

**Member Governments**

Town of Carrboro  
Town of Chapel Hill  
County of Chatham  
City of Durham  
County of Durham  
County of Orange  
NC Department of  
Transportation  
Town of Hillsborough

**DURHAM – CHAPEL HILL-CARRBORO  
METROPOLITAN PLANNING ORGANIZATION  
TECHNICAL COORDINATING COMMITTEE (TCC)**

**AGENDA**

**June 25, 2008  
9:00 a.m.**

**Transportation Conference Room  
4th floor Durham City Hall**

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- 1. Preliminaries**
- 2. Adjustments to the Agenda**
- 3. Public Comments**

**ACTION ITEMS**

**4. Approval of May 28, 2008 TCC Meeting Minutes  
(Attachment 4)**

A copy of the May 28, 2008 minutes is enclosed as Attachment 4.

**TCC Action:** Approve minutes of the May 28, 2008 TCC meeting.

**5. 2035 Long Range Transportation Plan and Comprehensive Transportation Plan  
(Attachment 5, 5A, 5B, 5C)  
Andy Henry, LPA Staff**

At the recent June 11<sup>th</sup> TAC meeting, the TAC approved the release of the 2035 LRTP Alternatives for public comment when all elements of the Alternatives are assembled, and scheduled a public hearing for the Alternatives at their August meeting. The release is contingent upon the review and approval of the TAC Chair, and staff is to provide copies to TAC members with ample time for the members to make any comments before the release. There is no TAC meeting in July.

The status of the availability and review of the various elements of the 2035 LRTP Alternatives is shown in the following table. The preliminary cost information and the performance data, which depends on the completion of TRM model runs, had not been completed at the time of the TCC agenda packet online posting.

The LPA staff will provide an update on the release of the 2035 LRTP Alternatives for public comments.

	TAC Mailout (6/5/08)	TAC Mtg. (6/11/08)	Public Release (July)
<b>Land Use Scenarios</b>			
Description	✓✓		
Review and Pop./Emp. Movement	✓		
Maps	✓		
<b>Alternatives</b>			
Combination Table	✓✓		
Performance Data	(format without data)		✓
Preliminary Revenue	✓		
Preliminary Cost			✓
Project Lists	✓✓		
Maps		✓	
<b>Public Involvement</b>			
Table of Meeting Dates	✓		

✓ = Available      ✓✓ = Updated version available (Reviewed at previous TAC meeting)

Attachment 5 provides further explanation for the 2035 LRTP Alternatives release, and describes the attachments below. These are the same attachments provided for the June 11<sup>th</sup> TAC meeting.

- Attachment 5A – Land Use Scenarios (information is complete)
- Attachment 5B – Alternatives (maps, cost data and evaluation data are incomplete)
- Attachment 5C – Public Input process. (information is complete)

**TCC Action:** Receive an update on the status of the 2035 LRTP Alternatives release, review the attachments, and provide comments.

**6. Triangle Regional Model Travel Demand Model**

(Attachment 6)

**Dawn Qiu, LPA Staff**

**Felix Nwoko, LPA Staff**

The Triangle Regional Model version TCV4-2008 has been released to the stakeholders for review since January of 2008. This version is the result of a three-year effort undertaken by the Triangle Regional Model Service Bureau at ITRE, in partnership with NCDOT, Triangle Transit, CAMPO and DCHC MPO. Attachment 6 summarizes the major changes between the new version and the old version of the model including the validation measures and targets. The TCC is asked to recommend that the TAC send a letter to the Triangle Model Service Bureau adopting the Triangle Regional Model version TCV4-2008. The DCHC MPO will use this version of the model for the 2035 Long Range Transportation Plan.

**TCC Action:** Recommend that the TAC send a letter to the Triangle Model Service Bureau adopting the Triangle Regional Model version TCV4-2008

**7. FY 2011-2017 Transportation Improvement Program**

(Attachment 7)

**Ellen Beckmann, LPA Staff**

NCDOT has requested that MPOs provide their Regional Priority Lists for the FY 2011-2017 Transportation Improvement Program (TIP) by December 31, 2008. In order to meet this

schedule, the LPA recommends following the schedule proposed in Attachment 7 for the development and approval of the Ranking Methodology and Regional Priority List.

**TCC Action:** Receive schedule for developing the FY 2011-2017 TIP, refer to TIP Subcommittee.

**8. Transportation Demand Management – FY 2009 Funding  
(Attachment 8)**

**Dale McKeel, LPA Staff**

The DCHC MPO approved the 7-Year Transportation Demand Management Plan in November 2007 and also approved the use of CMAQ funding for the FY 2009-2012 program. Triangle J COG is the administrator of the TDM program. Attachment 8 is a summary of proposed TDM funding for FY2009 prepared by Triangle J COG.

**TCC Action:** Receive update on the proposed FY 2009 funding for the regional Transportation Demand Management program.

**REPORTS FROM STAFF:**

**9. Reports from Staff  
(Attachment 9)**

**Felix Nwoko, LPA Staff**

**TCC Action:** Receive Report from staff

**10. Report from the Chair  
Mark Ahrendsen, TCC Chair**

**TCC Action:** Receive Report from TCC Chair

**11. NCDOT Report  
(Attachment 11)  
Wally Bowman, Division 5 – NCDOT  
Mike Mills, Division 7 – NCDOT**

**INFORMATIONAL ITEMS**

**Adjourn**

**Next meeting: July 23, 2008**

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**TECHNICAL COORDINATING COMMITTEE**

**May 28, 2008**

**MINUTES OF MEETING**

- \*Mark Ahrendsen City of Durham – Transportation (TCC Chair)
- \*Jamal Alavi NCDOT – TPB
- \*Bill Barlow NCDOT - PTD
- \*Kelly Becker NCDOT – Traffic Engineering
- \*Andy Henry City of Durham - Transportation
- \*Tom King Town of Hillsborough
- \*Karen Lincoln Orange County Planning
- \*Patrick McDonough Triangle Transit
- \*Patricia McGuire Town of Carrboro
- \*Ryan Mickles Town of Chapel Hill
- \*Felix Nwoko City of Durham – Transportation
- \*Pierre Osei Owusu City of Durham - DATA
- \*Pat Strong Triangle J COG
- \*Battle Whitley NCDOT – Division 5 Engineer
- Ellen Beckmann City of Durham – Transportation
- Joe Huegy ITRE
- Dale McKeel City of Durham - Transportation
- Dawn Qiu City of Durham – Transportation
- \*Voting Member

Mark Ahrendsen, TCC Chair, called the meeting to order at 9:10 a.m.

**PRELIMINARIES:**

**Adjustments to the Agenda**

Mark Ahrendsen stated there were no adjustments to the agenda. Mark stated a handout was distributed at the beginning of the meeting regarding comments on the Triangle Parkway Project. Andy Henry also distributed a Proposed TAC Presentation on the LRTP which will be discussed during agenda item #5.

**Public Comments**

There were no public comments.

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**ACTION ITEMS:**

**Approval of April 23, 2008 TCC Meeting Minutes (Attachment 4)**

A motion was made by Felix Nwoko and seconded by Andy Henry to approve the April 23, 2008 TCC Meeting Minutes. The motion carried unanimously.

**2035 Long Range Transportation Plan and Comprehensive Transportation Plan (Attachments 5, 5A, and 5B)**

Andy Henry provided an update on the 2035 Long Range Transportation Plan and Comprehensive Transportation Plan, along with the attachments.

Andy stated that the TAC asked that there be a night meeting for the public hearing for alternatives and preferred option to allow for better public attendance. Alice Gordon, TAC Chair, also stated that the alternatives will be released at the June TAC meeting and therefore the information needs to be in the TAC packets so the TAC can be prepared for the meeting.

Andy stated that it will be difficult to have the model results for all the alternatives before the TAC meeting. However, we will have one example of the evaluation measures done and hopefully the TAC will authorize the staff to release it for public comment when the evaluation data has been received for the remaining alternatives.

Joe Huegy stated that the Service Bureau does not have mapping for some of the existing plus committed (E+C) transit network and they are still trying to prepare the STAC recommendations. He thinks they will have the E+C model run for the highway network. Andy Henry asked if we will have the CTP. Joe stated that hopefully they will have the highway E+C and maybe the E+C for transit. They are still missing the committed piece of the mapping for the E+C for transit (i.e. Wake Forest Service and other CAMPO area changes). Felix Nwoko stated he and Andy will meet with Joe Huegy next week to try to resolve some of the concerns. They are working as quickly as possible.

**FY 2007-2013 Metropolitan Transportation Improvement Program Administrative Modification #3 (Attachments 6 and 6A)**

61 Ellen Beckmann provided an introduction for the FY 2007-2013 Metropolitan Transportation  
62 Improvement Program Administrative Modification #3, along with the attachments.

63 A motion was made by Felix Nwoko and Pierre Osei-Owusu to recommend that the TAC approve  
64 the Administrative Modification #3 to the FY 2007-2013 Metropolitan Transportation Improvement  
65 Program (Attachment 6) and send the letter requesting that the CMAQ funds be flexed to FTA  
66 (Attachment 6A). The motion carried unanimously.

67 **FY 2009-2015 Metropolitan Transportation Improvement Program (Attachments 7, 7A, 7B, 7C, 7D, and**  
68 **7E)**

69  
70 Ellen Beckmann provided an introduction for the FY 2009-2015 Metropolitan Transportation  
71 Improvement Program, along with the attachments. Comments were sent by Ellen to Mike Stanley on  
72 7D; primarily concerned with errors in the transit projects.

73 The State Board of Transportation is scheduled to approve the final STIP in early June and we  
74 would like the TAC to approve our MTIP at the June meeting.

75 A motion was made by Felix Nwoko and seconded by Karen Lincoln to recommend that the TAC  
76 approve the FY 2009-2015 Metropolitan Transportation Improvement Program and the Air Quality  
77 Conformity Determination Report (Attachment 7E).

78 **Memorandum of Agreement between the DCHC MPO, DATA, Chapel Hill Transit and Triangle Transit**  
79 **(Attachment 8)**

80  
81 Felix Nwoko provided an introduction for the Memorandum of Agreement between the DCHC  
82 MPO, DATA, Chapel Hill Transit and Triangle Transit.

83 Felix stated this was brought to our attention during the MPO's certification review. It is a  
84 checklist item for the tri-annual review that is coming up in the fall for the transit agencies.

85 Attached is a draft that we are proposing. The Memorandum of Agreement documents what  
86 we have been doing.

87           The action is to forward the MOA to the transit operators and execution will be in August. The  
88 TAC will receive it in June and forward it to the transit operators. It will then be approved by transit  
89 operators' boards so the TAC can approve it in August.

90           Pierre Osei Owusu stated DATA's tri-annual review is in August.

91           Mark Ahrendsen stated that the recommended action should be to forward the draft to transit  
92 operators for review and feedback, then come back to the TCC in July, and then go to the TAC for  
93 approval in August.

94           A motion was made by Pierre Osei Owusu and seconded by Jamal Alavi to forward the draft  
95 Memorandum of Agreement between the DCHC MPO, DATA, Chapel Hill Transit, and Triangle Transit to  
96 transit operators for review and feedback, bring it back to the TCC at the July meeting, and then  
97 recommend TAC approval in August. The motion carried unanimously.

98           **Pedestrian Safety Workshop – Issues for Discussion (Attachment 9)**

99           Dale McKeel provided an introduction for the Pedestrian Safety Workshop – Issues for  
100 Discussion.

101           Dale stated that due to North Carolina being identified as a state with a high pedestrian fatality  
102 rate, the Federal Highway Administration is holding a workshop next week to develop a pedestrian  
103 safety action plan for North Carolina.

104           The purpose of this item is to get feedback and issues that the TCC would like to have brought  
105 up during the workshop. Dale suggested having a bicycle/pedestrian subcommittee meeting later this  
106 week to discuss issues and concerns.

107           Patrick McDonough asked if the meeting was open to citizens and Jamal Alavi stated he thought  
108 it is by invitation only. Dale McKeel will check and get back to Patrick.

109 Karen Lincoln asked about wider shoulders in rural areas for pedestrians. Bill Barlow stated that  
110 better wayfinding and directional signs for motorists will help pedestrian safety. Patrick McDonough  
111 thinks adding multi-modal descriptions to the TIP would be good.

112 Mark Ahrendsen recommended that TCC members channel their comments to Dale McKeel to  
113 get them brought up at the workshop.

#### 114 **Triangle Parkway**

115 An email was distributed at the beginning of the meeting that was received from Julie  
116 McClintock with the EPA this morning addressing a concern with the Triangle Parkway.

117 After staff discussion, Mark Ahrendsen suggested referring this to the LPA staff for review and  
118 also to draft a response.

#### 119 **REPORTS FROM STAFF:**

##### 120 **Reports from Staff (Attachment 10)**

121 The report from staff is attached for review.

##### 122 **Report from the Chair**

123 Mark Ahrendsen stated there was a Joint TAC meeting last Wednesday, May 21, 2008 to receive  
124 the completed STAC Report.

125 Pierre Osei Owusu asked if we have the JARC/New Freedom funds designation letter from the  
126 Governor and Felix Nwoko and Ellen Beckmann stated yes it has been received.

##### 127 **NCDOT Reports (Attachment 12)**

128 Battle Whitley, NCDOT Division 5 Engineer, provided an update on projects. Battle stated the  
129 Leesville Road project is underway.

130 There was no representation for NCDOT Division 7.

##### 131 **Adjournment**

132            There being no further business before the Technical Coordinating Committee, the meeting was  
133 adjourned at 9:55 a.m.

## MEMORANDUM

**TO:** Transportation Coordinating Committee (TCC)  
DCHC MPO

**FROM:** Lead Planning Agency

**DATE:** June 25, 2008

**RE:** 2035 LRTP Alternatives

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### Purpose

The purpose of this memorandum is to describe the contents of the various attachments for this agenda item. It is important to note that the TAC received these attachments in the packet for their June 11, 2008 meeting, and provided comments at that meeting.

### TCC Action

Receive an update on the status of the 2035 LRTP Alternatives release, review the attachments, and provide comments.

### Description of Attachments

#### Land Use Scenarios

Staff has created Socioeconomic Data (SE Data – future location of population and employment) for four Land Use Scenarios, including *Constrained*, *Buildout*, *Transit Nodes* and *Transportation Corridors*. The TCC and TAC have reviewed and commented on the description of these scenarios at previous meetings. The maps show how population and employment was changed from the Baseline SE Data (which is the SE Data that the TAC approved for use in the 2035 LRTP process and depicts the future population and employment based on current land use plan and policies).

#### Attachment 5A includes:

- Summary of land use scenarios. The TCC and TAC has reviewed and commented on this information at a previous meeting.
- Land Use Scenario Tables. These tables compare the population and employment totals for each Scenario, and show the population and employment movement between the TAZs. This is new information for the TCC.
- Land Use Scenario Maps. These are maps of each Scenario that shows the population and employment increase or decrease from the Baseline Scenario. This is new information for the TCC.

### LRTP Alternatives

Staff has defined five LRTP Alternatives for review and analysis, including *Highway Intensive*, *Fixed Guideway*, *Bus Transit*, *Moderate Multimodal*, and, *System Preservations*. The TCC and TAC have reviewed and commented on these Alternatives at previous meetings.

Attachment 5B includes:

- Summary Description of Alternatives. The TCC and TAC have reviewed and commented on this information at previous meetings.
- Evaluation of Alternatives. This table provides a Performance Target table that will be completed as the Alternatives are processed, i.e., the travel demand model data for the Alternative is generated. This information is not yet complete.
- Preliminary Cost and Revenue. These data assist in evaluating the financial impact and worthiness of each Alternative. The cost information is not yet complete.
- Project Lists. These tables list all the highway and transit projects for each Alternative. The TCC and TAC have reviewed and commented on these tables at a previous meeting.
- Project Maps. These maps illustrate the highway and transit projects for each Alternative. The TCC has not reviewed these maps before.

### Public Input

Staff has begun scheduling the review and input from elected officials, local boards and commissions, state and federal agencies, and the general public.

Attachment 5C is a matrix table shows the jurisdictions and agency types that will formally provide review and input.

## **Additional Public Input Information**

In addition to the tables, maps and summaries included in this presentation, there are other documents that will be released to the public to assist them in their evaluation of the 2035 LRTP Alternatives. These documents include:

- 2035 LRTP Goals and Objectives;
- 2035 LRTP Targets; and,
- 2035 LRTP Deficiency Analysis and Needs Assessment.

The TCC and TAC have already reviewed and approved these documents, and therefore copies are not enclosed. Copies are available on the MPO's Web site:

[www.dchcmo.org](http://www.dchcmo.org).

## **2035 LRTP and CTP Land Use Scenarios (6/11/08)**

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### **Land Use Scenarios Proposed**

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) prepares Socioeconomic Data (SE Data) for input into the Triangle Regional Model (TRM). The TRM produces transportation system performance data, such as the level of congestion and vehicle miles traveled, for the Long Range Transportation Plan (LRTP) and Comprehensive Transportation Plan (CTP). The question is often asked during the development process – How might changes in land use plans or policies affect the design and performance of future transportation system? And, how might local jurisdictions change their plans and policies to realize a desired outcome in the future transportation system?

The DCHC MPO has created land use scenarios as part of the 2035 LRTP and CTP development process. That is, the MPO has developed alternative land use assumptions that change the SE Data and subsequently will have an impact on the transportation system performance data of the TRM (travel demand model).

The proposed land use scenarios are summarized in the table on the next page.

### **Additional Information**

There are a few additional points that are important to understanding the use of these scenarios:

CAMPO Participation – The Capital Area Metropolitan Planning Organization (CAMPO) has developed SE Data for a set of land use scenarios that complement the four DCHC MPO land use scenarios. The SE Data for these scenarios has been combined and checked by the Triangle Regional Model Service Bureau.

Scenario Implementation

The TAC might be able to adopt the SE Data produced by a favorable land use scenario. The 2035 LRTP and Air Quality Conformity Determination would also be based on this newly adopted SE Data.

## 2035 LRTP and CTP Land Use Scenarios (June 11, 2008)

No.	Name	Description	Purpose	SE Data Changes	Land Use Plan Changes	Control Total Changes
1	<b>Baseline</b>	Uses current land use plans, policies and official actions. Most likely future reality.	Produces adopted LRTP and Air Quality Conformity Determination	None	None	No change -- Use baseline control totals
2	<b>Build-out</b>	Assumes all available land is developed as proposed in existing long range land use plans, policies and official actions.	Identify needs in CTP, which does not have time horizon, and show long range trajectory of current plans	Realize buildout for each TAZ	None	No control totals used because there is no time horizon
3	<b>Constrained Growth</b>	Assume overall slower growth than current forecasts (could include only "existing plus committed" transportation network)	Impact of slower growth because of congestion (reduced mobility)	Decrease development in specified TAZs	May not include any policy changes	Reduce population and employment control totals
4	<b>Travel Corridors</b>	Increase population and employment development in key <u>corridors</u> (perhaps those identified by Special Transit Advisory Commission)	Impact of new policies that direct development to existing transportation infrastructure	Increase development in identified TAZs, and reduce in other TAZs	Recommended specific policy changes that encourage and permit more development in corridors	No change -- Use baseline control totals
5	<b>Transit Nodes</b>	Increase population and employment development in transit oriented areas ( <u>distinct nodes</u> )	Impact of new policies that direct development to existing and appropriate transportation infrastructure	Increase development in identified TAZs, and reduce in other TAZs	Recommended specific policy changes that encourage and permit more development in corridors	No change -- Use baseline control totals

## Scenario Review

The remainder of this document presents several methods for reviewing the Scenarios.

### Total Comparison

The following two tables compare the total employment and population for each Scenario with the Baseline SE Data (the data approved by the TAC for use in the 2035 LRTP development and that is based on the current land use plans and policies of the jurisdictions). The tables demonstrate that the overall totals for the Travel Corridor and Transit Nodes Scenarios remain equal to the Baseline SE Data, and that the Buildout and Constrained Scenarios show expected increases and decreases, respectively, compared to the Baseline SE Data.

### Population

Jurisdiction	Baseline		Buildout		Constrained		Travel Corridors		Transit Nodes	
	2005	2035	Pop.	% Change	Pop.	% Change	Pop.	% Change	Pop.	% Change
Durham (1)	244,022	354,164	545,514	54%	325,325	-8%	354,163	0%	354,164	0%
Orange (2)	44,904	57,649	217,359	277%	50,346	-13%	57,649	0%	57,649	0%
Chatham (3)	34,067	117,130	140,583	20%	75,986	-35%	117,130	0%	117,150	0%
Chapel Hill (4)	58,339	80,483	86,957	8%	72,373	-10%	80,466	0%	80,483	0%
Carrboro	20,858	28,269	28,269	0%	24,626	-13%	28,255	0%	28,269	0%
Hillsborough	12,438	22,380	22,380	0%	21,262	-5%	22,380	0%	22,382	0%
<b>Total</b>	<b>414,628</b>	<b>660,075</b>	<b>1,041,062</b>	<b>58%</b>	<b>569,918</b>	<b>-14%</b>	<b>660,043</b>	<b>0%</b>	<b>660,097</b>	<b>0%</b>

### Employment

Jurisdiction	Baseline		Buildout		Constrained		Travel Corridors		Transit Nodes	
	2005	2035	Emp.	% Change	Emp.	% Change	Emp.	% Change	Emp.	% Change
Durham (1)	175,487	282,571	440,830	56%	258,653	-8%	282,583	0%	282,601	0%
Orange (2)	4,290	10,087	34,347	241%	9,204	-9%	10,087	0%	10,087	0%
Chatham (3)	8,199	23,863	47,035	97%	17,606	-26%	23,863	0%	23,853	0%
Chapel Hill (4)	36,702	74,875	82,313	10%	67,735	-10%	74,875	0%	74,923	0%
Carrboro	4,390	6,857	6,945	1%	5,734	-16%	6,856	0%	6,856	0%
Hillsborough	5,679	14,453	14,625	1%	13,916	-4%	14,452	0%	14,426	0%
<b>Total</b>	<b>234,747</b>	<b>412,706</b>	<b>626,095</b>	<b>52%</b>	<b>372,848</b>	<b>-10%</b>	<b>412,716</b>	<b>0%</b>	<b>412,746</b>	<b>0%</b>

(1) Durham County does not include Chapel Hill jurisdiction

(2) Includes parts of Orange County that are not in Carrboro, Chapel Hill and Hillsborough

(3) Includes eastern half of Chatham County

(4) Includes parts of Chapel Hill in Orange County and Durham County

### Movement Comparison

The total population and employment in the Travel Corridor and Transit Node Scenarios remains the same as that of the Baseline SE Data. However, the TAZ totals increase and decrease to depict a shift, or movement, of the population and employment from one TAZ to another. The following two tables show the amount of population and employment movement that occurs in these two Scenarios for the various jurisdictions, and indicates what percentage of the total this movement represents.

## Travel Corridor Movement

Jurisdiction	Population			Employment		
	Total	Movement	Percent Move	Total	Movement	Percent Move
Durham (1)	354,163	20,002	6%	282,583	13,138	5%
Orange (2)	57,649	4,780	8%	10,087	297	3%
Chatham (3)	117,130	0	0%	23,863	0	0%
Chapel Hill (4)	80,466	2,140	3%	74,875	1,371	2%
Carrboro	28,255	928	3%	6,856	230	3%
Hillsborough	22,380	849	4%	14,452	421	3%
<b>Total</b>	<b>660,043</b>	<b>28,699</b>	<b>4%</b>	<b>412,716</b>	<b>15,457</b>	<b>4%</b>

## Transit Node Movement

Jurisdiction	Population			Employment		
	Total	Movement	Percent Move	Total	Movement	Percent Move
Durham (1)	354,164	15,842	4%	282,601	20,535	7%
Orange (2)	57,649	5,370	9%	10,087	848	8%
Chatham (3)	117,150	24,671	21%	23,853	14,556	61%
Chapel Hill (4)	80,483	5,643	7%	74,923	1,532	2%
Carrboro	28,269	26	0%	6,856	830	12%
Hillsborough	22,382	842	4%	14,426	803	6%
<b>Total</b>	<b>660,097</b>	<b>52,394</b>	<b>8%</b>	<b>412,746</b>	<b>39,104</b>	<b>9%</b>

### TAZ Maps

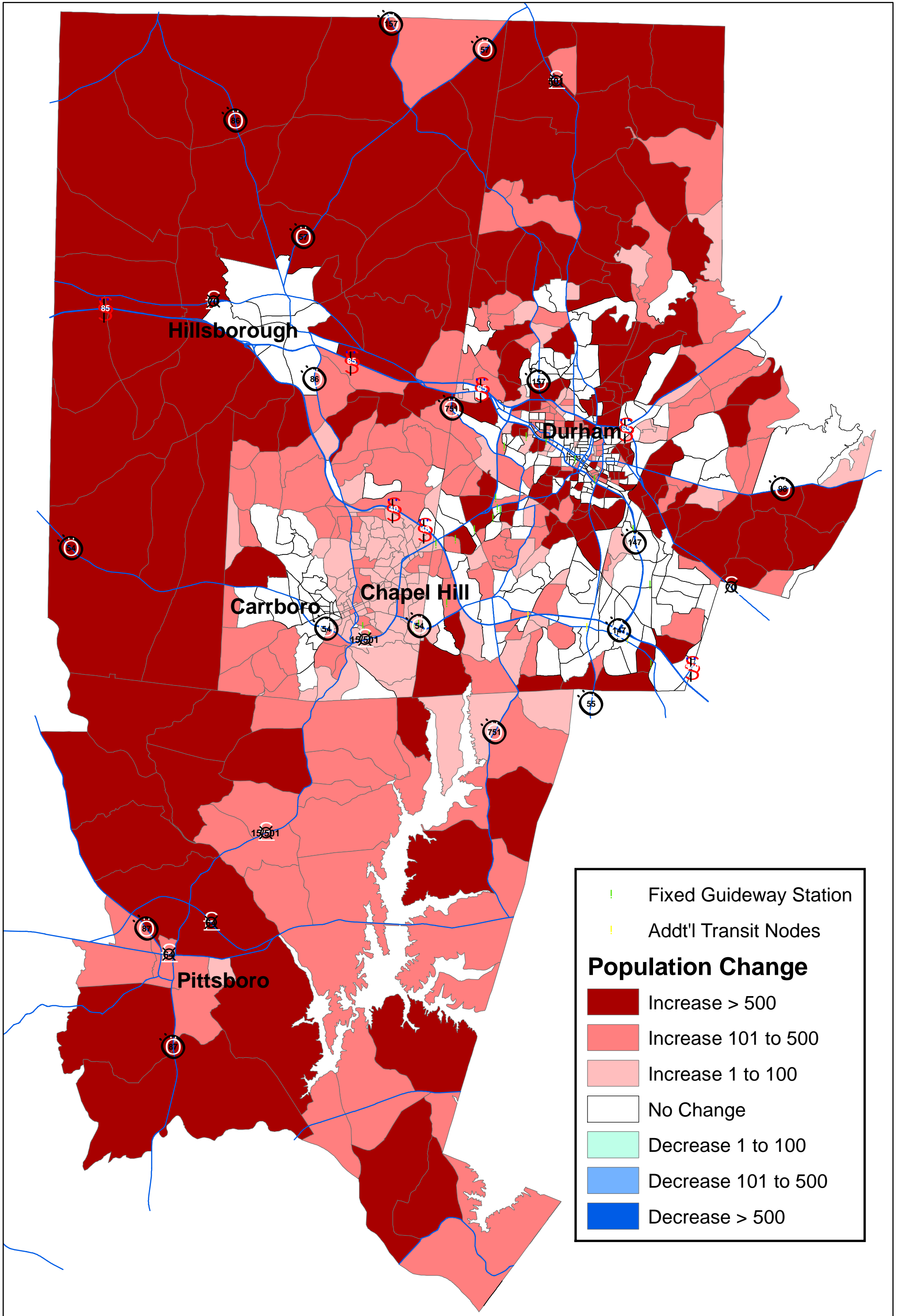
The remaining pages present eight maps; a population and employment map for each of the four Scenarios. The map coloring depicts the level of increase or decrease of population and employment in each TAZ (Traffic Analysis Zone) for that Scenario. The reader can distinguish the expected patterns such as the increases around transit stations and along corridors for the Transit Node and Travel Corridor Scenarios, and decreases in areas of low transportation access for the Constrained Scenario.

