DCHC
Metropolitan Planning Organization
Planning Tomorrow Today

Comprehensive Transportation Plan

Draft Deficiency Analysis

(January 14, 2015)

Direct Comment and Questions to:

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www.dchcmpo.org

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Comprehensive Transportation Plan – Deficiency Analysis

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1 – Purpose, Public Input and Schedule

Purpose

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) and North Carolina Department of Transportation (NCDOT) are developing a Comprehensive Transportation Plan (CTP) for the MPO's planning area. The CTP will identify highways, transit, bicycle, pedestrian and other transportation facility improvements and additions that are needed to accommodate the future population and employment of this area. Among the first steps in this development process is the enclosed Deficiency Analysis that for the most part projects the future population and employment onto the current transportation network to identify where capacity, safety and other improvements are needed.

Public Input

The DCHC MPO and NCDOT have made the enclosed Deficiency Analysis available to the public and request that the public provide feedback on:

- Deficiencies that the enclosed analysis has not identified;
- Proposed transportation facilities, such as roadway lane additions, new bus routes, bicycle lanes, etc., that are needed to alleviate the deficiencies; and,
- Other comments on the goals, objectives, socioeconomic forecast, and other data presented in the Deficiency Analysis.

Comments can be directed to:

- Andy Henry, Senior Transportation Planner, DCHC MPO, andrew.henry@durhamnc.gov
- Julie Bollinger, PE, Transportation Engineer, NCDOT, jbollinger@ncdot.gov

The MPO will accept comments through March 2, 2015.

Schedule

The anticipated schedule for the CTP is:

- Publish Deficiency Analysis for public comment – January 14, 2015
- Publish Alternatives for public comment – April 8, 2015
- Publish Draft CTP for public comment, MPO Board hearing, workshops and local government consideration -- August 12, 2015
- MPO adopt final plan – October 14, 2014
- NCDOT adopt final plan – November 30, 2014.

Availability on Web Site

The tables and maps contained in this Deficiency Analysis are available for download from the DCHC MPO Web site – www.dchcmpo.org. In addition, the Web page has interactive, online maps of the highway study segments and related transportation data.

2 – Goals, Objectives and Targets

Background

Purpose

The DCHC MPO has a set of Goals and Objectives and Targets that are designed to achieve the region's overall transportation vision based on the values of the various communities and citizens. The citizens, MPO Board members and staff will continually come back to consider these measures while reviewing the transportation deficiencies, discussing the project alternatives, selecting the final plan, and engaging in any activity related to the CTP.

The DCHC MPO adopted these Goals and Objectives and Targets in June 2012 as part of the process to develop the 2040 Metropolitan Transportation Plan (2040 MTP). The MPO conducted an extensive public input process that included four public workshops, an online survey and a public hearing.

Content

- Goals and Objectives are on pages 2-2 through 2-6
- Targets are on page 2-7

2 – Goals and Objectives

1. Overall Transportation System

Goal: A safe, sustainable, efficient, attractive, multi-modal transportation system that: supports local land use; accommodates trip-making choices; maintains mobility and access; protects the environment and neighborhoods; and improves the quality of life for urban area residents.

Objectives:

a) Establish performance standards that will measure the effectiveness of the urban area's overall transportation system in supporting access to goods, services, activities, and destinations.
b) Select and program transportation projects, which are consistent with community goals and are a cost-effective use of funds.
c) Develop and maintain a multi-modal regional transportation model that reflects travel patterns and incorporates innovative techniques for evaluating the impacts of proposed transportation investments on travel and land use patterns.
d) Promote non-automobile transportation alternatives and create efficient connections between all transportation modes.
e) Conserve natural resources and reduce the rate of energy consumption.
f) Develop cooperative strategies with employers to reduce congestion and increase the efficiency of the transportation system.
g) Use transportation funds based on the priority needs of the urban area, in keeping with community values.
h) Seek additional funding and funding sources to ensure implementation of the long range plan.
i) Monitor the implementation of the Plan and the targets through the biannual TIP process.
j) Ensure that the transportation needs are met for all populations, especially for the youth and elderly, the mobility impaired, and the economically disadvantaged.
k) Work cooperatively with the North Carolina Department of Transportation, neighboring Metropolitan Planning Organizations and Rural Planning Organizations and other transportation-related organizations to address the transportation issues of the broader region.

2. Multi-Modal Street and Highway System

Goal: An attractive multi-modal street and highway system that allows people and goods to be moved safely, conveniently, and efficiently.

Objectives:

a) Establish performance standards and report on the condition and effectiveness of the multi-modal street and highway system.

b) Create multi-modal street patterns that: encourage safe pedestrian, bicycle, and vehicular travel; provide access to public transportation; and ensure connectivity.
c) Develop and implement level of service (LOS) standards for the urban area that are based on a cooperative agreement between state and local agencies.
d) Preserve and enhance the traffic carrying capacity of arterial street systems, while minimizing traffic intrusion in residential neighborhoods.
e) Identify and recommend design standards that: establish safe speeds; increase pedestrian and bicycle usage of streets; and enhance the attractiveness and appeal of the street and highway system.

3. Public Transportation System

Goal: A convenient, accessible, and affordable public transportation system, provided by public and private operators, that enhances mobility and economic development.

Objectives:
a) Establish performance standards and report on the condition and effectiveness of the public transportation system.
b) Increase public transit ridership by enlarging the service area and increasing the frequency of service within the urban area.
c) Coordinate transit service within the urban area by promoting high quality, seamless, integrated, and customer-friendly service.
d) Expand ridesharing, carpool, and vanpool services and opportunities.
e) Develop and implement alternatives to the use of single occupant vehicles, including high occupancy vehicle (HOV) facilities and regional rail services.
f) Develop and implement the Regional Transit Plan.
g) Develop a regional park and ride system for cars and bicycles to support transit services and encourage ridesharing.

