor.

Station Locations
Intermediate stops - Wake / Durham

- Page Road between Airport stop and Phase 1
- North Park Station to Page Road Airport

SUMMARY OF TRANSIT REVISIONS

The attached tables illustrate changes made to transit network. As the tables show, peak (am) and off-peak headways were modified to reflect a reasonable continuation of the current trends. Also, some transit improvements were moved from baseline to moderate transit.

The first column depicts the mode (5 and 6 for local bus, 7 for express bus, and 8 for fixed guideway). Second column indicates a line number (used for modeling accounting purposes). The column with A, M and I letters highlights the alternatives (A for assumption, M for moderate and I for intensive).

Base Transit Revision

			Revised Headway				Original headway			
		Revised Transit Alternatives	**CHANGES IN BOLD**							
Mode	Line	NAME	Transit	am	pm	Alt	am	pm	Alt
5	81	NORTH/SOUTH EXPRESS ob/NB	CHT	15	30	A	15	30	A
5	82	NORTH/SOUTH EXPRESS ib/SB'	CHT	15	30	A	15	30	A
5	85	C ROUTE OUTBOUND'	CHT	20	20	A	15	30	A
5	86	C ROUTE INBOUND	CHT	20	20	A	15	30	A
5	91	D ROUTE OUTBOUND	CHT	20	30	A	15	30	A
5	92	D ROUTE INBOUND	CHT	20	30	A	15	30	A
5	93	F ROUTE OUTBOUND	CHT	20	30	A	15	30	A
5	94	F ROUTE INBOUND	CHT	20	30	A	15	30	A
5	95	G ROUTE OUTBOUND	CHT	20	25	A	15	30	A
5	96	G ROUTE INBOUND	CHT	20	25	A	15	30	A
5	97	J ROUTE OUTBOUND'	CHT	15	30	A	15	30	A
5	98	J ROUTE INBOUND	CHT	15	30	A	15	30	A
5	99	N ROUTE OUTBOUND	CHT	20	30	A	15	30	A
5	100	N ROUTE INBOUND	CHT	20	30	A	15	30	A
5	101	***Rename*** - Airport Road Express (NU Route) OB	CHT	20	30	A	15	30	
5	102	***Rename*** - Airport Road Express (NU Route) IB	CHT	20	30	A	15	30	A
5	103	S ROUTE OUTBOUND	CHT	10	15	A	15	30	A

(37)

5	104	S ROUTE INBOUND	CHT	10	15	A	15	30	A
5	105	T ROUTE OUTBOUND	CHT	20	30	A	15	30	A
5	106	T ROUTE INBOUND	CHT	20	30	A	15	30	A
5	107	U ROUTE OUTBOUND	CHT	12	30	A	12	15	A
5	108	U ROUTE INBOUND	CHT	12	30	A	12	15	A
		H EXPRESS OUTBOUND	CHT	15	30	A			A
		H EXPRESS INBOUND	CHT	15	30	A			A
		CARRBORO EXPRESS OUTBOUND	CHT	20	30	A			A
		CARRBORO EXPRESS INBOUND	CHT	20	30	A			A
		EU SHUTTLE OUTBOUND	CHT	12	30	A			A
		EU SHUTTLE INBOUND	CHT	12	30	A			A
		BCBS PARK RIDE OUTBOUND	CHT	15	30	A			A
		BCBS PARK RIDE INBOUND	CHT	15	30	A			A
		JONES FERRY PARK RIDE OUTBOUND	CHT	15	30	A			A
		JONES FERRY PARK RIDE INBOUND	CHT	15	30	A			A
		A ROUTE OUTBOUND	CHT	30	60	A			A
		A ROUTE INBOUND	CHT	30	60	A			A
		V ROUTE OUTBOUND	CHT	30	60	A			A
		V ROUTE INBOUND	CHT	30	60	A			A
5	111	MAIN&ROBERSON->ELLIOTT&US 15/501',	CHT			M	15	30	A
5	112	:ILLIOTT&US 15/501->MAIN&ROBERSON',	CHT			M	15	30	A
5	113	***Rename*** - Weaver Dairy Road loop [CH6]	CHT			M	15	30	A
5	115	***Unknown*** - :S&COLUMBIA->LAUREL H&EPHESUS	CHT			M	15	30	A
5	116	***Unknown*** - LAUREL H&EPHESUS CH->S&COLUM	CHT			M	15	30	A
5	117	***Rename*** - Downtown Carrboro - UNC loop [CH12]	CHT			M	15	30	A
5	121	Ligget Myers->DENFIELD&ROXBR',	DATA	30	30	A	15	30	A
5	122	DENFIELD&ROXBR->Ligget Myers',	DATA	30	30	A	15	30	A
5	123	Liggett Myers->CARVER&FRONT',	DATA	30	30	A	15	30	A
5	124	CARVER&FRONT->Liggett Myers',	DATA	30	30	A	15	30	A
5	125	ALSTON STA->HOLDER&SHERRON	DATA	30	30	A	15	30	A
5	126	HOLDER&SHERRON->ALSTON STA	DATA	30	30	A	15	30	A
5	127	Ligget Myers->HOLOWAY/VILLAG',	DATA	30	30	A	15	30	A
5	128	HOLOWAY/VILLAG->Ligget Myers',	DATA	30	30	A	15	30	A
5	129	Ligget Myers->N.DUKE MALL	DATA	30	30	A	15	30	A
5	130	N.DUKE MALL->Liggett Myers	DATA	30	30	A	15	30	A
5	131	Ligget Myers->S.SQUARE MALL	DATA	30	30	A	15	30	A
5	132	S.SQUARE MALL->Ligget Myers	DATA	30	30	A	15	30	A
5	133	Ligg Myers->NEAL&MEADOWBROOK	DATA	30	30	A	15	30	A
5	134	:NEAL&MEADOWBROOK->Ligg Myers',	DATA	30	30	A	15	30	A
5	135	Liggett Myers->S.ROXBORO ST.',	DATA	30	30	A	15	30	A
5	136	S.ROXBORO ST.->Liggett Myers',	DATA	30	30	A	15	30	A
5	137	Ligget Myers->HOLMES REC.CTR',	DATA	30	30	A	15	30	A
5	138	HOLMES REC.CTR->Ligget Myers',	DATA	30	30	A	15	30	A
5	139	Liggett Myers->DURH.REG.HOSP',	DATA	30	30	A	15	30	A
5	140	DURH. REG.HOSP->Ligget Myers',	DATA	30	30	A	15	30	A
5	141	Ligget Myers->S.SQUARE MAL',	DATA	30	30	A	15	30	A
5	142	S.SQUARE MAL->Ligget Myers',	DATA	30	30	A	15	30	A
5	143	9TH ST(Buchanan)->DUKE/VA H',	DATA	30	30	A	15	30	A
5	144	DUKE/VA H->9TH ST(Buchanan)',	DATA	30	30	A	15	30	A
5	145	Liggett Myers->S.PARK STA	DATA	30	60	A	15	30	A

5	146	S.PARK STA->Liggett Myers'	DATA	30	60	A	15	30	A
5	147	NCCU->HOLLOWAY&LYNN',	DATA	30	60	A	15	30	A
5	148	HOLLOWAY&LYNN->NCCU	DATA	30	60	A	15	30	
5	149	FAYTTVL&CORNWLLS->HW54&ALSTN',	DATA	30	60	A	15	30	A
5	150	HW54&ALSTN->FAYTTVL&CORNWLLS',	DATA	30	60	A	15	30	A
5	151	DA VINC&HINSN->HORTN&HLNDL',	DATA	30	30	A	15	30	A
5	152	HORTN&HLNDL->DA VINC&HINSN',	DATA	30	30	A	15	30	A
5	153	15/501&SCARLTT->ACADMY&PICKT',	DATA	30	30	A	15	30	A
5	154	ACADMY&PICKTT->15/501&SCARLT',	DATA	30	30	A	15	30	A
5	155	N.PARK->WAKE FORES&SHERRON',	DATA	30	30	A	15	30	A
5	156	WAKE FORES&SHERRON->N.PARK',	DATA	30	60	A	15	30	A
5	157	Ligget Myer->TOREDG&SNOWHL',	DATA	60	60	A	15	30	A
5	158	TOREDG&SNOWHL->Ligget Myer',	DATA	60	60	A	15	30	A
5	159	S.SQ.MALL->N.PARK	DATA	30	30	A	15	30	A
5	160	:N.PARK->S.SQ.MALL'	DATA	30	30	A	15	30	A
5	161	n dur exp>leggitt myers -501 snow hill	DATA			M	15	30	A
5	162	n dur exp>501 snow hill - liggett myers	DATA			M	15	30	A
5	163	:DA VINCI&HINSN->INFIN&ROXBR',	DATA	15		A	15	30	A
5	164	INFIN&ROXBR->DA VINCI&HINSN',	DATA	15		A	15	30	A
5	171	W.CAMPUS->E.CAMPUS	DUKE	5		A	5	5	A
5	172	E.CAMPUS->W.CAMPUS'	DUKE	5		A	5	5	A
5	173	DUKE E/CENT/W EB:W.->E.CAMPUS'	DUKE	10		A	10	10	A
5	174	T,ID='DUKE E/CENT/W WB:E.->W.CAMPUS	DUKE	10		A	10	10	A
5	175	DUKE SCIENCE DR LOOP:CLOCKWISE',	DUKE	15	30	A	15	15	A
5	176	DUKE SCIENCE DR LOOP:COUNTER-CLOCKWISE',	DUKE	15	30	A	15	15	A
5	177	DUKE MED.CTR.->GREYSTONE',	DUKE	15	30	A	15	15	A
5	178	GREYSTONE->DUKE MED.CTR.',	DUKE	15	30	A	15	15	A
5	181	T,ID='DUKE MED 3 WITH STOP NB:ENTRY 11->PG3	DUKE	15	30	A	15	15	A
5	182	PG3->ENTRY 11	DUKE	15	30	A	15	15	A
5	185	DUKE HOSP N.->ERWIN SQ	DUKE	15	30	A	15	15	A
5	186	ERWIN SQ->DUKE HOSP N.	DUKE	15	30	A	15	15	A
5	187	RT LOT->ENTR 11',	DUKE	15	30	A	15	15	A
5	188	ENTR 11->RT LOT',	DUKE	15	30	A	15	15	A
5	193	:E.CAMPUS->DUKE VILLA	DUKE	15	30	A	15	15	A
5	194	DUKE VILLA->E.CAMPUS	DUKE	15	30	A	15	15	A
5	195	ROXBR&LAWSN->ALSTN STA',	NCCU	15	30	A	15	15	A
5	196	ALSTN STA->ROXBR&LAWSN',	NCCU	15	30	A	15	15	A
5	197	CU CIRCULAR:FAYETTVILL:GEORG-MOLINE	NCCU	15	30	A	15	15	A
5	201	DUKE MED.CTR.->S.PARK	TTA	15	30	A	15	30	A
5	202	S.PARK->DUKE MED.CTR.	TTA	15	30	A	15	30	A
5	209	S.PK->SO-HI DR&ENFIELD DR',	TTA	15	30	A	15	30	A
5	210	SO-HI DR&ENFIELD DR->S.PK',	TTA	15	30	A	15	30	A
5	213	S.PARK->N.PARK'	TTA	15	30	A	15	30	A
5	214	N.PARK->S.PARK	TTA	15	30	A	15	30	A
5	215	MORRISVILLE->S.PARK',	TTA	15	30	A	15	30	A
5	216	S.PARK->MORRISVILLE',	TTA	15	30	A	15	30	A
5	217	MORRISVILLE->S.PARK	TTA	15	30	A	15	30	A
5	218	S.PARK->MORRISVILLE	TTA	15	30	A	15	30	A
5	221	MORRISVILLE->S.PARK	TTA	15	30	A	15	30	A
5	222	:S.PARK->MORRISVILLE	TTA	15	30	A	15	30	A

(39)

5	251	S.SQUARE-woodcroft	DATA	30	60	A	15	30	A
5	252	woodcroft-S.SQUARE	DATA	30	60	A	15	30	A
5	253	D-TOWN->NC98/MN SPR	DATA	30	60	A	15	30	A
5	254	NC98/MN SPR->D-TOWN	DATA	30	60	A	15	30	A
5	255	DATA 20 UNIV DR >RTP OB				M	10	15	A
5	256	DARA 20 RTP >UNIV DR IB				M	10	15	A
5	3	SPOINT->N-GATE	DATA	30	30	A	15	30	A
5	4	N-GATE->SPOINT	DATA	30	30	A	15	30	A
5	1	N-GATE->SPOINT????/	DATA	30	60	A	15	30	A
5	7	CARR N TRANSITION'	CHT			M	15	30	A
5	8	CARR N TRANSITION	CHT			M	15	30	A
5	17	I40/15501->FRANKLIN/UNC	CHT			M	15	30	A
5	18	FRANKLIN/UNC->I40/15501	CHT			M	15	30	A
5	19	***Delete*** - Duplicate listing of route # 5-111&112 above	CHT			M	15	30	A
5	20	***Delete*** - Duplicate listing of route # 7-35 & 36 below	CHT			M	15	30	A
5	33	HORAC WILLIAMS->UNC	CHT			M	15	30	A
5	34	:HORAC WILLIAMS->UNC	CHT			M	15	30	A
5	35	UNC->MASON FARM	CHT			M	15	30	A
5	36	MASON FARMUNC->UNC	CHT			M	15	30	A
7	41	SOUTHERN VILLAGE->UNC	CHT			M	15	30	A
7	42	SOUTHERN VILLAGE->UNC	CHT			M	15	30	A
7	43	MASON FARM-AIRPRT-HORAC WMS	CHT			M	15	30	A
7	44	HORAC WMS AIRPORT-MASON FAM	CHT			M	15	30	A
7	5	SPR F(At Spr)->WAKE F'	TTA	15	30	A	15	30	A
7	6	WAKE F->SPR F(At Spr)	TTA	15	30	A	15	30	A
7	9	Harrington Sta->CLAYTON	TTA	15	30	A	15	30	A
7	10	CLAYTON->HARRINGTON STA	TTA	15	30	A	15	30	A
7	13	:H->CH'	ORANGE	60	90	A	15	30	A
7	14	CH->H'	ORANGE	60	90	A	15	30	A
7	25	H->DUKE MED	TTA	30	60	A	15	30	A
7	26	DUKE MED->H	TTA	30	60	A	15	30	A
7	29	D-TWN->NIEHS/EPA	DATA	30	60	A	15	30	A
7	30	NIEHS/EPA->D-TOWN	DATA	30	60	A	15	30	A
7	31	UNC->HORAC WILLIAMS EXP	CHT			M	15	30	A
7	32	UNC->HORAC WILLIAMS EXP	CHT			M	15	30	A
7	33	SOUTH ORANGE EXPRESS	CHT			M	15	30	A
7	34	SOUTH ORANGE EXPRESS	CHT			M	15	30	A
7	37	UNC->HILLSBORO EXPRESS	CHT			M	15	30	A
7	38	UNC->HILLSBORO EXPRESS	CHT			M	15	30	A
7	39	:GOVERNOR PLACE EXPRESS	CHT			M	15	30	A
7	40	GOVERNOR PLACE EXPRESS changes in italics-->	*CHT*			*M*	15	30	A
8	1	DUKE HOSPITAL/VA STAT->SPRING FOREST STA',	TTA RAIL	15		A	15	30	A
8	2	SPRING FOREST STA->DUKE HOSPITAL/VA STAT',	TTA RAIL	15		A	15	30	A

(40)

Moderate Transit Revisions

			Revised Headway				Original hdway		
		Revised Transit Alternatives	**CHANGES IN BOLD**						
Mode	Line	NAME	Transit	am	pm	Alt	am	pm	Alt
5	81	NORTH/SOUTH EXPRESS ob/NB	CHT	**15**	**30**	A	15	30	A
5	82	NORTH/SOUTH EXPRESS ib/SB'	CHT	**15**	**30**	A	15	30	A
5	85	C ROUTE OUTBOUND'	CHT	**15**	**20**	A	15	30	A
5	86	C ROUTE INBOUND	CHT	**15**	**20**	A	15	30	A
5	91	D ROUTE OUTBOUND	CHT	**15**	**30**	A	15	30	A
5	92	D ROUTE INBOUND	CHT	**15**	**30**	A	15	30	A
5	93	F ROUTE OUTBOUND	CHT	**15**	**30**	A	15	30	A
5	94	F ROUTE INBOUND	CHT	**15**	**30**	A	15	30	A
5	95	G ROUTE OUTBOUND	CHT	**15**	**25**	A	15	30	A
5	96	G ROUTE INBOUND	CHT	**15**	**25**	A	15	30	A
5	97	J ROUTE OUTBOUND'	CHT	**15**	**30**	A	15	30	A
5	98	J ROUTE INBOUND	CHT	**15**	**30**	A	15	30	A
5	99	N ROUTE OUTBOUND	CHT	**15**	**30**	A	15	30	A
5	100	N ROUTE INBOUND	CHT	**15**	**30**	A	15	30	A
5	101	***Rename*** - Airport Road Express (NU Route) OB	CHT	**15**	**30**	A	15	30	A
5	102	***Rename*** - Airport Road Express (NU Route) IB	CHT	**15**	**30**	A	15	30	A
5	103	S ROUTE OUTBOUND	CHT	**10**	**15**	A	15	30	A
5	104	S ROUTE INBOUND	CHT	**10**	**15**	A	15	30	A
5	105	T ROUTE OUTBOUND	CHT	**15**	**30**	A	15	30	A
5	106	T ROUTE INBOUND	CHT	**15**	**30**	A	15	30	A
5	107	U ROUTE OUTBOUND	CHT	**12**	**30**	A	12	15	A
5	108	U ROUTE INBOUND	CHT	**12**	**30**	A	12	15	A
		H EXPRESS OUTBOUND	**CHT**	**15**	**30**	**A**			A
		H EXPRESS INBOUND	**CHT**	**15**	**30**	**A**			A
		CARRBORO EXPRESS OUTBOUND	**CHT**	**15**	**30**	**A**			A
		CARRBORO EXPRESS INBOUND	**CHT**	**15**	**30**	**A**			A
		EU SHUTTLE OUTBOUND	**CHT**	**12**	**30**	**A**			A
		EU SHUTTLE INBOUND	**CHT**	**12**	**30**	**A**			A
		BCBS PARK RIDE OUTBOUND	**CHT**	**15**	**30**	**A**			A
		BCBS PARK RIDE INBOUND	**CHT**	**15**	**30**	**A**			A
		JONES FERRY PARK RIDE OUTBOUND	**CHT**	**15**	**30**	**A**			A
		JONES FERRY PARK RIDE INBOUND	**CHT**	**15**	**30**	**A**			A
		A ROUTE OUTBOUND	**CHT**	**30**	**30**	**A**			A
		A ROUTE INBOUND	**CHT**	**30**	**30**	**A**			A
		V ROUTE OUTBOUND	**CHT**	**30**	**30**	**A**			A
		V ROUTE INBOUND	**CHT**	**30**	**30**	**A**			A
5	111	MAIN&ROBERSON->ELLIOTT&US 15/501',	CHT	15	30	M	15	30	A
5	112	:ILLIOTT&US 15/501->MAIN&ROBERSON',	CHT	15	30	M	15	30	A
5	113	***Rename*** - Weaver Dairy Road loop [CH6]	CHT	15	30	M	15	30	A
5	115	***Unknown*** - :S&COLUMBIA->LAUREL H&EPHESUS	CHT	15	30	M	15	30	A
5	116	***Unknown*** - LAUREL H&EPHESUS CH->S&COLUM	CHT	15	30	M	15	30	A
5	117	***Rename*** - Downtown Carrboro - UNC loop [CH12]	CHT	10	30	M	15	30	A