### TAZ Tables

The tables showing the detailed SE Data for each of the four scenarios are voluminous and therefore are not included in this document. The tables are available on the MPO's Web site – [www.dchhcmpo.org](http://www.dchhcmpo.org), or by contacting Andy Henry, (919) 560-4366.

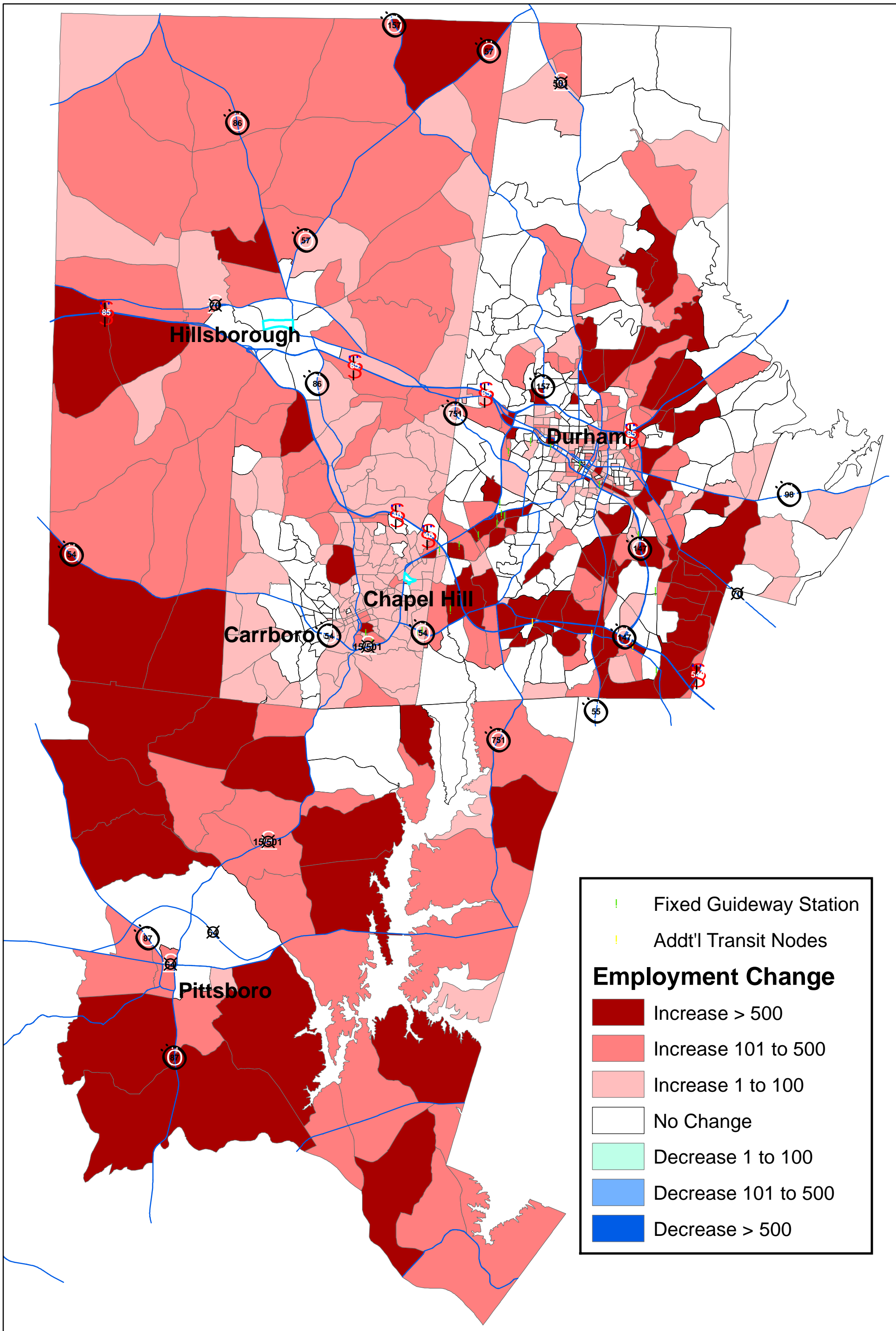
# Buildout L.U. Scenario -- Population Compared to Baseline

TCC 6/25/2008 Attachment 5A



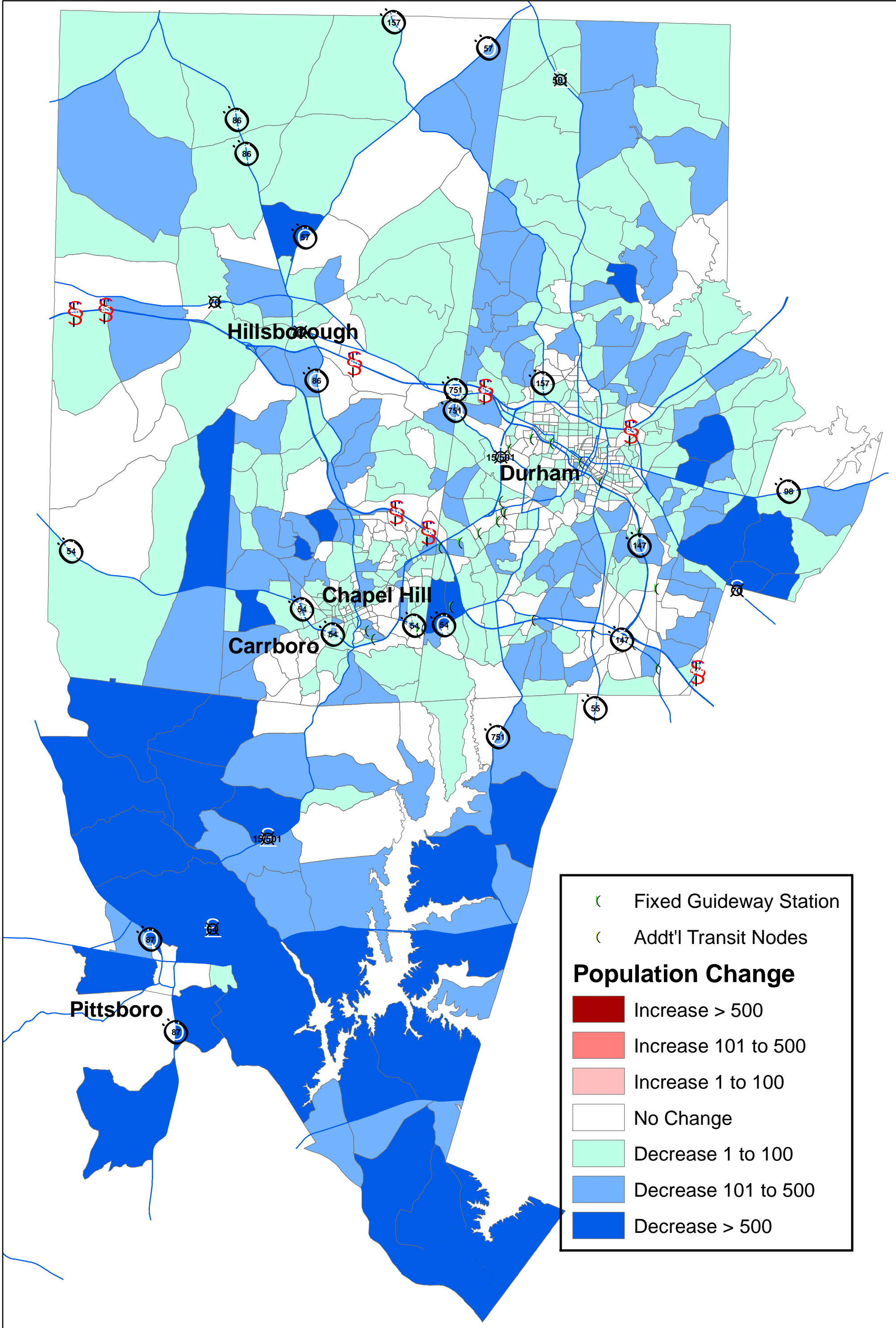
# Buildout L.U. Scenario -- Employment Compared to Baseline

TCC 6/25/2008 Attachment 5A



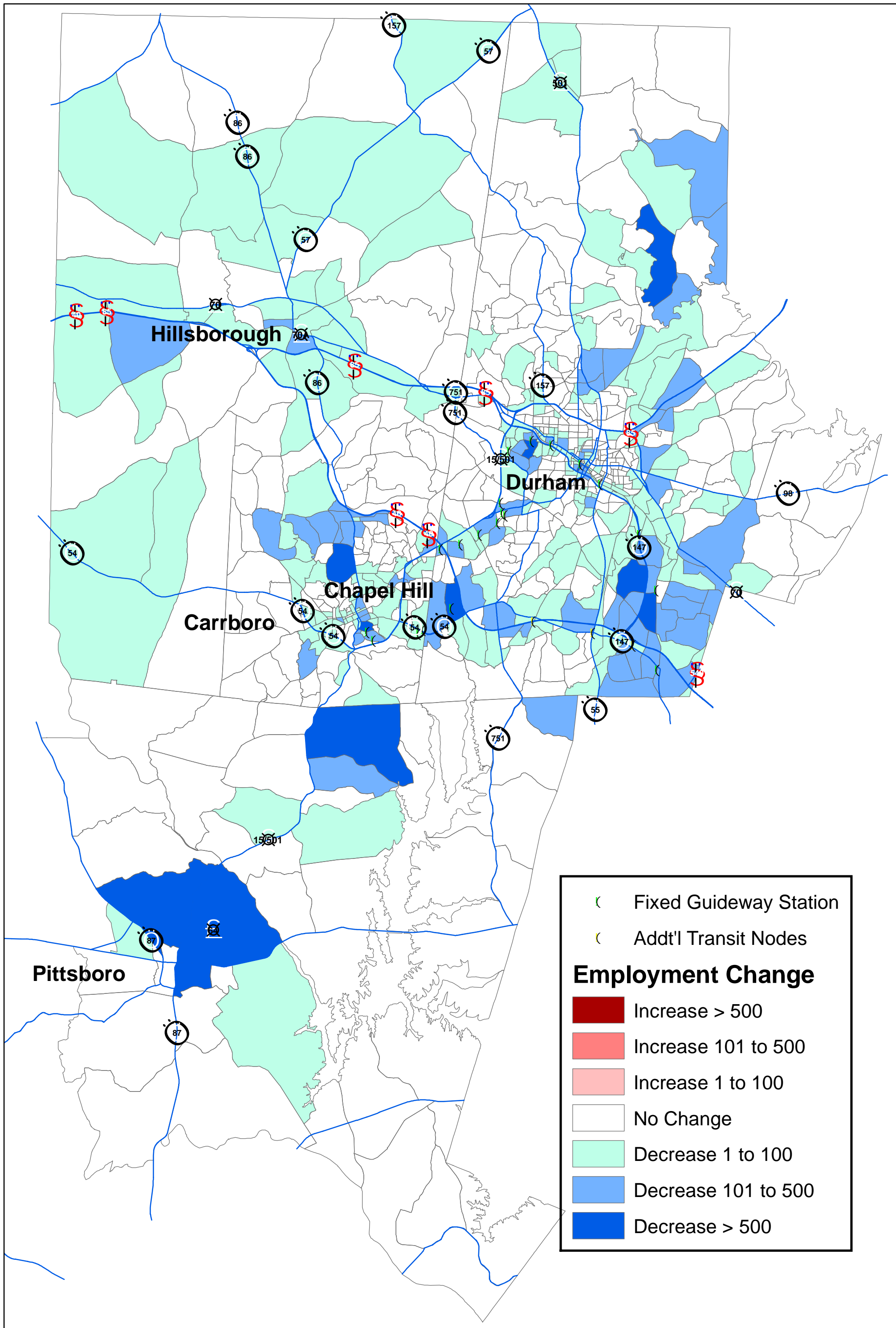
# Constrained L.U. Scenario -- Population Compared to Baseline

TCC 6/25/2008 Attachment 5A



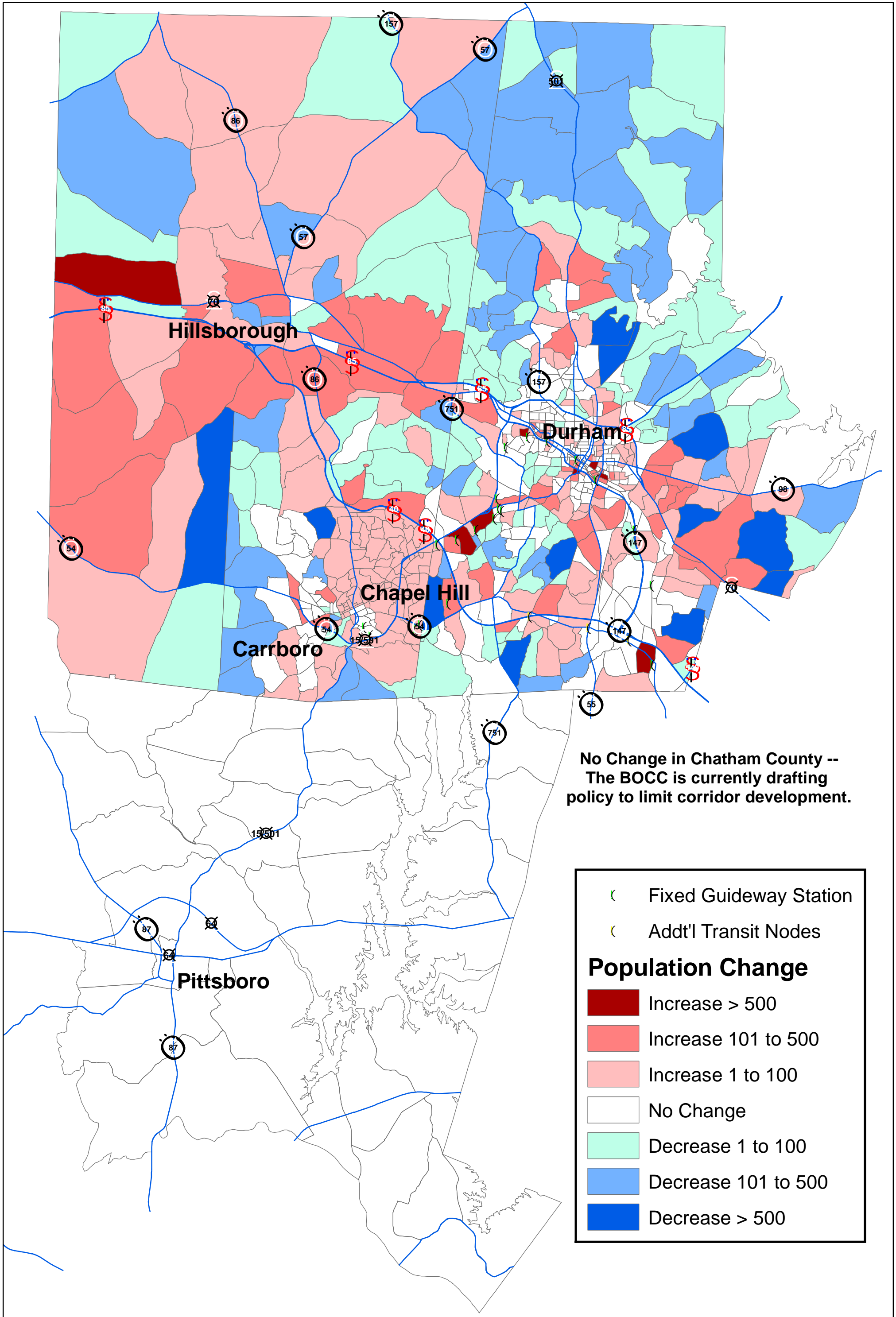
# Constrained L.U. Scenario -- Employment Compared to Baseline

TCC 6/25/2008 Attachment 5A



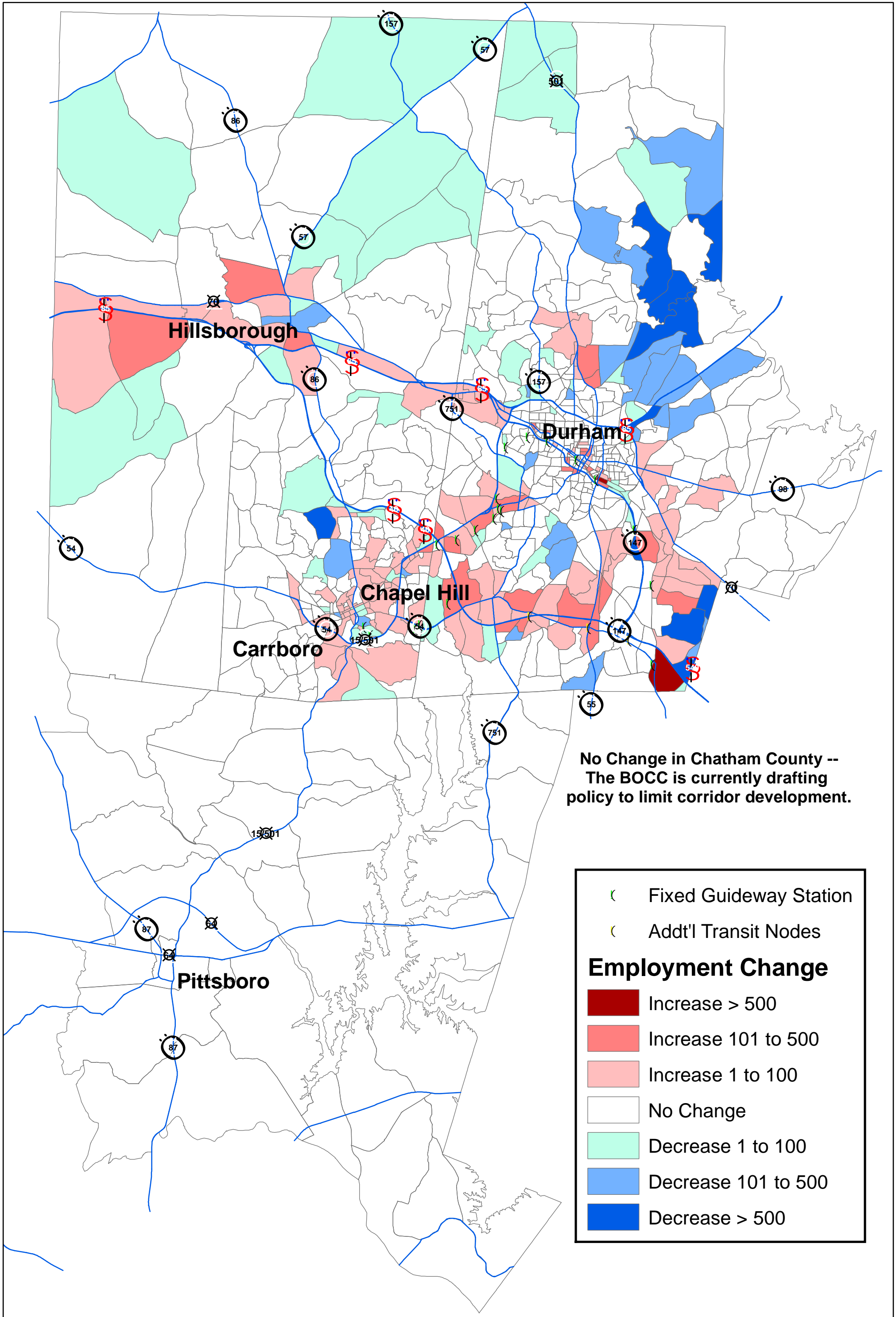
# Travel Corridor L.U. Scenario -- Population Compared to Baseline

TCC 6/25/2008 Attachment 5A



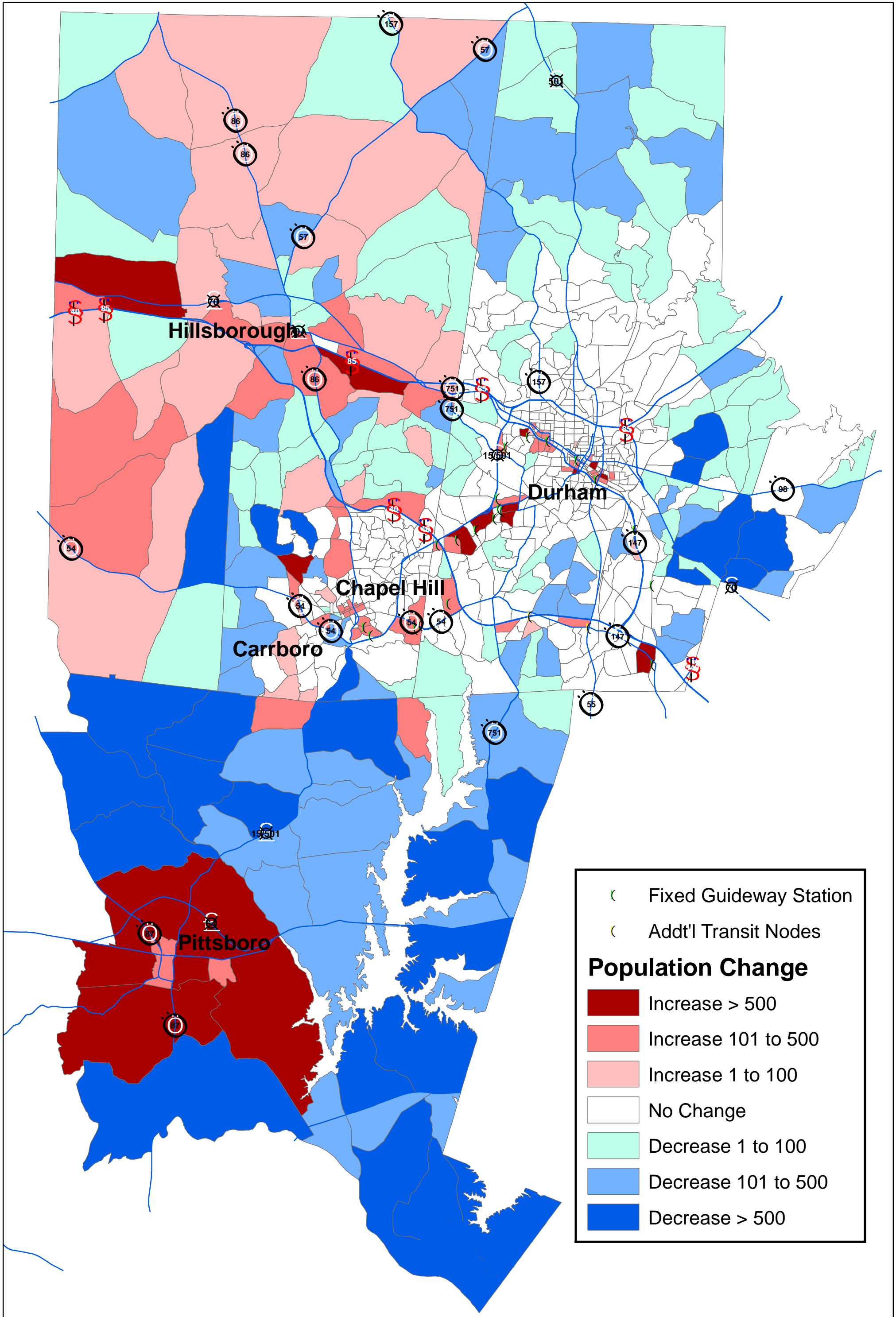
# Travel Corridor L.U. Scenario -- Employment Compared to Baseline