4. Pedestrian and Bicycle System

Goal: A pedestrian and bicycle system that: provides a safe alternative means of transportation; allows greater access to public transit; supports recreational opportunities; and includes off-road trails

Objectives:
a) Establish performance standards and report on the condition and effectiveness of the pedestrian and bicycle system.
b) Maintain and implement a Regional Pedestrian Plan and a Regional Bicycle Plan.
c) Identify and recommend ways that local governments may provide adequate staff and resources to meet the goals of their pedestrian and bicycle programs.
d) Develop a regional bicycle and pedestrian policy that establishes linkages between activity centers and provides for access to public transit.

e) Ensure that bicycle and pedestrian facilities are included in the planning, design, and construction of every roadway and development project, including the connection to external transportation facilities, in accordance with bicycle and pedestrian plans and local ordinances.
f) Increase education about bicycling and walking, especially concerning the benefits of pedestrian and bicycle alternatives.
g) Support the enforcement of motor vehicle, pedestrian and bicycle regulations.
h) Pursue strong funding commitment for building both pedestrian and bicycle facilities.
i) Provide greater safety for pedestrians and bicyclists of all levels of ability, and safer interaction with users of other modes of transportation.
j) Encourage the efforts and activities of citizen advocacy groups for pedestrian and bicycling by providing information and support for their programs.

5. Integration of Land Use and Transportation

Goal: A Transportation Plan that is integrated with local land use plans and development policies.

Objectives:
a) Establish performance standards and report on the integration and consistency of the Transportation Plan with local land use plans and development policies.
b) Create transportation systems that enhance the livability of all communities.
c) Identify the impacts of different land use patterns and site designs on travel behavior.
d) Evaluate the changes in land use brought about by the expansion of existing transportation facilities and the construction of new facilities.
e) Identify and recommend land use patterns, parking requirements and development policies that increase overall mobility and that improve and support transportation efficiency, and compact, mixed-use, transit-friendly, and walk able development

6. Protection of Natural Environment and Social Systems

Goal: A multi-modal transportation system which provides access and mobility to all residents, while protecting the public health, natural environment, cultural resources, and social systems.

Objectives:
a) Establish performance standards and report on transportation impacts on the public health, natural environment, cultural resources, and social systems.
b) Protect and preserve archaeological, historic, and culturally valuable areas.
c) Identify and protect environmentally sensitive areas early in the planning process.
d) Develop and implement modifications to the transportation system that reduce the rate of growth in vehicle miles traveled (VMT).

e) Modify the transportation system to reduce the pollutants in highway runoff and the vehicle emissions, in accordance with federal, state and local Clean Air and Water legislation.
f) Minimize the noise and dust generated by transportation facilities in neighborhoods and the urban area.
g) Ensure that transportation facilities do not negatively affect disadvantaged populations disproportionately.
h) Develop and implement a transportation system that supports the reduction of greenhouse gases and carbon production and is coordinated with local greenhouse gas and carbon reduction plans.

7. Public Involvement

Goal: An ongoing program to inform and involve citizens throughout all stages of the development, update, and implementation of the Transportation Plan.

Objective:
a) Establish performance standards and report on the effectiveness of the public involvement element of the Transportation Plan.
b) Encourage a broad cross section of citizens to take a proactive role in the transportation policy and planning process.
c) Educate the public and elected officials, in order to increase public understanding of both the options and the constraints of transportation alternatives.
d) Determine the public's knowledge of the metropolitan transportation system, and public values, attitudes and concerns regarding transportation.
e) Determine which elements of the Transportation Plan would support or diminish the public's desired lifestyle.

8. Safety and Security

Goal: Continue to improve transportation safety and ensure the security of the transportation system.

Objective:
a) Reduce fatality, injury, and crash/incident rates on all modes.
b) Reduce vulnerability of transportation facilities/users to terrorists, natural disasters and risks by implementing and monitoring an evacuation plan, and working with the regional emergency management team.
c) Reduce economic losses due to transportation crashes and incidents.
d) Improve the ability to identify high accident locations, and evaluate their impacts in TIP project prioritization.
e) Provide a safe environment for transportation users through the "3 Es" (Engineering, Enforcement and Education).

f) Increase transit safety and security for riders and employees.

9. Freight Transportation and Urban Goods Movement

Goal: Improve mobility and accessibility of freight and urban goods movement.

Objective:

a) Relieve congestion on heavily-traveled truck routes, including through the encouragement of expanded rail transportation.
b) Improve mobility and access to intermodal operations and facilities.
c) Establish and designate truck routes consistent with federal, state and local regulations.

2 – Targets

These Targets use data from the Triangle Regional Model and other sources to represent a broad spectrum of the various types of more narrowly defined measurements found in the model. 2010 is the current condition using 2010 population and employment and the 2010 transportation network. 2040 is the "no build" scenario. It is the 2040 population and employment using the existing transportation network plus any projects that are committed to being completed.

There are three Target values -- Good, Better and Best. The use of more than one Target value helps to set a range of values that can be used for comparison.

Targets

		Comparison Data		Targets		
No.	**Mobility Targets**	**2010**	**2040 E+C**	**Good**	**Better**	**Best**
1	VMT Per Capita (daily miles)	31	31	30	29	28
2	Percent of population whose avg trip time is greater than 15 minutes (all trips)	27%	44%	25%	22%	20%
3	Average Travel Time: all peak trips (daily minutes)	15	16	14	13	12
4	Transit Mode Share: all trips	2.8%	2.2%	5%	7%	10%
5	Percent SOV Trip Share: work trips	81%	80%	78%	75%	72%
6	Percent Non-motorized Trip Share: all trips	10%	11%	13%	14%	16%
7	Greenhouse Gas Change: annual per capita emissions from transportation sector (in tons)	9.6	9.5	9.0	8.6	8.1
8	Cost of Congestion (daily; in million $)	$1.62	$3.2	$1.8	$1.5	$1.2
9	Low and Moderate Income Population within 1/4 mile of transit	67%	67%	80%	83%	85%

3 – Socioeconomic Data (SE Data)

Purpose

The SE Data depicts the growth and total households, population and employment from the years 2010 through 2040. Households and employment are the generators and attractors of trips, and thus understanding the forecasted location of these units helps to interpret where travel demand will likely grow in the future. The SE Data is a critical input into the Triangle Regional Model (TRM), which among other measurements compares the supply and demand for travel facilities and services, such as roadways and transit, and is used as the principal tool for identifying future transportation deficiencies.

Content

- Guide totals are on page 3-2
- Land Use model information is on page 3-3
- County household growth maps are on pages 3-4 through 3-6
- County employment growth maps are on pages 3-7 through 3-9

Guide Totals

The following two tables depict the county-level population and employment guide totals used in the land use modeling for the CTP. These are the same values that were used for the 2040 Metropolitan Transportation Plan (2040 MTP). The MPO is in the process of updating the SE Data and land use model (i.e., Community Visualization) however, the model update will not be completed until December 2015, thus requiring the use of the current SE Data and land use model.