5	121	Ligget Myers->DENFIELD&ROXBR',	DATA	15	30	A	15	30	A
5	122	DENFIELD&ROXBR->Ligget Myers',	DATA	15	30	A	15	30	A
5	123	Liggett Myers->CARVER&FRONT',	DATA	15	30	A	15	30	A
5	124	CARVER&FRONT->Liggett Myers',	DATA	15	30	A	15	30	A
5	125	ALSTON STA->HOLDER&SHERRON	DATA	15	30	A	15	30	A
5	126	HOLDER&SHERRON->ALSTON STA	DATA	15	30	A	15	30	A
5	127	Ligget Myers->HOLOWAY/VILLAG',	DATA	15	30	A	15	30	A
5	128	HOLOWAY/VILLAG->Ligget Myers',	DATA	15	30	A	15	30	A
5	129	Ligget Myers->N.DUKE MALL	DATA	15	30	A	15	30	A
5	130	N.DUKE MALL->Liggett Myers	DATA	15	30	A	15	30	A
5	131	Ligget Myers->S.SQUARE MALL	DATA	15	30	A	15	30	A
5	132	S.SQUARE MALL->Ligget Myers	DATA	15	30	A	15	30	A
5	133	Ligg Myers->NEAL&MEADOWBROOK	DATA	15	30	A	15	30	A
5	134	:NEAL&MEADOWBROOK->Ligg Myers',	DATA	15	30	A	15	30	A
5	135	Liggett Myers->S.ROXBORO ST.',	DATA	15	30	A	15	30	A
5	136	S.ROXBORO ST.->Liggett Myers',	DATA	15	30	A	15	30	A
5	137	Ligget Myers->HOLMES REC.CTR',	DATA	15	30	A	15	30	A
5	138	HOLMES REC.CTR->Ligget Myers',	DATA	15	30	A	15	30	A
5	139	Liggett Myers->DURH.REG.HOSP',	DATA	15	30	A	15	30	A
5	140	DURH. REG.HOSP->Ligget Myers',	DATA	15	30	A	15	30	A
5	141	Ligget Myers->S.SQUARE MAL',	DATA	15	30	A	15	30	A
5	142	S.SQUARE MAL->Ligget Myers',	DATA	15	30	A	15	30	A
5	143	9TH ST(Buchanan)->DUKE/VA H',	DATA	15	30	A	15	30	A
5	144	DUKE/VA H->9TH ST(Buchanan)',	DATA	15	30	A	15	30	A
5	145	Liggett Myers->S.PARK STA	DATA	15	30	A	15	30	A
5	146	S.PARK STA->Liggett Myers'	DATA	15	30	A	15	30	A
5	147	NCCU->HOLLOWAY&LYNN',	DATA	15	30	A	15	30	A
5	148	HOLLOWAY&LYNN->NCCU	DATA	15	30	A	15	30	A
5	149	FAYTTVL&CORNWLLS->HW54&ALSTN',	DATA	15	30	A	15	30	A
5	150	HW54&ALSTN->FAYTTVL&CORNWLLS',	DATA	15	30	A	15	30	A
5	151	DA VINC&HINSN->HORTN&HLNDL',	DATA	15	30	A	15	30	A
5	152	HORTN&HLNDL->DA VINC&HINSN',	DATA	15	30	A	15	30	A
5	153	15/501&SCARLTT->ACADMY&PICKT',	DATA	15	30	A	15	30	A
5	154	ACADMY&PICKTT->15/501&SCARLT',	DATA	15	30	A	15	30	A
5	155	N.PARK->WAKE FORES&SHERRON',	DATA	15	30	A	15	30	A
5	156	WAKE FORES&SHERRON->N.PARK',	DATA	15	30	A	15	30	A
5	157	Ligget Myer->TOREDG&SNOWHL',	DATA	15	30	A	15	30	A
5	158	TOREDG&SNOWHL->Ligget Myer',	DATA	15	30	A	15	30	A
5	159	S.SQ.MALL->N.PARK	DATA	15	30	A	15	30	A
5	160	:N.PARK->S.SQ.MALL'	DATA	15	30	A	15	30	A
5	161	**n dur exp>leggitt myers -501 snow hill**	DATA			M	15	30	A
5	162	**n dur exp>501 snow hill - liggett myers**	DATA			M	15	30	A
5	163	:DA VINCI&HINSN->INFIN&ROXBR',	DATA	15	30	A	15	30	A
5	164	INFIN&ROXBR->DA VINCI&HINSN',	DATA	15	30	A	15	30	A
5	171	W.CAMPUS->E.CAMPUS	DUKE	5	5	A	5	5	A
5	172	E.CAMPUS->W.CAMPUS'	DUKE	5	5	A	5	5	A
5	173	DUKE E/CENT/W EB:W.->E.CAMPUS'	DUKE	10	10	A	10	10	A
5	174	T,ID='DUKE E/CENT/W WB:E.->W.CAMPUS	DUKE	10	10	A	10	10	A
5	175	DUKE SCIENCE DR LOOP:CLOCKWISE',	DUKE	15	15	A	15	15	A
5	176	DUKE SCIENCE DR LOOP:COUNTER-CLOCKWISE',	DUKE	15	15	A	15	15	A

5	177	DUKE MED.CTR.->GREYSTONE',	DUKE	15	15	A	15	15	A
5	178	GREYSTONE->DUKE MED.CTR.',	DUKE	15	15	A	15	15	A
5	181	T,ID='DUKE MED 3 WITH STOP NB:ENTRY 11->PG3	DUKE	15	15	A	15	15	A
5	182	PG3->ENTRY 11	DUKE	15	15	A	15	15	A
5	185	DUKE HOSP N.->ERWIN SQ	DUKE	15	15	A	15	15	A
5	186	ERWIN SQ->DUKE HOSP N.	DUKE	15	15	A	15	15	A
5	187	RT LOT->ENTR 11',	DUKE	15	15	A	15	15	A
5	188	ENTR 11->RT LOT',	DUKE	15	15	A	15	15	A
5	193	:E.CAMPUS->DUKE VILLA	DUKE	15	15	A	15	15	A
5	194	DUKE VILLA->E.CAMPUS	DUKE	15	15	A	15	15	A
5	195	ROXBR&LAWSN->ALSTN STA',	NCCU	15	15	A	15	15	A
5	196	ALSTN STA->ROXBR&LAWSN',	NCCU	15	15	A	15	15	A
5	197	CU CIRCULAR:FAYETTVILL:GEORG-MOLINE	NCCU	15	15	A	15	15	A
5	201	DUKE MED.CTR.->S.PARK	TTA	15	30	A	15	30	A
5	202	S.PARK->DUKE MED.CTR.	TTA	15	30	A	15	30	A
5	209	S.PK->SO-HI DR&ENFIELD DR',	TTA	15	30	A	15	30	A
5	210	SO-HI DR&ENFIELD DR->S.PK',	TTA	15	30	A	15	30	A
5	213	S.PARK->N.PARK'	TTA	15	30	A	15	30	A
5	214	N.PARK->S.PARK	TTA	15	30	A	15	30	A
5	215	MORRISVILLE->S.PARK',	TTA	15	30	A	15	30	A
5	216	S.PARK->MORRISVILLE',	TTA	15	30	A	15	30	A
5	217	MORRISVILLE->S.PARK	TTA	15	30	A	15	30	A
5	218	S.PARK->MORRISVILLE	TTA	15	30	A	15	30	A
5	221	MORRISVILLE->S.PARK	TTA	15	30	A	15	30	A
5	222	:S.PARK->MORRISVILLE	TTA	15	30	A	15	30	A
5	251	S.SQUARE-woodcroft	DATA	15	30	A	15	30	A
5	252	woodcroft-S.SQUARE	DATA	15	30	A	15	30	A
5	253	D-TOWN->NC98/MN SPR	DATA	15	30	A	15	30	A
5	254	NC98/MN SPR->D-TOWN	DATA	15	30	A	15	30	A
5	255	DATA 20 UNIV DR >RTP OB				M	10	15	A
5	256	DARA 20 RTP >UNIV DR IB				M	10	15	A
5	3	SPOINT->N-GATE	DATA	15	30	A	15	30	A
5	1	N-GATE->SPOINT	DATA	15	30	A	15	30	A
5	4	N-GATE->SPOINT	DATA	30	30	A	15	30	A
5	7	CARR N TRANSITION'	CHT	15	30	M	15	30	A
5	8	CARR N TRANSITION	CHT	15	30	M	15	30	A
5	17	I40/15501->FRANKLIN/UNC	CHT	15	30	M	15	30	A
5	18	FRANKLIN/UNC->I40/15501	CHT	15	30	M	15	30	A
5	19	***Delete*** - Duplicate listing of route # 5-111&112 above	CHT	15	30	M	15	30	A
5	20	***Delete*** - Duplicate listing of route # 7-35 & 36 below	CHT	15	30	M	15	30	A
5	33	HORAC WILLIAMS->UNC	CHT	15	30	M	15	30	A
5	34	:HORAC WILLIAMS->UNC	CHT	15	30	M	15	30	A
5	35	UNC->MASON FARM	CHT	15	30	M	15	30	A
5	36	MASON FARMUNC->UNC	CHT	15	30	M	15	30	A
7	41	SOUTHERN VILLAGE->UNC	CHT	15	30	M	15	30	A
7	42	SOUTHERN VILLAGE->UNC	CHT	15	30	M	15	30	A
7	43	MASON FARM-AIRPRT-HORAC WMS	CHT	15	30	M	15	30	A
7	44	HORAC WMS AIRPORT-MASON FAM	CHT	15	30	M	15	30	A
7	5	SPR F(At Spr)->WAKE F'	TTA	15	30	A	15	30	A
7	6	WAKE F->SPR F(At Spr)	TTA	15	30	A	15	30	A

(43)

7	9	Harrington Sta->CLAYTON	TTA	15	30	A	15	30	A
7	10	CLAYTON->HARRINGTON STA	TTA	15	30	A	15	30	A
7	13	:H->CH'	ORANGE	15	30	A	15	30	A
7	14	CH->H'	ORANGE	15	30	A	15	30	A
7	25	H->DUKE MED	TTA	15	30	A	15	30	A
7	26	DUKE MED->H	TTA	15	30	A	15	30	A
7	29	D-TWN->NIEHS/EPA	DATA	15	30	A	15	30	A
7	30	NIEHS/EPA->D-TOWN	DATA	15	30	A	15	30	A
7	31	UNC->HORAC WILLIAMS EXP	CHT	15	30	M	15	30	A
7	32	UNC->HORAC WILLIAMS EXP	CHT	15	30	M	15	30	A
7	33	SOUTH ORANGE EXPRESS	CHT	15	30	M	15	30	A
7	34	SOUTH ORANGE EXPRESS	CHT	15	30	M	15	30	A
7	37	UNC->HILLSBORO EXPRESS	CHT	15	30	M	15	30	A
7	38	UNC->HILLSBORO EXPRESS	CHT	15	30	M	15	30	A
7	39	:GOVERNOR PLACE EXPRESS	CHT	15	30	M	15	30	A
7	40	GOVERNOR PLACE EXPRESS changes in italics-->	*CHT*	15	30	*M*	15	30	A
8	1	DUKE HOSPITAL/VA STAT->SPRING FOREST STA',	TTA RAIL	15	30	A	15	30	A
8	2	SPRING FOREST STA->DUKE HOSPITAL/VA STAT',	TTA RAIL	15	30	A	15	30	A
7	35	laurel hill loop-meadowmont IB',	CHT	15	30	M	15	30	M
7	36	meadowmont-laurel hill loop OB',	CHT	15	30	M	15	30	M
7	45	***Rename*** - UNC-->H Williams-->Timberlyne, OB [CH7]	CHT	15	30	M	15	30	M
7	46	***Rename*** - UNC-->H Williams-->Timberlyne, IB [CH7]	CHT	15	30	M	15	30	M
7	47	***Delete*** - Duplicate listing of route # 6-3 below	CHT	15	30	M	15	30	M
7	48	***Delete*** - Duplicate listing of route # 6-4 below	CHT	15	30	M	15	30	M
6	1	UNI DR->RTP	DATA	15	30	M	15	30	M
6	2	UNI DR->RTP	DATA	15	30	M	15	30	M
6	3	UNC->PITTSBORO	CHT	15	30	M	15	30	M
6	4	PITTSBORO->UNC	CHT	15	30	M	15	30	M
6	5	***Delete*** - unc/nc54-friday ctr IB', **same as S Route**	CHT	15	30	M	15	30	M
6	6	***Delete*** - friday ctr-unc/nc54 OB', **same as S Route**	CHT	15	30	M	15	30	M
6	7	**54/farrton/barbee chapel loop',**	CHT	15	30	M	15	30	M
6	8	***Rename*** - MEADOWMONT --> 15-501 & UNIV MALL	CHT			I	15	30	M
6	9	***Rename*** - 15-501 & UNIV MALL --> MEADOWMONT	CHT			I	15	30	M
6	10	***Delete*** - Duplicate listing of route # 7-39 above	CHT			I	15	30	M
6	11	***Delete*** - Duplicate listing of route # 7-40 above	CHT			I	15	30	M
6	12	***Unknown*** - unc-jack bennett IB',	CHT			I	15	30	M
6	13	***Unknown*** - jack bennett-unc OB',	CHT			I	15	30	M
6	14	,'D7SP SOUTHPOINT MALL: OB	DATA	15		M	15	30	M
6	15	SPR SOUTHPOINT MALL: IB	DATA	15		M	15	30	M
6	16	DTT EPA local: OB	DATA	15		M	15	30	M
6	17	DTT EPA local: IB'	DATA	15		M	15	30	M
6	18	NCCU CAMPUS: LOOP	DATA	15		M	15	30	M
6	19	CENT MED PK WILLOWDALE: OB	DATA	15		M	15	30	M
6	20	CENT MED PK WILLOWDALE: IB	DATA	15		M	15	30	M
6	21	NC98 US70 SOUTH MIAMI: OB	DATA	15		M	15	30	M
6	22	NC98 US70 SOUTH MIAMI: IB	DATA	15		M	15	30	M
6	23	NORTHGATE RTP: INBOUND	DATA	15		M	15	30	M
6	24	NORTHGATE RTP: OUTBOUND	DATA	15		M	15	30	M
6	25	DUR REG HOSP DUKE MED CTR: OB'	DATA	15		M	15	30	M
6	26	DUR REG HOSP DUKE MED CTR: IB	DATA	15		M	15	30	M

6	27	***Delete*** - Duplicate listing of Jones Ferry P&R Exp	CHT						
6	28	***Delete*** - Duplicate listing of Jones Ferry P&R Exp	CHT						
6	29	***Delete*** - Duplicate listing of BCBS Express	CHT						
6	30	***Delete*** - Duplicate listing of BCBS Express	CHT						
6	31	DNTN DTECH SNOW OB	DATA	15		M	15	30	M
6	32	DNTN DTECH SNOW IB	DATA	15		M	15	30	M
6	33	NGATE RTP W OB	DATA	15		M	15	30	M
6	34	NGATE RTP W IB	DATA	15		M	15	30	M
6	35	NGATE RTP E OB	DATA	15		M	15	30	M
6	36	NGATE RTP E IB	DATA	15		M	15	30	M
6	37	DREGHOSP DUKE OB	DATA	15		M	15	30	M

Intensive Transit Revisions

			Revised Headway				Original hdway		
		Revised Chapel Hill Transit Alternatives	**CHANGES IN BOLD**						
Mode	Line	NAME	Transit	am	pm	Alt	am	pm	Alt
5	81	NORTH/SOUTH EXPRESS ob/NB	CHT	7.5	15	A	15	30	A
5	82	NORTH/SOUTH EXPRESS ib/SB'	CHT	7.5	15	A	15	30	A
5	85	C ROUTE OUTBOUND'	CHT	7.5	15	A	15	30	
5	86	C ROUTE INBOUND	CHT	7.5	15	A	15	30	
5	91	D ROUTE OUTBOUND	CHT	7.5	15	A	15	30	A
5	92	D ROUTE INBOUND	CHT	7.5	15	A	15	30	A
5	93	F ROUTE OUTBOUND	CHT	7.5	15	A	15	30	A
5	94	F ROUTE INBOUND	CHT	7.5	15	A	15	30	A
5	95	G ROUTE OUTBOUND	CHT	7.5	15	A	15	30	A
5	96	G ROUTE INBOUND	CHT	7.5	15	A	15	30	A
5	97	J ROUTE OUTBOUND'	CHT	7.5	15	A	15	30	A
5	98	J ROUTE INBOUND	CHT	7.5	15	A	15	30	A
5	99	N ROUTE OUTBOUND	CHT	7.5	15	A	15	30	A
5	100	N ROUTE INBOUND	CHT	7.5	15	A	15	30	A
5	101	***Rename*** - Airport Road Express (NU Route) OB	CHT	7.5	15	A	15	30	A
5	102	***Rename*** - Airport Road Express (NU Route) IB	CHT	7.5	15	A	15	30	A
5	103	S ROUTE OUTBOUND	CHT	7.5	15	A	15	30	A
5	104	S ROUTE INBOUND	CHT	7.5	15	A	15	30	A
5	105	T ROUTE OUTBOUND	CHT	7.5	15	A	15	30	A
5	106	T ROUTE INBOUND	CHT	7.5	15	A	15	30	A
5	107	U ROUTE OUTBOUND	CHT	7.5	15	A	12	15	A
5	108	U ROUTE INBOUND	CHT	7.5	15	A	12	15	A
		H EXPRESS OUTBOUND	**CHT**	7.5	15	A			A
		H EXPRESS INBOUND	**CHT**	7.5	15	A			A
		CARRBORO EXPRESS OUTBOUND	**CHT**	7.5	15	A			A
		CARRBORO EXPRESS INBOUND	**CHT**	7.5	15	A			
		EU SHUTTLE OUTBOUND	**CHT**	7.5	15	A			A
		EU SHUTTLE INBOUND	**CHT**	7.5	15	A			A