TCC 6/25/2008 Attachment 5A



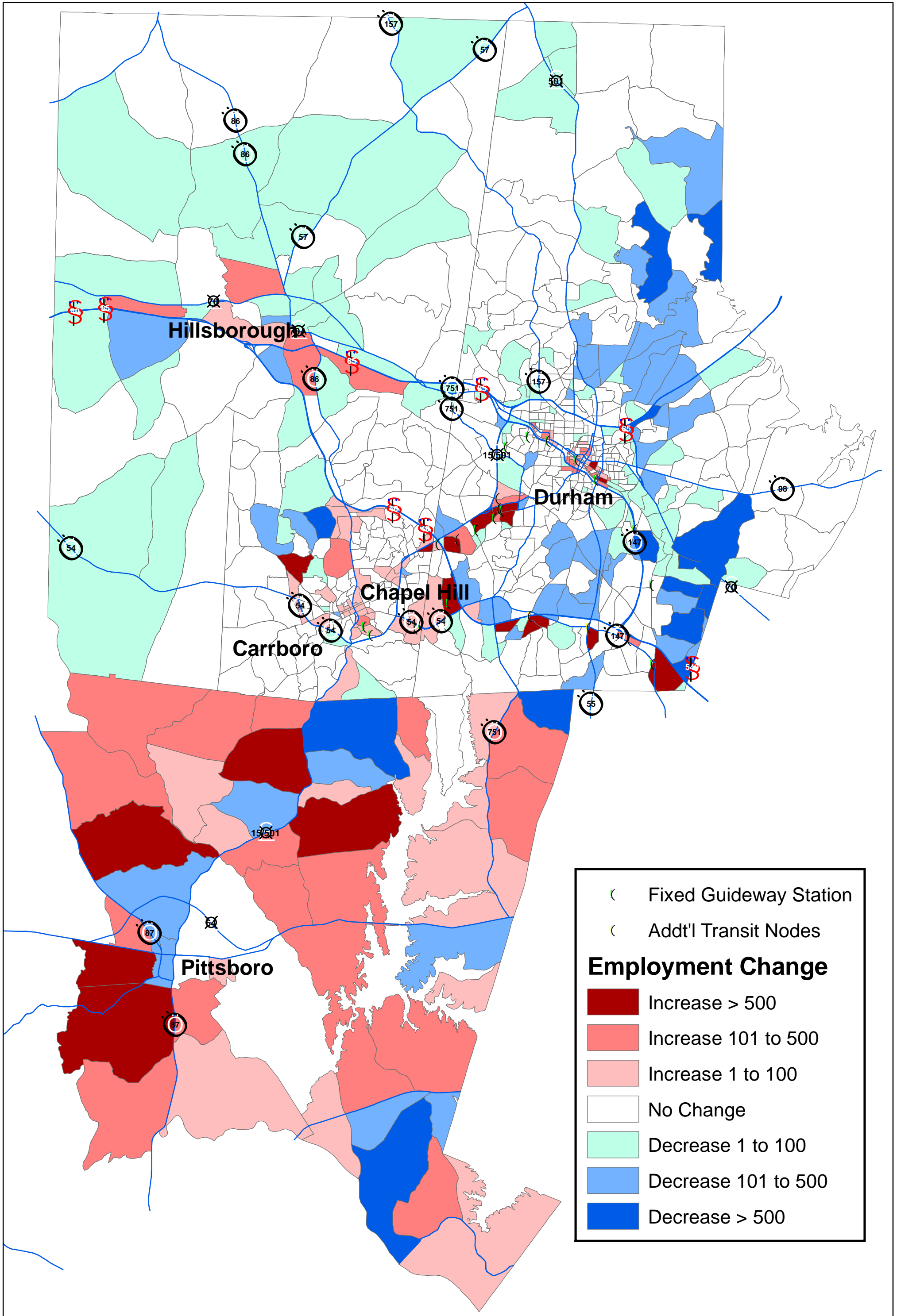
# Transit Node L.U. Scenario -- Population Compared to Baseline

TCC 6/25/2008 Attachment 5A



# Transit Node L.U. Scenario -- Employment Compared to Baseline

TCC 6/25/2008 Attachment 5A



## 2035 LRTP Alternatives

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### Transportation Systems and Land Use Scenarios

The DCHC MPO plans to develop and evaluate several Alternatives in the process to create the 2035 Long Range Transportation Plan. Each Alternative will be a combination of a Transportation System, which includes a set of highway, transit and other transportation improvements, and a Land Use Scenario that distributes the forecasted population and employment for the year 2035, and each Alternative will be run in the Triangle Regional Model (TRM) to produce a set of performance measures.

The table on the next page shows the combinations of Transportation Systems and Land Use Scenarios that will be modeled for the 2035 LRTP development process.

- The first two Transportation Systems (#1 and #2), the 2030 LRTP and Comprehensive Transportation Plan, will be used to compare with the 2035 LRTP Alternatives.
- The next five Transportation Systems (#3 through #7), are Alternatives for the 2035 LRTP.

Each of these Transportation Systems will be combined with one, or more, Land Use Scenarios to produce a set of performance measures that can be used to compare and evaluate the various Alternatives. There is a unique set of Socioeconomic Data (SE Data) for each Land Use Scenario. The Baseline Land Use Scenario, for example, is the SE Data approved by the Transportation Advisory Committee (TAC) for use in developing the 2035 LRTP and is based on the current land use plans and policies of the local jurisdictions. The other Land Use Scenarios, which have been previously presented and discussed with the TAC, assume certain changes to current land use policies. The Transportation System and Land Use Scenarios have only been combined into logical matches. For example, the Intensive Highway Transportation System assumes many highway improvements but relatively few transit improvements and no fixed-guideway stations, and thus this System was not matched with the Transit Node Land Use, which is designed to support fixed-guideway stations.

There are 15 combinations. However, three of the combinations are designated (with footnote #3) as having a lower priority compared to the others. Given the tight LRTP development schedule, these combinations might not be completed. The System Preservation (#7) will not require travel demand model runs because the TRM (model) is not designed to be sensitive to the levels of Intelligent Transportation Systems (ITS), Travel Demand Management (TDM) and other related programs and policies. The impact of these programs and policies can be accounted for after the model is run (these are sometimes called off-model credits).

## Combinations of Transportation Systems and Land Use Scenarios (1)

No.	Transportation System	Land Use Scenarios				
		Baseline	Constrained	Buildout	Corridor	Transit Nodes
<b>Benchmarks for comparison</b>						
1	<b>2030 Adopted LRTP</b> Currently adopted plan	1a ✓				
2	<b>Comprehensive Transportation Plan</b> Vision Plan to address population and employment buildout beyond the year 2035; no budget constraint	2a		2b		
<b>2035 LRTP Alternatives</b>						
3	<b>Intensive Highway</b> Emphasize highway investment to address transportation needs	3a	3b		3b	
4	<b>Fixed Guideway</b> Light rail and other grade separated transit	4a			4b (3)	4c
5	<b>Bus Transit</b> Emphasize bus transit service to address transportation needs	5a			5b	5c (3)
6	<b>Moderate Multimodal</b> Continue current investment trends with some shift to non-automobile modes	6a			6b	6c (3)
7	<b>System Preservation (2)</b> Preserve effectiveness of existing transportation using ITS, TDM, and CMS-TSM projects and policies					

(1) Each combination of a Transportation System and Land Use Scenario will require a unique travel demand model run.

(2) The Triangle Regional Model (TRM) is not designed to be very sensitive to changes in ITS, TDM, and CMS-TSM projects and policies. Therefore, the System Preservation Alternative will not require additional model runs.

(3) These are relatively low priority combinations, and thus might not be completed given the tight development schedule.

✓ = Model run completed

## Evaluation of Alternatives

This section discusses the various data that will be produced to assist in evaluating the Alternatives.

### Performance Data

The Triangle Regional Model (TRM) will produce the data needed to calculate the Target performance measures for each of the proposed Alternatives. The TAC reviewed and approved these Targets in February 2008. The table on the following page presents the Performance Target format – the data will be completed as the Alternatives are processed. In addition, the staff and TAC might request additional evaluation information such as “V/C” maps (Volume/Capacity – shows congestion on roadways) and ridership for specific transit systems.

### Preliminary Cost Data

As the Alternatives are processed, a preliminary total cost figure will be produced for each Alternative. These total cost figures are expected to be several billion dollars.

### Preliminary Revenue Data

The 2035 LRTP must be fiscally-constrained, which means that the projected revenues must cover the projected costs. The following table provides a preliminary Revenue estimate, in present dollar value, for the DCHC MPO over a 29-year period – from 2007 through 2035. The estimate for Alternatives with fixed guideway projects is \$295 higher because it assumes grant federal funding to pay for a portion of the fixed guideway capital costs.

	Low Estimate	High Estimate
	<u>Amount (in millions)</u>	<u>Amount (in millions)</u>
Without Fixed Guideway Projects	4,184	5,379
With Fixed Guideway Projects	4,479	5,674

## Project List

Following the Performance Target table, there is a list of highway and transit projects that shows which projects are in each of the Alternatives.

## Project Maps

Highway and transit maps that correspond to these project lists will also be distributed.

## 2035 Long Range Transportation Plan Alternative Performance v. Targets

		Alternatives					Targets		
		CTP	Highway	Fixed Guideway	Bus Transit	Mod. Multimodal	Good	Better	Best
<b>1</b>	<b>Mobility Targets</b>								
1.1	VMT Per Capita (daily miles)						29.1	27.5	24.5
1.2	Total VMT Reduction from 2035 Baseline						5%	10%	20%
1.3	VHT per capita (daily minutes)						50.5	47.9	42.5
1.4	Total VHT Reduction from 2035 Baseline						5%	10%	20%
1.5	Percent of Peak Period VMT at Congestion (V/C > 1)						12%	8%	4%
1.6	Average Travel Time (work trips) (daily minutes)						24	22	20
1.7	Average Travel Time (all trips) (daily minutes)						15	14	13
1.8	Average Travel Time (all peak trips) (daily minutes)						19	17	15
<b>2</b>	<b>Transit Targets</b>								
2.1	Transit Mode Share (all trips)						3.0%	5.0%	8.0%
2.2	Percent Ridership Increase from 2035 Baseline						100%	200%	400%
2.3	Transit Mode Share (work trips)						5.0%	8.0%	12.0%
2.4	Daily Transit Trips per Capita						0.29	0.43	0.72
<b>3</b>	<b>TDM Targets</b>								
3.1	Percent SOV Trip Share (all trips)						52.5%	50.0%	44.5%
3.2	Percent SOV Trip Reduction from 2035 Baseline						5%	10%	20%
3.3	Percent SOV Trip Share (work trips)						78.4%	74.3%	66.0%
3.4	Percent Non-motorized Trip Share (all trips)						9%	11%	15%
3.5	Percent Non-motorized trip increase from 2035 Baseline						30%	59%	117%
<b>4</b>	<b>Air Quality and Environmental Targets</b> (Guide data is the federal Air Quality Conformity budget)								
4.1	Carbon Monoxide - CO (kg/day)						5% under budget	10% under budget	20% under budget
4.2	Nitrogen Oxides - NOx (kg/day)						5% under budget	10% under budget	20% under budget
4.3	Greenhouse Gas Reduction (community target)						10%	20%	30%
<b>5</b>	<b>Financial/Economics Targets</b>								
5.1	Revenue/Cost Gap (Ratio of traditional revenue/cost)						0.90	0.95	1.00
5.2	Cost per Trip						\$0.20	\$0.18	\$0.16
5.3	Cost of Congestion (in million \$)						1,030	848	666
<b>6</b>	<b>Environment Justice/Land Use Targets</b>								
6.1	Percent of EJ Population within 1/4 mile of transit						65%	75%	85%
6.2	Percent of Employment within 1/4 mile of transit						75%	80%	90%
6.3	EJ Travel Time (ratio of avg.travel time) (EJ/All)						1.00	0.95	0.90

6/4/2008

## 2035 LRTP and CTP Highway Projects and Alternatives

New ID	Project	Project Limits	Existing Cross-Section	CTP 2040 Proposed Cross-Section	County	Proposed Improvement	AQ year	Benchmarks			LRTP Alternatives				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
1	Alexander Dr	Cornwallis Rd to NC 147	2-lane	4-lane divided	Durham	Widening	2017	0	1	1	1	1	1	1	1
2	Alexander Dr	NC 147 to Miami Blvd	2-lane	4-lane divided	Durham	Widening	2007	1	1	1	1	1	1	1	1
2.1	Alexander Dr	NC 147 to Miami Blvd	4-lane divided	6-lane divided	Durham	Widening	2040	0	0	1	1	0	0	0	0
3	Alexander Dr	NC 54 to NC 55	2-lane	4-lane divided	Durham	Widening	2025	0	1	1	1	1	1	1	1
4	Alexander Dr	NC 54 to Cornwallis Rd	2-lane	4-lane divided	Durham	Widening	2025	0	1	1	1	1	1	1	1
5	Alston Ave Ext	Holloway St to Old Oxford/Roxboro	New	4-lane divided	Durham	New	2035	0	1	1	1	1	1	1	1
5.1	Anderson St Ext (15th St)	Erwin Rd to Main (US 70 Bus)	2-lane	4-lane	Durham	Widening	2040	0	0	1	1	0	0	0	0
5.2	Barbee Road	E Woodcroft Pkwy to Herndon Rd	2-lane	4-lane	Durham	Widening	2040	0	0	1	1	0	0	0	0
6	Berryhill/Old Fayetteville Conn.	Old Fayetteville Rd to NC 54 Bypass	New	2-lane	Orange	New	2007	1	1	1	1	1	1	1	1
7	BPW Club/Rock Haven Conn.	Loop at Smith Level Road	New	2-lane	Orange	New	2007	1	1	1	1	1	1	1	1
7.1	Briggs Ave Ext	Lawson-NE Creek Pkwy	2-lane	4-lane divided	Durham	Widening		0	0	1	1				
8	Briggs Ave Ext	So-Hi Dr to Riddle Rd	New	4-lane	Durham	New	2017	0	1	1	1	1	1	1	1
8.1	Burton Road Ext	Burton Rd to Red Mill Rd/I-85	new	2-lane	Durham	New	2040	0	0	1	1	0	0	0	0
8.2	Carpenter Fletcher	Woodcroft Pewit ext to NC 55	2 lane	4-lane divided	Durham	Widening	2035	0	0	1	1	0	0	0	0
9	Carver Street Ext	Armfield St to Old Oxford Rd	New	4-lane divided	Durham	New	2017	0	1	1	1	0	0	0	0
10	Chin Page Ext.	Page Rd to Wake County Line	New	4-lane	Durham	New	2025	0	1	1	1	0	0	0	0
11	Churton Connector	Old NC 86 to NC 86 (Between I-85 & I-40)	New	4-lane divided	Orange	New	2008	1	1	1	1	1	1	1	1
11.1	Club Blvd	Washington to Roxboro	2-lane	4-lane divided	Durham	Widening	2040	0	0	1	1	0	0	0	0
11.2	Club Blvd	Roxboro to Geer St	2-lane	4-lane divided	Durham	Widening	2040	0	0	1	1	0	0	0	0
12	Cornwallis Rd	MLK to Alexander Dr	2-lane	4-lane divided	Durham	Widening	2025	0	1	1	1	0	0	0	0
13	Cornwallis Rd Ext	Miami Blvd to Chin Page Rd	New	4-lane divided	Durham	New	2035	0	1	1	1	0	0	0	0
14	Davis Dr	NC 54 to County Line	2-lane	4-lane divided	Durham	Widening	2009	1	1	1	1	1	1	1	1
14.1	Duke Street (North)	I-85 to N Roxboro split	4-lane	6-lane	Durham	Widening	2040	0	0	1	1	0	0	0	0
15	East End Connector (EEC)	NC 147 to US 70 E; US 70:EEC to NC 98	New	6-lane freeway	Durham	New	2017	0	1	1	1	1	1	1	1
15.1	East End Connector (EEC)	NC 147 to US 70 E; US 70:EEC to NC 99	6-lane freeway	8-lane HOV freeway	Durham	Widening	2040	0	0	1	1	0	0	0	0
16	Elizabeth Brady Rd Ext	US 70 Business to St Mary's Rd	New	4-lane divided	Orange	New	2017	0	1	1	1	1	1	1	1
17	Estes Dr	Greensboro Rd to NC 86	2-lane	3-lane	Orange	Widening	2025	0	1	1	1	1	1	1	1
18	FarmHouse/Tramore Conn.	Old NC 86 to Stratford Drive	New	2-lane	Orange	New	2035	0	1	1	1	0	0	0	0
19	Farrington Mill Rd	Jack Bennett Rd to Durham Co line	2-lane	4-lane divided	Durham	Widening	2035	0	0	1	1	0	0	0	0

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## 2035 LRTP and CTP Highway Projects and Alternatives

New ID	Project	Project Limits	Existing Cross-Section	CTP 2040 Proposed Cross-Section	County	Proposed Improvement	AQ year	Benchmarks			LRTP Alternatives				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
20	Farrington Mill Rd	Barbee Chapel Rd to Chatham Co. line	2-lane	4-lane divided	Durham	Widening	2035	0	0	1	1	0	0	0	0
21	Farrington Rd	Barbee Chapel Rd to Stagecoach Rd	2-lane	4-lane divided	Durham		2035	0	0	1	1	0	0	0	0
22	Fayetteville Rd	Woodcroft Pkwy to South Point	2-lane	4-lane divided	Durham	Widening	2005	1	1	1	1	1	1	1	1
23	Fayetteville Rd	Woodcroft Pkwy to Cornwallis Rd	2-lane	4-lane divided	Durham	Widening	2017	0	1	1	1	1	1	1	1
24	Garrett Rd	NC 751 to US 15-501	2-lane	4-lane divided	Durham	Widening	2025	0	1	1	1	0	0	0	0
25	Garrett Rd/NC 751/nc54	Garrett/NC 751 to NC 54	Intersection	4-lane	Durham	Widening	2008	0	0	1	1	1	1	1	1
25.1	Geer Street	Club Blvd to Cheek	2-lane	4-lane	Durham	Widening	2040	0	0	1	1	0	0	0	0
26	Globe St Ext. (Brier Creek Pkwy)	Miami Blvd. To Wake County Line	New	4-lane	Durham	New	2035	0	1	1	1	0	0	0	0
27	Glover Rd	Glover Rd/NC 147 interchange; 147 to Angier	2-lane	Interchg/4-lane divided	Durham	Widen/interchg	2025	0	1	1	1	0	0	0	0
28	Glover Rd	Angier to US 70	New	4-lane divided	Durham	New	2025	0	1	1	1	0	0	0	0
29	Guess Rd	Carver St to Umstead Rd	2-lane	5-lane/4-lane divided	Durham	Widening	2006	1	1	1	1	1	1	1	1
29.1	Hamlin Road Ext	Glenn Rd to Red Mill Rd	new	2-lane	Durham	New	2040	0	0	1	1	0	0	0	0
29.2	Herndon Rd	Scott King to Barbee Rd/Massey Chapel	2-lane	4-lane divided	Durham	Widening	2040	0	0	1	1	0	0	0	0
30	Hillandale Rd	I-85 to Carver St.	2-lane	4-lane divided	Durham	Widening	2011	1	1	1	1	1	1	1	1
31	Hillandale Rd	Carver to Horton Rd	2-lane	4-lane divided	Durham	Widening	2025	0	1	1	1	0	0	0	0
32	Hillandale Rd Ext	Horton Rd to Guess Rd	New	4-lane divided	Durham	New	2035	0	1	1	1	0	0	0	0
33	Hillsborough Rd/Old Fayetteville	Lorraine St to Old Fayetteville/NC 54	2-lane	2-lane (36-ft curb/gutter)	Orange	Widening	2025	0	1	1	1	1	1	1	1
34	Holloway Street	US 70 to east of Junction Rd	2-lane	5-lane	Durham	Widening	2009	1	1	1	1	1	1	1	1
35	Homestead Rd	High School Rd to NC 86	2-lane	3-lane	Orange	Widening	2025	0	1	1	1	1	1	1	1
36	Homestead Rd	Old NC 86 to High School Rd	2-lane	3-lane	Orange	Widening	2025	0	1	1	1	1	1	1	1
37	Hopson Rd. realignment (RTP)	Louis Stephens Dr to NC 55	2-lane	2-lane	Durham	Realignment	2010	1	1	1	1	1	1	1	1
39	Horton Rd	Duke St to Hillandale Rd	2-lane	4-lane divided	Durham	Widening	2035	0	1	1	1	0	0	0	0
40	(Horace Williams Network) Carolina North	Carolina North Campus (this is not an extension of Weaver Dairy Rd.)	New	2-lane	Orange	New	2020	0	1	1	1	1	1	1	1
41	I-40/Farrington Rd interchange	I-40/Farrington Interchange	New	Interchange	Durham	New	2025	0	0	1	1	0	0	0	0
42	I-40	US 15-501 to NC 147	4-lane freeway	6-lane freeway	Durham	Widening	2006	1	1	1	1	1	1	1	1
43	I-40	US 15-501 to NC 86	4-lane freeway	6-lane freeway	Orange	Widening	2035	0	1	1	1	0	0	0	0

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**2035 LRTP and CTP  
Highway Projects and Alternatives**

New ID	Project	Project Limits	Existing Cross-Section	CTP 2040 Proposed Cross-Section	County	Proposed Improvement	AQ year	Benchmarks			LRTP Alternatives				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
44	I-40	NC 86 to I-85	4-lane freeway	6-lane freeway	Orange	Widening	2035	0	1	1	1	0	0	0	0
45	I-40 HOV	Wake County Line to NC 86	New	HOV/HOT lane	Durham	New	2035	0	1	1	1	0	1	0	0
45.1	I-40 HOV	NC 86 to I-85/Orange County Line	New	HOV/HOT lane	Durham	New	2040	0	0	1	1	0	1	0	0
46	I-540	Ramp improvement: I-540 W to I-40 W	1-lane ramp	2-lane ramp	Durham	Widening	2010	0	1	1	1	1	1	1	1
47	I-85	US 15-501 Bypass N to US 70	4-lane freeway	8-lane freeway	Durham	Widening	2006	1	1	1	1	1	1	1	1
48	I-85	I-40 to the Durham Co line	4-lane freeway	8-lane freeway	Orange	Widening	2025	0	1	1	1	1	1	1	1
49	I-85	US 70 to Red Mill Rd.	4-lane freeway	8-lane HOV freeway	Durham	Widening	2035	0	1	1	1	1	1	1	1
50	Infinity Rd	Roxboro Rd to Snow Hill Rd	2-lane	4-lane divided	Durham	Widening	2035	0	1	1	1	0	0	0	0
50.1	Jack Bennet Rd/Lystra Rd.	US 15-5501 South to Farrington Mill/Point Rd	2-lane	4-lane divided	Chatham	Widening	2035	0	0	1	1	0	0	0	0
50.2	Kemp Road (SR 1902)	SR 1809 to Olive Branch	new	2-lane	Durham	New	2040	0	0	1	1	0	0	0	0
51	Lake Hogan Farms Rd	Eubanks Road to Homestead Rd.	New	2-lane	Orange	New	2020	0	1	1	1	1	1	1	1
52	Latta Rd	Guess Rd to Roxboro Rd	2-lane	4-lane divided	Durham	Widening	2035	0	1	1	1	0	0	0	0
53	Leesville Rd Ext	Northern Parkway to US 70/Page Rd.	New	4-lane	Durham	New	2035	0	1	1	1	0	0	0	0
54	Leesville Rd Realignment	East of Olive Branch Rd to County line	2-lane	4-lane	Durham	Realignment	2035	0	1	1	1	0	0	0	0
54.1	Leesville Rd	US 70 to Panoramic Dr	New	2-lane	Durham	New	2040	0	0	1	1	0	0	0	0
56	Louis Stephens Drive (RTP)	Hopson Rd to County Line	New	4-lane	Durham	New	2010	0	1	1	1	1	1	1	1
57	Lynn Rd. Ext	NC 98/Glover Rd Ext to Existing Lynn Rd.	New	2-lane	Durham	New	2035	0	1	1	1	0	0	0	0
57.1	Massey Chapel Rd	Fayetteville Rd. to Herndon Rd	2-lane	4-lane	Durham		2040	0	0	1	1	0	0	0	0
58	Mason Farm Rd Realignment	Near S Columbia St	2-lane	2-lane	Orange	Realignment	2025	0	1	1	1	0	0	0	0
59	Miami Blvd.	Methodist Dr to Angier Ave	2-lane	5-lane	Durham	Widening	2009	1	1	1	1	1	1	1	1
60	Midland Terrace	NC 98 to Geer St	New	2-lane	Durham	New	2035	0	1	1	1	0	0	0	0
61	Midland Terrace	Dearborn to Old Oxford Rd/Hamlin Junction	New	2-lane	Durham	New	2035	0	1	1	1	0	0	0	0
62	MLK Parkway	Old Chapel Hill Rd to NC 55	2-lane/new	4-lane divided	Durham	New	2007	1	1	1	1	1	1	1	1
63	MLK Pkwy (NC 55 interchange)	NC 55 to Cornwallis Rd connector	New	4-lane divided	Durham	New	2035	0	1	1	1	0	0	0	0