- Population -- The population forecast is from the North Carolina Office of State Budget and Management (OSBM) and is based on their May 2011 reporting.

- Employment – The employment forecast uses base data from the North Carolina Employment Security Commission and growth data from Woods and Poole Economics.

Population

--Guide Totals--	***2040 LRTP***		
Jurisdiction	**2010**	**2040**	**Annual Rate**
Durham County	268,925	432,571	1.6%
Orange County	134,325	197,675	1.3%
Chatham County(1)(2)	38,991	71,672	2.0%
Person County(1)	31,845	44,784	1.1%
Total	**474,086**	**746,702**	**1.5%**

Employment

--Guide Totals--	***2040 LRTP***		
Jurisdiction	**2010**	**2040**	**Annual Rate**
Durham County	194,770	306,637	1.5%
Orange County	70,491	119,787	1.8%
Chatham County	10,011	19,509	2.2%
Person County	8,791	13,093	1.3%
Total	**284,063**	**459,026**	**1.6%**

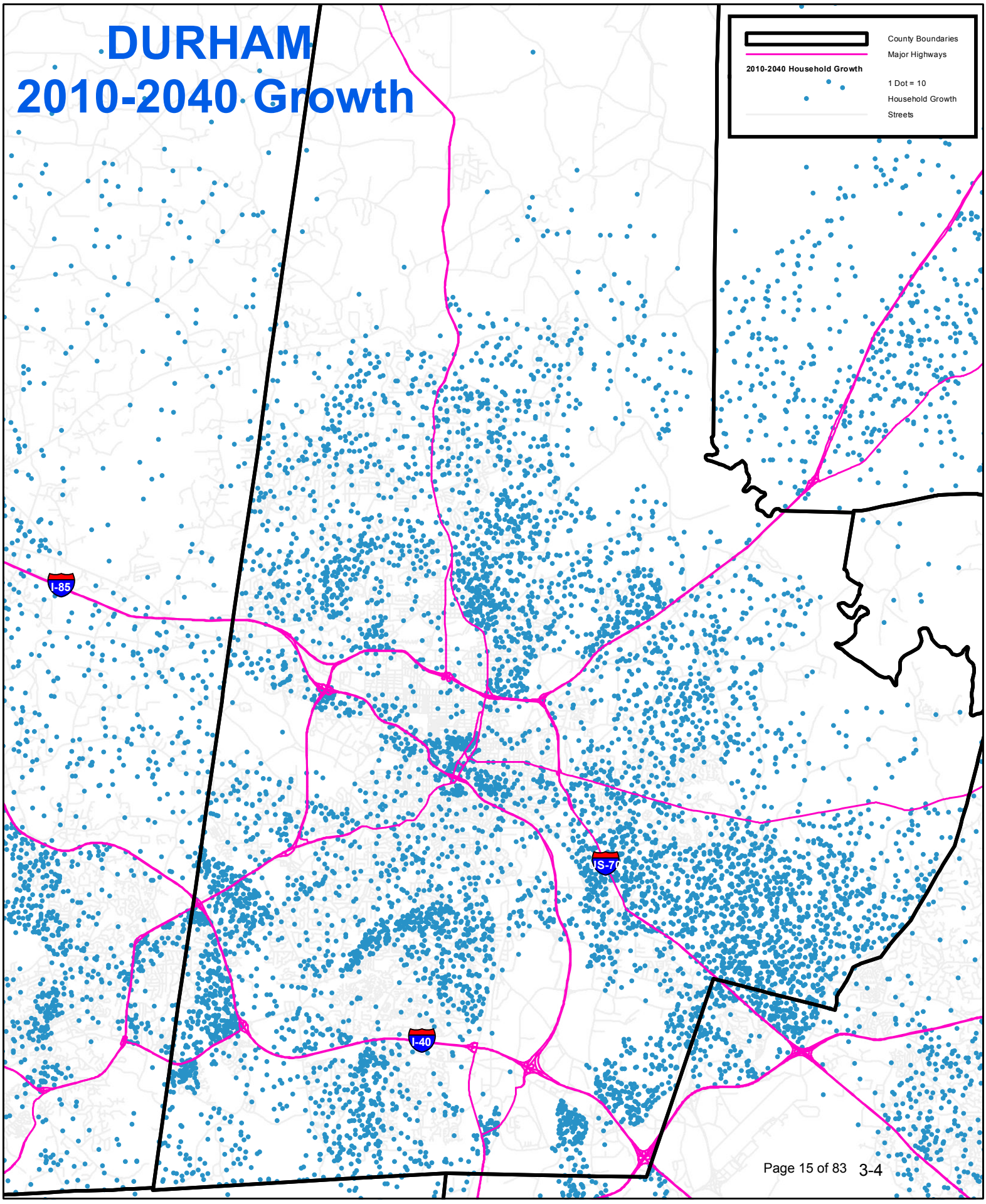
Land Use Model

The DCHC MPO used the Community Visualization land use modeling process to create a land use scenario using the long-range transportation plans of the various jurisdictions and counties of the Triangle region. The current zoning was used if a long-range plan was not adopted.