45

		BCBS PARK RIDE OUTBOUND	CHT	7.5	15	A			A
		BCBS PARK RIDE INBOUND	CHT	7.5	15	A			A
		JONES FERRY PARK RIDE OUTBOUND	CHT	7.5	15	A			A
		JONES FERRY PARK RIDE INBOUND	CHT	7.5	15	A			A
		A ROUTE OUTBOUND	CHT	7.5	15	A			A
		A ROUTE INBOUND	CHT	7.5	15	A			A
		V ROUTE OUTBOUND	CHT	7.5	15	A			A
		V ROUTE INBOUND	CHT	7.5	15	A			A
5	111	MAIN&ROBERSON->ELLIOTT&US 15/501',	CHT	7.5	15	M	15	30	A
5	112	:ILLIOTT&US 15/501->MAIN&ROBERSON',	CHT	7.5	15	M	15	30	A
5	113	***Rename*** - Weaver Dairy Road loop [CH6]	CHT	7.5	15	M	15	30	A
5	115	***Unknown*** - :S&COLUMBIA->LAUREL H&EPHESUS	CHT	7.5	15	M	15	30	A
5	116	***Unknown*** - LAUREL H&EPHESUS CH->S&COLUM	CHT	7.5	15	M	15	30	A
5	117	***Rename*** - Downtown Carrboro - UNC loop [CH12]	CHT	7.5	15	M	15	30	A
5	121	Ligget Myers->DENFIELD&ROXBR',	DATA	7.5	15	A	15	30	A
5	122	DENFIELD&ROXBR->Ligget Myers',	DATA	7.5	15	A	15	30	A
5	123	Liggett Myers->CARVER&FRONT',	DATA	7.5	15	A	15	30	A
5	124	CARVER&FRONT->Liggett Myers',	DATA	7.5	15	A	15	30	A
5	125	ALSTON STA->HOLDER&SHERRON	DATA	7.5	15	A	15	30	A
5	126	HOLDER&SHERRON->ALSTON STA	DATA	7.5	15	A	15	30	A
5	127	Ligget Myers->HOLOWAY/VILLAG',	DATA	7.5	15	A	15	30	A
5	128	HOLOWAY/VILLAG->Ligget Myers',	DATA	7.5	15	A	15	30	A
5	129	Ligget Myers->N.DUKE MALL	DATA	7.5	15	A	15	30	A
5	130	N.DUKE MALL->Liggett Myers	DATA	7.5	15	A	15	30	A
5	131	Ligget Myers->S.SQUARE MALL	DATA	7.5	15	A	15	30	A
5	132	S.SQUARE MALL->Ligget Myers	DATA	7.5	15	A	15	30	A
5	133	Ligg Myers->NEAL&MEADOWBROOK	DATA	7.5	15	A	15	30	A
5	134	:NEAL&MEADOWBROOK->Ligg Myers',	DATA	7.5	15	A	15	30	A
5	135	Liggett Myers->S.ROXBORO ST.',	DATA	7.5	15	A	15	30	A
5	136	S.ROXBORO ST.->Liggett Myers',	DATA	7.5	15	A	15	30	A
5	137	Ligget Myers->HOLMES REC.CTR',	DATA	7.5	15	A	15	30	A
5	138	HOLMES REC.CTR->Ligget Myers',	DATA	7.5	15	A	15	30	A
5	139	Liggett Myers->DURH.REG.HOSP',	DATA	7.5	15	A	15	30	A
5	140	DURH. REG.HOSP->Ligget Myers',	DATA	7.5	15	A	15	30	A
5	141	Ligget Myers->S.SQUARE MAL',	DATA	7.5	15	A	15	30	A
5	142	S.SQUARE MAL->Ligget Myers',	DATA	7.5	15	A	15	30	A
5	143	9TH ST(Buchanan)->DUKE/VA H',	DATA	7.5	15	A	15	30	A
5	144	DUKE/VA H->9TH ST(Buchanan)',	DATA	7.5	15	A	15	30	A
5	145	Liggett Myers->S.PARK STA	DATA	7.5	15	A	15	30	A
5	146	S.PARK STA->Liggett Myers'	DATA	7.5	15	A	15	30	A
5	147	NCCU->HOLLOWAY&LYNN',	DATA	7.5	15	A	15	30	A
5	148	HOLLOWAY&LYNN->NCCU	DATA	7.5	15	A	15	30	A
5	149	FAYTTVL&CORNWLLS->HW54&ALSTN',	DATA	7.5	15	A	15	30	A
5	150	HW54&ALSTN->FAYTTVL&CORNWLLS',	DATA	7.5	15	A	15	30	A
5	151	DA VINC&HINSN->HORTN&HLNDL',	DATA	7.5	15	A	15	30	A
5	152	HORTN&HLNDL->DA VINC&HINSN',	DATA	7.5	15	A	15	30	A
5	153	15/501&SCARLTT->ACADMY&PICKT',	DATA	7.5	15	A	15	30	A
5	154	ACADMY&PICKTT->15/501&SCARLT',	DATA	7.5	15	A	15	30	A
5	155	N.PARK->WAKE FORES&SHERRON',	DATA	7.5	15	A	15	30	A
5	156	WAKE FORES&SHERRON->N.PARK',	DATA	7.5	15	A	15	30	A

5	157	Ligget Myer->TOREDG&SNOWHL',	DATA	7.5	15	A	15	30	A
5	158	TOREDG&SNOWHL->Ligget Myer',	DATA	7.5	15	A	15	30	A
5	159	S.SQ.MALL->N.PARK	DATA	7.5	15	A	15	30	
5	160	:N.PARK->S.SQ.MALL'	DATA	7.5	15	A	15	30	A
5	161	n dur exp>leggitt myers -501 snow hill	DATA			M	15	30	A
5	162	n dur exp>501 snow hill - liggett myers	DATA			M	15	30	A
5	163	:DA VINCI&HINSN->INFIN&ROXBR',	DATA	7.5	15	A	15	30	A
5	164	INFIN&ROXBR->DA VINCI&HINSN',	DATA	7.5	15	A	15	30	A
5	171	W.CAMPUS->E.CAMPUS	DUKE	7.5	15	A	5	5	A
5	172	E.CAMPUS->W.CAMPUS'	DUKE	7.5	15	A	5	5	A
5	173	DUKE E/CENT/W EB:W.->E.CAMPUS'	DUKE	7.5	15	A	10	10	A
5	174	T,ID='DUKE E/CENT/W WB:E.->W.CAMPUS	DUKE	7.5	15	A	10	10	A
5	175	DUKE SCIENCE DR LOOP:CLOCKWISE',	DUKE	7.5	15	A	15	15	A
5	176	DUKE SCIENCE DR LOOP:COUNTER-CLOCKWISE',	DUKE	7.5	15	A	15	15	A
5	177	DUKE MED.CTR.->GREYSTONE',	DUKE	7.5	15	A	15	15	A
5	178	GREYSTONE->DUKE MED.CTR.',	DUKE	7.5	15	A	15	15	A
5	181	T,ID='DUKE MED 3 WITH STOP NB:ENTRY 11->PG3	DUKE	7.5	15	A	15	15	A
5	182	PG3->ENTRY 11	DUKE	7.5	15	A	15	15	A
5	185	DUKE HOSP N.->ERWIN SQ	DUKE	7.5	15	A	15	15	A
5	186	ERWIN SQ->DUKE HOSP N.	DUKE	7.5	15	A	15	15	A
5	187	RT LOT->ENTR 11',	DUKE	7.5	15	A	15	15	A
5	188	ENTR 11->RT LOT',	DUKE	7.5	15	A	15	15	A
5	193	:E.CAMPUS->DUKE VILLA	DUKE	7.5	15	A	15	15	A
5	194	DUKE VILLA->E.CAMPUS	DUKE	7.5	15	A	15	15	A
5	195	ROXBR&LAWSN->ALSTN STA',	NCCU	7.5	15	A	15	15	
5	196	ALSTN STA->ROXBR&LAWSN',	NCCU	7.5	15	A	15	15	
5	197	CU CIRCULAR:FAYETTVILL:GEORG-MOLINE	NCCU	7.5	15	A	15	15	A
5	201	DUKE MED.CTR.->S.PARK	TTA	7.5	15	A	15	30	A
5	202	S.PARK->DUKE MED.CTR.	TTA	7.5	15	A	15	30	A
5	209	S.PK->SO-HI DR&ENFIELD DR',	TTA	7.5	15	A	15	30	A
5	210	SO-HI DR&ENFIELD DR->S.PK',	TTA	7.5	15	A	15	30	A
5	213	S.PARK->N.PARK'	TTA	7.5	15	A	15	30	A
5	214	N.PARK->S.PARK	TTA	7.5	15	A	15	30	A
5	215	MORRISVILLE->S.PARK',	TTA	7.5	15	A	15	30	A
5	216	S.PARK->MORRISVILLE',	TTA	7.5	15	A	15	30	A
5	217	MORRISVILLE->S.PARK	TTA	7.5	15	A	15	30	A
5	218	S.PARK->MORRISVILLE	TTA	7.5	15	A	15	30	A
5	221	MORRISVILLE->S.PARK	TTA	7.5	15	A	15	30	A
5	222	:S.PARK->MORRISVILLE	TTA	7.5	15	A	15	30	A
5	251	S.SQUARE-woodcroft	DATA	7.5	15	A	15	30	A
5	252	woodcroft-S.SQUARE	DATA	7.5	15	A	15	30	A
5	253	D-TOWN->NC98/MN SPR	DATA	7.5	15	A	15	30	A
5	254	NC98/MN SPR->D-TOWN	DATA	7.5	15	A	15	30	A
5	255	DATA 20 UNIV DR >RTP OB				M	10	15	A
5	256	DARA 20 RTP >UNIV DR IB				M	10	15	A
5	3	SPOINT->N-GATE	DATA	7.5	15	A	15	30	A
5	4	N-GATE->SPOINT	DATA	30	30	A	15	30	A
5	1	N-GATE->SPOINT	DATA	7.5	15	A	15	30	
5	7	CARR N TRANSITION'	CHT	7.5	15	M	15	30	A
5	8	CARR N TRANSITION	CHT	7.5	15	M	15	30	A

(47)

5	17	I40/15501->FRANKLIN/UNC	CHT	7.5	15	M	15	30	A
5	18	FRANKLIN/UNC->I40/15501	CHT	7.5	15	M	15	30	A
5	19	***Delete*** - Duplicate listing of route # 5-111&112 above	CHT	7.5	15	M	15	30	A
5	20	***Delete*** - Duplicate listing of route # 7-35 & 36 below	CHT	7.5	15	M	15	30	A
5	33	HORAC WILLIAMS->UNC	CHT	7.5	15	M	15	30	A
5	34	:HORAC WILLIAMS->UNC	CHT	7.5	15	M	15	30	A
5	35	UNC->MASON FARM	CHT	7.5	15	M	15	30	A
5	36	MASON FARMUNC->UNC	CHT	7.5	15	M	15	30	A
7	41	SOUTHERN VILLAGE->UNC	CHT	7.5	15	M	15	30	A
7	42	SOUTHERN VILLAGE->UNC	CHT	7.5	15	M	15	30	A
7	43	MASON FARM-AIRPRT-HORAC WMS	CHT	7.5	15	M	15	30	A
7	44	HORAC WMS AIRPORT-MASON FAM	CHT	7.5	15	M	15	30	A
7	5	SPR F(At Spr)->WAKE F'	TTA	7.5	15	A	15	30	A
7	6	WAKE F->SPR F(At Spr)	TTA	7.5	15	A	15	30	A
7	9	Harrington Sta->CLAYTON	TTA	7.5	15	A	15	30	A
7	10	CLAYTON->HARRINGTON STA	TTA	7.5	15	A	15	30	A
7	13	:H->CH'	ORANGE	7.5	15	A	15	30	A
7	14	CH->H'	ORANGE	7.5	15	A	15	30	A
7	25	H->DUKE MED	TTA	7.5	15	A	15	30	A
7	26	DUKE MED->H	TTA	7.5	15	A	15	30	A
7	29	D-TWN->NIEHS/EPA	DATA	7.5	15	A	15	30	A
7	30	NIEHS/EPA->D-TOWN	DATA	7.5	15	A	15	30	A
7	31	UNC->HORAC WILLIAMS EXP	CHT	7.5	15	M	15	30	A
7	32	UNC->HORAC WILLIAMS EXP	CHT	7.5	15	M	15	30	A
7	33	SOUTH ORANGE EXPRESS	CHT	7.5	15	M	15	30	A
7	34	SOUTH ORANGE EXPRESS	CHT	7.5	15	M	15	30	A
7	37	UNC->HILLSBORO EXPRESS	CHT	7.5	15	M	15	30	A
7	38	UNC->HILLSBORO EXPRESS	CHT	7.5	15	M	15	30	A
7	39	:GOVERNOR PLACE EXPRESS	CHT	7.5	15	M	15	30	A
7	40	GOVERNOR PLACE EXPRESS changes in italics-->	*CHT*	7.5	15	*M*	15	30	A
8	1	DUKE HOSPITAL/VA STAT->SPRING FOREST STA',	TTA RAIL	7.5	15	A	15	30	A
8	2	SPRING FOREST STA->DUKE HOSPITAL/VA STAT',	TTA RAIL	7.5	15	A	15	30	A
7	35	laurel hill loop-meadowmont IB',	CHT	7.5	15	M	15	30	M
7	36	meadowmont-laurel hill loop OB',	CHT	7.5	15	M	15	30	M
7	45	***Rename*** - UNC-->H Williams-->Timberlyne, OB [CH7]	CHT	7.5	15	M	15	30	M
7	46	***Rename*** - UNC-->H Williams-->Timberlyne, IB [CH7]	CHT	7.5	15	M	15	30	M
7	47	***Delete*** - Duplicate listing of route # 6-3 below	CHT	7.5	15	M	15	30	M
7	48	***Delete*** - Duplicate listing of route # 6-4 below	CHT	7.5	15	M	15	30	M
6	1	UNI DR->RTP	DATA	7.5	15	M	15	30	M
6	2	UNI DR->RTP	DATA	7.5	15	M	15	30	M
6	3	UNC->PITTSBORO	CHT	7.5	15	M	15	30	M
6	4	PITTSBORO->UNC	CHT	7.5	15	M	15	30	M
6	5.	***Delete*** - unc/nc54-friday ctr IB', **same as S Route**	CHT	7.5	15	M	15	30	M
6	6	***Delete*** - friday ctr-unc/nc54 OB', **same as S Route**	CHT	7.5	15	M	15	30	M
6	7	54/farrton/barbee chapel loop',	CHT	7.5	15	M	15	30	M
6	8	***Rename*** - MEADOWMONT --> 15-501 & UNIV MALL	CHT	7.5	15	I	15	30	M
6	9	***Rename*** - 15-501 & UNIV MALL --> MEADOWMONT	CHT	7.5	15	I	15	30	M
6	10	***Delete*** - Duplicate listing of route # 7-39 above	CHT	7.5	15	I	15	30	M
6	11	***Delete*** - Duplicate listing of route # 7-40 above	CHT	7.5	15	I	15	30	M
6	12	***Unknown*** - unc-jack bennett IB',	CHT	7.5	15	I	15	30	M

(48)

6	13	***Unknown*** - jack bennett-unc OB',	CHT	7.5	15	I	15	30	M
6	14	,'D7SP SOUTHPOINT MALL: OB	DATA	7.5	15	M	15	30	M
6	15	SPR SOUTHPOINT MALL: IB	DATA	7.5	15	M	15	30	
6	16	DTT EPA local: OB	DATA	7.5	15	M	15	30	M
6	17	DTT EPA local: IB'	DATA	7.5	15	M	15	30	M
6	18	NCCU CAMPUS: LOOP	DATA	7.5	15	M	15	30	M
6	19	CENT MED PK WILLOWDALE: OB	DATA	7.5	15	M	15	30	M
6	20	CENT MED PK WILLOWDALE: IB	DATA	7.5	15	M	15	30	M
6	21	NC98 US70 SOUTH MIAMI: OB	DATA	7.5	15	M	15	30	M
6	22	NC98 US70 SOUTH MIAMI: IB	DATA	7.5	15	M	15	30	M
6	23	NORTHGATE RTP: INBOUND	DATA	7.5	15	M	15	30	M
6	24	NORTHGATE RTP: OUTBOUND	DATA	7.5	15	M	15	30	M
6	25	DUR REG HOSP DUKE MED CTR: OB'	DATA	7.5	15	M	15	30	M
6	26	DUR REG HOSP DUKE MED CTR: IB	DATA	7.5	15	M	15	30	M
6	27	***Delete*** - Duplicate listing of Jones Ferry P&R Exp	CHT	7.5	15				
6	28	***Delete*** - Duplicate listing of Jones Ferry P&R Exp	CHT	7.5	15				
6	29	***Delete*** - Duplicate listing of BCBS Express	CHT	7.5	15				
6	30	***Delete*** - Duplicate listing of BCBS Express	CHT	7.5	15				
6	31	DNTN DTECH SNOW OB	DATA	7.5	15	M	15	30	M
6	32	DNTN DTECH SNOW IB	DATA	7.5	15	M	15	30	M
6	33	NGATE RTP W OB	DATA	7.5	15	M	15	30	M
6	34	NGATE RTP W IB	DATA	7.5	15	M	15	30	M
6	35	NGATE RTP E OB	DATA	7.5	15	M	15	30	M
6	36	NGATE RTP E IB	DATA	7.5	15	M	15	30	M
6	37	DREGHOSP DUKE OB	DATA	7.5	15	M	15	30	
6	38	DREGHOSP DUKE IB	DATA	7.5	15	I	15	30	
7	49	GREEN LINE EXP OB	TTA	7.5	15	I	15	30	I
7	50	GREEN LINE EXP IB	TTA	7.5	15	I	15	30	I
7	51	HILLS-DURHAM EXP OB	TTA	7.5	15	I	15	30	I
7	52	HILLS-DURHAM EXP IB	TTA	7.5	15	I	15	30	I
7	53	DURHAM CH EXP OB	TTA	7.5	15	I	15	30	I
7	54	DURHAM CH EXP IB	TTA	7.5	15	I	15	30	I
7	55	CHAP HILL-RTP EXP OB	TTA	7.5	15	I	15	30	I
7	56	CHAP HILL-RTP EXP IB	TTA	7.5	15	I	15	30	I
7	57	N. CHAP HILL-RTP EXP OB	TTA	7.5	15	I	15	30	I
7	58	N. CHAP HILL-RTP EXP IB	TTA	7.5	15	I	15	30	I
7	59	TREYBURN EXP OB	TTA	7.5	15	I	15	30	I
7	60	TREYBURN EXP IB	TTA	7.5	15	I	15	30	I
7	61	DUKE-S.PARK STAT EXP OB	TTA	7.5	15	I	15	30	I
7	62	DUKE-S.PARK STAT EXP IB	TTA	7.5	15	I	15	30	I
7	63	DNTN DUR-STALLNGS EXP OB	TTA	7.5	15	I	15	30	I
7	64	DNTN DUR-STALLNGS EXP IB	TTA	7.5	15	I	15	30	I
7	65	N GATE-S POINT EXP OB	TTA	7.5	15	I	15	30	I
7	66	N GATE-S POINT EXP IB	TTA	7.5	15	I	15	30	I
8	3	9th ST-> UNC HOSP	RAIL-P2	7.5	15	I	15	30	I
8	4	Angier Spur-> Treyburn	RAIL	7.5	15	I	15	30	I
8	5	DTwn Durham-> APEX	RAIL	7.5	15	I	15	30	I
8	6	DTwn Durham->Hillsborough	RAIL	7.5	15	I	15	30	
8	7	Chapel Hill->Hillsborough	RAIL	7.5	15	I	15	30	I
8	8	UNC->NC54/RTP/RDU	RAIL	7.5	15	I	15	30	I