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New ID	Project	Project Limits	Existing Cross-Section	CTP 2040 Proposed Cross-Section	County	Proposed Improvement	AQ year	Benchmarks			LRTP Alternatives				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
64	NC 147	Alston Ave to I-40	4-lane freeway	6-lane HOV freeway	Durham	Widening	2035	0	1	1	1	0	0	0	0
64.1	NC 147	Alston Ave to I-85	4-lane freeway	6-lane HOV freeway	Durham	Widening	2040	0	0	1	1	0	0	0	0
65	NC 147	East End Conn to I-40	New	HOV lane	Durham	Widening	2035	0	1	1	1	0	0	0	0
66	NC 147 South Ext (Triangle Pkwy -toll)	I-40 to County Line	New	6-lane freeway	Durham	New	2017	0	1	1	1	1	1	1	1
67	NC 54	Burning Tree to Barbee Chapel	4-lane	6-lane divided	Durham	Widening	2005	1	1	1	1	1	1	1	1
68	NC 54	Miami Blvd to Wake Co line	2-lane	4-lane divided	Durham	Widening	2007	1	1	1	1	1	1	1	1
69	NC 54	I-40 Interchange to NC 55	2-lane	4-lane divided	Durham	Widening	2025	0	1	1	1	1	1	1	1
70	NC 54	I-40 to Barbee Chapel Rd	4-lane	6-lane divided	Durham	Widening	2025	0	1	1	1	0	0	0	0
71	NC 54/NC 751/Garrett Rd	NC 751/Garrett to NC 54	Intersection	Upgrade	Durham	Upgrade		1	1	1	1	1	1	1	1
72	NC 54/Page Rd	Davis Dr to Miami Blvd	2-lane	4-lane divided	Durham	Widening	2009	1	1	1	1	1	1	1	1
73	NC 54/US 15-501 Bypass	NC 54 to US 15-501	4-lane	6-lane divided	Orange	Widening	2025	0	1	1	1	0	0	0	0
74	NC 55	Cornwallis Rd to Wake Co.	2-lane	4-lane divided	Durham	Widening	2007	1	1	1	1	1	1	1	1
75	NC 55 (Alston Ave.)	NC 147 to NC 98	2-lane	4-lane divided	Durham	Widening	2017	1	1	1	1	1	1	1	1
76	NC 751	US 64 (MAB) to Durham Co. line	2-lane	4-lane divided	Chatham	Widening	2035	0	1	1	1	0	0	0	0
77	NC 751	Fayetteville/Scott King Rd to S Roxboro St	2-lane	4-lane divided	Durham	Widening	2025	0	1	1	1	0	0	0	0
78	NC 751	Chatham Co. Line to Fayetteville/Scott King Rd		4-lane divided	Durham		2035	0	1	1	1	0	0	0	0
80	NC 86	Old NC 10 to US 70 Business	2-lane	4-lane divided	Orange	Widening	2025	0	1	1	1	0	0	0	0
81	NC 86	US 70 Bypass to NC 57	2-lane	4-lane divided	Orange	Widening	2025	0	1	1	1	0	0	0	0
81.1	NC 98 (Holloway St)	Wake County Line to Mineral Springs	2-lane	4-lane	Durham	Widening	2040	0	0	1	1	0	0	0	0
83	Northern Durham Pkwy	US 70 E to I 85 N	New	4-lane divided	Durham	New	2025	0	1	1	1	1	1	1	1
84	Northern Durham Pkwy	I 85 North to Old Oxford Hwy	New	4-lane divided	Durham	New	2025	0	1	1	1	1	1	1	1
85	Northern Durham Pkwy	Old Oxford Hwy to Roxboro Rd	New	4-lane divided	Durham	New	2025	0	1	1	1	1	1	1	1
85.1	Oakdale Rd.	Old NC 85 to Old NC 86	new	2-lane	Orange		2040	0	0	1	1	0	0	0	0
86	Old NC 86	I-40 to Lafayette Dr.	2-lane	4-lane divided	Orange	Widening	2035	0	1	1	1	1	1	1	1
87	Old NC 86	Lafayette Dr to US 70 Business	2-lane	4-lane divided	Orange	Widening	2035	0	1	1	1	1	1	1	1
88	Old Oxford Rd	Roxboro Rd to Snow Hill Rd	2-lane	4-lane divided	Durham	Widening	2025	0	1	1	1	0	0	0	0
89	Olive Branch Rd Ext	NC 98 to US 70	New	2-lane	Durham	New	2035	0	1	1	1	0	0	0	0
89.1	Orange Factory Road	Snow Hill to Orange Factory	New	2-lane	Durham	New	2040	0	0	1	1	0	0	0	0

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6/4/2008

**2035 LRTP and CTP  
Highway Projects and Alternatives**

New ID	Project	Project Limits	Existing Cross-Section	CTP 2040 Proposed Cross-Section	County	Proposed Improvement	AQ year	Benchmarks			LRTP Alternatives				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
89.2	Orange Factory Road	Treyburn to Staggsville Connector	New	2-lane	Durham	New	2040	0	0	1	1	0	0	0	0
90	Page Rd	I-40 to Page Rd Ext	2-lane	4-lane divided	Durham	Widening	2035	0	1	1	1	0	0	0	0
91	Riddle Rd. Extension	Briggs Ave. to NC 147	New	2-lane	Durham	New	2025	0	1	1	1	0	0	0	0
91.1	Riddle Rd. Extension	Cornwallis to NC 55	New	2-lane	Durham	New	2040	0	0	1	1	0	0	0	0
92	Roxboro Road (501N)	Duke Street to Goodwin Rd	4-lane divided	6-lane divided	Durham	Widening	2035	0	1	1	1	1	1	1	1
93	Roxboro St Ext	Hope Valley Farms to MLK Pkwy	2-lane	4-lane divided	Durham	Widening	2005	1	1	1	1	1	1	1	1
94	Roxboro St	Cornwallis Rd to MLK Pkwy	2-lane	4-lane divided	Durham	New	2025	0	1	1	1	0	0	0	0
94.1	Roxboro St South	Summit to E. Lakewood	2-lane	4-lane divided	Durham	Widening	2040	0	0	1	1	0	0	0	0
95	Scott King Rd	Grandale Dr to Hopson Rd	New	4-lane divided	Durham	New	2035	0	1	1	1	0	0	0	0
95.1	Scott King Rd	Grandale Dr to Fayetteville Rd	2-lane	4-lane divided	Durham	Widening	2035	0	0	1	1	0	0	0	0
96	Seawell School Connector	Lake Hogan Farms Rd to Seawell School Rd	New	2-lane	Orange	New	2035	0	1	1	1	0	0	0	0
97	Smith Level Rd	Rock Haven Rd to NC 54 bypass	2-lane	Multilanes	Orange	Widening	2017	0	1	1	1	1	1	1	1
97.1	Snow Hill Rd (SR 1631)	Infinity Rd to Old Oxford Ext	new	2-lane	Durham	New	2040	0	0	1	1	0	0	0	0
98	South Columbia St	NC 54 to Manning Dr.	2-lane	turn lanes/bike facilities	Orange	Widening	2017	0	1	1	1	1	1	1	1
100	Stadium Drive Ext	Shaftsbury Dr to Kirkwood Dr	2-lane	3-lane curb & gutter	Durham	Widening	2005	1	1	1	1	1	1	1	1
101	Stagecoach Rd	Farrington Mill Rd to NC 751	2-lane	4-lane divided	Durham	Widening	2017	0	0	1	1	0	0	0	0
101.1	Staggsville Rd (1615)	SR 1619 to SR 1626	New	2-lane	Durham	New	2040	0	0	1	1	0	0	0	0
102	SW Durham Dr	Rizzo Conf. Dr to I-40	New	2-lane divided	Durham	New	2025	0	1	1	1	0	0	0	0
103	SW Durham Pkwy	Farrington Rd (I-40 to Old Chapel Hill Rd)	2-lane	4-lane divided	Durham	Widening	2025	0	1	1	1	1	1	1	1
104	SW Durham Pkwy	Watkins Rd (Old Chapel Hill Rd to US 15-501)	2-lane	4-lane divided	Durham	Widening	2017	0	1	1	1	1	1	1	1
105	SW Durham Pkwy	NC 54 to Rizzo Conf. Driveway	New	4-lane divided	Durham	New	2005	1	1	1	1	1	1	1	1
106	SW Durham Pkwy	15-501 to Mt. Moriah Rd.	New	4-lane divided	Durham	New	2025	0	1	1	1	1	1	1	1
106.1	T. W. Alexander Dr	Miami Blvd to US 70	4-lane divided	6-lane divided	Durham	Widening	2035	0	0	1	1	0	0	0	0
107	T. W. Alexander Dr Ext	US 70 to Carpenter Ponds (Durham Portion)	New	4-lane divided	Durham	New	2025	0	1	1	1	0	0	0	0
108	UNC Access to the Bypass	Manning Dr to 54/15-501 Bypass	New	4-lane divided	Orange	New	2025	0	1	1	1	0	0	0	0
109	US 15-501	Pittsboro Bypass (MAB) to Orange Co. line	2-lane	4-lane divided	Chatham	Widening	2007	1	1	1	1	1	1	1	1

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**2035 LRTP and CTP  
Highway Projects and Alternatives**

New ID	Project	Project Limits	Existing Cross-Section	CTP 2040 Proposed Cross-Section	County	Proposed Improvement	AQ year	Benchmarks			LRTP Alternatives				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
110	US 15-501	Mt Moriah Rd to Garrett Rd	4-lane divided	6-lane divided	Durham	Widening	2009	1	1	1	1	1	1	1	1
111	US 15-501	I-40 to Franklin St	4-lane divided	6-lane divided	Orange	Widening	2035	0	1	1	1	0	0	0	0
112	US 15-501	Orange Co line to Chapel Hill Bypass	2-lane	4-lane divided	Orange	Widening	2007	1	1	1	1	1	1	1	1
113	US 15-501	Bypass to I-40 (freeway conversion)	6-lane divided	6-lane freeway	Durham	Widening	2035	0	1	1	1	0	0	0	0
114	US 15-501 Bypass	Pickett Rd to Morreene Rd	4-lane freeway	6-lane freeway	Durham	Widening	2035	0	1	1	1	0	0	0	0
115	US 15-501 Service Rd (SR 1126)	Relocation of existing service road.	2-lane	2-lane	Durham	Realignment	2009	1	1	1	1	1	1	1	1
115.1	US 70	I-85 to East End Connector	6-lane freeway	8-lane HOV freeway	Durham	Widening	2040	0	0	1	1	0	0	0	0
116	US 70	Lynn Rd to Wake Co line	4-lane divided	6-lane freeway	Durham	Widening	2025	0	1	1	1	0	0	0	0
117	US 70 Bypass	NC 86 to I-85 (exit 170)	2-lane	4-lane divided	Orange	Widening	2025	0	1	1	1	0	0	0	0
118	US 70/Miami Blvd/Mineral	Intersection Upgrade	Existing	Upgrade	Durham	New	2009	1	1	1	1	1	1	1	1
119	Weaver Dairy Rd	NC 86 to Erwin Rd	2-lane	3-lane	Orange	Widening	2017	0	1	1	1	1	1	1	1
120	Western Bypass	US 70 to NC 86	New	2-lane	Orange		2025	0	1	1	1	0	0	0	0
121	Western Bypass	NC 86 to Stroud Creek Rd	New	2-lane	Orange		2025	0	1	1	1	0	0	0	0
122.1	Woodcroft Pkwy	Barbee Rd to Carpenter-Fletcher Rd.	2-lane divided	4-lane divided	Durham	Widening	2035	0	0	1	1	1	1	1	1
123	Woodcroft Pkwy Ext	Garrett Rd to Hope Valley Rd	New	4-lane divided	Durham	New	2025	0	1	1	1	0	0	0	0

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6/5/2008

**2030 LRTP and CTP  
Transit Projects and Alternatives**

Old ID	Route Name	System	CTP Peak Headway	CTP Off-Peak Headway	Reg. Fare	Service Type		Benchmarks:			LRTP Alternatives:				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
STAC	Burlington to Downtown Raleigh	MTC	45	NA	NA	Express	Commuter Rail	0	0	1	0	0	0	1	0
STAC	Selma to Downtown Durham	MTC	45	NA	NA	Express	Commuter Rail	0	0	1	0	0	0	1	0
STAC	Carolina North to Durham Multimodal Center Corridor	MTC	10	20	NA	Regional	LRT or BRT	0	1	1	0	1	0	0	0
STAC	UNC Hospital to Carolina North	MTC	10	20	NA	Local	High Level Bus Priority	0	0	1	0	0	0	0	0
STAC	Burlington to Carolina North:	MTC	45	NA	NA	Express	Commuter Rail	0	0	1	0	0	0	0	0
STAC	Hillsborough to Carolina North	MTC	30	60	NA	Regional	Low Level Bus Priority	0	0	1	0	0	1	0	0
STAC	Triangle Expressway/Apex I40 to Triangle Metro Center	MTC	20	60	NA	Regional	Buses on Turnpike	0	0	1	0	0	1	0	0
STAC	Duke to Triangle Metro Center via NC 147	MTC	20	60	NA	Regional	Buses on HOT	0	0	1	0	0	1	0	0
STAC	Durham to North Durham	MTC	30	60	NA	Express	Low Level Bus Priority	0	0	1	0	0	1	0	0
STAC	Duke to Triangle Metro Center	MTC	10	20	NA	Regional	Regional Rail (DMU)	0	0	1	0	1	0	0	0
STAC	Triangle Metro Center to NW Cary	MTC	10	20	NA	Regional	Regional Rail (DMU)	0	0	1	0	1	0	0	0
STAC	NW Cary to Downtown Raleigh to Durant Rd	MTC	10	20	NA	Regional	Regional Rail (DMU)	0	0	0	0	0	0	0	0
STAC	Durant Rd to Wake Forest	MTC	45	NA	NA	Express	Commuter Rail	0	0	0	0	0	0	0	0
STAC	Wake Forest to Franklinton	MTC	30	60	NA	Express	Conventional Express Bus	0	0	0	0	0	0	0	0
STAC	I-40: Wake/ Johnston Counties to Triangle Metr	MTC	20	60	NA	Regional	Buses on HOT	0	0	0	0	0	1	0	0
STAC	I-540 Northern Arc	MTC	20	60	NA	Regional	Buses on HOT	0	0	1	0	0	1	0	0
STAC	Southern Arc 540 Eastern/Southern Segments	MTC	20	60	NA	Regional	Buses on Turnpike	0	0	1	0	0	0	0	0
STAC	Pittsboro to Chapel Hill	MTC	30	60	NA	Regional	Low Level Bus Priority	0	0	1	0	0	0	0	0
STAC	Triangle Metro Center to Carolina North	MTC	10	20	NA	Regional	Bus Rapid Transit	0	0	1	0	1	1	0	0
STAC	Apex to Cary	MTC	30	30	NA	Regional	Regional Rail (DMU)	0	0	0	0	0	0	0	0
STAC	Raleigh to Durham via US 70	MTC	30	60	NA	Regional	Low Level Bus Priority	0	0	1	0	0	0	0	0

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### 2030 LRTP and CTP Transit Projects and Alternatives

Old ID	Route Name	System	CTP Peak Headway	CTP Off-Peak Headway	Reg. Fare	Service Type		Benchmarks:			LRTP Alternatives:				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
STAC	Downtown Raleigh to Zebulon	MTC	30	60	NA	Regional	Low Level Bus Priority	0	0	0	0	0	0	0	0
STAC	Raleigh to Fuquay-Varina	MTC	30	60	NA	Regional	Low Level Bus Priority	0	0	0	0	0	0	0	0
STAC	Chapel Hill Circulator	MTC	10	10	NA	Local	Low Level Bus Priority	0	0	1	1	1	1	1	0
STAC	Durham Circulator	MTC	10	10	NA	Local	Low Level Bus Priority	0	0	1	0	1	1	1	0
STAC	Raleigh Circulator 1	MTC	10	10	NA	Local	Low Level Bus Priority	0	0	0	0	0	0	0	0
STAC	Raleigh Circulator 2	MTC	10	10	NA	Local	Low Level Bus Priority	0	0	0	0	0	0	0	0
STAC	Cary Circulator	MTC	10	20	NA	Local	Low Level Bus Priority	0	0	0	0	0	0	0	0
STAC	RTP-RDU Circulator	MTC	10	10	NA	Local	Bus Rapid Transit	0	0	1	0	1	1	1	0
23	DATA Treyburn Station Feeder	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
24	DATA Woodcroft Feeder IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
25	DATA Woodcroft Feeder OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
26	DATA Meridian Pkwy Feeder IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
27	DATA Meridian Pkwy Feeder OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
28	DATA Joyner-Club-Duke IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
29	DATA Joyner-Club-Duke OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
30	DATA S Square Feeder IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
31	DATA S Square Feeder OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
32	DATA S Square Shuttle IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
33	DATA S Square Shuttle OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
34	DATA 17 Feeder Eno Loop	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
35	DATA 17 Feeder OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
36	DATA 17 Feeder IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
37	DATA 30R Duke Hospital IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
38	DATA 30 Duke Hospital OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
39	DATA 28R RTP E IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
40	DATA 28 RTP E OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
41	DATA 27R Ngate-RTP W IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
42	DATA 27 Ngate-RTP W OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
43	DATA 25 DurReg-DukeMed OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
44	DATA 25R DurReg-DukeMed IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
45	DATA 20 Ngate-RTP OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1

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**2030 LRTP and CTP  
Transit Projects and Alternatives**

Old ID	Route Name	System	CTP Peak Headway	CTP Off-Peak Headway	Reg. Fare	Service Type		Benchmarks:			LRTP Alternatives:				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
46	DATA 20R Ngate-RTP IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
47	DATA 15R Willowdale IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
48	DATA 15 Willowdale OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
49	DATA 20 UniDr-RTP IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
50	DATA 20 UniDr-RTP OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
51	DATA 17 Roxboro-Davinci SB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
52	DATA 17 Roxboro-Davinci NB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
53	DATA Durham XT NWB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
54	DATA Durham XT SEB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
63	DATA Treyburn NB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
64	DATA Treyburn SB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
65	DATA Bethesda SB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
66	DATA Bethesda NB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
67	DATA 17 Horton-Davinci SEB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
68	DATA 17 Horton-Davinci NWB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
69	DATA 21 Ngate-Spoint OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
70	DATA 21 Ngate-Spoint IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
71	DATA Holoway/The Village OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
72	DATA Holoway/The Village IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	
73	DATA Riddle Station Feeder IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
74	DATA Riddle Station Feeder OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
75	DATA NC98 - US70 - Miami OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
76	DATA NC98 - US70 - Miami IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
77	DATA Dtech-Snow IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
78	DATA Dtech-Snow OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
79	DATA Dtown Terminal Shuttle IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
80	DATA Dtown Terminal Shuttle OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
81	DATA Dtown Terminal Feeder IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
82	DATA Dtown Terminal Feeder OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
83	DATA EPA IB	DATA	7	15	\$ 1.	Express bus	2040		1	1	1	1	1	1	1
84	DATA EPA OB	DATA	7	15	\$ 1.	Express bus	2040		1	1	1	1	1	1	1
85	DATA 19 Feeder OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
86	DATA 19 Feeder IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
87	DATA 18 Feeder OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
88	DATA 18 Feeder IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	1	0	0
89	DATA 12XR DTT-EPA IB	DATA	7	15	\$ 1.	Express bus	2040		1	1	1	1	1	1	1
90	DATA 12X DTT-EPA OB	DATA	7	15	\$ 1.	Express bus	2040		1	1	1	1	1	1	1
91	DATA 7SPR Southpoint Mall IB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1
116	DATA 7SP Southpoint Mall OB	DATA	7	15	\$ 1.	Local bus	2040		1	1	1	1	1	1	1

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**2030 LRTP and CTP  
Transit Projects and Alternatives**

Old ID	Route Name	System	CTP Peak Headway	CTP Off-Peak Headway	Reg. Fare	Service Type		Benchmarks:			LRTP Alternatives:					
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres	
327	DATA 1-3 OB:Hillndal-Guess-MdInd	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
328	DATA 3-1 IB:MdInd-Guess-Hillndal	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
329	DATA 13 IB:Fayette-Birchwood	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
330	DATA 12 OB:Downtown-TTATerm	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
331	DATA 7 OB:Downtown-Southpointe	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
332	DATA 14 OB:NCCUShuttle	DATA	7	15	Free	Local bus	2040		1	1		1	1	1	1	1
333	DATA 14 IB:NCCUShuttle	DATA	7	15	Free	Local bus	2040		1	1		1	1	1	1	1
334	DATA 17 IB:Treyburn-Horton	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
335	DATA 16 OB:Downtown-MineralSprng	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
336	DATA 4-2 OB:Horton-Angier	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
337	DATA 2-4 IB:Angier-Horton	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
354	DATA 15 OB:WellonsVlg-Briarcreek	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	1	1	1
355	DATA 15 IB:Briarcreek-WellonsVlg	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
356	DATA 11-9 IB:Bennett-DRHosp	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
357	DATA 5-6 OB:Emrld-Crnw-Cnstitutn	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
358	DATA 10-8 IB:Woodcroft-DrhmTech	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
359	DATA 1-3 OB:Hillndal-Point-MdInd	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
360	DATA 6-5 IB:Cnstitutn-HV-Emerald	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
361	DATA 5-6 OB:Emerald-HV-Cnstitutn	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
366	DATA 13 OB: Birchwood-Fayette	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
405	DATA 12 IB:TTATerm-Downtown	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
406	DATA 7 IB:Southpointe-Downtown	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
407	DATA 17 OB:Horton-Treyburn	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
408	DATA 16 IB:MineralSprng-Downtown	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
409	DATA 9-11 OB:DRHosp-Bennett	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
410	DATA 8-10 OB:DrhmTech-Woodcroft	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
411	DATA 8-10 OB:DrhmTech-NewHopeCmn	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
419	DATA 3-1 IB:MdInd-Point-Hillndal	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
420	DATA 10-8 IB:NewHopeCmn-DrhmTech	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
441	DATA 6-5 IB:Cnstitutn-Crnw-Emrld	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
L1	NDP: Carver Street ext via old oxfor	DATA	7	15	\$ 1.	Local bus	2040		1	1		0	1	0	0	0
L1	NDP: Carver Street ext via old oxfor	DATA	7	15	\$ 1.	Local bus	2040		1	1		0	1	0	0	0
L2	North Creek Pkway:Cornwallis-Brier C	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
L2	North Creek Pkway:Cornwallis-Brier C	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
L3	S Alston Glover:Cornwallis/S Alston-	DATA	7	15	\$ 1.	Local bus	2040		1	1		0	1	0	0	0
L3	S Alston Glover:Cornwallis/S Alston-	DATA	7	15	\$ 1.	Local bus	2040		1	1		0	1	0	0	0
L4	S Roxboro/NC 751:W Cornwallis- South	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
L4	S Roxboro/NC 751:W Cornwallis- South	DATA	7	15	\$ 1.	Local bus	2040		1	1		1	1	0	1	1
L5	SW Durham Dr: Mt Moraih- NC 54/Hunti	DATA	7	15	\$ 1.	Local bus	2040		1	1		0	1	0	0	0

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## 2030 LRTP and CTP Transit Projects and Alternatives

Old ID	Route Name	System	CTP Peak Headway	CTP Off-Peak Headway	Reg. Fare	Service Type		Benchmarks:			LRTP Alternatives:				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
L5	SW Durham Dr: Mt Moraih- NC 54/Hunti	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
L6	University Drive: Morehead-Cornwalli	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
L6	University Drive: Morehead-Cornwalli	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
L7	W Trinity/Buchanan: Avondale- Chapel	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
L7	W Trinity/Buchanan: Avondale- Chapel	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
L8	Sparger/Cole Mill:hillsborough rd N-	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
L8	Sparger/Cole Mill:hillsborough rd N-	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
L9	Scott King RD: Renaissance pkway- Ho	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
L9	Scott King RD: Renaissance pkway- Ho	DATA	7	15	\$ 1.	Local bus	2040		1	1	0	1	0	0	0
427	TTA Rail: Dur-CH SB	TTA	7	15	\$ 2.	Rail	2035		1	1	0	1	0	0	0
428	TTA Rail: Dur-CH NB	TTA	7	15	\$ 2.	Rail	2035		1	1	0	1	0	0	0
425	TTA Rail: Ral-Dur EB	TTA	7	15	\$ 2.	Rail	2035		1	1	0	1	0	0	0
426	TTA Rail: Ral-Dur WB	TTA	7	15	\$ 2.	Rail	2035		1	1	0	1	0	0	0
c3a	dchc: durham beltline -Treyburn NB	DCHC	7	15	\$ 2.	Rail	2035		1	1	0	1	0	0	0
c3b	dchc: durham beltline-Treyburn SB	DCHC	7	15	\$ 2.	Rail	2035		1	1	0	1	0	0	0
c4a	dchc: durham beltline-Creedmor-butne	DCHC	7	15	\$ 2.	Rail	2040		1	1	0	1	0	0	0
c4b	dchc: durham beltline-Creedmor-butne	DCHC	7	15	\$ 2.	Rail	2040		1	1	0	1	0	0	0
c5a	dchc: durham beltline-briggs ave-dow	DCHC	7	15	\$ 2.	Rail	2040		1	1	0	1	0	0	0
c5b	dchc: durham beltline-briggs ave-dow	DCHC	7	15	\$ 2.	Rail	2040		1	1	0	1	0	0	0
c6	dchc: durham beltline-briggs ave-dun	DCHC	7	15	\$ 2.	Rail	2040		1	1	0	1	0	0	0
c7a	dchc: durham beltline-NC 147- briggs	DCHC	7	15	\$ 2.	Rail	2040		1	1	0	1	0	0	0
c7b	dchc: durham beltline-NC 147- briggs	DCHC	7	15	\$ 2.	Rail	2040		1	1	0	1	0	0	0
c8a	Chapel Hill/Carrboro - Hillsborough/	DCHC	7	15	\$ 2.	Rail	2040		0	1	0	1	0	0	0
c8b	Chapel Hill/Carrboro - Hillsborough/	DCHC	7	15	\$ 2.	Rail	2040		0	1	0	1	0	0	0
c9a	Burlington to Duke Commuter rail NB	DCHC	7	15	\$ 2.	Rail	2040		1	1	0	1	0	0	0
c9b	Burlington to Duke Commuter rail NB	DCHC	7	15	\$ 2.	Rail	2040		1	1	0	1	0	0	0
cb1	downtown durham DATA terminal via du	DCHC	7	15	\$ 1.	local	2040		1	1	0	0	0	0	0
cb2	downtown durham DATA terminal via du	DCHC	7	15	\$ 1.	local	2040		1	1	0	0	0	0	0
cb3	Duke univ to mebane: erwin/fulton vi	DCHC	7	15	\$ 1.	local	2040		1	1	0	0	0	0	0
cb4	Chapel Hill from Columbia St via MLK	DCHC	7	15	\$ 1.	local	2040		1	1	0	0	0	0	0
cb5	RDU -Hillsborough: RDU via I40 NC 86	DCHC	7	15	\$ 1.	local	2040		1	1	0	0	0	0	0
cb5a	Chapel Hill	DCHC	7	15	\$ 1.	local	2040		0	1	0	0	0	0	0
cb6	NC54 W to Alance Co:from US15501 via	DCHC	7	15	\$ 1.	local	2040		0	1	0	0	0	0	0
cb7	NC54 W to Alamance: jones ferry rd t	DCHC	7	15	\$ 1.	local	2040		0	1	0	0	0	0	0
cb8	Chapel to Pittsboro: columbia via US	DCHC	7	15	\$ 1.	local	2040		1	1	0	1	0	0	0
cb9	Mt carmel church rd: us15501 to old	DCHC	7	15	\$ 1.	local	2040		1	1	0	1	0	0	0
cb10	nc98 wake forest rd: DATA terminal t	DCHC	7	15	\$ 1.	express	2040		1	1	0	1	0	0	0
cb11	US70 Glenwood Ave:DATA term via chap	DCHC	7	15	\$ 1.	local	2040		1	1	0	0	0	0	0
cb12	NC 147 Triangle Parkway: from Duke/F	DCHC	7	15	\$ 1.	local	2040		1	1	0	0	0	0	0