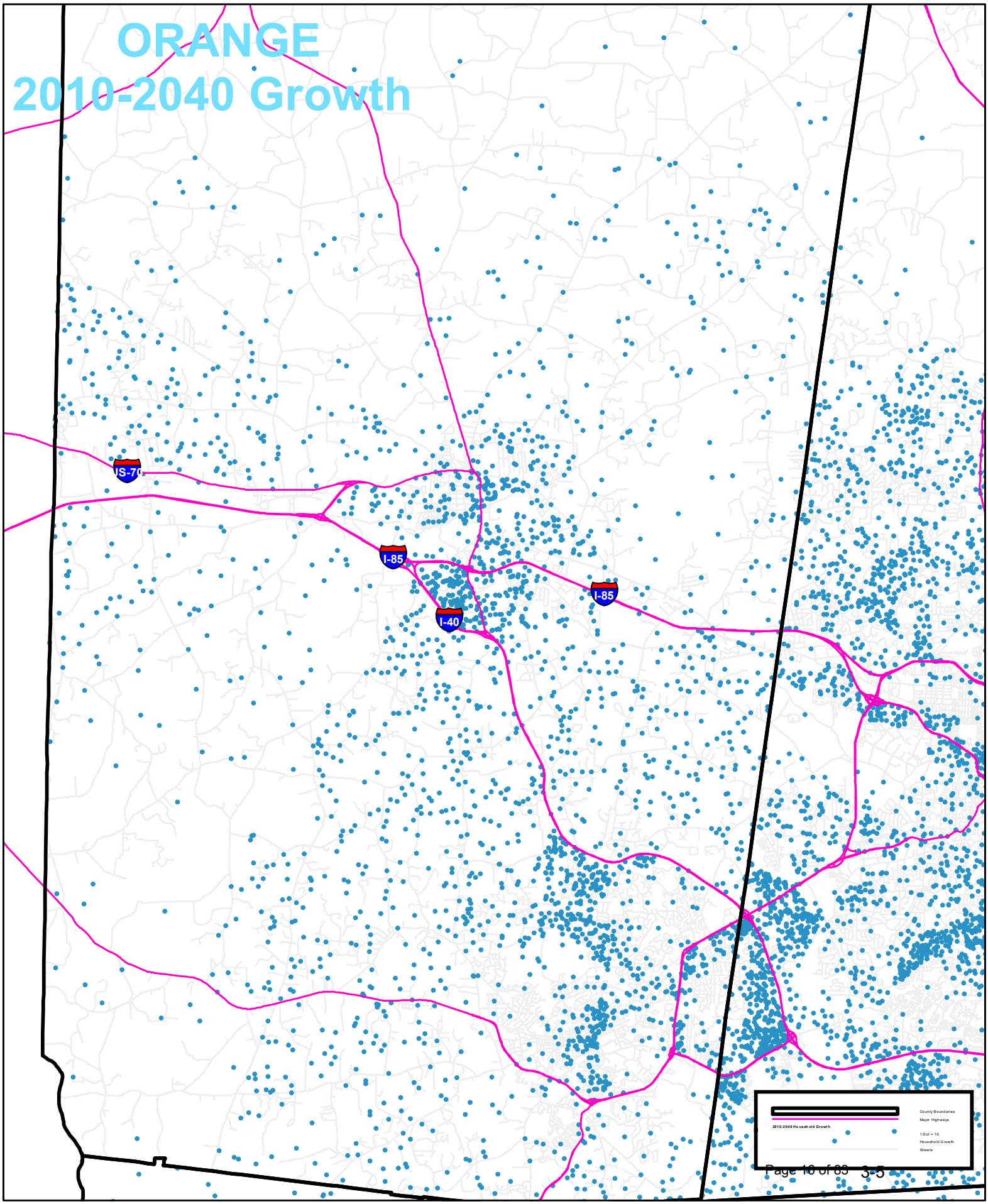
The six maps on the following pages display the growth distribution of households and employment from 2011 through 2040. Each dot represents ten households or jobs.

Maps that show the total households and employment, and that use a different display (such as grid cells) are available under the SE Data section of the following Deficiency Analysis Web page: http://bit.ly/1y9FGNb