(49)

8	9	RDU->ENO DR/N Durham	Bway	7.5	15	I	15	30	I
8	10	NC 147->RTP	Bway	7.5	15	I	15	30	I
6	39	DATA:feeder16 Treyburn Station, loop',	DATA	7.5	15	I	15	30	I
6	40	Eno DR. Station, OB',	DATA	7.5	15	I	15	30	I
6	41	Eno DR. Station, IB',	DATA	7.5	15	I	15	30	I
6	42	Eno Station, Loop',	DATA	7.5	15	I	15	30	I
6	43	DurRegHosp-Main,OB',	DATA	7.5	15	I	15	30	I
6	44	Main St-Dur Reg Hosp,IB',	DATA	7.5	15	I	15	30	I
6	45	Orangefactoryrd-terml OB',	DATA	7.5	15	I	15	30	I
6	46	Orangefactoryrd-terml IB',	DATA	7.5	15	I	15	30	I
6	47	dur reghosp OB',	DATA	7.5	15	I	15	30	I
6	48	dur reghosp IB',	DATA	7.5	15	I	15	30	I
6	49	S SQUARE STA Shuttle OB',	DATA	7.5	15	I	15	30	I
6	50	S SQUARE STA Shuttle IB',	DATA	7.5	15	I	15	30	I
6	51	S SQUARE Feeder OB',	DATA	7.5	15	I	15	30	I
6	52	S SQUARE Feeder IB',	DATA	7.5	15	I	15	30	I
6	53	Dtwn Terminal Feeder OB',	DATA	7.5	15	I	15	30	I
6	54	Dtwn Terminal Feeder IB',	DATA	7.5	15	I	15	30	I
6	55	Dtwn Terminal Shuttle OB',	DATA	7.5	15	I	15	30	I
6	56	Dtwn Terminal Shuttle IB',	DATA	7.5	15	I	15	30	I
6	57	Joyner/Club/Duke OB'	DATA	7.5	15	I	15	30	I
6	58	Joyner/Club/Duke IB	DATA	7.5	15	I	15	30	I
6	59	Meridian Pkway feeder OB'	DATA	7.5	15	I	15	30	I
6	60	Meridian Pkway feeder IB	DATA	7.5	15	I	15	30	I
6	61	Woodcroft ShopCtr feeder OB,	DATA	7.5	15	I	15	30	I
6	62	Woodcroft ShopCtr feeder IB	DATA	7.5	15	I	15	30	I
6	63	Riddle Sta feeder OB	DATA	7.5	15	I	15	30	I
6	64	Riddle Sta feeder IB	DATA	7.5	15	I	15	30	I
				7.5	15	I	15	30	I

(52)

Non-Motorized Transportation Assumptions (Bike/PED)

The assumptions for non-motorized transportation reflect a diversion of non-motorized trips in the model, based on an activity density formula. All existing facilities are reflected in the base. In addition, bicycle projects have been assumed for which there is funding or anticipated future funding. The non-motorized trip diversion is based on activity density of 2000 or more. The activity density formula is shown below:

[{Households + (C*Gq) + (R*Emp)}/Area in sq. miles]

Gq = Group Quarters (university beds)
C = Ratio of group quarters to population
Emp = Total Employment in the zone
R = Ratio of regional household to employment

Chatham County

	Project	Facility Type	Project Limits	TIP #
1	US 15-501	4' shoulders	Pittsboro Bypass to Orange Co. Line	R-942

Durham County

	Project	Facility Type	Project Limits	TIP #
2	Old Durham-Chapel Hill Rd	bike lanes	Orange Co. Line to University Drive	STP DA
3	American Tobacco Trail (ATT) Phase A	bike trail	Willard St. to Otis St.	E-2921
4	ATT Phase B	bike trail	Otis St. toward Cornwallis Rd.	E-2921
5	ATT Phase C	bike trail	Cornwallis Rd. to NC 54	E-2921
6	ATT Phase D	bike trail	Cornwallis Rd. east to near Briggs Ave.	E-2921
7	ATT Phase E	bike trail	NC 54 to South Point Pwky	E-2921
8	Cornwallis Rd.	bike lanes	Chapel Hill Rd. to S. Roxboro St.	STP DA
9	Guess Rd.	wide outside lanes	Carver St. to Umstead Rd.	U-2102
10	Alexander Dr.	wide outside lanes	Cornwallis Rd. to Miami Blvd.	U-3309
11	NC 55	wide outside lanes	NC 64 in Wake Co. to Cornwallis Rd. in Durham Co.	R-2906
12	Martin Luther King Pkwy	bike lanes	US 15-501 to NC 55	CIP/Bond

Orange County

	Project	Facility Type	Project Limits	TIP #
13	US 15-501	bike lanes	Chatham Co. Line to Chapel Hill Bypass	R-942
14	NC 54	bike lanes	Burning Tree Dr. to Barbee Chapel Rd.	Private
15	Old NC 86	bike lanes	I-40 to Oakdale dr. in Hillsborough	
16	Western Bypass	bike lanes	NC 86 to NC 57	
17	Old Durham-Chapel Hill Rd.	bike lanes	US 15-501 to Durham Co. Line	STP DA
18	South Columbia St.	bike lanes	US 15-501 to Manning Dr.	U-624
19	Hillsborough Rd.	bike lanes	Lorraine St. to Old Fayetteville Rd. and along Old Fayetteville Rd. to NC 54	U-3100
20	Weaver Dairy Rd.	bike lanes	NC 86 to Erwin Road	U-3306
21	Homestead Rd.	bike lanes	NC 86 to High School Rd.	U-2805
22	Smith Level Rd.	wide paved shoulders	Rock Haven Rd to NC 54 Bypass	U-2803
23	Booker Creek	bike path	Tadley Dr. to Franklin St.	E-3807

(57)

Moderate Bike

This bicycle alternative reflects the current trend in the funding and construction of bicycle facilities. The projects in this layer have been identified by local staff, the Durham Open Space & Trails Bicycle Committee, and by the general public.

Chatham County

	Project	Facility Type	Project Limits	TIP #
1	NC 751	bike lanes		
2	American Tobacco Tr.	bike path		
3	Farrington Rd.	bike lanes	Mt. Carmel Church Rd. to Farrington Mill Rd.	

Durham County

	Project	Facility Type	Project Limits	TIP #
4	NC 54	bike lanes	Orange Co. Line to the Wake Co. Line	
5	NC 751	bike lanes	Chatham Co. Line to Cornwallis Rd.	
6	Cornwallis Rd.	bike lanes	Orange Co. Line to Miami Blvd.	
7	Chapel Hill Rd.	bike lanes	University Dr. via Anderson and Broad to Broad St. at Carver St.	
8	Rose of Sharon Rd.	bike lanes	Cole Mill Rd. via Carver St. to Old Oxford Rd. at Hamlin Rd.	
9	Cole Mill Rd.	bike lanes	Hillsborough Rd. to the Orange Co. Line	
10	Holloway St.	bike lanes	Roxboro St. to the Wake Co. Line	
11	Pettigrew St. and Blackwell St.	bike lanes	S. Briggs Ave. and Riddle Rd. to S. Alston Ave. at Alexander Dr.	
12	Pope Rd.	bike lanes	Ephesus Church Rd. at the Orange Co. Line to Old Durham-Chapel Hill Rd.	
13	Garrett Rd.	bike lanes	NC 751 to Old Durham-Chapel Hill Rd.	
14	Leon St.	bike lanes	Broad St. via Glendale Ave. and Washington St. to Foster St. and Chapel Hill St.	
15	Alston Ave. Ext.	bike lanes	Holloway St. to Old Oxford Rd./Roxboro St.	
16	Woodcroft Pkwy	bike lanes	Barbee Rd. to Carpenter Fletcher Rd.	
17	Davis Dr.	wide outside lanes	Wake Co. Line to I-40	
18	Hillandale Rd.	wide outside lanes	I-85 to Carver St.	
19	Umstead Rd.	bike lanes	Cole Mill Rd. to Guess Rd.	

Orange County

	Project	Facility Type	Project Limits	TIP #
19	NC 86	4' paved shoulders	I-40 to US 70 Business	
20	Old NC 10	4' paved shoulders	NC 86 to US 70	
21	Old NC 86	bike lanes	Old Fayetteville Rd. to Eubanks Rd.	
22	Old NC 86	wide outside lanes	Oakdale Dr. to US 70 Business	
23	Elizabeth Brady Rd.	bike lanes	US 70 Business to St. Mary's Rd.	
24	Western Bypass	wide outside lanes	US 70 Bypass to NC 57	
25	New Hope Church Rd.	4' paved shoulders	NC 86 to Old NC 10	
26	Eubanks Rd.	bike lanes	Old NC 86 to NC 86	
27	Estes Dr.	bike lanes	US 15-501 to Greensboro St.	
28	Erwin Rd	bike lanes	Weaver Dairy Rd. to Cornwallis Rd.	
29	New Facility	bike lanes	Seawell School Rd. to Homestead Rd.	
30	Rogers Rd.	bike lanes	Homestead Rd. to Eubanks Rd.	
31	Smith Level Rd.	4' paved shoulders	Morgan Creek Bridge to Rock Haven Rd.	
32	Mt. Carmel Church Rd.	bike lanes	Chatham Co. Line to Pittsboro Rd.	
33	Manning Dr.	bike lanes	NC 54 Bypass to S. Columbia St.	
34	Raleigh Rd.	bike lanes	S. Columbia St. to Burning Tree Rd.	
35	Ephesus Church Rd.	bike lanes	US 15-501 to Farrington Rd.	
36	Weaver Dairy Rd Ext.	bike lanes	Horace Williams property to NC 86	
37	Culbreth Rd.	bike lanes	Smith Level Rd. to US 15-501 South	

(52)

Regional Bicycle Plan (Intensive Bike)

This alternative reevaluates the 1993 DCHC Regional Bicycle Plan. Please refer to the Plan document for the project descriptions. The Regional Bike Plan did not specify the design concept and scope. For purposes of this alternative, the routes will be modeled as 4 ft. bike lanes.

Chatham County

	Project	***Facility Type***	***Project Limits***	***TIP #***
	NONE		-	

Durham County (Urban Routes in City of Durham)

	Project	***Facility Type***	***Project Limits***	***TIP #***
1	Alexander Dr.	Bicycle Lane	T.W. Alexander Dr. from NC 54 to S. Miami Blvd.	
2	Alston Ave.	Bicycle Lane	Includes the proposed Alston Ave. extension from Holloway St. to Roxboro Rd. and Old Oxford Highway , and the existing Alston Ave. from the Holloway St. to the Durham Co. Line.	
3	American Tobacco Trail	Bicycle Lane	The American Tobacco Trail is a proposed off road bicycle trail that will be constructed along the abandoned Norfolk Southern Railroad corridor from its terminus in downtown Durham (at the proposed new Durham Bulls Ballpark) to the Chatham County Line.	
4	Angier Ave.	Bicycle Lane	Angier Ave. from Lynn Rd. Extension to S. Miami Blvd.	
5	Barbee Chapel Rd.	Bicycle Lane	Barbee Chapel Rd. from NC 54 to Stagecoach Rd.	
6	Broad/Sunset/ Maryland St.	Bicycle Lane	Broad St. from Carver St., connecting with Sunset Ave. near Guess Rd. intersection, connecting to Club Blvd. via Maryland Ave.	
7	Campus Dr.	Bicycle Lane	Campus Dr. from Academy Rd. to Duke University East Campus.	
8	Carver St.	Bicycle Lane	Carver St. from Cole Mill Rd. and Rose of Sharon Rd. to Old Oxford Rd. This route should include bicycle improvements to short segment of Rose of Sharon Rd linking Carver St. and Cole Mill Rd.	
9	Club Blvd./E. Greer/ Ferrel Road	Bicycle Lane	Traveling west to east, this route will follow Club Blvd. From Hillandale Rd. to East Greer St., Ferrel Rd. connection back to East Greer St., and then travel on East Greer St. ending at Red Mill Rd. (connection to county bicycle route).	
10	Cole Mill Rd.	Bicycle Lane	Cole Mill Road from Eno River State Park to Hillsborough Road (Bus. US 70).	
11	Cornwallis Rd.	Bicycle Lane	Cornwallis Rd. from Pickett Road to S. Miami Blvd. In Research Triangle Park.	
12	Davis Dr.	Bicycle Lane	Davis Dr. from Cornwallis Rd. to Hopson Rd.	
13	Downtown Durham Routes	Bicycle Lane	W. Main St. from Hillsborough Rd. to the Downtown Loop, the Downtown Loop in its entirety, and east E. Main St. from the Down town Loop to Alston Ave.	
14	Downtown Route to East Durham	Bicycle Lane	Traveling west to east, this route will follow Liberty St. From the downtown loop to Herbert St., Herbert St. From Liberty St. to Holloway St. to Junction Rd., Junction Rd. to Ross Rd., to Chandler Rd., north on	

(53)

			Clayton Rd. to Freeman Rd., ending at Eno Drive. (On road improvements are not recommended for non thoroughfare residential streets along this route.)
15	Durham Inner Route (proposed)	Bicycle Lane	Includes Cornwallis Rd.-Riddle Rd. Connector (proposed), Riddle Rd., Glover Rd., Lynn Road connector (proposed), Lynn Road, Midland Terrace and Midland Terrace Extension (proposed).
16	Eno Drive (Proposed)	Bicycle Lane	Eno Drive from US 70 Business (west Durham) to US 70 at the Wake Co. Line (east Durham).
17	Erwin Rd. - to Chapel Hill	Bicycle Lane	Erwin Rd. from NC 751 to the Orange Co. Line.
18	Erwin Rd. - Duke Campus Segment	Bicycle Lane	Erwin Rd. from Ninth St. to NC 751 (Cameron Blvd.)
19	Fayetteville St.	Bicycle Lane	Fayetteville St. from Cornwallis Rd. to Main St.
20	Fulton St. / Hillandale Rd.	Bicycle Lane	Hilllandale Rd. from Carver St. to Hillsborough Rd., Fulton St. from Hillsborough Rd. to Erwin Rd.
21	Guess Rd.	Bicycle Lane	Guess Rd. from Latta Rd. to Carver St.
22	Guthrie Ave./ Briggs Ave.	Bicycle Lane	Guthrie Ave. from Liberty St. to Angier Ave., and Briggs Ave. from Angier Ave. to So-Hi Dr. (joins Ed Cook Alignment). This connector route should include bicycle improvements to short route segment on Angier Ave. between Guthrie Ave. and Briggs Ave.
23	Hillsborough Rd.	Bicycle Lane	Hillsborough Rd. from Cole Mill Rd. to W. Main St.
24	Hopson Rd.	Bicycle Lane	Hopson Rd. from NC 751 to NC 54 (includes proposed extensions of Hopson Rd).
25	Latta Rd.	Bicycle Lane	Latta Road from Guess Road to Roxboro Road.
26	SW Durham Dr.. / Farrington Rd	Bicycle Lane	Proposed Laurel Dr. from NC 54 to Farrington Rd., and Farrington Rd. to Durham-Chapel Hill Rd.
27	Lumley Rd.	Bicycle Lane	Lumley Rd. from S. Miami Blvd. to the Wake Co. Line.
28	Martin Luther King , Jr. Pkwy (proposed)	Bicycle Lane	proposed Martin Luther King, Jr. Pkwy from University Dr. to Cornwallis Rd.
29	Massey Chapel Rd / Barbee Rd	Bicycle Lane	Massey Chapel Rd from NC 751 to Fayetteville Rd., and Barbee Rd. from Fayetteville Rd. to Woodcroft Pkwy.
30	Mineral Springs Rd./ Sherron Rd.	Bicycle Lane	Mineral Springs Rd. from Miami Blvd. to Sherron Rd., and Sherron Rd. from Minerals Springs Rd. to Eno Dr.
31	Morris St./ Washington St./ Leon St.	Bicycle Lane	The route includes Morris Street from the Downtown Loop to Washington Street, following Washington Street to Leon Avenue, following Leon Avenue to Broad St..
32	Ninth St. (Bus. US 70)	Bicycle Lane	Ninth St. from Club Blvd. to Main St.
33	NC 54	Bicycle Lane	NC 54 from Greenwood Rd. in Chapel Hill to Page Rd. interchange (east of Research Triangle Park).
34	NC 751: US 70 to University Dr.	Bicycle Lane	NC 751 from the US 70 (Hillsborough Rd.) to University Dr. Includes Cameron Blvd. and Academy Rd.
35	NC 751: Hope Valley Rd.	Bicycle Lane	Hope Valley Rd. from University Dr. to NC 54.
36	NC 751: NC 54 to Chatham Co. Line	Bicycle Lane	NC 751 from NC 54 to Chatham Co. Line.
37	Old Oxford Hwy	Bicycle Lane	Old Oxford Hwy from Roxboro St. to Eno Dr.
38	Pickett Rd.	Bicycle Lane	Pickett Rd. from Erwin Rd. to Cornwallis Dr.
39	Roxboro Rd. (US 501)	Bicycle Lane	Short segment of Roxboro Rd. from Old Oxford Rd. to Carver St.
40	Stadium Dr./ Olympic Ave.	Bicycle Lane	Stadium Dr. from Eno Drive to Olympic Ave., and Olympic Ave. to Roxboro St.