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cb13	NC 55 to Apex : Alston rail station	DCHC	7	15	\$ 1.	local	2040		1	1	0	0	0	0	0
cb14	Western Wake RDU via aviation pkway	DCHC	7	15	\$ 1.	local	2040		1	1	0	0	0	0	0
cb16	NC 54-RDU: Southpoint mail, via slat	DCHC	7	15	\$ 1.	local	2040		1	1	0	1	0	0	0
162	CHT Gateway Feeder 2	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
163	CHT Gateway Feeder 3	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
164	CHT HW 2B Feeder	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
165	CHT HW 2A Feeder	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
166	CHT HW 1B Feeder	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
167	CHT HW 1A Feeder	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
168	CHT Eubanks Station 1B Feeder	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
169	CHT Eubanks Station 1A Feeder	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
170	CHT MOD 10 XPS OB	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
171	CHT MOD 10 XPS IB	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
172	CHT Meadowmont Feeder OB	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
173	CHT Meadowmont Feeder IB	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
174	CHT CH MODY	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
175	CHT CARR 2 Feeder	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
176	CHT Base 11 S Orange OB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
177	CHT Base 11 S Orange IB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
178	CHT MOD 8 OB-1	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
179	CHT MOD 8 IB-1	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
180	CHT MOD 8 OB-2	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
181	CHT MOD 8 IB-2	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
182	CHT MOD 1 OB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
183	CHT MOD 1 IB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
184	CHT Meadowmont Feeder 3	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
185	CHT Meadowmont Feeder 2	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
186	CHT MODV OB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
187	CHT MODV IB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
188	CHT MOD 22 Exp OB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
189	CHT MOD 22 Exp IB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
190	CHT MOD 21 OB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
191	CHT MOD 21 IB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
192	CHT HW 3B Feeder	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
193	CHT HW 3A Feeder	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
194	CHT EW Crosstown	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
195	CHT Carr 1B Feeder	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
196	CHT Carr 1A Feeder	CHT	5	10	Free	Local bus	2040		1	1	0	1	0	0	0
197	CHT Base 9 Mason Farm Exp OB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1

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**2030 LRTP and CTP  
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								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
198	CHT Base 9 Mason Farm Exp IB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
199	CHT Base 8 UNC Exp OB	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
200	CHT Base 8 UNC Exp IB	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
201	CHT Base 2 New Hope Commons OB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
202	CHT Base 2 New Hope Commons IB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
203	CHT Base 13 Hills. Exp OB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
204	CHT Base 13 Hills. Exp IB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
205	CHT Base 1 Carr N OB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
206	CHT Base 1 Carr N IB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
207	CHT Base 4 Laurel Hills OB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
208	CHT Base 4 Laurel Hills IB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
209	CHT Base 3 Estes-Carrboro OB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
210	CHT Base 3 Estes-Carrboro IB	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
211	CHT MOD 20 Pitt. Exp OB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
212	CHT MOD 20 Pitt. Exp IB	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
253	CHT A OB:MLKBlvd-Weiner	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
254	CHT A IB:Weiner-MLKBlvd	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
255	CHT CW OB:JonesFerry-Pittsboro	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
256	CHT CW IB:Pittsboro-JonesFerry	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
257	CHT CM IB:FamPrac-JonesFerry	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
258	CHT CM OB:JonesFerry-FamPrac	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
259	CHT CPX OB:CarrboroP&R-UNC	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
260	CHT CPX IB:UNC-CarborroP&R	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
261	CHT D OB:SmithLevel-Providence	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
262	CHT D IB:Providence-SmithLevel	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
263	CHT CL OB: UNCHosp-WaldenGrnfls	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
264	CHT CL IB: WaldenGrnfls-UNCHosp	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
265	CHT FCX OB:FridayCntr-Pittsboro	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
266	CHT FCX IB:Pittsboro-FridayCntr	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
267	CHT F IB:ColonyWoods-McDougle	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
268	CHT F OB:McDougle-ColonyWoods	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
269	CHT G OB:BookerCreek-Briarcliff	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
270	CHT G IB:Briarcliff-BookerCreek	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
271	CHT HS OB:Hghsch-VarsityTheater	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
272	CHT HS IB:VarsityTheater-Hghsch	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
273	CHT HUX OB:HedrickBldg-UNCHosp	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
274	CHT HUX IB:UNCHosp-HedrickBldg	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
275	CHT J OB:RockCrkApt-SGreensboro	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
276	CHT J IB:SGreensboro-RockCrkApt	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1

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								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
277	CHT JFX OB:JonesFerry-Pittsboro	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
278	CHT JFX IB:Pittsboro-JonesFerry	CHT			Free	Express bus	2040		1	1	1	0	0	1	1
279	CHT NS IB:SVillage-Eubanks	CHT			Free	Local bus	2040		1	1	1	0	0	1	1
280	CHT NUX OB: PRLot-UNCHosp	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
281	CHT NUX IB:UNCHosp-PR Lot	CHT	5	10	Free	Express bus	2040		1	1	1	1	0	1	1
282	CHT T OB:ECHHghSch-UNCHosp	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
283	CHT T IB:UNCHosp-ECHHghSch	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
284	CHT U OB:FranklinSt-BowlesDr	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
285	CHT U IB:BowlesDr-FranklinSt	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
286	CHT RU OB:FamilyPract-Columbia	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
287	CHT RU IB:Columbia-FamilyPract	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
288	CHT V OB:SVillage-Meadowmont	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
289	CHT V IB:Meadowmont-SVillage	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
290	CHT N OB:FamilyPract-EstsPrkApt	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
291	CHT N IB:EstsParkApt-FamilyPract	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
292	CHT M IB:UnivMall-CrestCole	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
293	CHT M OB:CrestCole-UnivMall	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
308	CHT NS OB:Eubanks-SVillage	CHT			Free	Local bus			1	1	1	0	0	1	1
362	CHT S OB: HedrickBldg-UNCHosp	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
363	CHT S IB: UNCHosp-HedrickBldg	CHT	5	10	Free	Local bus	2040		1	1	1	1	0	1	1
c1	BRT 1 IB I40_Rosemary_UNC	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c2	BRT 1 OB UNC- Rosemary - I40	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c3	BRT 3A IB I40 to UNC via US 15	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c4	BRT 3A OB UNC to I40 via US15	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c5	BRT 3B IB I40-Elizabeth-UNC	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c6	BRT 3B OB UNC-Elizabeth-I40	CHT	3	10	free	BRT	2040		1	1	0	1	0	0	0
c7	BRT 3C IB I40 to Carolina N	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c8	BRT 3C OB Carolina N to I40	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c9	BRT 4 IB City Boundary to UNC	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c10	BRT 4 OB UNC to City Boundary	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c11	BRT 5 IB I40 to UNC	CHT	3	10	free	BRT	2040		0	1	0	0	0	0	0
c12	BRT 5 OB UNC to I40	CHT	3	10	free	BRT	2040		0	1	0	0	0	0	0
c13	BRT 6 IB to Carolina North	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c14	BRT 6 OB from Carolina North	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c15	BRT 7 IB to Carolina North	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c16	BRT 7 IB to UNC	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c17	BRT 7 OB from Carolina North	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c18	BRT 7 OB from UNC	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c19	BRT 8 IB to UNC	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0

1 = In Alternative 0 = Not in Alternative

6/5/2008

**2030 LRTP and CTP  
Transit Projects and Alternatives**

Old ID	Route Name	System	CTP Peak Headway	CTP Off-Peak Headway	Reg. Fare	Service Type		Benchmarks:			LRTP Alternatives:				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
c20	BRT 8 OB from UNC	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c21	BRT 8 IB to Carolina North	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
c22	BRT 8 OB from Carolina North	CHT	3	10	free	BRT	2040		0	1	0	1	0	0	0
117	Duke Med 1 WB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
118	Duke Med 1 EB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
119	Duke Villa NB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
120	Duke Villa SB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
121	Duke Med 4 WB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
122	Duke Med 4 EB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
123	Duke Student Park WB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
124	Duke Student Park EB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
125	Duke Med 3 SB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
126	Duke Med 3 NB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
127	Duke Science Loop CW	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
128	Duke Science Loop CCW	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
129	Duke E/Cent./W WB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
130	Duke E/Cent./W EB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
131	Duke E/W WB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
132	Duke E/W EB	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
309	DUKE C2 OB:WestCampus-EastCampus	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
310	DUKE C2 IB:EastCampus-WestCampus	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
311	DUKE C3 OB:ScienceDr-EastCampus	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
312	DUKE C3 IB:EastCampus-ScienceDr	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
313	DUKE H1 IB:Entry11-PG3	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
314	DUKE H1 OB:PG3-Entry11	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
315	DUKE H2 IB:HospNorth-PG3	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
316	DUKE H3 OB:HospNorth-HillsbghRd	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
317	DUKE H3 IB:HillsbghRd-HospNorth	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
318	DUKE H5 OB:MillBldg-HockPlaza	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
319	DUKE PR1 IB:Entry11-BassettDr	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
320	DUKE PR2 IB:ScienceDr-BassettDr	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
321	DUKE H2 OB:PG3-HospNorth	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
322	DUKE PR1 OB:BassettDr-Entry11	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
323	DUKE PR2 OB:BassettDr-ScienceDr	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
324	DUKE H6 OB: LaSalleStLot-Entry11	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
325	DUKE C1 IB:WestCampus-EastCampus	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
326	DUKE C1 OB:EastCampus-WestCampus	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
364	DUKE H5 IB: HockPlaza-MillBldg	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
365	DUKE H6 IB: Entry11-LasalleStLot	Duke	5	10	Free	Local bus	2035		1	1	1	1	0	1	1

1 = In Alternative 0 = Not in Alternative

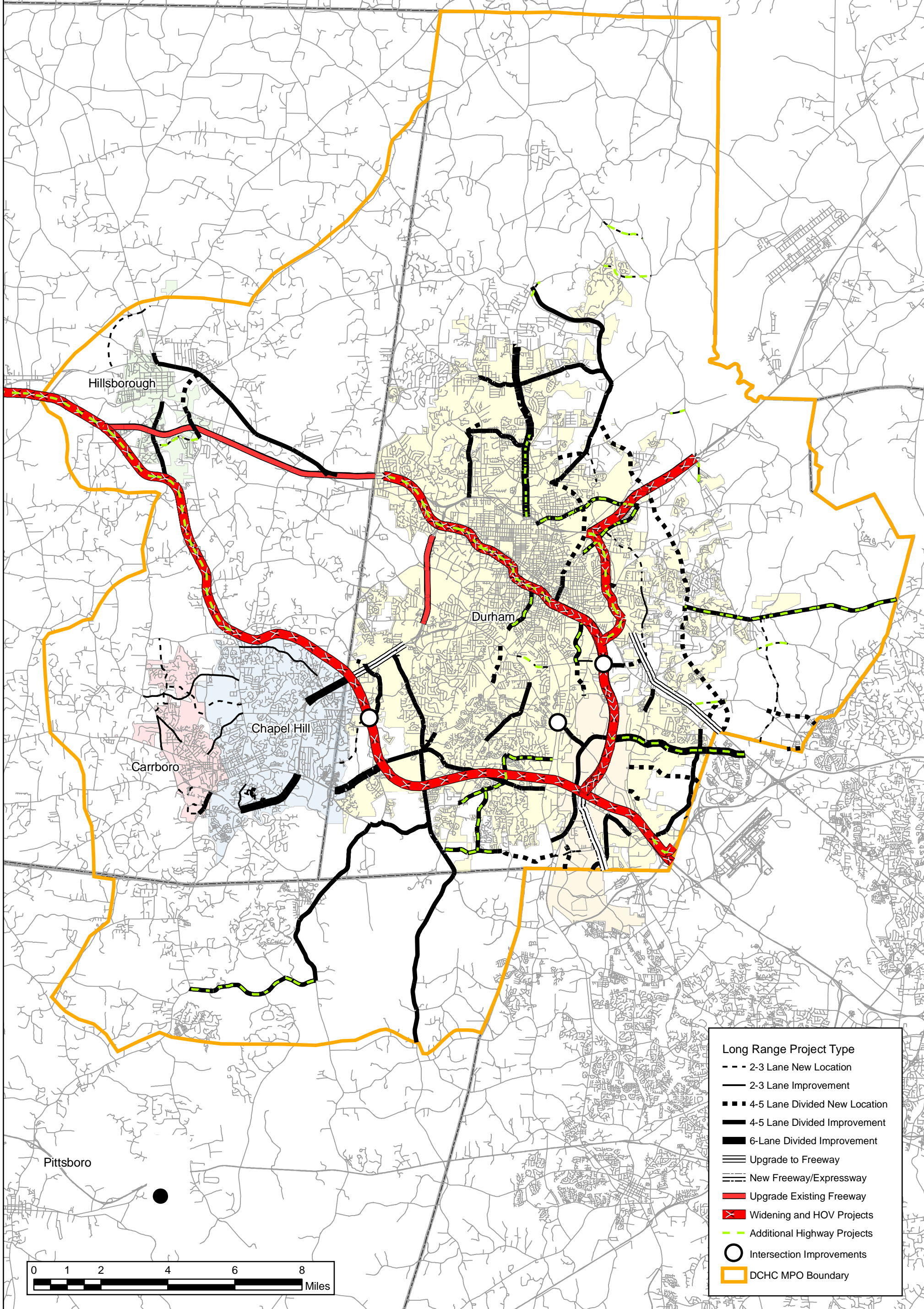
6/5/2008

### 2030 LRTP and CTP Transit Projects and Alternatives

Old ID	Route Name	System	CTP Peak Headway	CTP Off-Peak Headway	Reg. Fare	Service Type		Benchmarks:			LRTP Alternatives:				
								0-- E+C	1-- 2030	2-- CTP	3-- Hwy	4-- FG	5-- Bus	6-- Mod	7-- Pres
156	NCCU Circular	NCCU	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
157	NCCU Shuttle SB	NCCU	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
158	NCCU Shuttle NB	NCCU	5	10	Free	Local bus	2035		1	1	1	1	0	1	1
159	OPT Hillsborough-Chapel Hill SB	OPT	7	15	\$ 0.	Express bus	2035		1	1	1	1	0	1	1
160	OPT Hillsborough-Chapel Hill NB	OPT	7	15	\$ 0.	Express bus	2035		1	1	1	1	0	1	1

1 = In Alternative    0 = Not in Alternative

# Comprehensive Transportation Plan Highway Projects

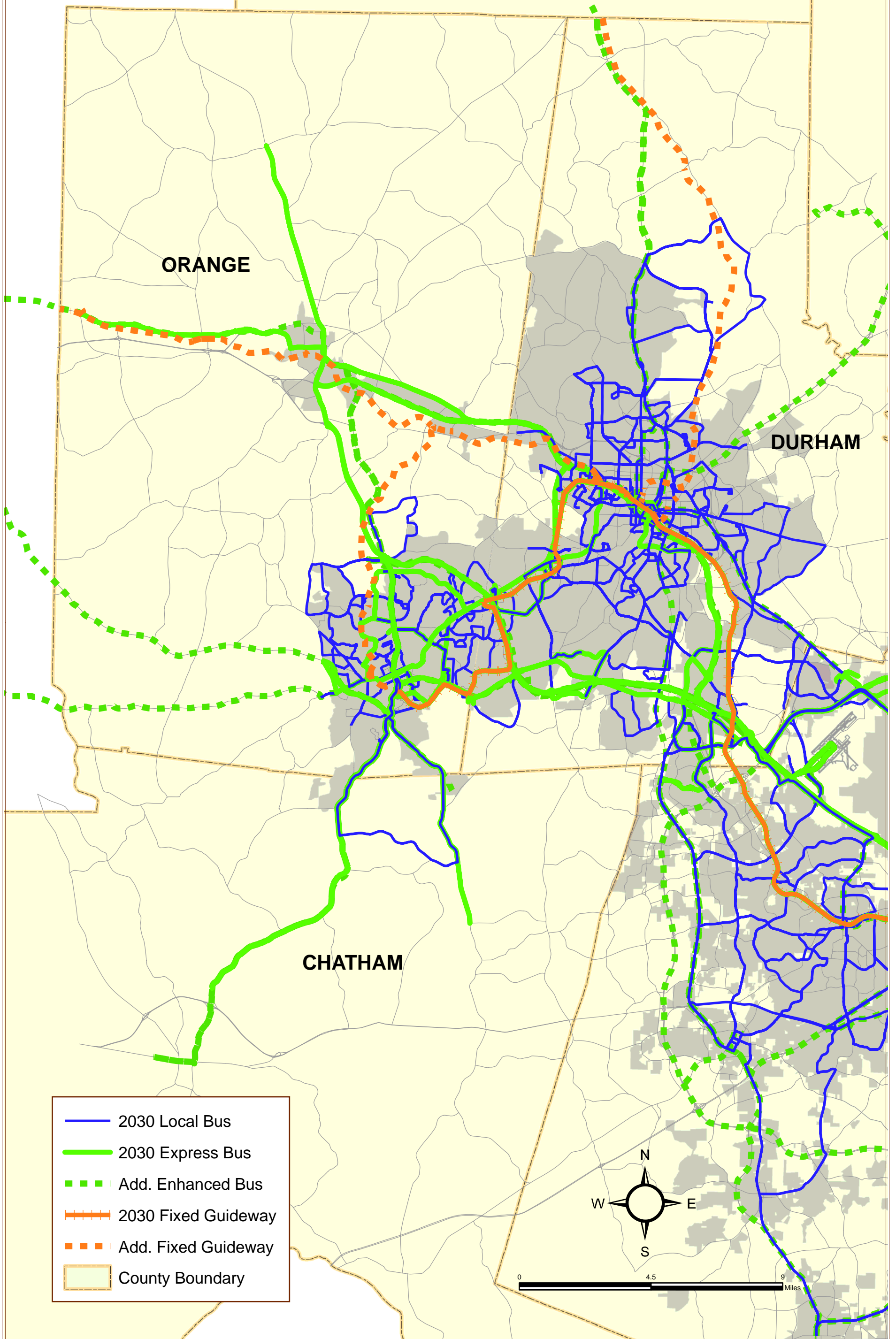


- Long Range Project Type**
- - - 2-3 Lane New Location
  - 2-3 Lane Improvement
  - ■ ■ 4-5 Lane Divided New Location
  - ■ ■ 4-5 Lane Divided Improvement
  - ■ ■ 6-Lane Divided Improvement
  - ≡≡≡ Upgrade to Freeway
  - ≡≡≡ New Freeway/Expressway
  - Upgrade Existing Freeway
  - Widening and HOV Projects
  - Additional Highway Projects
  - Intersection Improvements
  - DCHC MPO Boundary

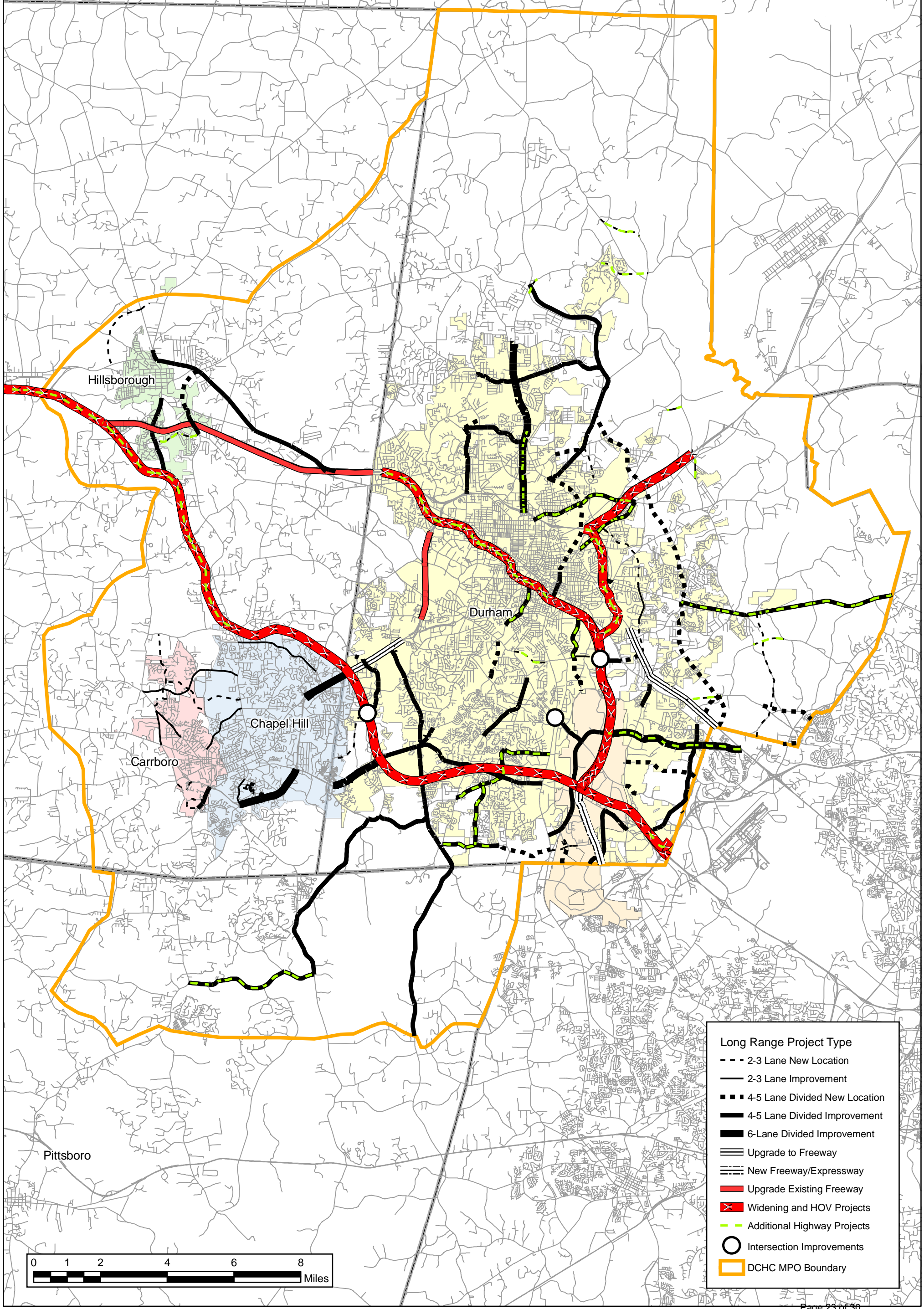
0 1 2 4 6 8 Miles

# Comprehensive Transportation Plan

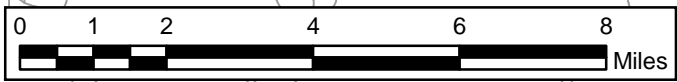
## Transit Network



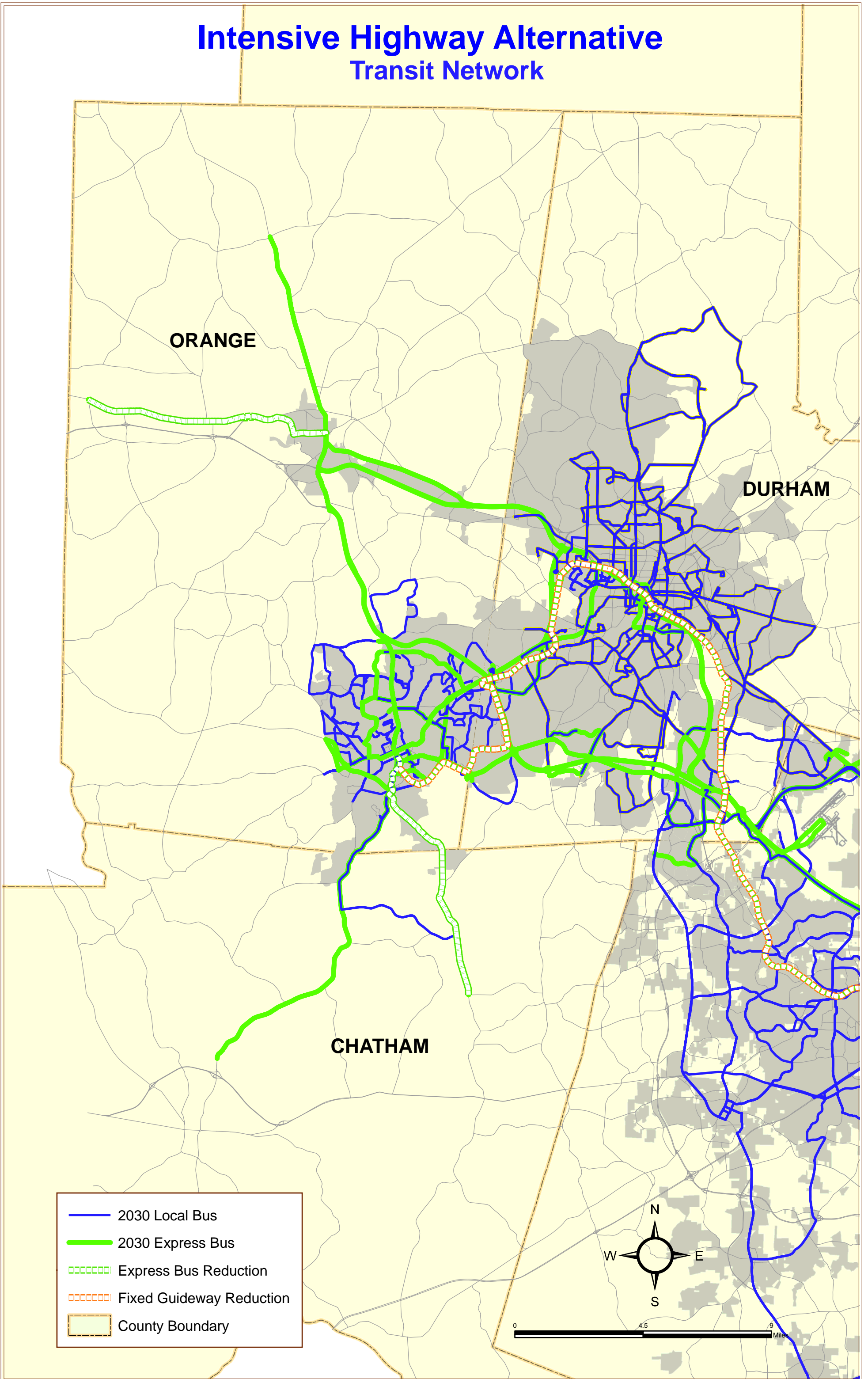
# Highway Intensive Alternative Highway Projects