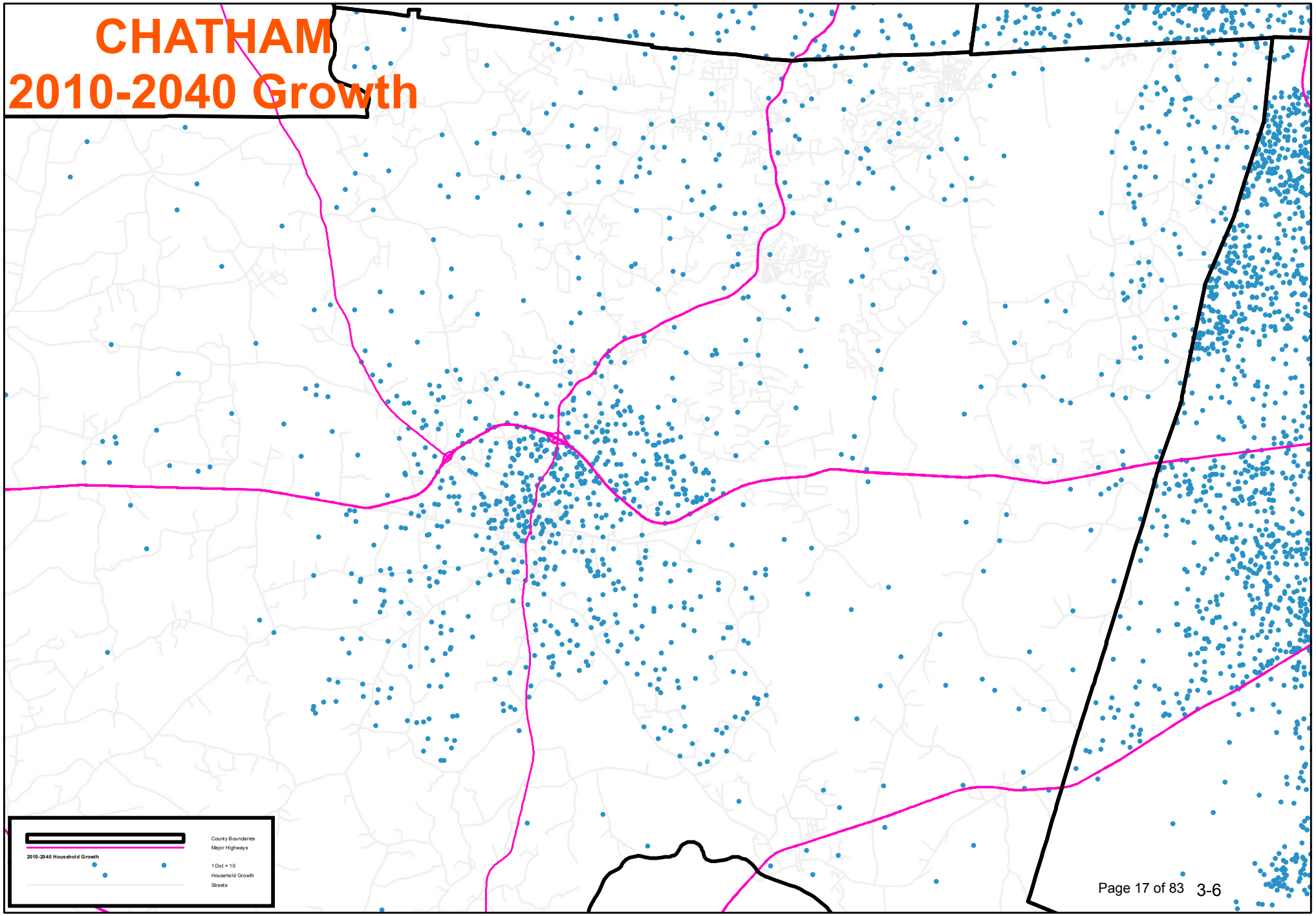
SE Data--Household



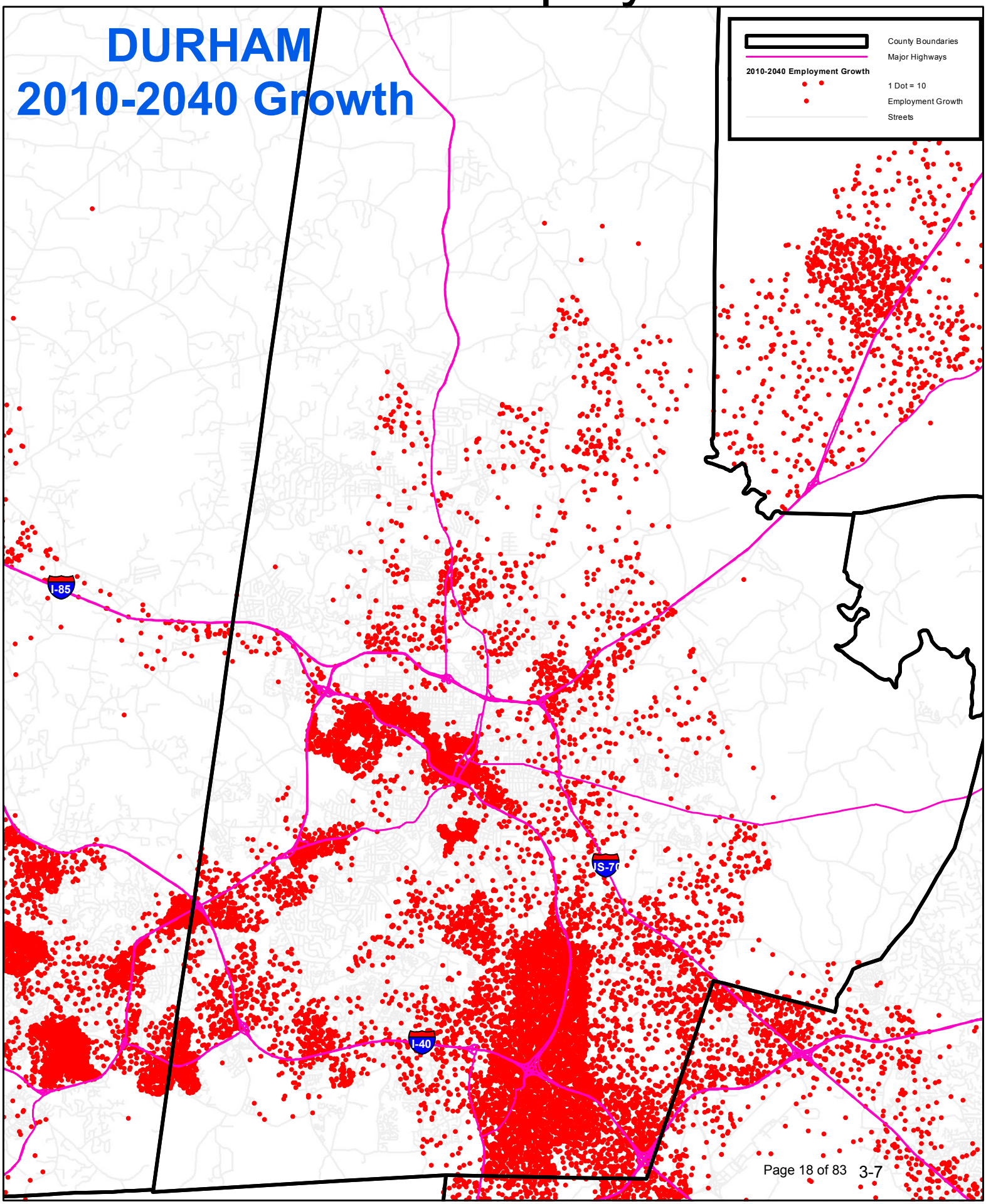
SE Data--Household



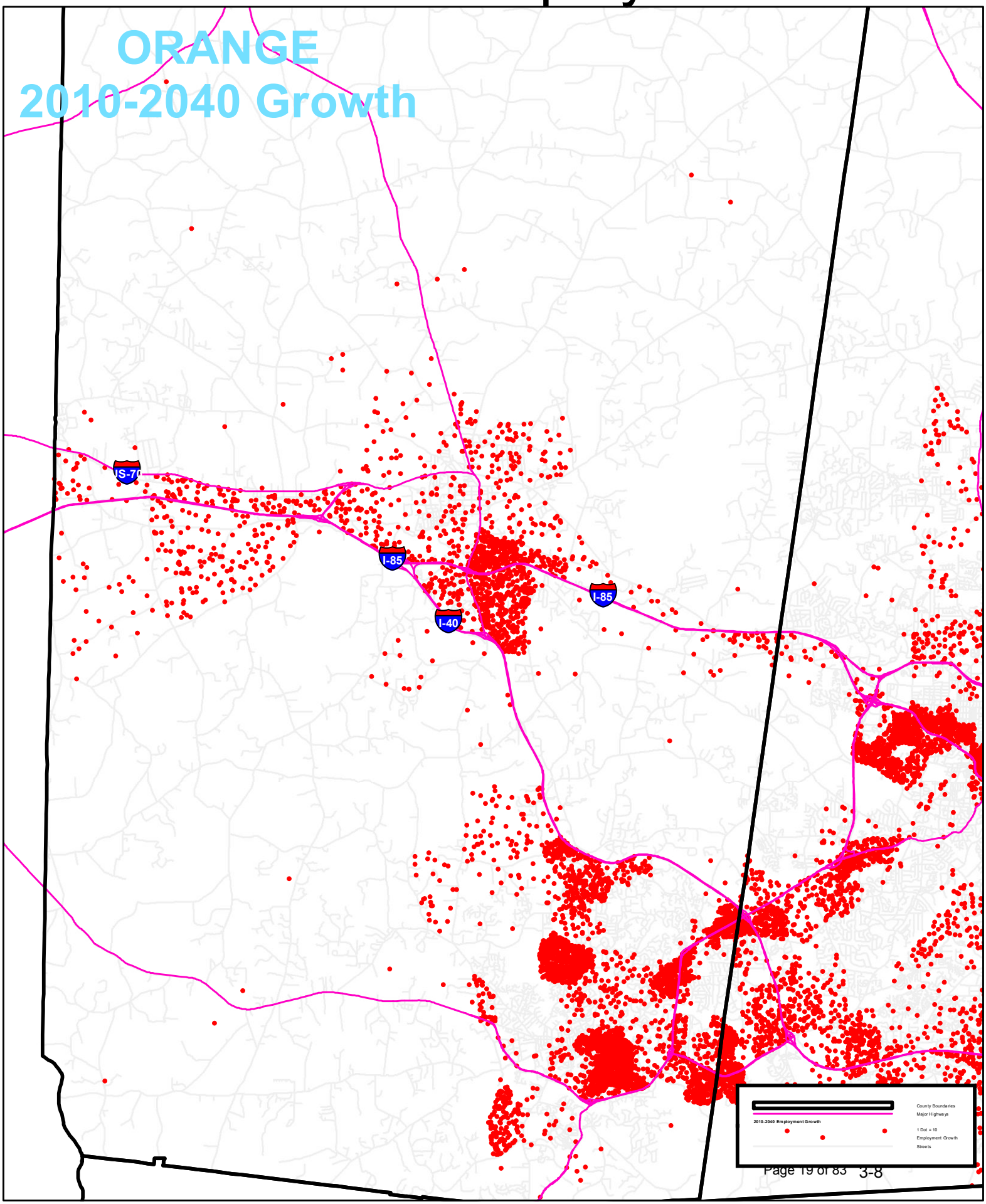
SE Data--Household



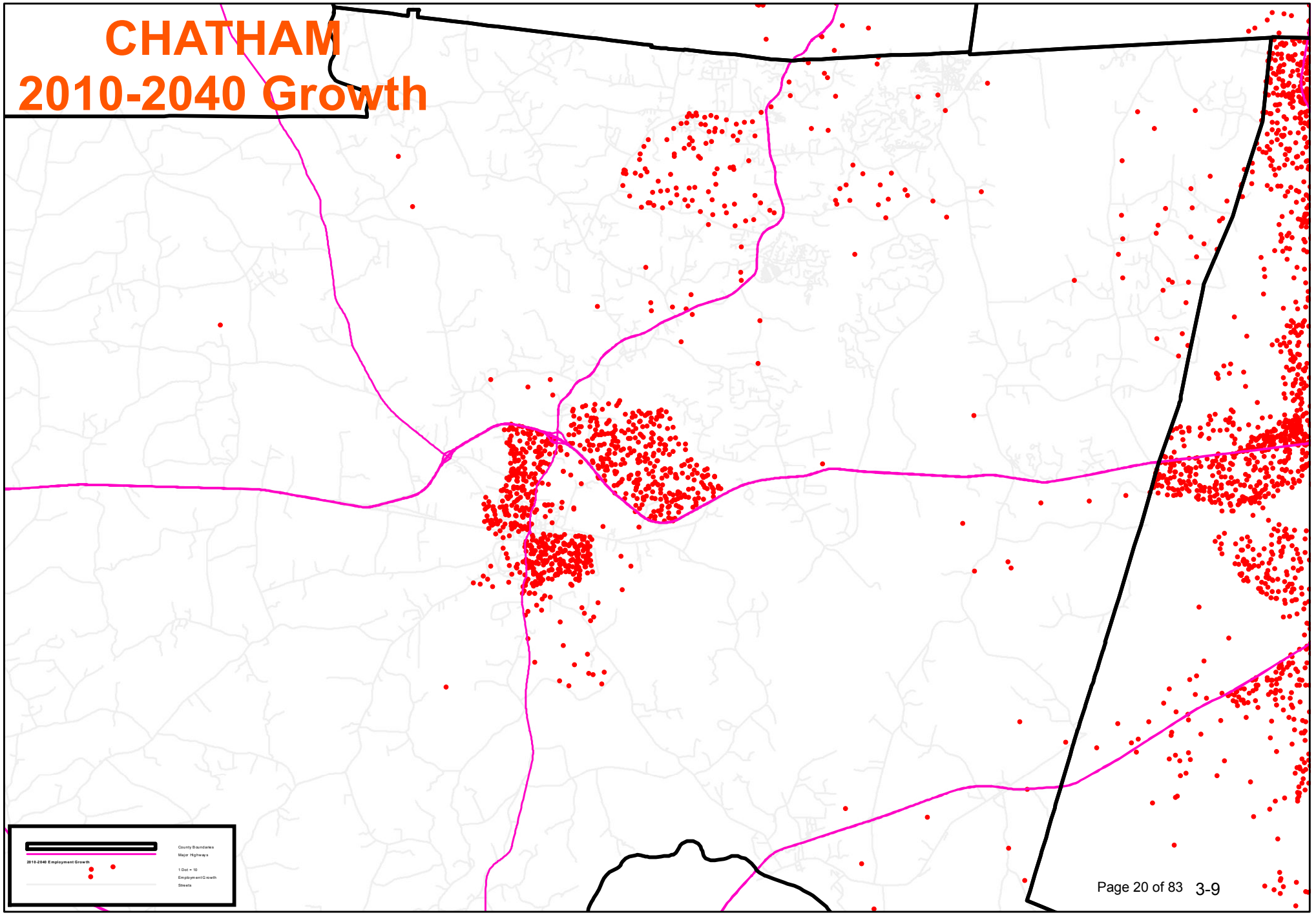
SE Data--Employment



SE Data--Employment



SE Data--Employment



4 – Highway

Purpose

The highway maps and tables show the level of projected congestion and the salient attributes of the CTP highway study segments. We can use this information to identify highways that will need future improvements, such as lane additions and intersection improvements, or that will need capacity increases on parallel routes.