41	Stagecoach Rd.	Bicycle Lane	Stagecoach Rd. from Farrington Rd. to NC 751.
42	So-Hi / Ellis / NE Pkwy	Bicycle Lane	Traveling east to west, this route will follow Ellis Rd. from S. Miami Blvd. to So-Hi Dr., then follow So-Hi Dr. to the proposed North-East Creek Pkwy, and follow N-East Creek Pkwy to Cornwallis Rd.
43	S. Miami Blvd.	Bicycle Lane	S. Miami Blvd. from US 70 to NC 54.
44	S. Roxboro St. Ext.	Bicycle Lane	S. Roxboro St. Ext. from Cornwallis Rd. to Hope Valley Rd.
45	Umstead/Enterprise/ Forest Hills	Bicycle Lane	Follows Umstead St. from Fayetteville St. to Enterprise St., Enterprise St. to Forest Hills Blvd., and then Forest Hills Blvd. to University Dr.
46	University Dr./ Durham-Chapel Hill Rd.	Bicycle Lane	Lakewood Rd. / University Dr. from Blackwell St. to Garret Rd., and Old Durham-Chapel Hill Rd. from Garret Rd. to US 15-501 (in Chapel Hill).
47	Woodcroft Pkwy	Bicycle Lane	Woodcroft Pkwy from Hope Valley Rd. to Alston Ave.
48	US 15-501 Corridor	Bicycle Lane	US 15-501 Corridor (Chapel Hill-Durham Blvd.) from Old Durham-Chapel Hill Rd. to Academy Rd. (NC 751) in Durham.
49	Blackwell St.	Bicycle Lane	Blackwell St. from Lakewood Dr. to the Downtown Loop.

Orange County (Urban Routes in Town of Chapel Hill)

	Project	***Facility Type***	***Project Limits***	***TIP #***
50	Booker Creek Road / Old Oxford Road	Bicycle Lane	Traveling north to south, this route follows Booker Creek Road from Honeysuckle Road to Old Oxford Road, and Old Oxford Road to Erwin Road.	
51	Boundary Street	Bicycle Lane	Boundary Street from Country Club Road to Rosemary Street.	
52	Burning Tree Drive / Pinehurst Drive	Bicycle Lane	Burning Tree Drive from NC 54 to Pinehurst Drive, and Pinehurst Drive to Ephesus Church Road.	
53	Cameron Avenue	Bicycle Lane	Cameron Avenue from Pittsboro Street to Raleigh Street	
54	Caswell / Curtis / Lake Shore / Honeysuckle / Sedgefield Drive	Bicycle Lane	Traveling from south to north, this route follows Caswell Road from Estes Drive to Curtis Road, Curtis Road to Lake Shore Drive, Lake Shore to Honeysuckle Road, and Honeysuckle to Sedgefield Drive, ending at Weaver Dairy Road.	
55	Culbreth Road	Bicycle Lane	Culbreth Road from Smith Level Road to US 15-501 South.	
56	Elliot Road	Bicycle Lane	Elliot Road from Curtis Road to East Franklin Street.	
57	Ephesus Church Road	Bicycle Lane	Ephesus Church Road from Fordham Blvd. to King Road.	
58	Erwin Road	Bicycle Lane	Erwin Road from 15-501 to Durham County Line	
59	Estes Drive	Bicycle Lane	Estes Drive from Carrboro city limits 15-501 Bypass.	
60	Finley Golf Course Road / Mason Farm Road	Bicycle Lane	Traveling north to south, this route follows Finley Golf Course Road to Mason Farm Road, and Mason Farm Road to Fordham Blvd.	
61	Fordham Blvd. (US 15-501 Bypass)	Bicycle Lane	15-501 Bypass from SR1838 (old Durham/Chapel Hill Road) to Culbreth Road.	
62	Franklin Street	Bicycle Lane	Franklin Street from Boundary Street to Durham Chapel Hill Road.	
63	Homestead Road	Bicycle Lane	Homestead Road from Airport Road to Old NC 86.	
64	Manning Drive	Bicycle Lane	Manning Drive from Fordham Blvd. to South Columbia Street.	
65	Mason farm Road	Bicycle Lane	mason farm Road from Fordham Blvd. to South Columbia Street.	

55

66	Merritt Mill Road	Bicycle Lane	Merritt Mill Road from Cameron Avenue to the NC 54 Bypass.
67	Mount Carmel Church Road	Bicycle Lane	Mount Carmel Church Road from US 15-501 South to the Chatham County line.
68	NC 86 (Airport Road)	Bicycle Lane	NC 86 north from Columbia Street to Whitfield Road. Possibility of improvements to NC 86 from Whitfield Road to Hillsborough should be examined.
69	Old Durham-Chapel Hill Road	Bicycle Lane	Old Durham Chapel Hill Road from US 15-501 to Durham County line.
70	Piney Mountain Road	Bicycle Lane	Piney Mountain Road from Airport Road to Weaver Dairy Road via Cedar Hills Circle.
71	Pittsboro Street	Bicycle Lane	Pittsboro Street from Cameron Avenue to South Columbia Street.
72	Rosemary Street	Bicycle Lane	Rosemary Street from Boundary Street to Carrboro City limits.
73	Seawell School Road	Bicycle Lane	Seawell School Road from Homestead Road to Estes Drive Extension.
74	Smith Level Road	Bicycle Lane	Smith Level Road from NC 54 Bypass to Culbreth Road.
75	South Columbia Street	Bicycle Lane	South Columbia Street from Airport Road to US 15-501 Bypass.
76	South Raleigh Road (NC 54)	Bicycle Lane	NC 54 from Country Club Road to the Durham County line.
77	Sunrise Drive	Bicycle Lane	Sunrise Drive from Whitfield Road to Weaver Dairy Road.
78	Umstead Drive	Bicycle Lane	Umstead Drive from the Estes Drive Extension to Airport Road (NC 86).
80	US 15-501Corridor (Chapel Hill - Durham Blvd.)	Bicycle Lane	US 15-501 Corridor (Chapel Hill-Durham Blvd.) from the Old Durham-Chapel Hill Road to Academy Road (NC 751) in Durham.
81	US 15-501 South	Bicycle Lane	US 15-501 from 54 Bypass to the Chatham County line.
82	Weaver Dairy Road	Bicycle Lane	Weaver Dairy Road from NC 86 to Erwin Road.
83	Bolin Creek Bikeway	Bicycle Lane	This proposed off-road trail extends from the Chapel Hill Police Department on NC 86 along Bolin Creek, passes under East Franklin Street, and terminates at the Estes Drive Community Center.
84	Booker Creek Bikeway	Bicycle Lane	This proposed off-road trail extends from Lakeshore Lane in the north to Pinehurst Drive in the south.

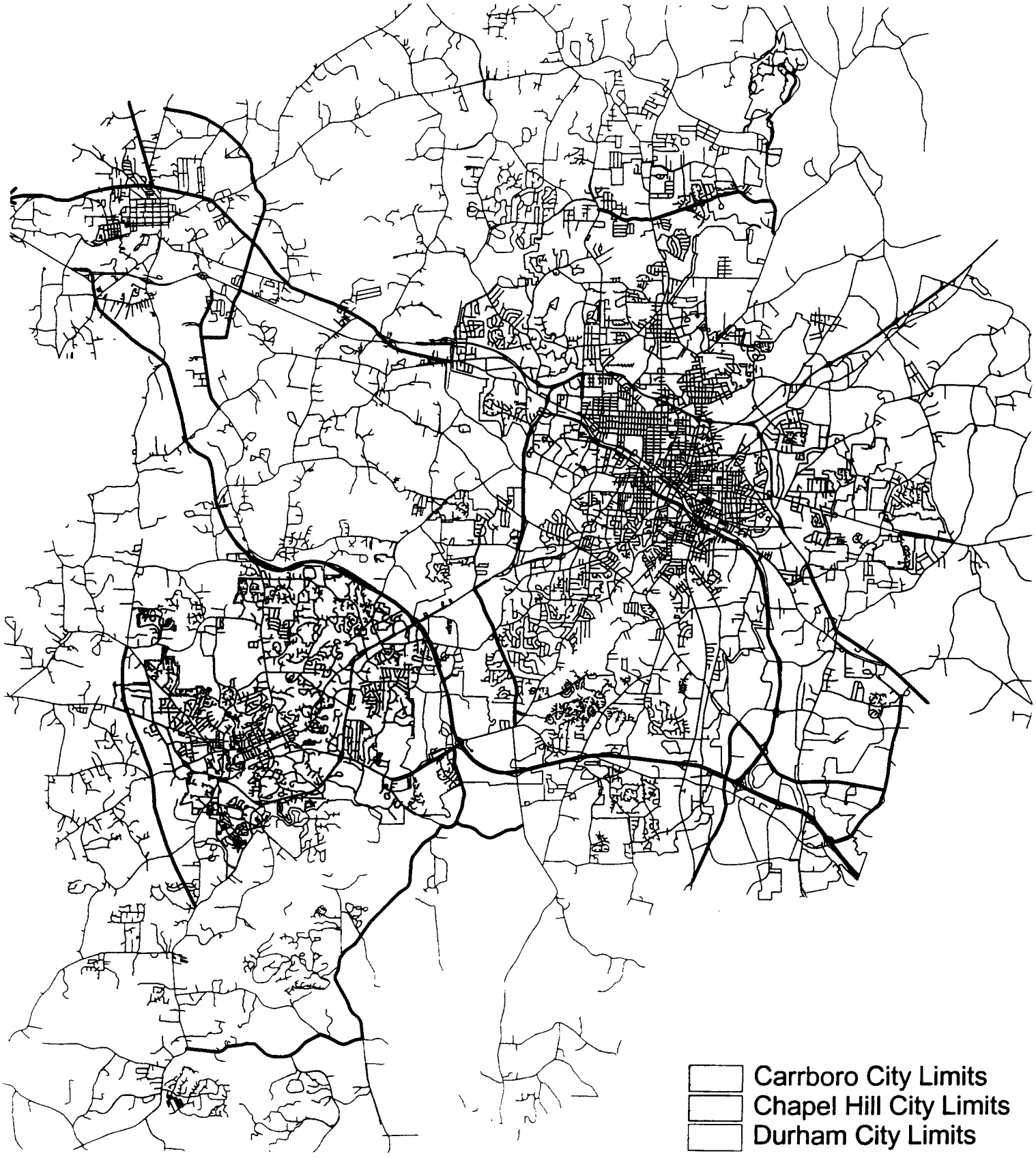
56

Sidewalk Infill/Connectivity (MOD PED)

This alternative layer is designed to identify gaps in the pedestrian system and target areas for connectivity. The mapping is not yet available for this alternative, but will be considered in the Plan development.