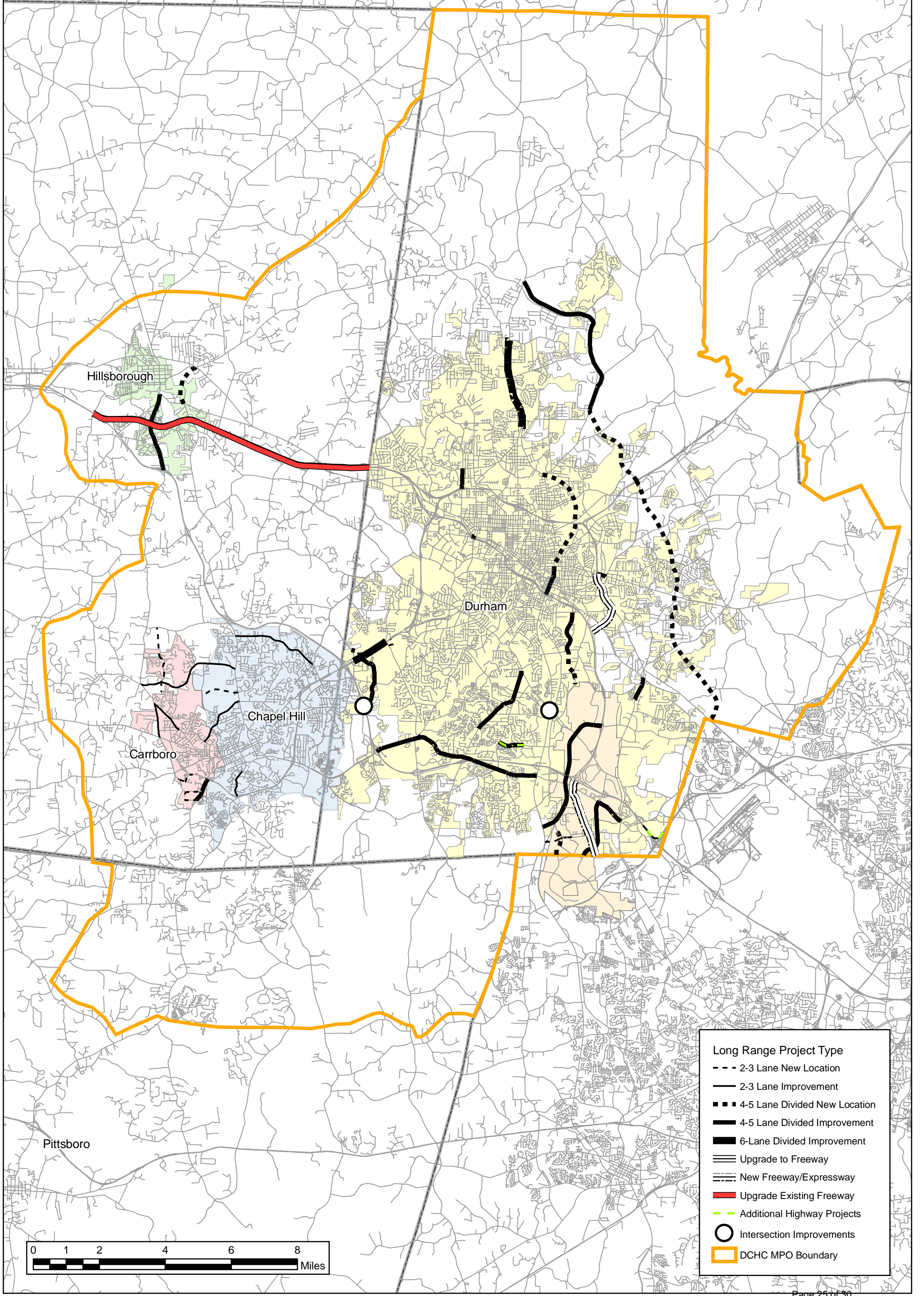
- Long Range Project Type**
- - - 2-3 Lane New Location
  - 2-3 Lane Improvement
  - ■ ■ 4-5 Lane Divided New Location
  - 4-5 Lane Divided Improvement
  - 6-Lane Divided Improvement
  - ≡ Upgrade to Freeway
  - ≡ New Freeway/Expressway
  - Upgrade Existing Freeway
  - ⊠ Widening and HOV Projects
  - - - Additional Highway Projects
  - Intersection Improvements
  - DCHC MPO Boundary



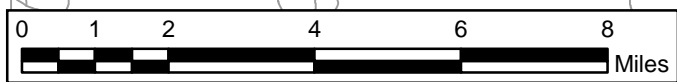
# Intensive Highway Alternative Transit Network



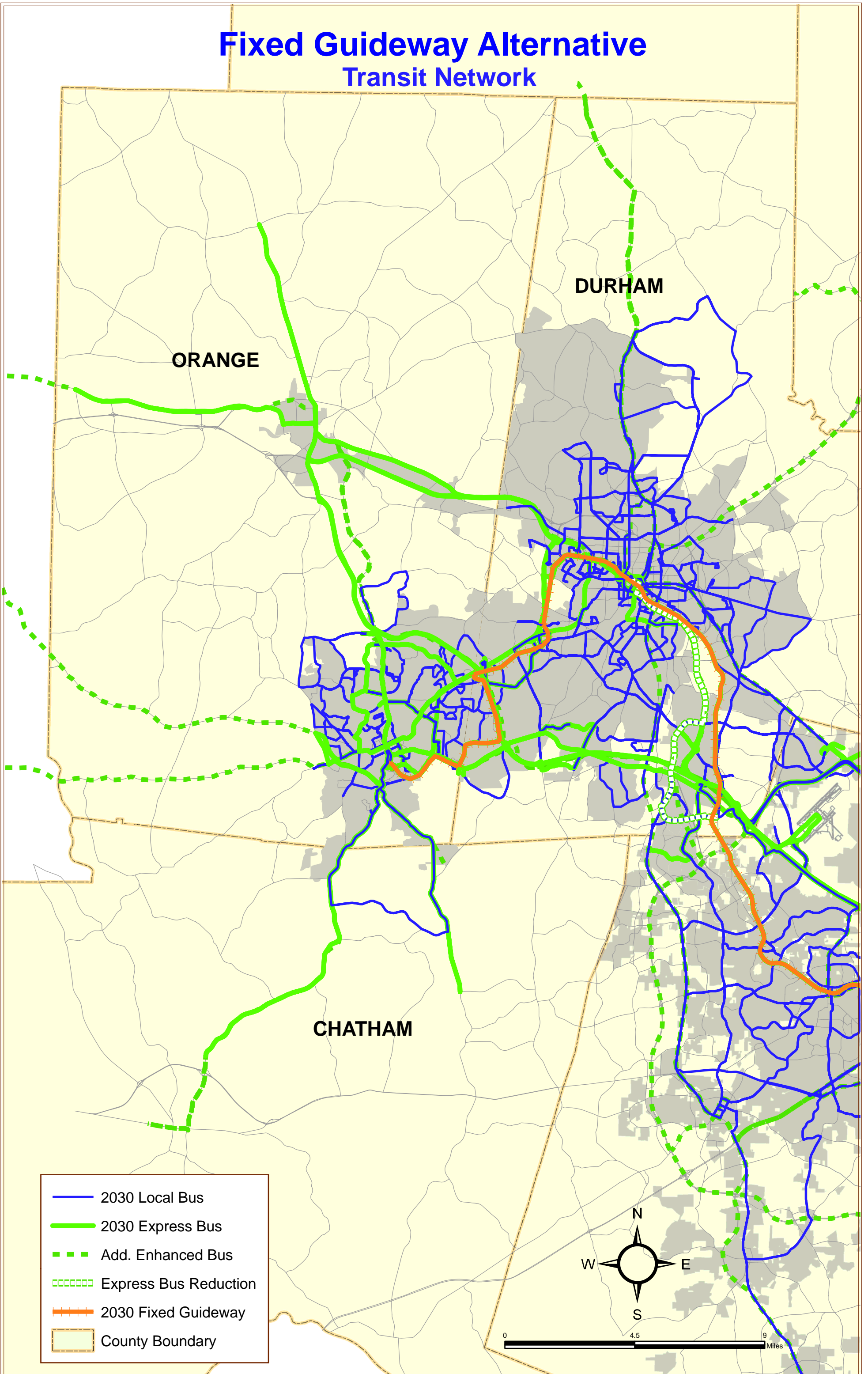
# Fixed Guideway Alternative Highway Projects



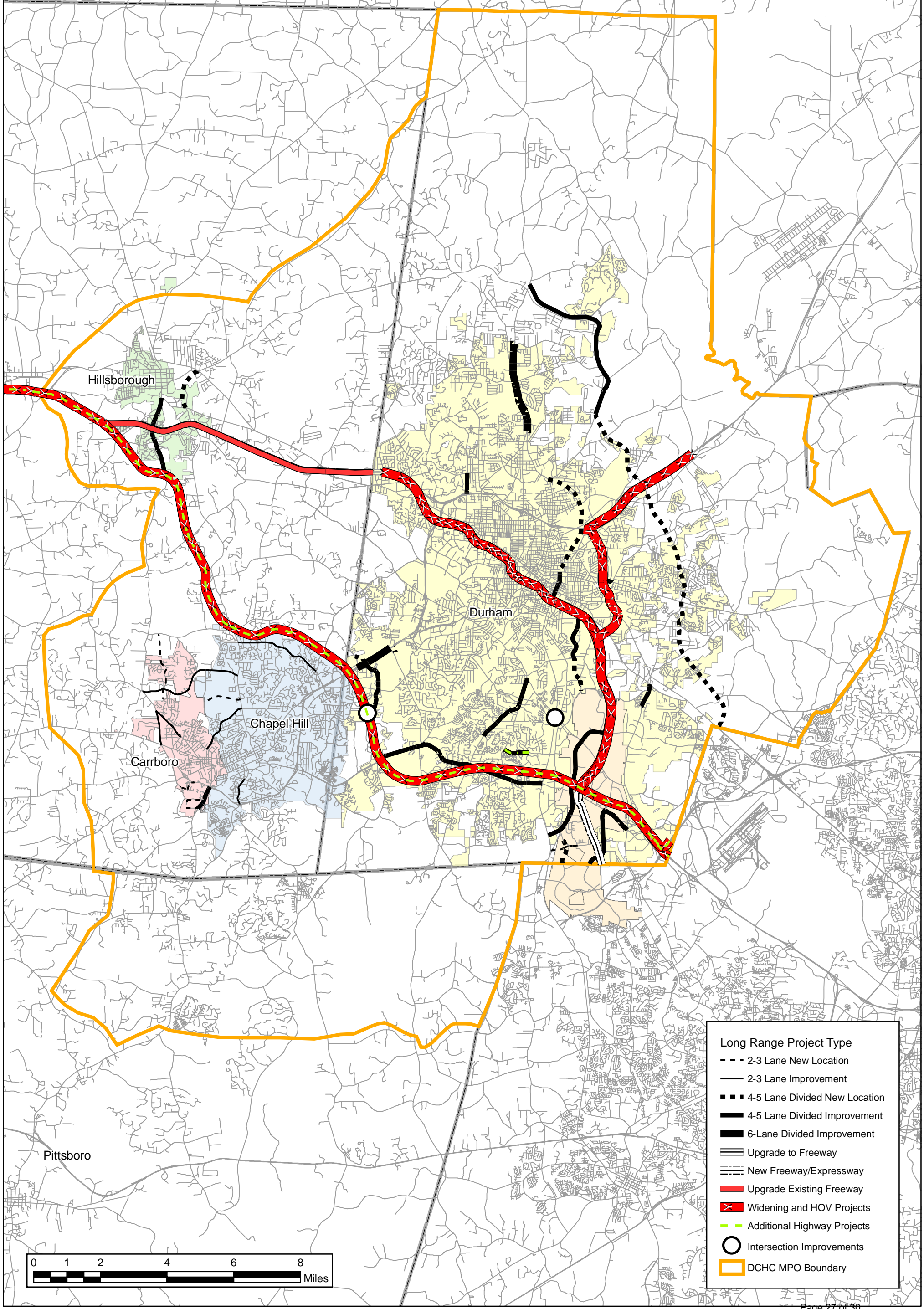
- Long Range Project Type**
- - - 2-3 Lane New Location
  - 2-3 Lane Improvement
  - ■ ■ 4-5 Lane Divided New Location
  - ■ ■ 4-5 Lane Divided Improvement
  - ■ ■ 6-Lane Divided Improvement
  - ≡≡≡ Upgrade to Freeway
  - ≡≡≡ New Freeway/Expressway
  - Upgrade Existing Freeway
  - Additional Highway Projects
  - Intersection Improvements
  - DCHC MPO Boundary



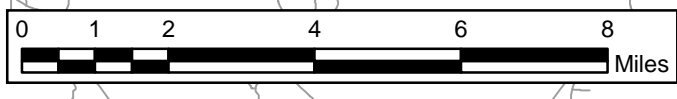
# Fixed Guideway Alternative Transit Network



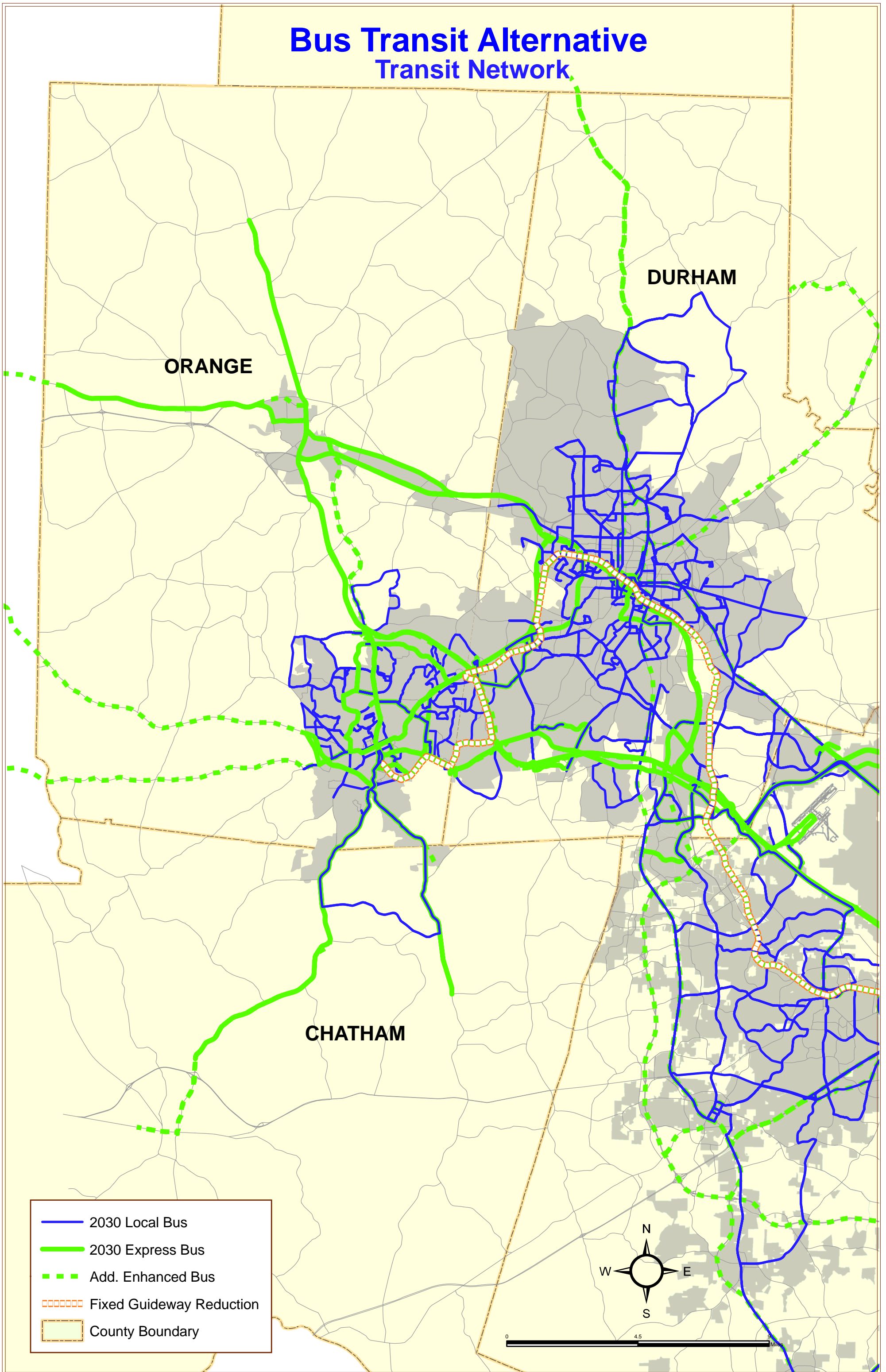
# Bus Transit Alternative Highway Projects



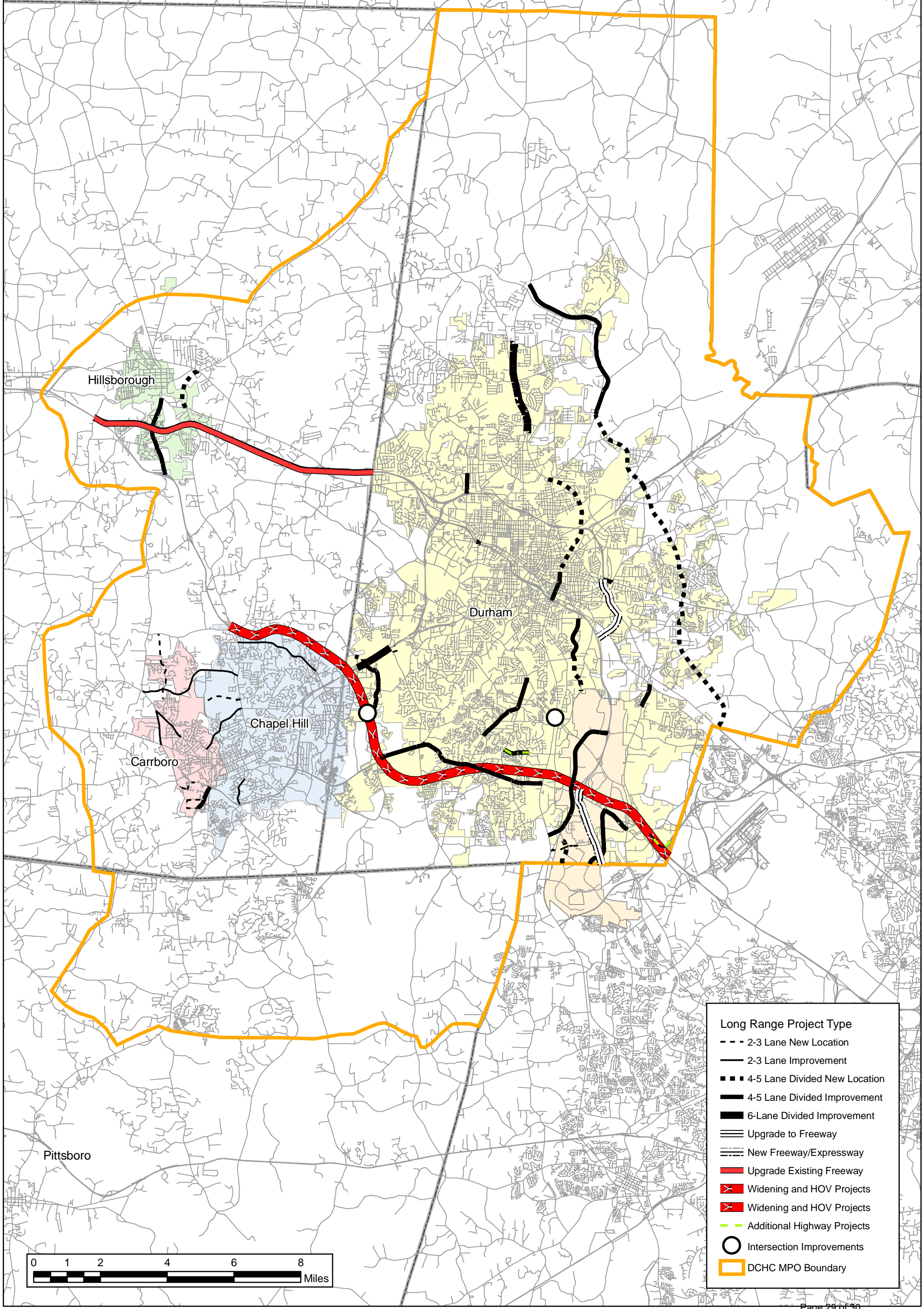
- Long Range Project Type**
- - - 2-3 Lane New Location
  - 2-3 Lane Improvement
  - ■ ■ 4-5 Lane Divided New Location
  - — — 4-5 Lane Divided Improvement
  - — — 6-Lane Divided Improvement
  - == Upgrade to Freeway
  - == New Freeway/Expressway
  - Upgrade Existing Freeway
  - ⊠ Widening and HOV Projects
  - Additional Highway Projects
  - Intersection Improvements
  - DCHC MPO Boundary



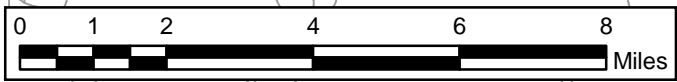
# Bus Transit Alternative Transit Network



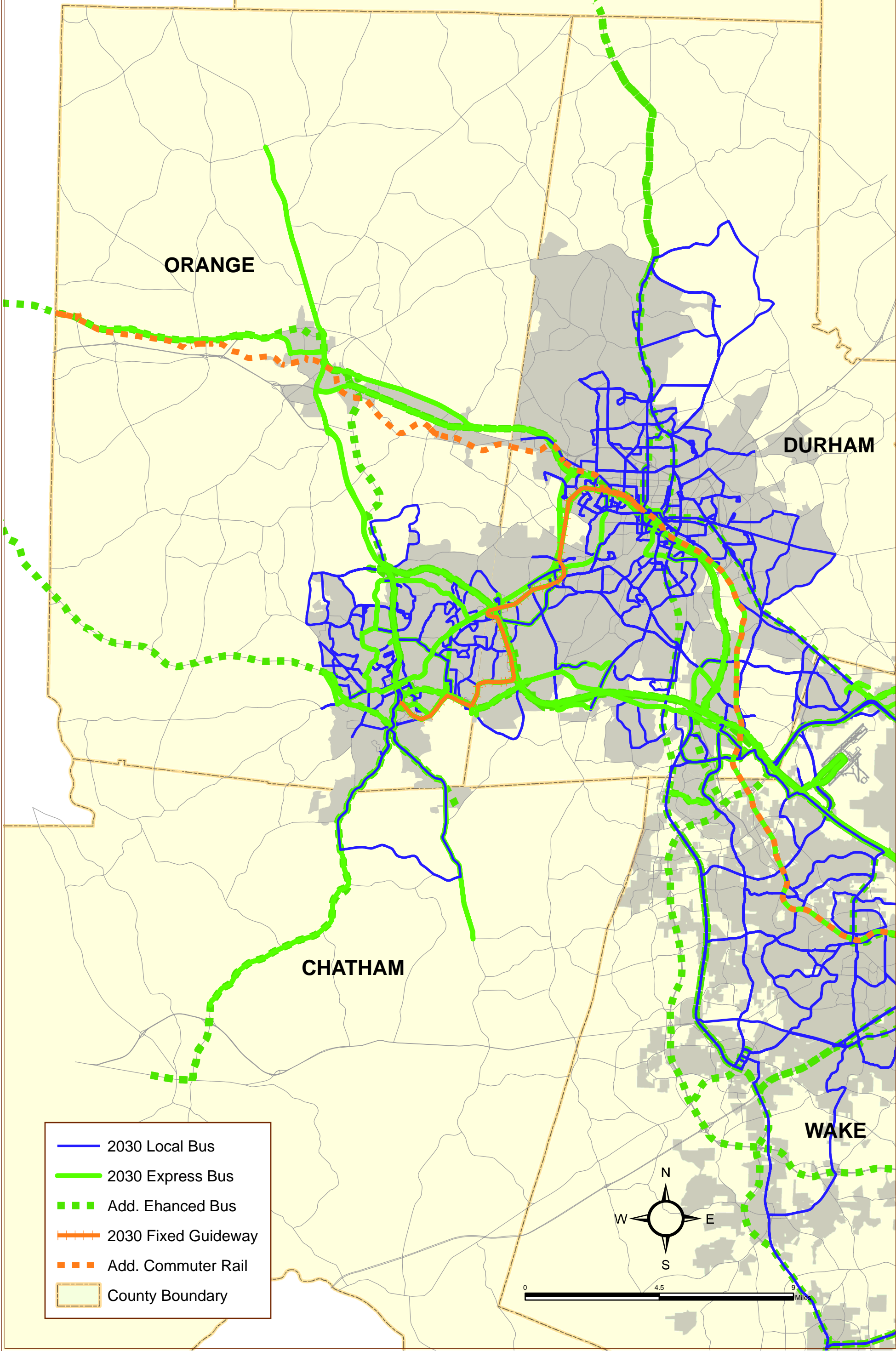
# Moderate Multimodal Alternative Highway Projects



- Long Range Project Type**
- - - 2-3 Lane New Location
  - 2-3 Lane Improvement
  - ■ ■ 4-5 Lane Divided New Location
  - ■ ■ 4-5 Lane Divided Improvement
  - ■ ■ 6-Lane Divided Improvement
  - ==== Upgrade to Freeway
  - ==== New Freeway/Expressway
  - Upgrade Existing Freeway
  - Widening and HOV Projects
  - Widening and HOV Projects
  - Additional Highway Projects
  - Intersection Improvements
  - DCHC MPO Boundary



# Moderate Multi Modal Alternative Transit Network



## 2035 LRTP and CTP Public Involvement Meeting Dates

The DCHC MPO will take the 2035 Long Range Transportation Plan Alternatives Analysis and Preferred Option out for public comment. This will include presentation to local boards and public workshops. These tables display the schedule for local board review.