Methodology – V/C Maps

Staff identified the MPO highway network that requires analysis and broke the network into discrete study segments using information such as the number of lanes and projected volume to separate the network into segments. The V/C maps show the projected 2040 volume divided by the capacity, thus any value of 1 or greater indicates that the volume will exceed the capacity if no improvements are made. Some key factors in these maps include:

- This is a no-build scenario. The Triangle Regional Model (TRM) uses the 2040 population and employment data on the current transportation network.
- The capacity uses Level of Service (LOS) D. The NCDOT and MPO commonly use LOS D and LOS E, respectively, in their studies. LOS D has lower capacities, and thus the number of roadways exceeding capacity will appear to increase to those persons who are accustomed to previous MPO studies such as the 2040 MTP.
- The projected 2040 volume is based on traffic counts. The study segment growth rate from the 2010 to 2040 traffic volume (from the TRM) is applied to the most recent traffic count, which is usually for the year 2011. Traffic counts were used because many study segments had a large variance between the model's 2010 volume and the 2011 traffic count.
- Each study segment is comprised of several TRM roadway links that many times varied significantly in projected volume. The study segment volume was calculated by using a weighted average of the TRM roadway link volumes.

Methodology – Highway Tables

The highway table, which is organized alphabetically by roadway name, provides detailed data for each study segment such as a recent traffic count, current traffic capacity, 2040 traffic volume and the level of capacity (i.e., volume divided by capacity, or V/C).

Content

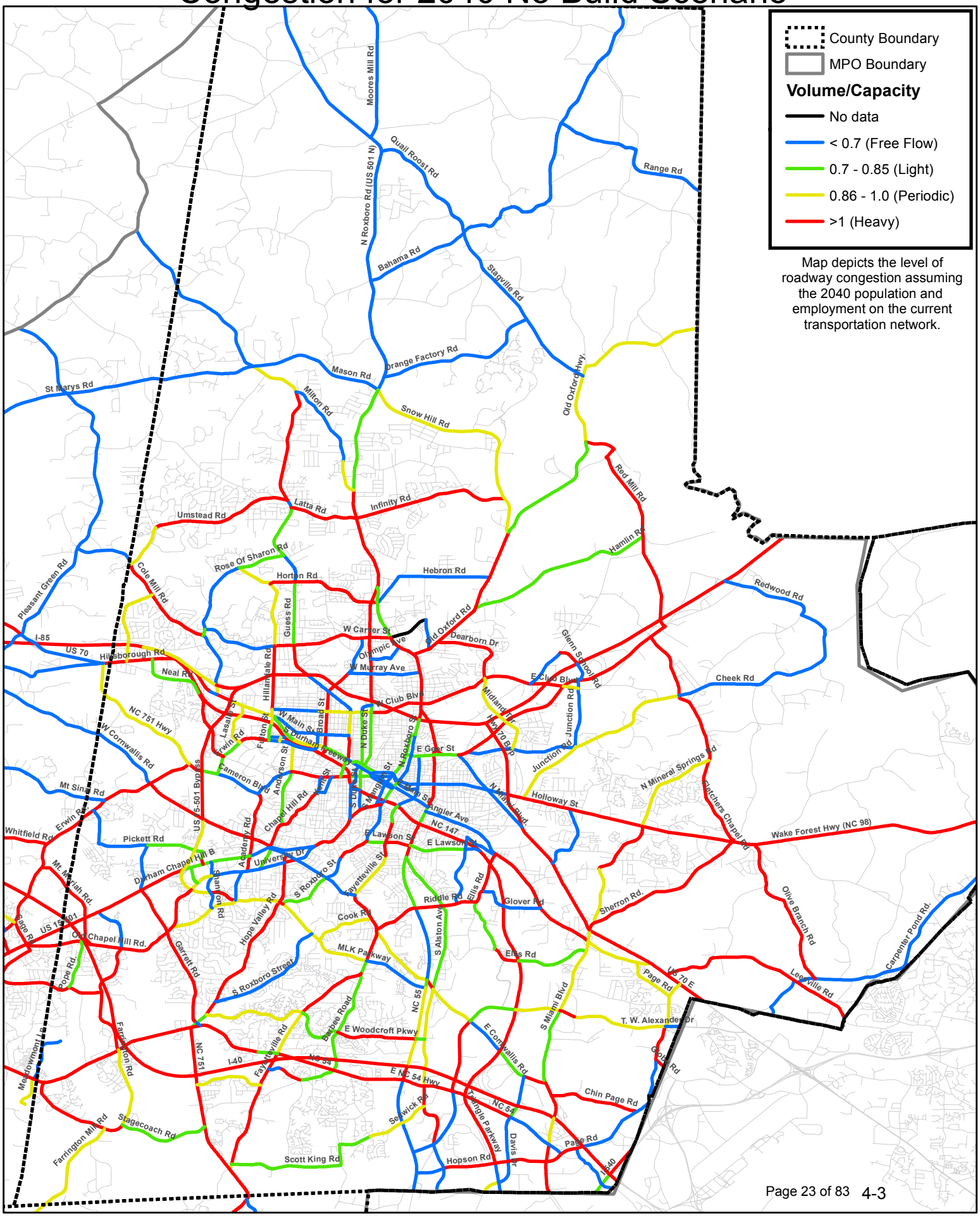
- Highway maps:

- Durham County maps are pages 4-3 through 4-7;
- Orange County maps are pages 4-8 through 4-10; and,
- The Chatham County map is page 4-11.

- The highway tables starts on page 4-12.