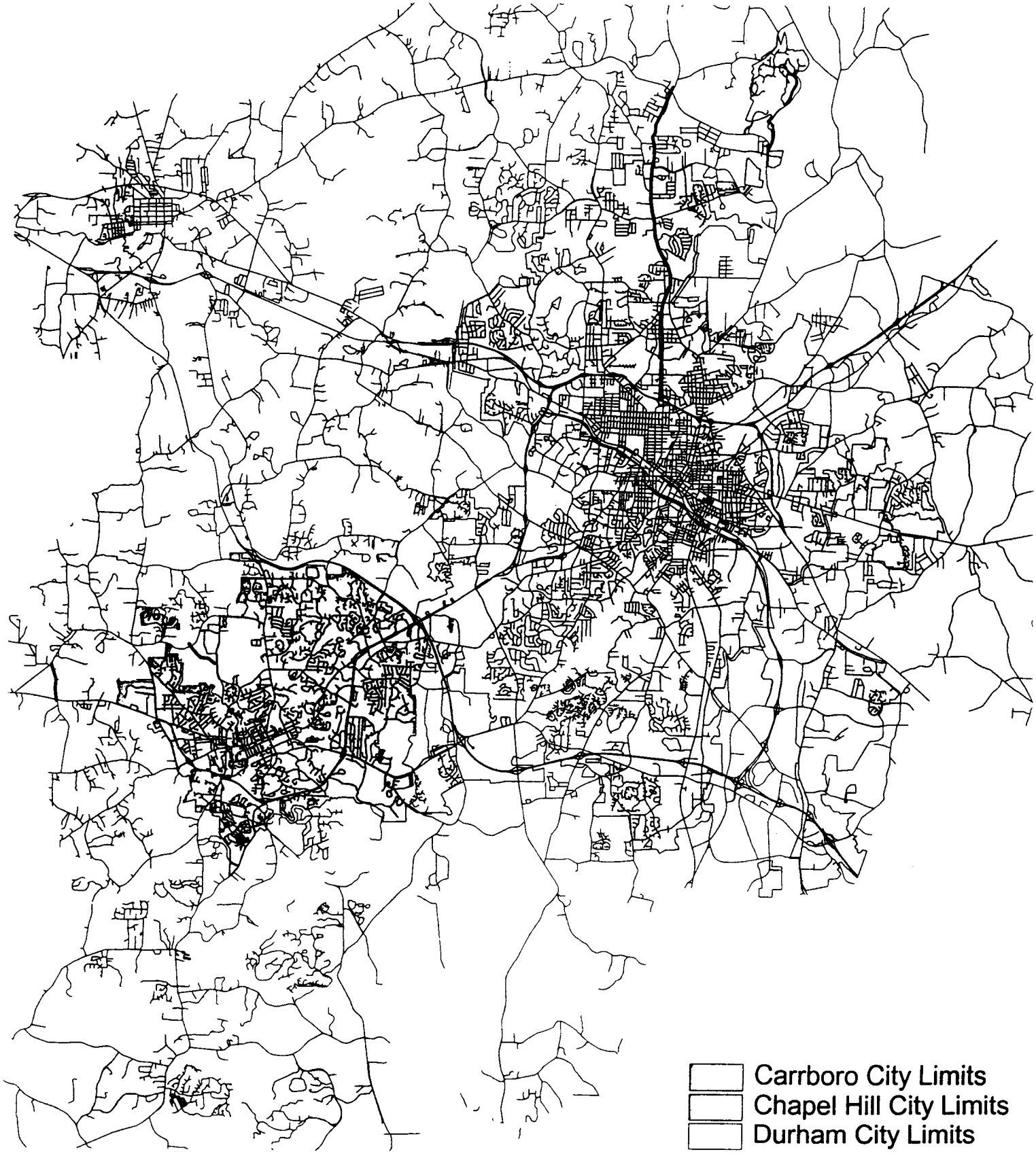
2025 DCHC Transportation Plan

MODERATE 1 HIGHWAY PROJECTS



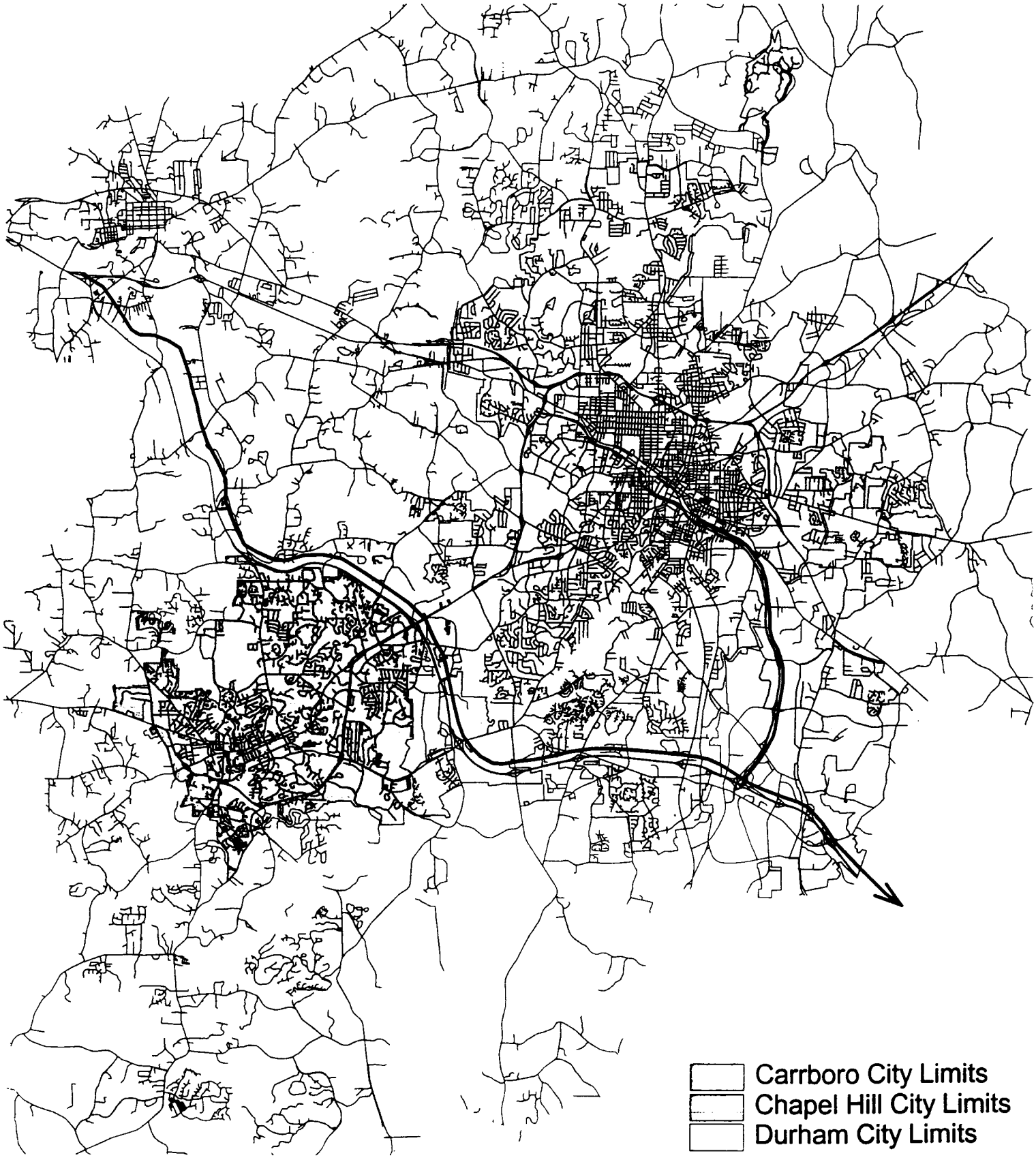
2025 DCHC Transportation Plan

MODERATE 2 HIGHWAY PROJECTS



2025 DCHC Transportation Plan

INTENSIVE - HOV HIGHWAY PROJECTS



2025 DCHC Transportation Plan

INTENSIVE HIGHWAY PROJECTS

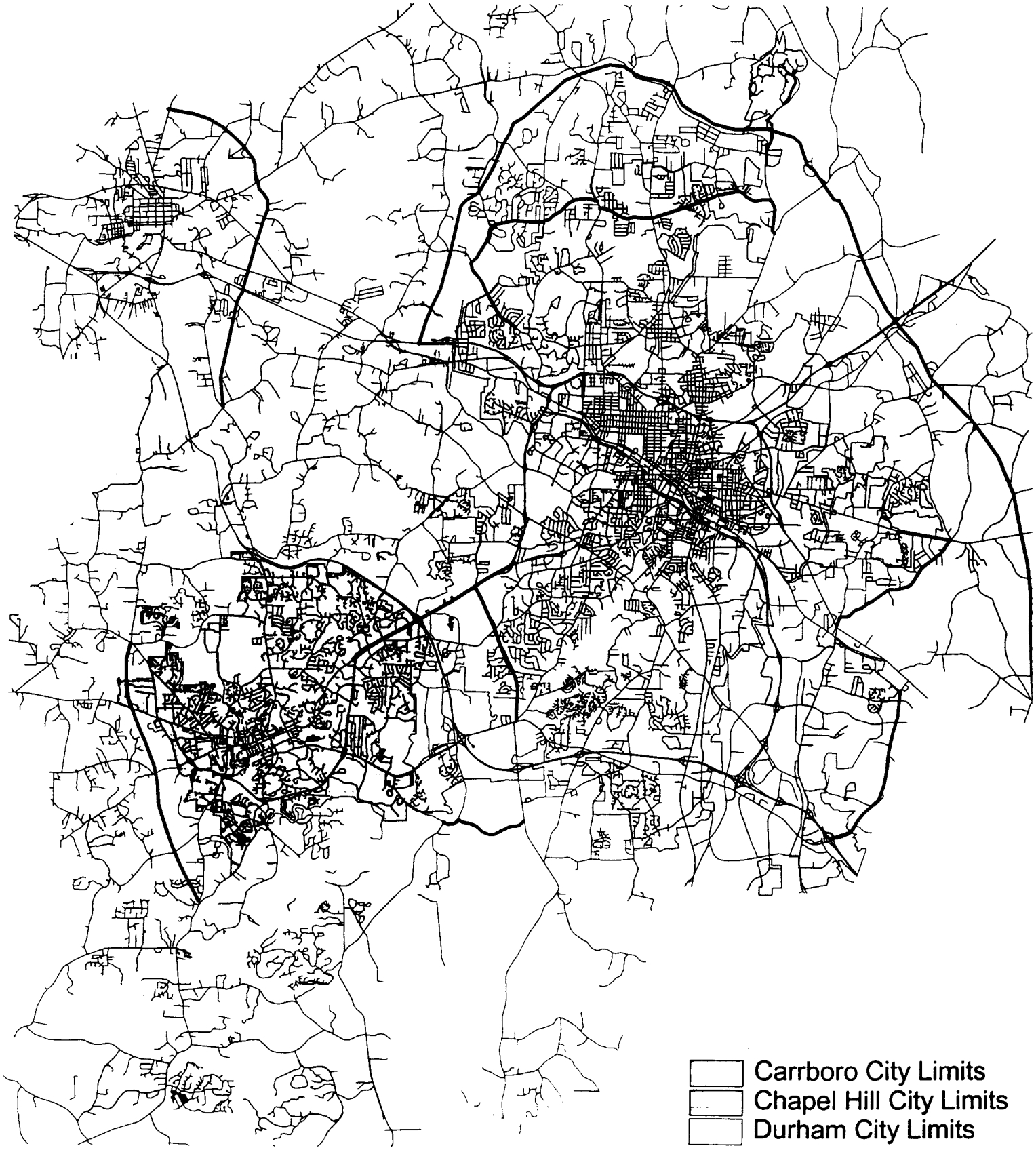


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Table 1

2025 DCHC Transportation Plan - Tier 2 Alternative Evaluation

Performance Measures

ATTACHMENT 2

Criteria	1995	Base 2025	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9	Alt 10	Alt 11	Alt 12	Alt 13	Alt 14
HIGHWAY																
MPO Population	313434	507335														
Total Vehicle Miles of Travel (VMT)	8,055,830	20,180,440	18,666,503	18,069,279	16,133,858	15,592,821	15,515,529	15,104,858	15,117,168	15,992,191	15,639,841	15,603,113	15,651,142	15,550,442	16,014,995	12,039,045
VMT per Capita	26	40	37	36	32	31	31	30	30	32	31	31	31	31	32	24
Total Vehicle Hours of Travel (VHT)	185,143	465,920	434,871	422,100	371,608	356,951	356,876	345,307	348,937	357,007	347,329	347,916	349,137	332,522	367,084	257,458
VHT per Capita	0.59	0.92	0.86	0.83	0.73	0.70	0.70	0.68	0.69	0.70	0.68	0.69	0.69	0.66	0.72	0.51
Average Speed	45.2	33.8	33.9	33.9	34.4	36.2	39.6	40.3	39	35	35.7	35.7	35.2	35.7	34.6	44.4
Percent Network Experiencing Congestion																
Freeway	38.34	78.7	69.6	65.5	63.0	27.9	25.7	13.1	18.3	53.0	46.4	51.0	40.1	37.7	56.9	4.9
Arterial	27.27	69.5	67.0	60.3	58.4	26.2	23.8	12.4	14.4	54.8	45.5	43.9	52.0	37.6	54.8	6.5
Overall	19.33	53.3	49.8	44.4	41.0	29.1	17.9	12.4	15.5	33.1	28.3	29.2	31.7	22.9	34.5	8.9
MODE-SPLIT																
Percent Mode Choice - All Trips																
Drive alone (single occupant vehicle -SOV)		78.8%	75.52	75.97	75.41	75.36	75.36	65.46	66.93	72.22	64.49	63.57	67.02	59.68	71.31	49.27
Share ride (carpool)		18.0%	19.06	19.06	19.06	19.11	19.11	29	27.55	19.28	24.88	24.87	23.66	26.73	21.45	33.94
Transit		1.8%	2.14	1.78	2.14	2.12	2.12	2.13	2.11	4.35	5.55	6.41	4.86	7.74	3.09	10.12
Bike & Pedestrian		1.4%	3.28	3.19	3.39	3.41	3.41	3.41	3.41	4.15	5.08	5.15	4.46	5.85	4.15	6.67
Percent Mode Choice - Work Trips																
Drive alone (single occupant vehicle -SOV)		88.5%	85.68	86.71	85.68	85.55	85.55	75.62	78.41	81.41	73.61	72.88	76.33	68.1	80.1	52.74
Share ride (carpool)		8.8%	10.53	10.53	10.53	10.59	10.59	20.35	17.83	11.06	15.55	15.55	14.27	17.83	12.44	24.0
Transit		1.96%	2.59	1.96	2.59	2.59	2.59	2.7	2.43	5.38	7.82	8.44	7	10.26	5.35	18.88
Bike & Pedestrian		0.70%	1.20	0.80	1.20	1.27	1.27	1.33	1.33	2.15	3.02	3.13	2.40	3.81	2.11	4.18
TRANSIT																
Average weekday Transit Ridership																
CHAPEL HILL TRANSIT - CHT	13228	27550	28448	27815	28491	29218	29264	29467	29478	30323	31798	32179	30617	33614	29552	39518
DURHAM AREA TRANSIT - DATA	10740	52400	54989	52795	55105	55415	55619	55909	55874	57630	61733	60902	58607	62524	56523	74115
TRIANGLE TRANSIT AUTHORITY - TTA	1505	39610	40093	39701	40450	41216	41282	41575	41590	42385	44442	45750	43753	46867	42489	49366
Rail Ridership			28844	27414	28900	29051	29089	29385	29173	29884	38793	38700	36286	51035	29957	66810
TOTAL COST ESTIMATES FOR ALTS ($000)		$ 1,413,187	$ 1,747,497	$ 2,623,337	$ 2,623,337	$ 3,743,345	$ 3,864,303	$ 4,125,292	$ 4,155,457	$ 2,828,902	$ 3,237,770	$ 3,253,115	$ 3,249,655	$ 3,662,345	$ 3,484,461	$ 7,017,574
			Base Highway and Moderate Transit	Moderate Highway & Base Transit	Moderate Highway and Moderate Transit	Moderate Highway +I and Moderate Transit	Moderate Highway + I & +2 & Moderate Transit	Moderate Highway + I & +2 & HOV & Moderate Transit	Moderate Highway + I & +2 & HOT & Moderate Transit	Moderate Highway & Intensive Transit	Moderate Highway & Intensive Transit & US 15501 Fixed Guideway (with airport connection)	Moderate Highway & Intensive Transit & NC 54 Fixed Guideway (with airport connection)	Moderate Highway & Intensive Transit & I-40 Fixed Guideway (with airport connection)	Moderate Highway & Intensive Transit & US 15501 + NC 54 Fixed Guideway	Moderate Highway & Moderate Transit & US 15501 + NC 54 Fixed Guideway	Intensive Highway with HOV & Intensive Transit & Intensive Fixed Guideway

Table 2

2025 DCHC Transportation Plan - Tier 2 Alternative Evaluation

COST ESTIMATES

	Criteria	1995	Base 2025	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9	Alt 10	Alt 11	Alt 12	Alt 13	Alt 14
	COST ESTIMATES (Thousand Dollars)																
1	***Highway***																
	Improvement																
	Maintenance		$857,920	$857,920	$1,733,760	$1,733,760	$2,853,768	$2,974,726	$3,205,715	$3,235,880	$1,733,760	$1,733,760	$1,733,760	$1,733,760	$1,733,760	$1,733,760	$4,377,282
	Total Highway Cost Estimates		$857,920	$857,920	$1,733,760	$1,733,760	$2,853,768	$2,974,726	$3,205,715	$3,235,880	$1,733,760	$1,733,760	$1,733,760	$1,733,760	$1,733,760	$1,733,760	$4,377,282
2	***Transit***																
	Bus Capital Cost		$38,990	$67,825	$67,825	$67,825	$67,825	$67,825	$67,825	$67,825	$98,790	$99,846	$99,846	$99,805	$102,254	$70,118	$144,330
	Bus Operating & Maintenance		$127,500	$252,000	$252,000	$252,000	$252,000	$252,000	$252,000	$252,000	$396,600	$398,770	$398,770	$398,770	$399,950	$254,202	$680,000
	Total Bus Cost		$166,490	$319,825	$319,825	$319,825	$319,825	$319,825	$319,825	$319,825	$495,390	$498,616	$498,616	$498,575	$502,204	$324,320	$824,330
	Rail Capital		$212,432	$212,432	$212,432	$212,432	$212,432	$212,432	$222,432	$222,432	$222,432	$538,074	$543,419	$540,000	$859,061	$859,061	$986,987
	Rail Operating & maintenace		$176,345	$176,345	$176,345	$176,345	$176,345	$176,345	$196,345	$196,345	$196,345	$286,345	$296,345	$296,345	$386,345	$386,345	$620,000
	Total Rail Cost Estimate		$388,777	$388,777	$388,777	$388,777	$388,777	$388,777	$418,777	$418,777	$418,777	$824,419	$839,764	$836,345	$1,245,406	$1,245,406	$1,606,987
	Total Transit Cost Estimate		$555,267	$708,602	$708,602	$708,602	$708,602	$708,602	$738,602	$738,602	$914,167	$1,323,035	$1,338,380	$1,334,920	$1,747,610	$1,569,726	$2,431,317
4	***Non Motorized Transportation***																
	Bike Facilities			$64,600	$64,600	$64,600	$64,600	$64,600	$64,600	$64,600	$64,600	$64,600	$64,600	$64,600	$64,600	$64,600	$64,600
	Sidewalks & Pedestrian Walkways			$18,700	$18,700	$18,700	$18,700	$18,700	$18,700	$18,700	$18,700	$18,700	$18,700	$18,700	$18,700	$18,700	$18,700
	Total			$83,300	$83,300	$83,300	$83,300	$83,300	$83,300	$83,300	$83,300	$83,300	$83,300	$83,300	$83,300	$83,300	$83,300
5	**TDM**			$45,675	$45,675	$45,675	$45,675	$45,675	$45,675	$45,675	$45,675	$45,675	$45,675	$45,675	$45,675	$45,675	$45,675
6	**ITS/TSM**			$52,000	$52,000	$52,000	$52,000	$52,000	$52,000	$52,000	$52,000	$52,000	$52,000	$52,000	$52,000	$52,000	$80,000
	TOTAL COST ESTIMATES FOR ALTS ($000)		**$1,413,187**	**$1,747,497**	**$2,623,337**	**$2,623,337**	**$3,743,345**	**$3,864,303**	**$4,125,292**	**$4,155,457**	**$2,828,902**	**$3,237,770**	**$3,253,115**	**$3,249,655**	**$3,662,345**	**$3,484,461**	**$7,017,574**
				Base Highway and Moderate Transit	Moderate Highway & Base Transit	Moderate Highway and Moderate Transit	Moderate Highway +1 and Moderate Transit	Moderate Highway + 1 & +2 & Moderate Transit	Moderate Highway + 1 & +2 & HOV & Moderate Transit	Moderate Highway + 1 & +2 & HOT & Moderate Transit	Moderate Highway & Intensive Transit	Moderate Highway & Intensive Transit & US 15501 Fixed Guideway (with airport connection)	Moderate Highway & Intensive Transit & NC 54 Fixed Guideway (with airport connection)	Moderate Highway & Intensive Transit & I-40 Fixed Guideway (with airport connection)	Moderate Highway & Intensive Transit & US 15501 + NC 54 Fixed Guideway	Moderate Highway & Moderate Transit & US 15501 + NC 54 Fixed Guideway	Intensive Highway with HOV & Intensive Transit & Intensive Fixed Guideway	

(42)

2025 TRANSPORTATION PLAN REVENUE FORECAST

A draft summary of the DCHC revenue forecast is presented. The Transportation Equity Act for the 21st Century (TEA 21) requires that long-range transportation plans be financially feasible. The Legislation explicitly mandates that the MPOs' long-range transportation plans include " ... a financial plan that demonstrates how the long-range plan can be implemented, indicates resources from public and private sources that are **reasonably** expected to be made available to carry out the plan, and recommends any innovative financing techniques to finance needed projects and programs, including such techniques as value capture, tolls and congestion pricing."

The subsequent Metropolitan Planning Rules issued by the Federal Highway Administration (FHWA) in 1999 amplify TEA-21 fiscally constrained transportation plan requirement by stating that MPO plans:

"... include a financial plan that demonstrates the consistency of proposed transportation investments with already available and projected sources of revenue. The financial plan shall comprise the estimated revenue from existing and proposed funding sources that can be reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system, over the period of the plan. The estimated revenue by existing source (federal, state, local and private) available for transportation projects shall be determined and any shortfall shall be identified. Proposed new revenue and/or revenue sources to cover shortfalls shall be identified, including strategies for ensuring their availability for proposed investments. Existing and proposed revenue shall cover all forecasted capital operating, and maintenance costs. **All cost and revenue projections shall be based on the data reflecting the existing situation and historical trends.**"

The DCHC Metropolitan Planning Organization (MPO) is adhering to TEA 21 by providing a comprehensive picture of the financing requirements for maintaining and improving the urban area's transportation system. The first step in developing a fiscally constrained Transportation Plan is to determine how much money would potentially be available to sustain and improve proposed transportation system and strategies.

In order to comply with TEA-21 requirements, explicit assumptions had to be made to project revenue source. The major assumptions used to forecast the traditional revenues for the DCHC Transportation Plan are summarized as follows:

1. Existing sources of federal, State, local, and private revenues will continue throughout the Plan horizon (2025).

2. State revenue contributions are expected to continue, with funding levels based on the existing formula.

3. Local sources of revenue, bonds, CIP, impacts, motor registration fees, and car rental for TTA will continue, with growth at inflation rate.

4. TEA-21, due to expire in 2003, will be re-authorized and the State and MPO allocations will reflect past funding levels

Summary of Total Revenue Forecast from Traditional Sources (Federal, State, local and private)

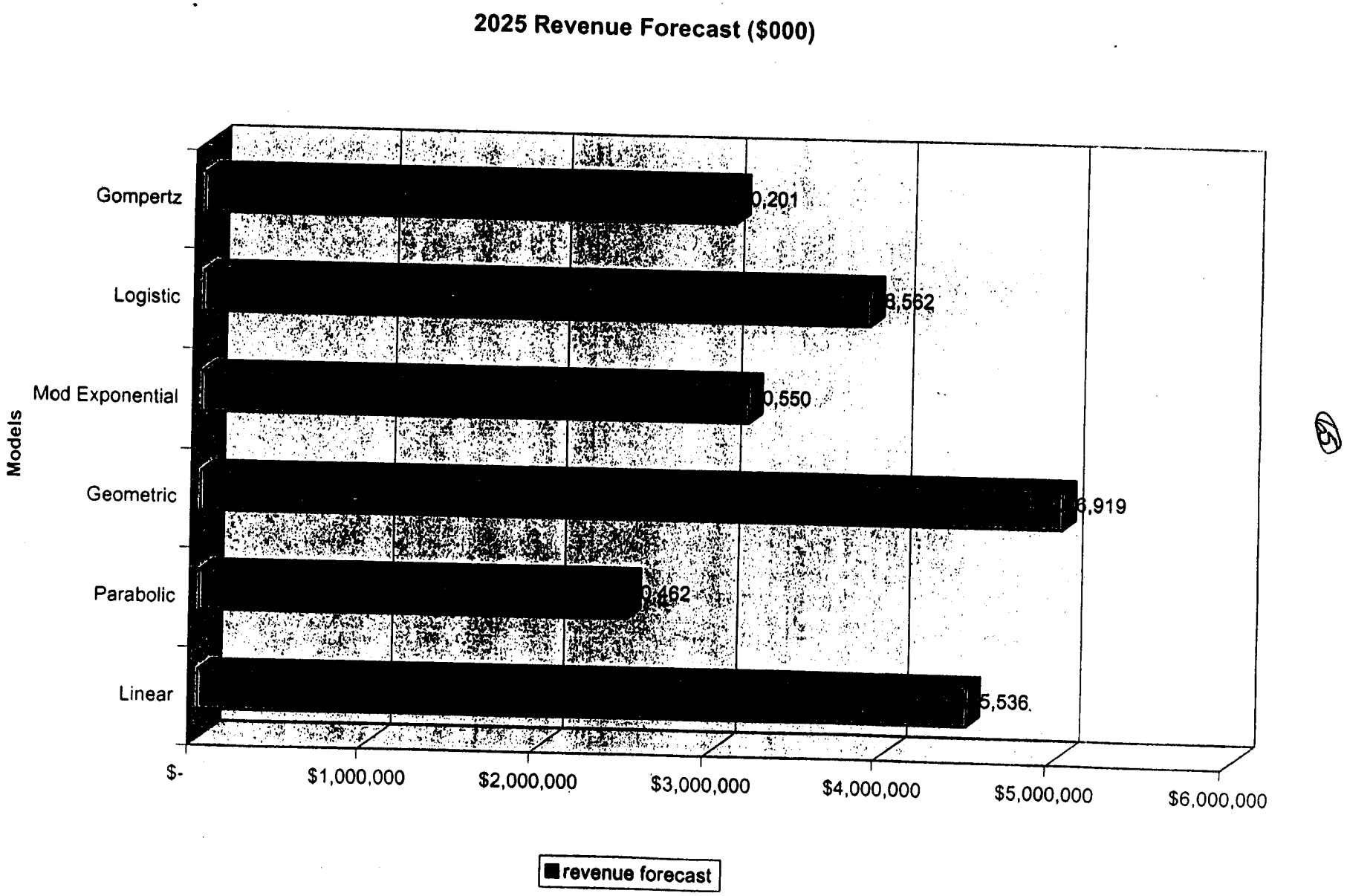
Revenue forecasts were developed using historic trends of traditional funding and the models highlighted below. The table below and the attached graph show the draft total revenue from traditional sources.