### Alternatives Analysis – Local Board Review

The TAC meeting on August 13 will include a public hearing on the Alternatives Analysis, but written comments can be submitted until the August 27 TCC meeting.

Jurisdiction	Elected Board	Planning Board	Transportation Board	Bicycle/ Pedestrian Board	Transit Board	Public Workshops
<b>City of Durham</b>	8/7/2008	7/8/2008	n/a	7/15/2008	8/6/2008	2 in July/August*
<b>Durham County</b>	8/4/2008 or 8/11/2008	7/8/2008	n/a	7/15/2008	n/a	See Durham
<b>Chapel Hill</b>	6/25/2008**	n/a	n/a	n/a	n/a	1 in July/August
<b>Carrboro</b>	9/2/2008***	8/21/2008	8/21/2008	n/a	n/a	See Chapel Hill
<b>Hillsborough</b>	7/17/2008	7/17/2008	n/a	n/a	n/a	1 in July/August
<b>Orange County</b>	8/19/2008	Will be invited to attend Transportation Board meeting	7/16/2008	n/a	n/a	See Chapel Hill and Hillsborough
<b>Chatham County</b>	8/18/2008	8/5/2008	n/a	n/a	n/a	1 in July/August

\*One workshop will emphasize environmental justice issues and organizations.

\*\*Presentation will not include all modeling results.

\*\*\*The Carrboro BOA meeting is after the August TCC meeting so comments will be forwarded directly to the TAC.

## Preferred Option – Local Board Review

The TAC meeting on October 8 will include a public hearing on the Preferred Option, but written comments can be submitted until the October 22 TCC meeting.

<b>Jurisdiction</b>	<b>Elected Board</b>	<b>Planning Board</b>	<b>Transportation Board</b>	<b>Bicycle/ Pedestrian Board</b>	<b>Transit Board</b>	<b>Public Workshops</b>
<b>City of Durham</b>	10/9/2008	10/14/2008	n/a	9/16/2008	10/1/2008	2 in September/ October*
<b>Durham County</b>	10/6/2008 or 10/13/2008	10/14/2008	n/a	9/16/2008	n/a	See Durham
<b>Chapel Hill</b>	10/6/2008	9/16/2008	9/25/2008	n/a	n/a	1 in September/ October
<b>Carrboro</b>	10/21/2008	10/2/2008	10/2/2008	n/a	n/a	See Chapel Hill
<b>Hillsborough</b>	10/13/2008	9/18/2008	n/a	n/a	n/a	1 in September/ October
<b>Orange County</b>	10/21/2008	Will be invited to attend Transportation Board meeting	9/17/2008	n/a	n/a	See Chapel Hill and Hillsborough
<b>Chatham County</b>	10/20/2008	10/7/2008	n/a	n/a	n/a	1 in September/ October

\*One workshop will emphasize environmental justice issues and organizations.

**MEMORANDUM**

**TO:** Technical Coordinating Committee  
DCHC MPO

**FROM:** DCHC MPO Lead Planning Agency

**DATE:** June 25, 2008

**SUBJECT: Triangle Regional Model Version TCV4-2008**

The Triangle Regional Model version TCV4-2008 has been released to the stakeholders for review since January of 2008. This version is the result of a three-year effort undertaken by the Triangle Regional Model Service Bureau at ITRE, in partnership with NCDOT, Triangle Transit, CAMPO and DCHC MPO.

The Triangle Regional Model version TCV4-2008 is updated and recalibrated from the 2004 TransCAD model, using the 2005 population and employment data, traffic count data, highway and transit network information, and the 2006 household survey and transit on-board survey data. This model utilizes the new travel behavior-oriented modeling techniques and greatly improves highway and transit assignments over the previous TranPlan and TransCAD models. The major model improvements are summarized as:

1. A household stratification model is applied for trip generation vs. the old cross classifications model, and trip frequency choice is based on individual behavior vs. the old zonal aggregated average;
2. A destination choice model is used for trip distribution instead of the gravity model;
3. A more sophisticated mode choice model – 3-tier nested logit structure replaces the old 2-tier structure;
4. The TTA New Start model is recalibrated with the improved kiss and ride approach, average transit fares and asserted constants, and
5. HOV/HOT toll features are tested and added for the MPO long range plan updates.

The Triangle Regional Model version TCV4-2008 meets the validation measures and targets recommended by FHWA's validation manual. The overall model performance measures in version TCV4-2008 are better than the previous model (see attachment). In January of 2008 the Model Executive Committee recommended all signatory agencies approve the new Triangle Regional Model upon completion of the MTIP 2009-2015 conformity analysis. Upon adoption, the DCHC MPO can use the most updated model for its 2035 Long Range Transportation Plan update and the air quality conformity analysis.

**TCC Action:**

Recommend that the TAC send a letter to the Triangle Model Service Bureau adopting the Triangle Regional Model version TCV4-2008.

Table 1: Screenline Volume/ Count Comparison

Screenlines	2005 Model	2005 ADT	2005 Model	2002 Model	1995 model	Traget
	Volume	Count	%	%	%	%
SW Durham	166,667	143,280	16%	11%	-4%	+/- 10%
Durham	470,965	451,800	4%	-9%	7%	+/- 10%
North Durham	296,051	295,840	0%	-17%	-11%	+/- 10%
Johnston Co.	210,951	186,890	13%	6%	-15%	+/- 10%
Chatham Co.	28,588	28,000	2%	-25%	-17%	+/- 10%
I-40	942,884	903,250	4%	0%	0%	+/- 10%
N. Raleigh	481,781	458,900	5%	-4%	-9%	+/- 10%
East Wake	176,538	189,190	-7%	-5%	-2%	+/- 10%
US 1 South	203,601	219,380	-7%	8%	-4%	+/- 10%
Wake/Durham Co. Line	411,156	438,290	-6%	-4%	-3%	+/- 10%
North Wake	105,508	105,600	0%	2%	7%	+/- 10%
US 70	130,487	151,500	-14%	-12%	2%	+/- 10%

Table 2: Percent Difference for Daily Traffic Volumes by Facility Type

Facility Type	2005 Model	2002 Model	1995 Model	Target
	%	%	%	%
Freeway	-2%	3%	10%	+/- 7%
Major Arterial	4%	-11%	-5%	+/- 10%
Minor Arterial	-2%	-11%	-5%	+/- 15%
Collector	-5%	3%	-5%	+/- 25%
Locals	-1%	-9%	-17%	+/- 25%

Table 3: Percent Difference for Daily Traffic Volumes by Volume Group

Volume Group	2005 Model	2002 Model	1995 Model	Target
	%	%	%	%
> 50,000	-7%	-9%	-8%	+/- 10%
25,000 - 50,000	-1%	1%	-5%	+/- 15%
10,000 - 25,000	-2%	-14%	1%	+/- 20%
5,000 - 10,000	4%	0	3%	+/- 25%
2,500 - 5,000	-2%	2%	2%	+/- 30%
1,000 - 2,500	31%	-9%	-10%	+/- 50%
< 1,000	128%	40%	-11%	+/- 55%
All Groups	-1%	-5%	-3%	+/- 5%

Table 4: Validation Root Mean Square Error Summary

Federal Functional Class	# of Counts 2005	Traffic Count Average 2005	Modeled Volume 2005	%RMSE 2005	%RMSE 2002	%RMSE 1995	%RMSE Target
Freeway	137	34,389	33,761	13%	0	27%	NA
Principal Arterial	264	19,225	19,994	27%	0	40%	NA
Minor Arterial	266	14,572	14,221	29%			NA
Collector	352	6,143	5,854	48%	1	61%	NA
Local	288	4,270	4,241	51%	1	83%	NA
All Roads	1,307	13,049	12,983	29%	45%	47%	32% ~39%

Table 5: Validation Root Mean Square Error Summary by Volume Group

Volume Group	# of Counts 2005	Traffic Count Average 2005	Modeled Volume 2005	%RMSE 2005	%RMSE 2002	%RMSE 1995	%RMSE Target
≥ 25,001	178	38,739	37,681	15%	23%	13%	20% ~ 25%
10,001 - 25,000	404	16,957	16,693	25%	31%	38%	25% ~ 35%
5,001 - 10,000	295	7,504	7,767	47%	51%	41%	35% ~45%
2,501 - 5,000	207	3,715	3,629	61%	63%	63%	45% ~ 55%
1,001 - 2,500	156	1,792	2,354	102%	80%	69%	
1 - 1,000	68	697	1,590	328%	116%	69%	
All Groups	1,307	11,567	11,619	29%	45%	47%	32% ~39%

Table 6: Transit Ridership

Transit Operator	Observed Ridership 2005	Modeled Daily Ridership TRM 2005	% Deviation 2005	% Deviation 2002	% Deviation 1995
TTA	3,272	3,391	3.6%	135%	103%
CAT	12,911	12,832	-0.6%	5%	20%
CHT	27,209	29,804	9.5%	-30%	15%
DATA	13,514	13,467	-0.3%	-18%	-34%
NCSU	11,313	12,758	12.8%		
Duke	13,211	9,334	-29.3%		
<b>Total</b>	<b>81,430</b>	<b>81,587</b>	<b>0.2%</b>	<b>-9.30%</b>	<b>5%</b>

**Durham-Chapel Hill-Carrboro Metropolitan Planning Organization  
(DCHC MPO)**

***Development Schedule***

**FY 2011-2017 Metropolitan Transportation Improvement Program**

<b>Due Date</b>	<b>Task</b>
July-August 2008	Jurisdictions develop local priority lists
July-August 2008	TCC Subcommittee develops Regional Priority List Ranking Methodology
23-July-2008	TCC recommends Regional Priority List Ranking Methodology
<b>13-Aug-2008</b>	<b>TAC approves the Regional Priority List Ranking Methodology</b>
1-Sep-2008	TCC receives local priority lists from member jurisdictions/agencies with application of the Ranking Methodology
September 2008	Development of the Draft Regional Priority List
24-Sep-2008	TCC recommends Draft Regional Priority List.
<b>8-Oct-2008</b>	<b>TAC releases Draft Regional Priority List for a minimum 21-day public comment period</b>
October- November 2008	Local jurisdictions offer comments on the Regional Priority List
<b>12-Nov-2008</b>	<b>TAC holds a Public Hearing on Draft Regional Priority List</b>
26-Nov-2008	TCC considers public comments and input from local governments on the Regional Priority List. TCC makes recommendations as needed.
<b>10-Dec-2008</b>	<b>TAC approves Regional Priority List</b>
<b>31-Dec-2008</b>	<b>NCDOT deadline for Regional Priority Lists</b>
January- March 2009	NCDOT holds Statewide public comment and One-on-One project priority review session with the MPO
<b>TBD (spring 2009)</b>	<b>NCDOT releases Draft 2011-2017 State Transportation Improvement Program (STIP)</b>

**TRANSPORTATION DEMAND MANAGEMENT (TDM)  
IN THE RESEARCH TRIANGLE REGION – FY2009**  
May 23, 2008

This document summarizes the current status of the regional TDM program based on the Oversight Committee's guidance and follow-up with regional and local service providers. Please note that Triangle J Council of Governments (TJCOG) staff is seeking concurrence or further guidance on five issues noted in this document.

### Overview

The FY2008-09 Triangle TDM program was budgeted at \$2,220,614 as noted below, involving four distinct funding partnerships, two of which – CMAQ funding for the Triangle Best Workplaces for Commuters and TDM technology projects at Triangle Transit – are pre-existing. A third is for planning and administrative services contracted between NCDOT and TJCOG and is also not a part of the Oversight Committee's work or a subject of this document. The fourth funding partnership, budgeted at \$1,903,048 involves the allocation of NCDOT PTD funds and MPO-allocated CMAQ funds to local and regional service providers for TDM marketing and outreach activities and is shown in the column labeled "TDM services" in Table 1, which indicates the budgeted sources of funding for TDM activities in the coming year.

Table 1. Budgeted Sources of Funding for the Triangle TDM Program – FY2009

FY2009 Allocations	TDM Services	△ Best Workplaces for Commuters (pre-existing)	TDM Technology (pre-existing)	TDM Planning & Administration
NC DOT PTD	\$676,000		Pre-existing	\$102,500
CAMPO (CMAQ)	\$340,105	Pre-existing CMAQ		
DCHC MPO (CMAQ)	\$275,073	Pre-existing CMAQ		
Service Provider Match	\$611,870	\$12,513	\$15,250	
<b>Total</b>	<b>\$1,903,048</b>	<b>\$62,566</b>	<b>\$152,500</b>	<b>\$102,500</b>

Based on the recommendations in the Triangle's 7-Year TDM plan, an estimated budget by use for the funding available under the TDM services column in Table 1 was developed to guide allocations to local service delivery in "hot spots" identified in the 7-Year Plan, regional services to be broadly provided to employers and commuters, TDM ordinance marketing and outreach, special one-time or pilot projects and program evaluation. Table 2 shows the estimated budgets by use that the funding sponsors (NC DOT, DCHC MPO and CAMPO) used to establish estimated funding levels for the FY2009 Triangle TDM program.

Table 2. Uses of TDM Services Funding for the Triangle TDM Program – FY2009 Budget Development

FY2009 Budget Development Estimates	DCHC MPO	CAMPO	NCDOT PTD	Local Match	Total	Other (△ BWC)
Local "hot spot" services (6)	\$77,673	\$71,411	\$149,084	\$298,167	\$596,334	
Regional marketing & outreach	\$165,463	\$248,194	\$382,754	\$199,103	\$995,513	\$62,566
TDM Ordinances*	\$11,438	0	\$11,437	\$22,875	\$45,750	
Special projects	\$0	\$0	\$91,725	\$91,725	\$183,450	
Monitoring and evaluation	\$20,500	\$20,500	\$41,000	0	\$82,000	
<b>Total</b>	<b>\$275,073</b>	<b>\$340,105</b>	<b>\$676,000</b>	<b>\$611,870</b>	<b>\$1,903,048</b>	

\* currently only Durham County and Chapel Hill have TDM ordinances

As part of the funding commitments, it was agreed that funding for local "hot spot" services would come from NCDOT and the MPO in which the hot spot is located, with CAMPO and DCHC MPO both participating in the funding for the Research Triangle Park hot spot that crosses the MPO boundary.

### Concurrence or Further Guidance Issues

In order to finalize the workplan and contracts, the Oversight Committee needs to reach concurrence on 5 outstanding issues in order to match available funding with the proposals for regional and local marketing and outreach services submitted by Triangle Transit and local service providers.

1. Revision of category line items in the estimated budget. The estimated budget in Table 2 used some assumptions that are in variance with the applications received and the guidance of the Oversight Committee:
  - The budget assumed that only 6 hot spots would be able to be served in the initial year, but applicants are able to provide service in 7 hot spots, resulting in increased requests in the local services category.
  - The budget assumed an average of \$100,000 per local hot spot, but two of the premier existing local programs – UNC-Chapel Hill and SmartCommute@RTP – supported by the Oversight Committee have budgets significantly above this average, resulting in increased requests in the local services category.
  - The budget assumed the Best Workplaces for Commuters program would require new funding, but pre-existing funding can support the program for FY09, resulting in decreased requests in the regional services category.
  - Only 1 special project was proposed in the initial year, resulting in decreased requests in the special projects category.

Based on these variances, the likelihood that at least 7 hot spots will be served in FY10 as well, and the ability to carry-over CMAQ funding to future years, but not the NCDOT funding (which is an annual appropriation), the TJCOG staff recommends the following funding by category. Note that none of the sponsors would be asked to increase their overall level of funding as shown in Table 2. The principal result is to shift NCDOT funding from the special projects category into the local services category, with most of the shift going to UNC-CH (a state institution) and the SmartCommute @ RTP program, an area of state interest, as described later in this document.

Some CMAQ funding in each MPO (\$14,704 in DCHC MPO and \$13,291 in CAMPO) would be retained for carry-over to FY2010 when it is expected that local hot spot requests would again exceed the initially estimated funding amount from the 7-year TDM Plan budget. Note that the overall budget declines from \$1,903,048 to \$1,883,119 since the local matches for these carry-over funds are no longer in the estimated budget.

Table 3. Uses of TDM Services Funding for the Triangle TDM Program – Revised FY2009 Category Allocation

FY2009 Recommended Revised Budget Allocations	DCHC MPO	CAMPO	NCDOT PTD	Local Match	Revised Total	Other (△ BWC)
Local “hot spot” services (7)	\$65,723	\$66,120	\$185,809	\$317,652	\$635,304	
Regional marketing & outreach	\$162,708	\$240,194	\$382,754	\$196,414	\$982,070	\$62,566
TDM Ordinances*	\$11,438	0	\$11,437	\$22,875	\$45,750	
Special projects	\$0	\$0	\$55,000	\$55,000	\$110,000	
Monitoring and evaluation	\$20,500	\$20,500	\$41,000	\$0	\$82,000	
CMAQ carry-over to FY2010	\$14,704	\$13,291	\$0	n/a	\$27,995	
Total	\$275,073	\$340,105	\$676,000	\$591,941	\$1,883,119	

\* currently only Durham County and Chapel Hill have TDM ordinances

**Concurrence or Further Guidance Requested:** Does the oversight committee concur with the reallocations among categories as shown in the table above? If not, what additional guidance is needed?

2. Regional Services, Special Projects and Local Services in the Durham, downtown Raleigh, North Raleigh, NC State University and Research Triangle Park hot spots. At its April 18, 2008 meeting, the oversight committee endorsed the proposals for regional services provided by Triangle Transit, the special project proposed by Triangle Transit, and the hot-spot local services provided by Triangle Transit (Durham, downtown Raleigh and North Raleigh hot-spots), NCSU (NC State University campus hot-spot) and the SmartCommute @ RTP program of the Research Triangle Foundation (Research Triangle Park hot spot), subject to some specific line-item cost reductions and the following clarifications:

- Triangle Transit clarify the staff time and costs devoted to the Best Workplaces for Commuters program and remove these from the staff time and costs in the application, since the BWC program has pre-existing funding.
- Triangle Transit clarify the staff time and costs for each of the hot spots it will provide with local marketing and outreach services, so these costs can be understood and tied to the funding budget; including a break-out of the staff time and costs for administering the Durham TDM ordinance.

Based on the clarifications that Triangle Transit provided, TJCOG staff recommends the following sources and uses for these three applicants. Note that in order to fund 7 actual hot spots vs. the 6 initially budgeted, NCDOT funds shifted from the special projects line will go to support a larger portion of the SmartCommute @ RTP program than initially estimated.

Table 4. Regional Services, NCSU Hot Spot and RTP Hot Spot Funding

FY2009 Budget Sources and uses	Triangle Transit	SmartCommute @ RTP	NCSU	Revised Total	Remainder	Other-△ BWC (Triangle Transit)
Local "hot spot" services	\$208,179	\$134,312	\$75,693	\$635,304	\$217,120	
# of hot spots:	3	1	1	7	2	
DHC MPO CMAQ	\$17,348	\$12,500	\$0	\$65,723	\$35,875	
CAMPO CMAQ	\$34,697	\$12,500	\$18,923	\$66,120	\$0	
NCDOT	\$52,045	\$42,156	\$18,923	\$185,809	\$72,685	
Local match (50%)	\$104,090	\$67,156	\$37,847	\$317,652	\$108,559	
Regional services	\$982,070	\$0	\$0	\$982,070	\$0	\$62,566
DHC MPO CMAQ	\$162,708	\$0	\$0	\$162,708	\$0	\$50,053
CAMPO CMAQ	\$240,194	\$0	\$0	\$240,194	\$0	
NCDOT	\$382,754	\$0	\$0	\$382,754	\$0	
Local match (20%)	\$196,414	\$0	\$0	\$196,414	\$0	\$12,513
TDM ordinances*	\$22,875	\$0	\$0	\$45,750	\$22,875	
DHC MPO CMAQ	\$5,719	\$0	\$0	\$11,438	\$5,719	
NCDOT	\$5,719	\$0	\$0	\$11,438	\$5,719	
Local match (50%)	\$11,438	\$0	\$0	\$22,875	\$11,438	
Special projects	\$110,000	\$0	\$0	\$110,000	\$0	
NCDOT	\$55,000	\$0	\$0	\$55,000	\$0	
Local match (50%)	\$55,000	\$0	\$0	\$55,000	\$0	
Monitoring & evaluation	\$0	\$0	\$0	\$82,000	\$82,000	
CMAQ carryover - FY10	\$0	\$0	\$0	\$27,995	\$27,995	
DHC MPO CMAQ	\$0	\$0	\$0	\$14,704	\$14,704	
CAMPO CMAQ	\$0	\$0	\$0	\$13,291	\$13,291	
<b>Total</b>	<b>\$1,323,123</b>	<b>\$134,312</b>	<b>\$75,693</b>	<b>\$1,883,119</b>	<b>\$349,990</b>	<b>\$62,566</b>

\* currently only Durham County and Chapel Hill have TDM ordinances

**Concurrence or Further Guidance Requested:** Does the oversight committee concur with the distributions for the 3 applicants shown in the table above? If not, what additional guidance is needed?

3. Local Services in the UNC-Chapel Hill hot spot. At its April 18, 2008 meeting, the Oversight Committee also endorsed the proposal for hot-spot local services provided by UNC-Chapel Hill to university departments, students and employees, subject to certain line item reductions and clarification of how the UNC-CH program relates to the Town of Chapel Hill proposal. Based on the April 25, 2008 meeting with the Chapel Hill providers and Triangle Transit, the Oversight Committee indicated the UNC-CH program has been a top performer and supported funding the program at \$142,120 based on the April 18, 2008 line item reduction recommendations. In order to fund the UNC-CH program at this level, NCDOT funds were shifted from the special projects line.

Table 5. Addition of UNC-CH Hot Spot Funding

FY2009 Budget Sources and uses	Triangle Transit	Smart Commute @ RTP	NCSU	UNC-CH	Revised Budget	Remainder	Other- △ BWC (Triangle Transit)
Local "hot spot" services	\$208,179	\$134,312	\$75,693	\$142,120	\$635,304	\$75,000	
# of hot spots:	3	1	1	1	7	1	
DCHC MPO CMAQ	\$17,348	\$12,500	\$0	\$17,125	\$65,723	\$18,750	
CAMPO CMAQ	\$34,697	\$12,500	\$18,923	\$0	\$66,120	\$0	
NCDOT	\$52,045	\$42,156	\$18,923	\$53,935	\$185,809	\$18,750	
Local match (50%)	\$104,090	\$67,156	\$37,847	\$71,060	\$317,652	\$37,500	
Regional services	\$982,070	\$0	\$0	\$0	\$982,070	\$0	\$62,566
DCHC MPO CMAQ	\$162,708	\$0	\$0	\$0	\$162,708	\$0	\$50,053
CAMPO CMAQ	\$240,194	\$0	\$0	\$0	\$240,194	\$0	
NCDOT	\$382,754	\$0	\$0	\$0	\$382,754	\$0	
Local match (20%)	\$196,414	\$0	\$0	\$0	\$196,414	\$0	\$12,513
TDM ordinances*	\$22,875	\$0	\$0	\$0	\$45,750	\$22,875	
DCHC MPO CMAQ	\$5,719	\$0	\$0	\$0	\$11,438	\$5,719	
NCDOT	\$5,719	\$0	\$0	\$0	\$11,438	\$5,719	
Local match (50%)	\$11,438	\$0	\$0	\$0	\$22,875	\$11,438	
Special projects	\$110,000	\$0	\$0	\$0	\$110,000	\$0	
NCDOT	\$55,000	\$0	\$0	\$0	\$55,000	\$0	
Local match (50%)	\$55,000	\$0	\$0	\$0	\$55,000	\$0	
Monitoring & evaluation	\$0	\$0	\$0	\$0	\$82,000	\$82,000	
CMAQ carryover - FY10	\$0	\$0	\$0	\$0	\$27,995	\$27,995	
DCHC MPO CMAQ	\$0	\$0	\$0	\$0	\$14,704	\$14,704	
CAMPO CMAQ	\$0	\$0	\$0	\$0	\$13,291	\$13,291	
Total	\$1,323,123	\$134,312	\$75,693	\$142,120	\$1,883,119	\$207,870	\$62,566

\* currently only Durham County and Chapel Hill have TDM ordinances

**Concurrence or Further Guidance Requested:** Does the oversight committee concur with the distributions shown in the table above, which adds the UNC-CH program? If not, what additional guidance is needed? Note that the funding of UNC-CH relies on shifting NCDOT funding from the estimated budget for regional services to the local services category.

4. Local Services in the Town of Chapel Hill hot spot. At its April 18<sup>th</sup> meeting, the Oversight Committee endorsed support for TDM marketing and outreach in the Town of Chapel Hill hot spot (including TDM services in Carrboro), but requested additional discussions with Town of Chapel Hill staff on some issues:
- Clarification of how the Town of Chapel Hill program relates to the UNC-Chapel Hill program.
  - Clarification of how the planning department staff work related to the TDM ordinance and outreach to non-University employers relates to the work that Chapel Hill Transit agency staff will undertake.
  - Clarification that the TDM funding is not designed to support transit agency administrative staff and work related to overall transit agency services.
  - Clarification that sponsor support for the Town of Chapel Hill program be commensurate with the non-University employment in the Town and the average hot-spot funding in the region.

Based on the April 25, 2008 meeting with the Chapel Hill providers and Triangle Transit and follow-up conversations with oversight committee members, Table 6 adds the Town of Chapel Hill program to the previous allocations:

Table 6. Addition of Town of Chapel Hill Hot Spot Funding

FY2009 Budget Sources and uses	Triangle Transit	Smart Commute @ RTP	NCSU	UNC-CH	Town of Chapel Hill	Revised Budget	Other- △ BWC (Triangle Transit)
Local "hot spot" services	\$208,179	\$134,312	\$75,693	\$142,120	\$75,000	\$635,304	
# of hot spots:	3	1	1	1	1	7	
DHC MPO CMAQ	\$17,348	\$12,500	\$0	\$17,125	\$18,750	\$65,723	
CAMPO CMAQ	\$34,697	\$12,500	\$18,923	\$0	\$0	\$66,120	
NCDOT	\$52,045	\$42,156	\$18,923	\$53,935	\$18,750	\$185,809	
Local match (50%)	\$104,090	\$67,156	\$37,847	\$71,060	\$37,500	\$317,652	
Regional services	\$982,070	\$0	\$0	\$0	\$0	\$982,070	\$62,566
DHC MPO CMAQ	\$162,708	\$0	\$0	\$0	\$0	\$162,708	\$50,053
CAMPO CMAQ	\$240,194	\$0	\$0	\$0	\$0	\$240,194	
NCDOT	\$382,754	\$0	\$0	\$0	\$0	\$382,754	
Local match (20%)	\$196,414	\$0	\$0	\$0	\$0	\$196,414	\$12,513
TDM ordinances*	\$22,875	\$0	\$0	\$0	\$22,875	\$45,750	
DHC MPO CMAQ	\$5,719	\$0	\$0	\$0	\$5,719	\$11,438	
NCDOT	\$5,719	\$0	\$0	\$0	\$5,719	\$11,438	
Local match (50%)	\$11,438	\$0	\$0	\$0	\$11,438	\$22,875	
Special projects	\$110,000	\$0	\$0	\$0	\$0	\$110,000	
NCDOT	\$55,000	\$0	\$0	\$0	\$0	\$55,000	
Local match (50%)	\$55,000	\$0	\$0	\$0	\$0	\$55,000	
Monitoring & evaluation	\$0	\$0	\$0	\$0	\$0	\$82,000	
CMAQ carryover - FY10	\$0	\$0	\$0	\$0	\$0	\$27,995	
DHC MPO CMAQ	\$0	\$0	\$0	\$0	\$0	\$14,704	
CAMPO CMAQ	\$0	\$0	\$0	\$0	\$0	\$13,291	
<b>Total</b>	<b>\$1,323,123</b>	<b>\$134,312</b>	<b>\$75,693</b>	<b>\$142,120</b>	<b>\$99,875</b>	<b>\$1,883,119</b>	<b>\$62,566</b>

\* currently only Durham County and Chapel Hill have TDM ordinances

**Concurrence or Further Guidance Requested:** Does the oversight committee concur with the distributions shown in the table above? If not, what additional guidance is needed?

5. Evaluation and Monitoring funding. The 7-year program includes an annual amount to go towards improved monitoring and evaluation, and communication of these evaluation metrics to the sponsors and participants so that the program can evolve over time in ways that increase alternative commuting. The Oversight Committee has not yet addressed the nature or scope of this activity; the budget has assumed this would be a contracted project, perhaps undertaken with one of the region's universities. The total amount and funding shares for evaluation and monitoring remain unchanged from the estimated budget: \$82,000 total with \$41,000 from NCDOT and \$20,500 from each of the two MPOs (as shown in Tables 2 and 3).

**Concurrence or Further Guidance Requested:** Does the oversight committee concur with placing the evaluation and monitoring funds in the contractual line of the overall TDM budget initially, with later decisions by the Oversight Committee on how these funds will be spent?

## MEMORANDUM

**To:** Transportation Advisory Committee (TAC)  
DCHC MPO

**From:** DCHC MPO Lead Planning Agency

**Date:** June 11, 2008

**Subject:** **Lead Planning Agency (LPA) Staff Report**

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This memorandum provides a summary status of tasks for projects in the FY 2007-2008 Unified Planning Work Program.

- ✓ Indicates that task is complete.
- Indicates that task is ongoing or not complete.

### **2007-08 Unified Planning Work Program (UPWP) – Projects**

#### **Long Range Transportation Plan (LRTP) / Comprehensive Transportation Plan (CTP) Update**

- ✓ Draft schedule – August 2006
- ✓ Release SE Data for public comment – January 2007
- ✓ Release Goals and Objectives for public comment – July 2007
- ✓ TAC approve SE Data – September 2007
- ✓ Goals and Objectives – TAC hold public hearing, September 2007, and approve, October 2007.
- ✓ TAC approve Targets – February 2008
- ✓ TAC review Deficiency Analysis – March 2008
- TAC review Land Use Scenarios – May 2008
- TAC review LRTP Alternatives – June 2008

#### **Travel Time Survey/Speed Study**

- ✓ Consultant has been selected for the survey.
- ✓ Scoping and contract negotiations completed.
- ✓ Field reconnaissance and data collection – in progress.
- Field survey completed. Analysis in progress

#### **GIS/Data Integration and Automation**

- ✓ Issue RFQ – September 11, 2006
- ✓ Non-mandatory pre-proposal conference – September 25, 2006
- ✓ Receive written proposals – October 15, 2006
- ✓ Consultant short list by October 23-27, 2006

- ✓ Consultant short list interviews/references check and city issues Notice of Intent to Award a Contract by October 30-November 13, 2006
- ✓ Contract negotiation and scoping in progress
- ✓ Council approves contract – August 13, 2007
- ✓ City issues contract
- ✓ Notice to proceed
- ✓ Kick-off meeting held in October
- ✓ Project underway

#### **Land-use Model development**

- ✓ Issue RFQ – August 7, 2006
- ✓ Pre-proposal conference – August 29, 2006
- ✓ Receive written proposals – September 8, 2006
- ✓ Consultant short list – September 13-22, 2006
- ✓ Consultant short list interviews/references check and City issues notice of intent to award a contract – September 25-29, 2006
- ✓ Contract negotiation and scoping completed
- ✓ Council approves contract March 5, 2007
- ✓ City issues contract – March 25, 2007
- ✓ Notice to proceed – March 25, 2007
- Study underway – completion December 2008

#### **Non-Motorized Model development**

- ✓ Issue RFQ – August 21, 2006
- ✓ Non-mandatory pre-proposal conference – September 6, 2006
- ✓ Receive written proposals – September 21, 2006
- ✓ Consultant short list – September 25-29, 2006
- ✓ Consultant short list interviews/references check and City issues notice of intent to award a contract – October 2-6, 2006
- ✓ Contract negotiation and scoping completed
- ✓ Council approves contract – March 5, 2007
- ✓ City issues contract – March 25, 2007
- ✓ Notice to proceed – March 25, 2007
- Study underway –completion December 2008

#### **ITS Deployment Plan**

- Two Triangle regional stakeholder coordination meetings held.
- ✓ Update of ITS short range strategies for the 2007-2013 TIP.
- ✓ Update of 2007-2010 ITS project – December 2006
- ✓ Request for funding from NCDOT
- ✓ Draft scope of services and Request for Proposals.
- Consultants selection in spring of 2008
- Notice to proceed in spring 2008
- Completion of Project expected in spring of 2009.

#### **Farrington Road/Stagecoach Road Corridor Study**

- This study would involve the following tasks:
  1. Data collection and analysis
  2. Traffic circulation plan (including a collector street system plan)
  3. Sub-area modeling analysis and forecast of future demand
  4. Alternative evaluation
  5. Recommendation
- Kimley Horn and Associates is the consultant
- Data collection underway
- Steering Committee proposed
- Completion of study expected in January
- Integration in the 2035 LRTP
- Draft report complete
- Presentation at June TAC

#### **MPO Collector Street Plan**

- ✓ Supplemental Agreement with Kimley Horn and Associates
- ✓ Data collection underway
- Completion of study and integration with the 2035 LRTP in Spring 2008

#### **Regional Transit Infrastructure Blueprint**

- ✓ Establish and convene sponsors and partners teams, agree on detailed task list, responsibilities, products, begin infrastructure and corridor descriptions; begin investment principles - summer 2006
- ✓ Finish corridor and infrastructure descriptions; finalize principles fall 2006
- ✓ Begin land use, travel and cost analysis - winter 2006
- ✓ Finish land use, travel, cost analysis - spring 2007
- Conclude work, issue Blueprint, implement tracking mechanism - summer 2007

#### **Chapel Hill/Carrboro/UNC Long Range Transit Plan**

- Project underway
- Projected to be completed in spring of 2008

### **Unified Planning Work Program (UPWP) – Continuing Projects**

#### **Greenhouse Gas (GHG) Emission Inventory and Action Plan**

- ✓ Execute contract and give consultant Notice-to-Proceed – March 2006 (delayed due to contract issues)
- ✓ Formation of Technical Committee finalized in February 2006.
- ✓ Formation of stakeholder committee (Advisory Committee) finalized in February 2006.
- ✓ Kick off meeting for the study held March 23, 2006
- ✓ Establish Project Team List serve in February 2006
- ✓ Base Year data Collection and Information Gathering to be completed in March-August 2006 (Durham – complete; Orange – in progress).

- ✓ Data Analysis and Projection likely to be completed in (Durham - August 2006; Orange - ?).
- ✓ Determine and quantify historic and existing measures likely to be completed in July-August 2006.
- ✓ Identify new measures to be completed in August 2006.
- ✓ Criteria Air Pollutant (CAP) Analysis anticipated to be completed in September 2006.
- ✓ Identify GHG target and model reduction targets anticipated to be completed in February-March 2006.
- ✓ Formulate Action Plan anticipated to be completed in March 2007.
- ✓ Recommend reduction targets, strategies and action plan anticipated to be done by March 2007.
- ✓ Draft Plan finalized in June 2007.
- ✓ Durham Public Forum - June 21, 2007
- ✓ Plan Adoption anticipated occurring during fall 2007. Durham City and Durham County approved on September 19, 2007.
- The Orange County plan has been delayed several months beyond the Durham County plan.

#### **Congestion Management System (CMS)/Mobility Report Card**

- ✓ Consultants selected for the study.
- ✓ Data collection for the Mobility Report Card underway
- ✓ Data Collection for the Durham study about 80% complete.
- ✓ Data Collection and field inventory completed.
- Level of Service analysis and draft report completed.
- Development of CMS performance measures and guidelines likely to be completed in winter 2008.
- Evaluation of congestion management strategies and development of cost-effective mitigation measures expected to be done in winter 2008.
- Draft CMS State of System Report likely to be done in winter 2008.
- Public Comment and local review in spring 2008.
- Adoption anticipated in spring/summer 2008.

#### **Travel Demand Model Update – Model Revision to Incorporate FTA New Start Enhancement**

- ✓ Consultant has been selected to assist the Triangle Regional Model (TRM) Service Bureau at ITRE in the model update.
- ✓ Data collection is complete.
- ✓ Migration of model from Tranplan to TransCad has been completed.
- ✓ Phase I (TTA new start model revision) completed in October 2005.
- ✓ Phase II TTA New Start model conversion to TransCad to be completed in August 2006.
- Calibration of 2002 model in TransCad anticipated to be completed in fall 2007.
- Validation of 2002 model against 2005 count data anticipated to be completed in fall 2007.

## **Unified Planning Work Program (UPWP) – Routine and Other Special Projects**

### **MPO Environmental Justice (EJ) and Limited English Proficiency (LEP) Plan Integration**

- Mandated by federal regulations
- Draft plan to be prepared in 2008.

### **Update of the MPO Public Involvement Policy Consistent with SAFETEA-LU**

- ✓ Draft to be ready for fall of 2007.
- ✓ Adopted anticipated in Spring of 2008

### **MPO Expansion for the next LRTP Update**

- ✓ Initiated dialogue with Person County, Granville County, Butner, Roxboro and Pittsboro – July 2006
- ✓ Met with governing bodies of these jurisdictions – September 2006
- MPO expansion and revision of MOU expected to be completed as part of the 2035 LRTP update.

### **Public Outreach for the East End Connector Planning and Environmental Study**

- ✓ LPA working on the Public Involvement and Outreach Program for the East End Connector Planning and Environmental Study (NEPA).
- ✓ Development of mailing list database complete.
- ✓ Received project schedule and time line from NCDOT.
- ✓ Newsletter distributed May 2006
- ✓ Speakers Bureau presentations June 2006 – ongoing
- ✓ First public meeting September 26, 2006
- ✓ Second public meeting – January 30, 2007
- ✓ Alternative 3 selected as LEDPA – June 19, 2007
- ✓ Ad Hoc Committee Meetings – August 9, 2007, August 27, 2007, September 19, 2007, October 10, 2007, November 7, 2007, December 5, 2007
- ✓ Third public meeting December 10, 2007, Orange Grove Missionary Baptist Church
- Environmental Study expected completion - Spring 2008

**NCDOT PROJECTS UNDER CONSTRUCTION IN DURHAM COUNTY - 6/1/2008**

County	TIP #	Route	Location Description	Contract Amount	Length	Contractor Name	Resident Engineer	RE Ph. #	Contract Completion	Scheduled Progress	Actual Progress	Estimated Completion
Durham	I-306C	I-85	WIDENING OF I-85 FROM EAST OF COLE MILL RD TO WEST OF BROAD STREET.	\$ 66,628,382.65	3.416 km	Granite Construction Company	Aaron V. Earwood, PE	(919) 220-4680	12/31/2006	100%	100%	
DURHAM	U-4010	NC 98	WIDENING OF NC 98 (HOLLOWAY ST) FROM EAST OF US 70 TO EAST OF JUNCTION ROAD	\$ 3,288,207.30	0.369 miles	Triangle Grading and Paving	Cadmus Capehart, PE	(919) 840-0914	6/15/2008	70.5%	27.7%	12/15/2008
DURHAM	U-4410DB	HOPSON ROAD	NEW ALIGNMENT OF HOPSON ROAD FROM NC-55 TO LOUIS STEPHENS DRIVE	\$ 3,476,305.55	0.587 miles	Thompson Contracting, Inc.	Jeff Allen, PE	(919) 733-9499	10/1/2008	55.5%	52.0%	10/1/2008
DURHAM / WAKE	U-4026A/B R-2904	DAVIS DRIVE / NC-54	WIDENING OF DAVIS DRIVE FROM MORRISVILLE-CARPENTER ROAD TO NC 54, WIDENING OF NC-54 FROM DAVIS DRIVE TO MIAMI BLVD	\$ 35,467,891.08	6.363 miles	C C Mangum Company LLC	Jeff Allen, PE	(919) 733-9499	11/1/2009	36.4%	48.1%	11/1/2009
DURHAM	B-3450 / U-4009 / U-4012	GARRETT ROAD	TWO BRIDGES ON GARRETT RD; SERVICE ROAD NEAR US 15-501 AND GARRETT RD INTERSECTION; US 15-501 FROM NORTH MT. MORIAH RD SOUTH OF GARRETT RD	\$ 18,810,912.36	1.769 miles	DLB, Inc.	Aaron V. Earwood, PE	(919) 220-4680	8/1/2010	10.5%	11.2%	8/1/2010
DURHAM	2008 RESURF	US-501, NC-55, SR	RESURFACING AND SHLDR RECONSTR. OF US-501, NC-55 AND 14 SECTIONS OF SECONDARY RDS	\$ 3,389,883.53	21.5 miles	C C Mangum Company LLC	Cadmus Capehart, PE	(919) 840-0914	8/1/2008	17.5%	25.1%	8/1/2008
DURHAM	B-3169	RIVERMONT ROAD	BRIDGE 158 ON RIVERMONT ROAD (SR-1402)	\$ 539,350.81	0.067 miles	SMITH-ROWE, INC.	Aaron V. Earwood, PE	(919) 220-4680	11/10/2008			
DURHAM / WAKE	B-3528	LEESVILLE ROAD	BRIDGE OVER SYCAMORE CREEK ON LEESVILLE ROAD (SR-1839)	\$ 1,174,705.74	0.284 miles	Mountain Creek Contractors, LLC	Cadmus Capehart, PE	(919) 840-0914	5/15/2009	3.3%	3.6%	5/15/2009

**NCDOT PROJECTS FOR LET NEXT 12 MONTHS IN DURHAM COUNTY - 6/1/2008**

County	TIP #	Route	Location Description	Contract Estimate	Length	Contact Engineer	Phone #	Contract Let Date
DURHAM	B-4109	PICKETT ROAD	BRIDGE OVER MUD CREEK ON PICKETT ROAD (SR-1303)	\$ 850,000.00	0.078 miles	D. TAYLOR	(919) 250-4016	5/20/2008
DURHAM / WAKE	2008-RESURF	US-70	WIDENING, RESURF. AND SHLDR RECONSTR. OF US-70 W OF ANGIER AVE TO W OF ANGUS DR	\$ 2,000,000.00	4.39 miles	M. KNEIS	(919) 220-4600	5/20/2008
DURHAM	U-2055B	NC 55	CONSTRUCTION OF TURN LANES AT RIDDLE ROAD AND NC-55	\$ 223,238.50		B. UPSHAW	(919) 220-4600	spring 2008
DURHAM	U-2055D	AVONDALE DRIVE	CONSTRUCTION OF ROUNDABOUT ON AVONDALE DRIVE	\$ 493,065.78		B. UPSHAW	(919) 220-4600	spring 2008
DURHAM	U-3309A	TW ALEXANDER DR	WIDENING FROM CORNWALLIS ROAD TO EAST OF NC-147	\$ 8,900,000.00	1.072 miles	J. MOORE	(919) 250-4016	2/17/2009

12 MONTH TENTATIVE LET LIST MAY BE FOUND ONLINE AT: <http://www.ncdot.org/planning/development/ProjectMgmt/12month/>

PROGRESS REPORTS MAY BE FOUND ONLINE AT: <https://apps.dot.state.nc.us/traffictravel/progloc/>

**ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO**

County	WBS #	Route	Location Description	Amount	Status
Orange	36945	SR 1010 (Franklin St.) @ Mallette St.	Upgrade traffic signal and install pedestrian signal heads REVISION: Install mast arm	\$110,000.00	<b>Proposal being developed</b>
Orange	41096	NC 54 @ SR 2016 (Southern Drive)	Construct a left turn lane on NC 54 westbound	\$200,000.00	Barrett, Irvin & Jordan Contr., Inc.; <b>Pre-con 6/4/08</b>
Orange	41488	US 15-501 @ SR 1900 (Old Mason Farm Road)	Extend the left turn lane on northbound US 15-501 , revise the signal and add a right turn lane at SR 1900	\$147,500.00	District design underway
Orange	41593	Union Street	Construct 750 feet of sidewalk and a crosswalk to connect Hillsborough Elementary School to SR 1156 (Nash St.)	\$32,000.00	Town to include as part of large STP- DA sidewalk contract for Nash St.-Enc. Agreement under review
Orange	41686	NC 54 @ SR 1102/1951 (Dodson's Crossroads/ Butler Rd.)	Construct left turn lanes in both directions	\$250,000.00	<b>S.T. Wooten Corp. ; Available 6/2/08</b>
Orange	41953	SR 1733 (Weaver Dairy Rd.) @ SR 1737 (Sunrise Dr.)	Install a traffic signal	\$75,000	Signal installed- to be operable by 5/30/08
Orange	41966	I-85/I-40 Weigh Station	Mill and pave lanes of I-40 WB/ I-85 SB at the Orange County Weigh Station near Efland.	\$100,000	APAC-Atlantic, Thompson Arthur Div.; <b>100% complete</b>
Orange	42037	SR 1939 (Damascus Ch. Rd.) 0.8 mi. west of SR 1919 (Smith Level Rd.)	Install guardrail at Pipe# 89	\$17,000	Req. by OWASA; District POC
Orange	42038	SR 1005 (Greensboro - Chapel Hill Rd.) approx. 1.6 mi. west of SR 1942 (Jones Ferry Rd.)	Install guardrail at Bridge# 85	\$11,000	Req. by OWASA; District POC
Orange	42039	SR 1115 (Bradshaw Quarry Rd. 0.4 mi. west of SR 1114 (Buckhorn Rd.)	Install guardrail at Bridge# 33	\$30,000	Req. by OWASA; District POC

**ACTIVE NCDOT PROJECTS LOCATED IN ORANGE COUNTY - DCHC MPO**

Orange	42040	SR 1006 (Orange Grove Rd.) 0.3 mi. south of SR 1177 (Orange Grove-Calvander Rd.)	Install guardrail at the culvert	\$24,000	Req. by OWASA; District POC
Orange	7CR.10681.14 7CR.20681.14 7C.068081	4 sections of NC 54 and ramps and 5 sections of secondary roads	Milling, resurfacing, pavement markings, and shoulder reconstruction		S.T. Wooten Corp.; to begin 7/1/08 ICD 8/8/08 Compl. 10/31/08; FA patching underway
Orange	SF-4907 B 41699.1	US 70 (Hillsborough Rd.) and NC 751 near Durham	Install a right turn lane for traffic travelling east on US 70 and turning right onto NC 751	\$35,000 PE	Design=90% compl.; to R/W 6/20/08
Orange	SF-4907 C 41698.1	NC 57@ NC157 near Hillsborough	Install center traffic islands with stop signs on NC 157	\$7,000 PE	<b>Scope revised to include a signal</b>
Orange	SS-4907E 41026.3	NC 54 @ SR 1952 (White Cross Road)	Construct a left turn lane	\$173,000.00	APAC-Atlantic, Thompson Arthur Div.; <b>began 5/19/08</b> Compl. 6/27/08
Orange	SS-4907 J 41634.3	NC 54 and SR 1945 (Neville Rd.)	Construct a left turn lane	\$187,000.00	<b>S.T. Wooten Corp.</b> ; Avail. 6/2/08 Compl. 8/8/08
Orange	U-4008 35009.3.2	US 15-501 & SR 1734 (Erwin Rd.)	Grading, drainage, paving and intersection improvements(Super Street)	\$4.98 million	98% complete; open to traffic 1/8/08; Rev. compl 5/30/08
<b>NCDOT PROJECTS CURRENTLY IN 12 MONTH LETTING LIST</b>					
County	TIP #	Route	Location Description	TIP Est.	Est. Let Date
Orange	I-4716	I-40	Grind and reseal joints on I-40 from I-85 to Durham Co.	\$1.5 million to be revised	Jan. 20, 2009
Orange	B-4218	SR 1730 (Turkey Farm Rd.)	Replace Bridge # 108 over New Hope Creek	<b>\$750,000.00</b>	July 15, 2008
Orange	B-4592	SR 1561 (Lawrence Rd.)	Replace Bridge # 64 over the Eno River	\$1.6 million	Jan. 20, 2009
Orange	R-4468	I-85/I-40 Weigh Station	Upgrade weigh in motion technology on SBL/WBL	\$1.0 million	<b>June 25, 2008</b>
Orange	U-4704	Chapel Hill-Carrboro	Computerized Traffic Signal System	<b>\$5.0 million</b>	<b>April 21, 2009</b>