Models	2025 Revenue ($000)	
Linear	$	4,475,536
Parabolic	$	2,500,462
Geometric	$	5,016,919
Mod Exponential	$	3,180,550
Logistic	$	3,888,562
Gompertz	$	3,090,201

Forecast of Other Potential Revenue Sources

Other revenue sources examined are

- Sales tax
- Property Tax
- Tolls (value pricing)
- Sin Tax (alcohol beverages & cigarettes)
- Gasoline tax increase


2025 Revenue Forecast ($000)
Models
Gompertz
Logistic
Mod Exponential
Geometric
Parabolic
Linear
$-
$1,000,000
$2,000,000
$3,000,000
$4,000,000
$5,000,000
$6,000,000
revenue forecast

Summary of Revenue Forecasts from Other Sources

Potential New Dedicated Funding Sources

Annual Revenue Estimates (1999 Tax Data)*

Potential Sales Tax Revenue		
	1/2 Percent Tax	1 Percent Tax
Durham /Chapel Hill	$ 19,662,584	$ 39,325,168

Potential Regional Motor Fuels Tax Revenue			
	1/2 Cent Tax	1 Cent Tax	2 Cents Tax
Durham /Chapel Hill	$ 2,047,998	$ 4,095,995	$ 8,191,990

Potential Regional Property Tax Revenue			
	1 Cent Tax per $100	3 Cent Tax per $100	5 Cent Tax per $100
Durham /Chapel Hill	$ 2,058,000	$ 6,174,000	$ 10,290,000

*Estimates are for the two county study area; Durham and Orange counties

Sales and Use Tax Collections and Incremental Revenue Potential (Year 2000 Dollars)			
	2000 to 2005 1%	2005 to 2015 1%	2015 to 2025 1%
Durham	$ 215,707,267	$ 534,536,530	$ 870,703,681
Orange	$ 51,779,099	$ 128,311,949	$ 209,006,644
Total	$ 267,486,366	$ 662,848,478	$ 1,079,710,325

Assumes a 5% annual growth over 25 years.

Assessed Real Property Valuation Data

	Assessed Value of Total Taxable Property	Property Tax Annual Revenue 1 Cent Tax per $100	Property Tax Annual Revenue 3 Cent Tax per $100	Property Tax Annual Revenue 5 Cent Tax per $100
Durham	$ 13,265,000,000	$ 1,326,500	$ 3,979,500	$ 6,632,500
Orange	$ 7,315,000,000	$ 731,500	$ 2,194,500	$ 3,657,500
Total	$ 20,580,000,000	$ 2,058,000	$ 6,174,000	$ 10,290,000

Overview of Funding Sources

An important element of the Financial Plan is planning for transportation needs within the current and expected financial constraints. This section presents a description of current federal, state, and local financial resources.

- **Federal Funding**

The Transportation Equity Act for the 21st Century (TEA 21) was signed into law on June 9, 1998. This six-year transportation authorizing legislation increased funding by forty percent (40%) over the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. TEA 21 authorizes a total $217 billion for transportation, with $198 billion guaranteed ($36 billion for transit). For purposes of this Financial Plan, it is assumed that Congress will maintain its current trend in federal transportation funding over the planning horizon. The federal funding categories on the highway side are: Interstate Maintenance, National Highway System, Bridge, Surface Transportation Program, Congestion Mitigation Air Quality. Bicycle and pedestrian improvements are funded through the Surface Transportation Program. Federal transit funding occurs through formula grants and capital program grants. Federal moneys are distributed to the DCHC urban area through the North Carolina Department of Transportation (NCDOT), with the exception of the Surface Transportation Program Direct Allocation Funds for which the DCHC MPO is directly responsible. North Carolina is a donor state, meaning that under TEA 21 North Carolina is guaranteed to receive a 90.5 % return on the revenue it puts into the Highway Trust Fund via the federal gas tax.

- **State Revenue Sources**

Highway

The State highway budget consists of the Federal Aid Construction Program, the State match from the Highway Fund, and the Intrastate and Urban Loop Programs from the North Carolina Trust Fund. The proceeds from the sale of bonds are also included in the construction budget as of 1998. The Federal Aid and North Carolina Intrastate System funds, which are expended under the Transportation Improvement Program, are distributed throughout the State in accordance with the State's equity formula. For purposes of distribution, counties in North Carolina are grouped into seven regions comprised of two divisions per region. The equity formula is calculated using a factor that is based:

(1) Twenty-five percent (25%) on the estimated number of miles to complete the Intrastate System projects in the region compared to the estimated number of miles to complete the total Intrastate System;
(2) Fifty percent (50%) on the estimated population of the distribution region compared to the total estimated population of the state; and
(3) Twenty-five percent (25%) on the fraction one-seventh, which provides an equal share based on the number of distribution regions.

The DCHC urban area falls under three State funding divisions. Durham County is in Division 5, Orange County is in Division 7, and Chatham County is in Division 8. This inconsistency between federal and State funding boundaries makes it difficult for the DCHC urban area to forecast future revenues.

Transit - Transit 2001/HB 1231

North Carolina's funding for public transportation is among the lowest in the nation. It is currently represents about three percent (3%) of the State's transportation budget. The Transit 2001 Commission provided a number of recommendations on funding desired public transportation improvements.

Bicycle & Pedestrian Program

North Carolina funds bicycle and pedestrian facilities primarily through the distribution of federal Enhancement funds. NCDOT's Bicycle Program imposes an annual funding cap of $300,000 for individual bicycle projects. The State has placed this funding cap to spread its scarce resources among

projects. However, this also serves to limit its ability to fund larger projects. The State's Pedestrian Policy requires a cost sharing arrangement between State and local governments for funding the construction of sidewalks. The policy calls for a 50-50% cost share for urban areas and an 80-20% State-local cost share for smaller communities. NCDOT's Powell Bill Program is another source of revenue that can be utilized for pedestrian facilities. While used principally for street maintenance, municipalities can also use their Powell Bill funds to construct and maintain sidewalks.

- **Local Revenue Sources**

Historical Trend

This section provides historical financial information for expenditures and revenues. The information is provided on a county and municipal basis (and for the urban area where available). The historical expenditures have also been broken down by transportation mode to see where transportation investment has been made in the past. This task was done to examine the urban area's report card on funding transportation alternatives to the automobile. The historical revenues will be used as the basis from which future projections will be made under the current trend financial scenario. The historical financial information is only presented back to 1992. This date coincides with the implementation of the ISTEA legislation which significantly changed the way in which transportation was funded.

- **Historical Expenditures**

The categories of transportation expenditures that this document will consider are highway construction, highway maintenance, transit capital, transit operating and maintenance, and bicycle and pedestrian facility construction.

Highway Construction

The State is the responsible entity for constructing roads outside municipal limits. The State highway system accounts for the vast majority of roads and new road construction in the urban area. The expenditures for highway construction, using federal and State funds, is shown below for the three counties which are located or partially located within the urban area.

Exhibit 1: Highway Construction Expenditures by County
(in thousands)

1992	1993	1994	1995	1996	1997	1998	1999	2000	Annual
14,836	27,460	33,693	30,716	27,150	21,922	21,592	26,205	36,953	26,725
11,757	13,145	18,358	19,906	12,548	11,277	10,607	11,277	11,534	13,379
5,098	5,305	7,972	12,390	18,681	32,752	32,696	40,159	21,307	19,596

the nearest $1000
OT

Highway Maintenance

The maintenance program for the State highway system is funded entirely with State funds and is not subject to the equity formula. The maintenance funds are allocated by the General Assembly for each fiscal year. Therefore, the amount varies from year to year. Two formulas are used for distributing maintenance funds: one for routine maintenance and another for resurfacing. Routine maintenance uses facility categories and road miles, lane miles, and population to allocate maintenance funding. The resurfacing funding formula uses lane miles, population, and pavement condition. These formulas are outlined below.

Routine Maintenance

	Primary	Secondary	Urban
Road Miles		X	
Lane Miles	X		X
Population		X	

Resurfacing

	Primary	Secondary	Urban
Lane Miles	X	X	X
Population	X	X	X
Pavement Condition	X	X	X

The State currently spends about $2100 per lane mile for routine maintenance and $871 per lane mile for resurfacing. However, this funding level represents a shortfall of approximately $705 million over the maintenance needs. According to NCDOT the amount of funding per lane mile that is needed is $2,989 per lane mile for routine maintenance and $1,430 per lane mile for resurfacing. The historical expenditures on highway maintenance are provided below.

Exhibit 2: Highway Maintenance Expenditures by County
(in thousands)

County	1992	1993	1994	1995	1996	1997	1998	Average Annual
Durham	2,737	3,382	3,945	3,280	3,447	3,650		3,407
Orange	3,035	2,706	2,987	3,092	3,546	4,643		3,335
Chatham	3,253	3,818	4,091	3,734	4,698	3,891		3,914

* Rounded to the nearest $1000
Source: NCDOT

- **Historical Revenues**

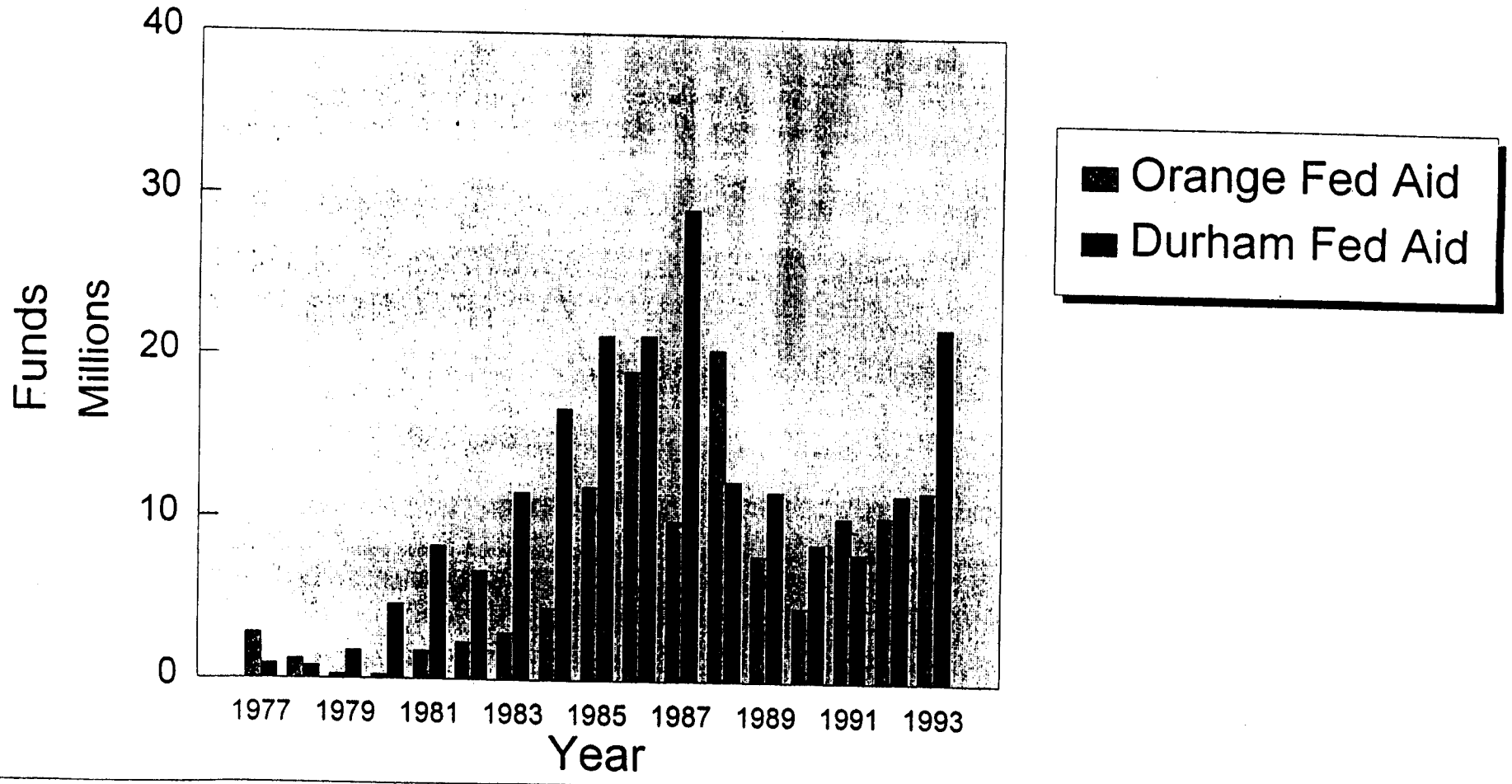
Exhibit : Historical Federal/State Highway Funding Levels
(in thousands)

Fiscal Year	7-Year Funding Levels				Yearly Average				Post-Year Needs			
	Durham*	Orange	Chatham	MPO	Durham*	Orange	Chatham	MPO	Durham*	Orange	Chatham	MPO
1992-98	129,620	12,834	8,580	151,034	18,517	1,833	1,226	21,576	202,465	30,382	16,926	249,773
1993-99	160,854	15,657	18,486	194,997	22,979	2,237	2,641	27,857	158,150	27,588	7,020	192,758
1994-00	193,832	24,674	19,431	237,937	27,690	3,525	2,776	33,991	189,691	30,888	7,020	227,599
1995-01	181,408	22,504	24,122	228,034	25,915	3,215	3,446	32,576	157,600	30,238	5,070	192,908
1996-02	245,957	32,822	29,325	308,104	35,137	4,689	4,189	44,015	244,143	37,500	0	281,643
1997-03	252,517	36,751	35,139	324,407	36,074	5,250	5,020	46,344	266,183	41,850	0	308,033
1998-04	258,342	34,630	68,594	361,566	36,906	4,947	9,799	51,652	257,458	36,850	34,500	328,808

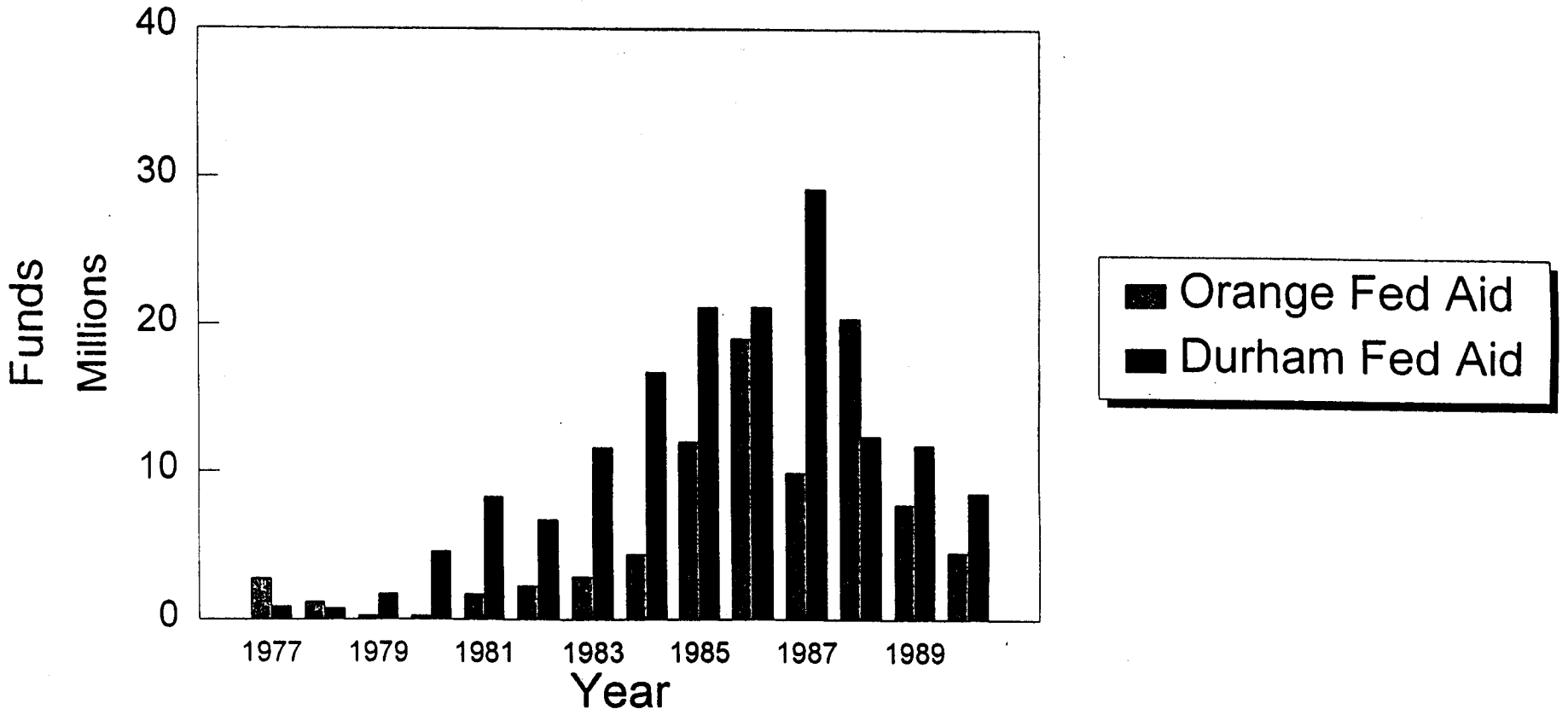
Source: Historical Transportation Improvement Programs
* Includes Loop Funds

APPENDIX

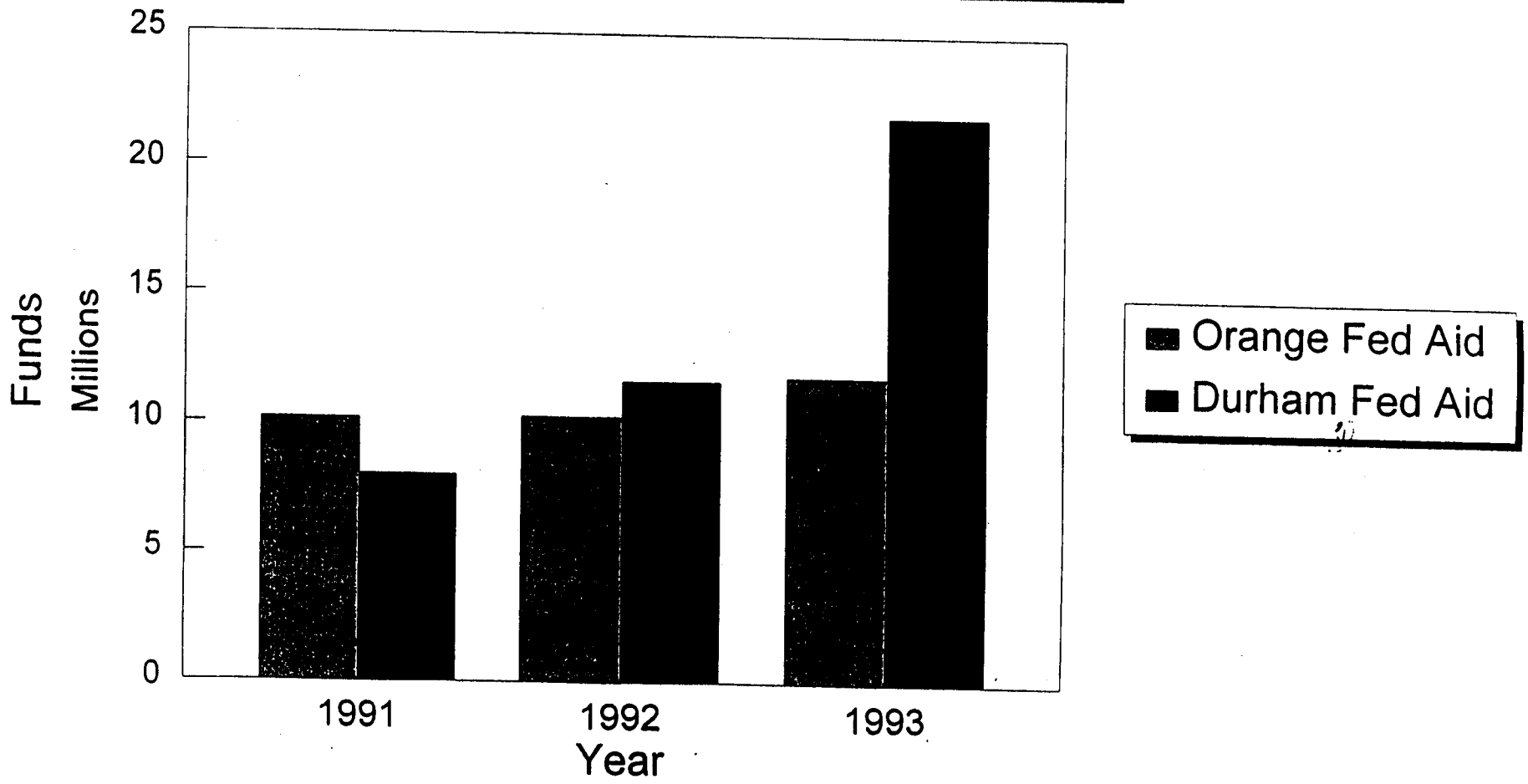
Federal Aid to Durham & Orange Counties
1977-1992



Pre-ISTEA Federal Funding (1977-1990)



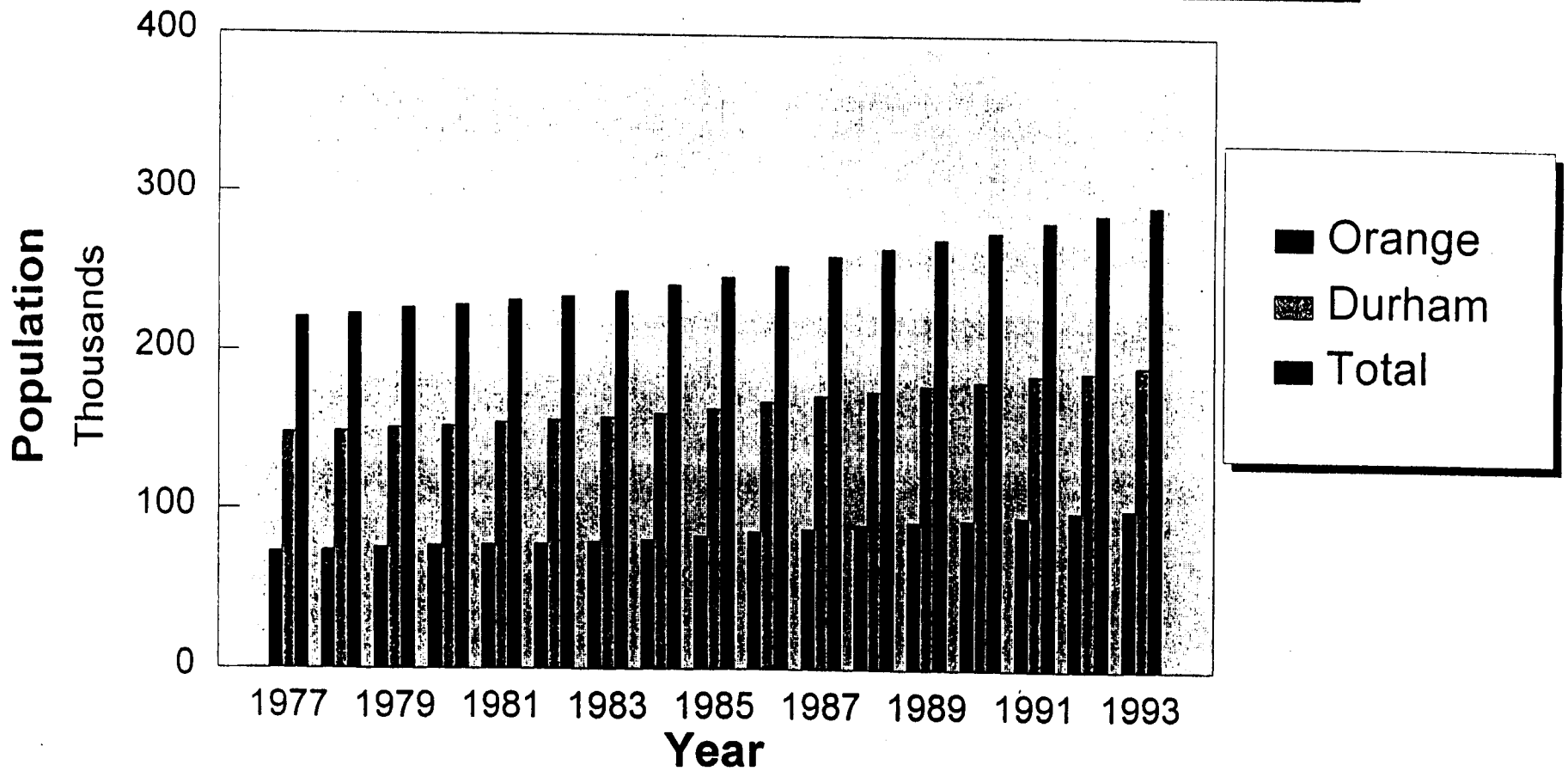
Post-ISTEA Federal Funding
(1991-1993)



Historical Data Used for 2010 DCHC MPO Revenue Forecasts

Orange Population	Durham Population	Total Population	Year	Orange Fed Aid	Durham Fed Al	Orange State	Durham State	Orange Bond	Durham Bond	Orange Trust	Durham Trust	Orange P-A	Durham P-A	Raw Total	1983 $ Total	1993 $ Total
73,200	148,000	221,200	1977	2,803,060	927,883	743,800	1,438,391	14,713	25,914	0	0	41,699	61,931	6,057,411	9,728,202	14,057,252
74,100	149,100	223,200	1978	1,206,035	785,082	309,201	1,730,085	77,009	41,218	0	0	0	86,649	4,235,279	6,996,681	10,110,204
75,900	151,300	227,200	1979	260,605	1,756,860	402,670	1,348,254	399,527	694,176	0	0	54,959	37,558	4,954,609	8,551,655	12,357,142
77,055	152,235	229,290	1980	224,872	4,586,246	362,456	1,223,216	302,725	1,628,278	0	0	30,379	20,397	8,378,569	15,282,510	22,083,227
77,855	154,741	232,596	1981	1,728,256	8,247,996	205,571	373,894	500,889	934,256	0	0	0	89,504	12,080,366	23,061,419	33,323,750
78,617	156,273	234,890	1982	2,251,476	6,702,681	410,846	533,524	127,595	152,198	0	0	0	84,212	10,262,532	20,165,875	29,139,690
80,051	158,201	238,252	1983	2,687,410	11,609,502	534,468	953,662	48,679	483,372	0	0	0	180,368	16,677,461	33,288,212	48,101,467
81,274	160,906	242,180	1984	4,399,103	16,746,934	688,451	1,173,844	37,912	1,151,728	0	0	0	24,571	24,222,543	23,277,864	33,636,513
83,581	163,952	247,533	1985	11,964,027	21,230,781	782,839	854,244	0	983,941	0	0	15,855	255,996	36,087,683	33,345,019	48,183,553
86,132	168,491	254,623	1986	19,036,603	21,260,454	895,297	1,414,192	18,981	296,168	0	0	607,647	549,475	44,080,817	39,849,059	57,581,890
87,993	172,472	260,465	1987	9,874,341	29,166,594	736,608	1,612,858	62,244	54,305	0	0	0	38,602	41,565,352	35,912,464	51,893,511
90,388	175,152	265,540	1988	20,415,485	12,375,648	1,578,520	3,776,110	52,457	46,925	0	0	15,931	217,204	38,478,260	31,436,738	45,426,087
92,543	178,876	271,419	1989	7,767,236	11,775,178	1,741,506	4,520,049	0	19,740	0	0	52,073	97,461	25,973,243	19,739,665	28,523,815
93,851	181,854	275,705	1990	4,547,031	8,535,489	1,119,632	3,947,109	0	0	428,306	432,992	58,155	106,322	19,175,036	13,288,300	19,201,593
96,265	186,210	282,475	1991	10,163,367	7,995,313	1,030,158	5,690,903	0	0	920,489	488,525	0	154,248	26,443,003	16,870,636	24,378,069
99,674	187,911	287,585	1992	10,242,192	11,645,165	893,673	2,938,736	0	0	557,912	889,215	623	12,004	27,179,520	16,226,173	23,446,821
100,929	191,836	292,765	1993	11,835,397	21,889,964	740,203	5,650,438	0	0	499,521	419,043	0	16,365	41,050,931	22,783,267	32,921,820

Population for Durham & Orange Counties
(1977-1992)



COUNTY DURHAM

Fiscal Year	*Construction*
1990	$12.227.647
1991	$12.656.760
1992	$14.836.004
1993	$27.460.327
1994	$33.693.431
1995	$30.716.071
1996	$27.149.701
1997	$21.922.282
1998	$21.591.645
1999	$26.204.670
2000	$36.953.200
Total:	**$265.411.737**

(77)

COUNTY ORANGE

Fiscal Year	*Construction*
1990	$6.388.099
1991	$15.330.168
1992	$12.105.137
1993	$13.373.472
1994	$18.700.763
1995	$20.036.406
1996	$12.723.789
1997	$11.472.832
1998	$10.607.145
1999	$11.277.132
2000	$11.534.418
Total:	**$143.549.360**

COUNTY CHATHAM

Fiscal Year	*Construction*
1990	$8.034.238
1991	$6.873.218
1992	$5.164.590
1993	$5.543.064
1994	$8.165.550
1995	$11.980.029
1996	$18.534.264
1997	$32.279.572
1998	$32.696.116
1999	$40.159.044
2000	$21.307.205
Total:	**$190.736.890**

ATTACHMENT 4

AGENDA #4k

MEMORANDUM

TO: Mayor and Council

FROM: W. Calvin Horton, Town Manager

SUBJECT: Update on Durham-Chapel Hill 2025 Regional Transportation Plan

DATE October 22, 2001

This memorandum reviews the anticipated schedule (Attachment 1) for completing the Durham-Chapel Hill-Carrboro 2025 Regional Transportation Plan. This schedule has been prepared by the staff of Metropolitan Planning Organization. The attached resolution would request the Transportation Advisory Committee provide additional opportunities for public comment in the schedule.

BACKGROUND

The Durham-Chapel Hill-Carrboro Urban Area is currently preparing a 2025 Regional Transportation Plan as required by federal transportation and air quality regulations. This Plan includes an assessment of roadway, transit, bicycle and pedestrian system to be implemented through 2025 to maintain mobility within the region and meet regional air quality standards.

The Council's last action with regard to the 2025 Plan was in March, 2001. At that time the Council revised the Chapel Hill 2025 housing and employment projections (Attachment 2). It was anticipated at that time that the 2025 Plan would be completed by November, 2001. Continuing refinements of the Regional Transportation Model and staff turnover has delayed the completion of the 2025 Plan.

On October 10, 2001 the Transportation Advisory Committee reviewed and approved a revised schedule for completing the 2025 Plan (Attachment 1). This schedule has been provided for your information.

DISCUSSION

The schedule reviewed and adopted by the Transportation Advisory Committee proposes to adopt a final draft 2025 Plan by May, 2002. This draft Plan would then be analyzed by federal and State transportation and air quality agencies to determine conformity with federal air quality regulations. The final approval of the 2025 Plan by the Transportation Advisory Committee is anticipated by December, 2002. Federal air quality conformity guidelines require the approval of a 2025 Plan by December, 2002.

Regional staff is currently analyzing fourteen Tier 2 composite alternatives (Attachment 3). The Tier 2 alternatives, B4 on the schedule, were endorsed by the Transportation Advisory

Committee on October 10, 2001. The Tier 2 alternatives were derived from the Tier 1 analysis of 60 separate transportation alternatives. The analysis of the Tier 2 alternatives will result in th identification of three final draft alternatives.

We note that although the adopted schedule proposes a public comment period on the draft 2025 Plan in March, 2002, there are other milestones proposed that could be considered for public comment earlier in the process. We believe it would useful to allow public comment at those points where the Transportation Advisory Committee reviews the analysis of different alternatives. It is anticipated that in December, 2001, the Transportation Advisory Committee will be presented with the analysis of the fourteen alternatives approved in October by the Committee.

We suggest that the results of the Tier 2 analysis be made available for review and comment by the public. We also suggest a similar public comment period in February, 2002 when the analysis of the three final alternatives is available.

NEXT STEPS

We will provide the Council with periodic updates on the status of the 2025 Plan and related analysis. We anticipate scheduling opportunities for Council review and public comment if the Transportation Advisory Committee agrees to the Council's request for additional public comment. We also expect to schedule opportunities Council review and public comment after release of the draft 2025 Plan, anticipated now in March or April, 2002.

MANAGER'S RECOMMENDATION

We recommend approval of the attached Resolution requesting the Transportation Advisory Committee provide a public comment period to review the analysis of the fourteen Tier 2 alternatives and the three final draft alternatives. We note that in order to allow the Town Council the opportunity to review and comment on the analysis of Tier 2 alternatives, expected to be released in December, 2001, the public comment period would have to extend through January, 2002.

ATTACHMENTS

1. Revised (10-1-01) DCHC 2025 Transportation Plan Schedule Highlights (p. 4).
2. March 26, 2001 Council memorandum (p. 6).
3. TCC Recommended Alternatives to Tier 2 (p.13).

A RESOLUTION REQUESTING THAT THE DURHAM-CHAPEL HILL-CARRBORO TRANSPORTATION ADVISORY COMMITTEE PROVIDE ADDITIONAL OPPORTUNITIES FOR PUBLIC COMMENT AS PART OF THE DEVELOPMENT OF THE 2025 REGIONAL TRANSPORTATION PLAN (2001-10-22/R-7)

WHEREAS, the Durham-Chapel Hill-Carrboro Transportation Advisory Committee is preparing a 2025 Transportation Plan; and

WHEREAS, as part of the development of the 2025 Plan the Transportation Advisory Committee is analyzing alternative transportation scenarios; and

WHEREAS, the Council of the Town of Chapel Hill recommends that the public be given the opportunity to comment on important milestones of the 2025 Plan as they are being developed;

NOW, THEREFORE BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council requests the Transportation Advisory Committee provide additional public comment periods for the review of analysis of the Tier 2 alternatives and the final three alternatives.

BE IT FURTHER RESOLVED, that the Council requests that the public comment period for the Tier 2 alternatives extend through January, 2002.

This the 22nd day of October, 2001.

Revised (10-1-01) (82)

DCHC 2025 Transportation Plan

Schedule Highlights

	Task	Time	Status
A	Plan Schedule revised, Milestones, and Critical Paths Identified		Complete
B	Deficiency Analysis / Purpose and Need Analysis of Existing Condition (Version 2.0 Triangle Regional Model)		Complete
1	Transit Refinement (Model Recalibration)		Complete
2	Highway & Transit Network Update (All Alternatives)		Complete
3	Run Model and Generate Forecast for 60 alternatives (Quick Scan)		Complete
4	Alternative Evaluation Analysis (Target 10 to 15)		To be done by Public, CAC, & TCC. Recommendation to TAC in September.
5	Development of Environmental Screening Overlays Development of Environmental Justice Overlays		Complete
6	Development of Transportation Systems Cost Database	Nov-01	Draft to TCC in October
7	Generation of Preliminary Revenue Forecasts	Nov-01	Draft to TCC in October
8	Bike and Pedestrian Evaluation	Dec-01	GIS Information
9	Analysis of Public Transportation Issues & Trends	Nov-01	Draft to TCC in October
10	Environmental Screening / Environmental Justice of Tier-2	Dec-01	Tier-2 Evaluation
11	Consideration of TEA-21 Planning Factors	Dec 01	Tier-2 results
12	Air Quality Analysis (Preliminary)	Dec 01	Tier-2 results
13	Recommendations for Preliminary Preferred Options (3 Alternatives)	Jan-02	
14	Preferred System Analysis (Regional Performance, MPO performance, and Sub-Area/Corridor performance)	Feb-02	
15	Analysis of Modal System Strategy	Mar-02	
	· Roadway System Strategy		
	· Freight System Strategy		
	· Transit System Strategy		
	· ITS System Strategy		
	· TDM System Strategy		
	· Bike / Pedestrian System Strategy		
16	Environmental Impacts	Mar-02	
17	Development of Financial Plan	Mar-02	
18	Land Use Impacts and Strategy	Mar-02	
19	Plan Implementation/Action Plan	Mar-02	
20	Draft TP - Public Comment	Mar-02	
21	Adopt 2025 Plan (TAC)	May-02	
	Air Quality Conformity		
22	Final Plan Report Writing / Generation of Maps-Graphics	Jan - Mar 2002	
23	Air Quality Determination	May-02	
24	Air Quality Finding by TAC	Nov-02	
25	Air Quality Conformity approval by USDOT	May - Dec 2002	