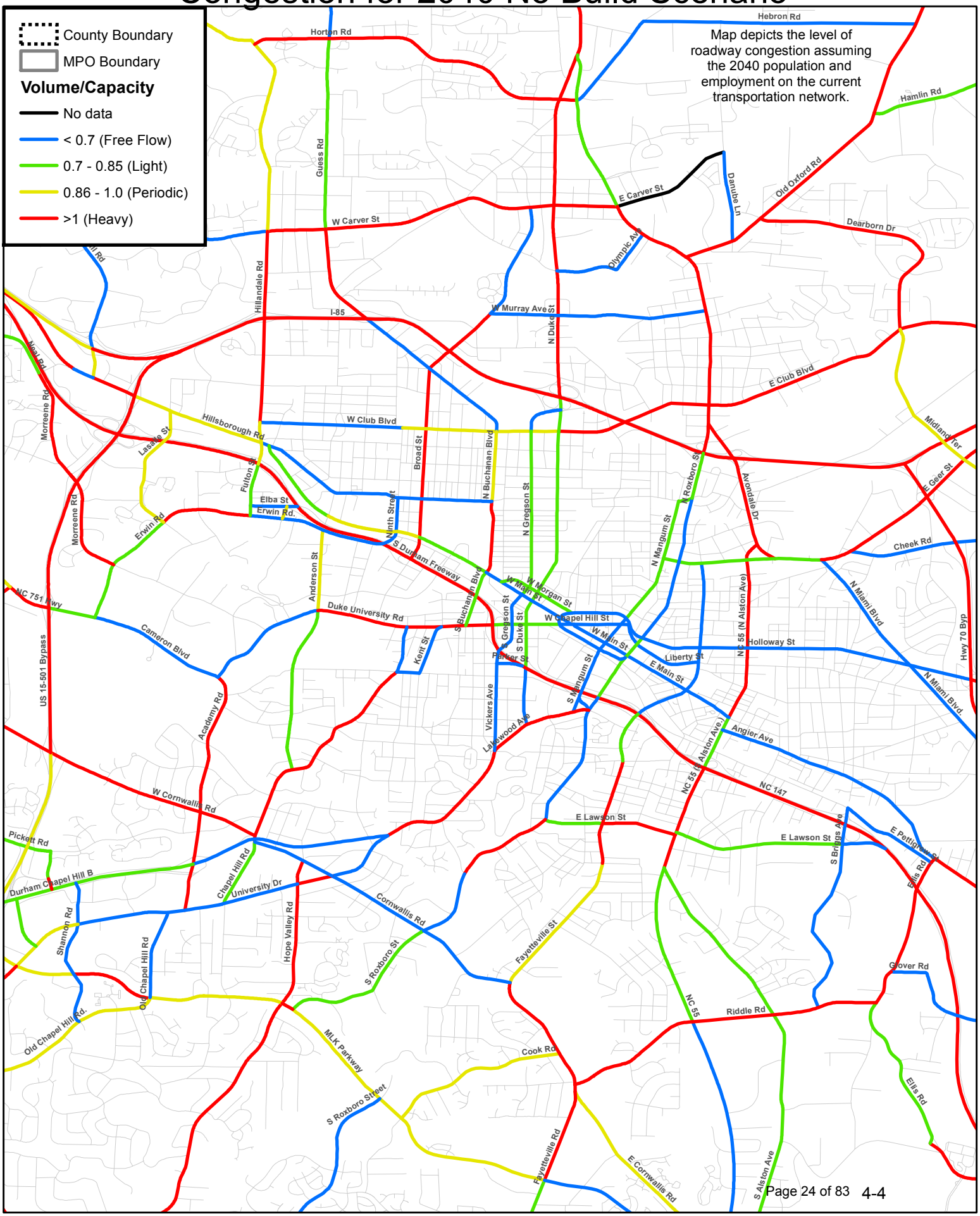
CTP Highways -- Durham County
Congestion for 2040 No Build Scenario

Date: 12/8/2014



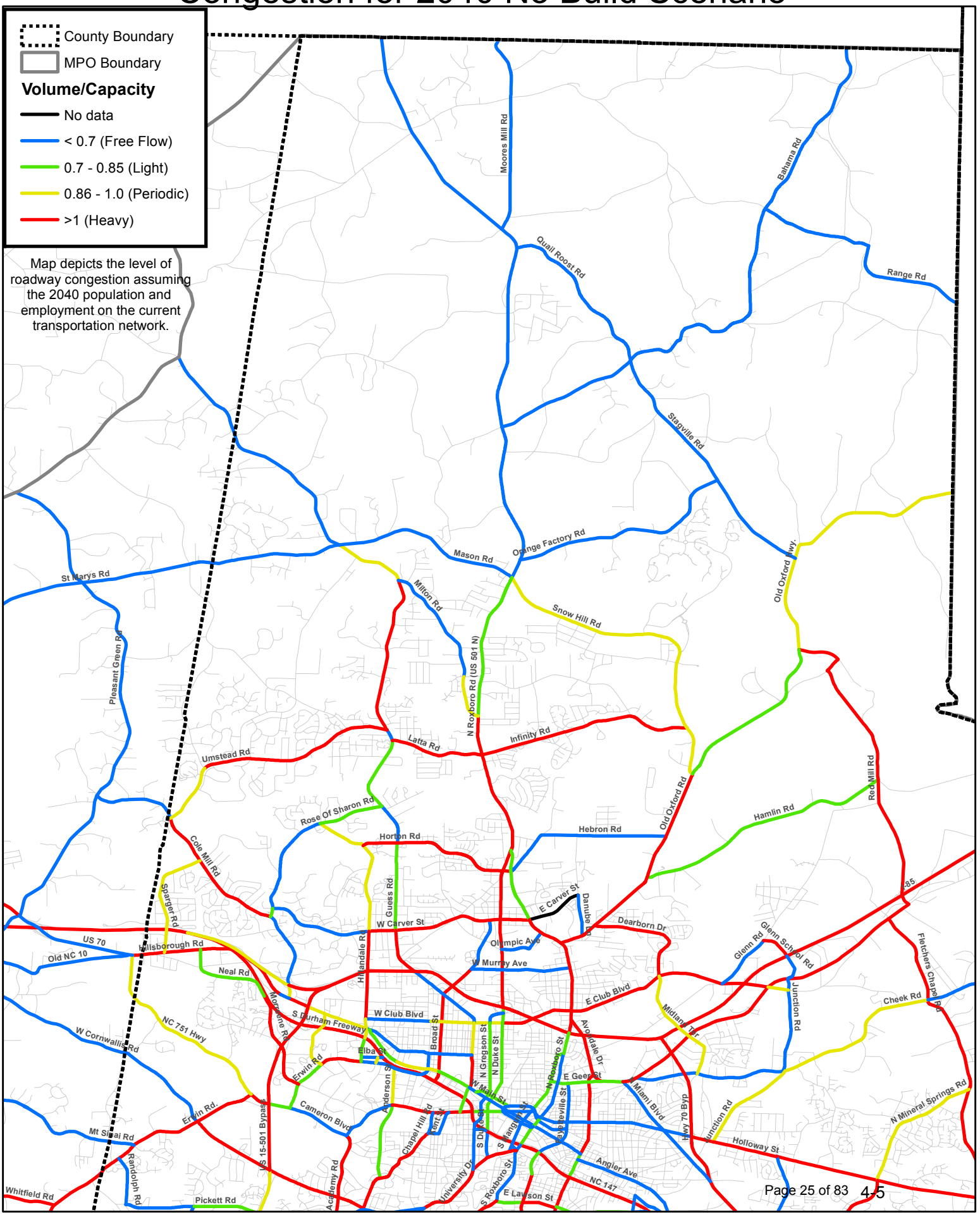
CTP Highways -- Central Durham County Congestion for 2040 No Build Scenario

Date: 12/8/2014



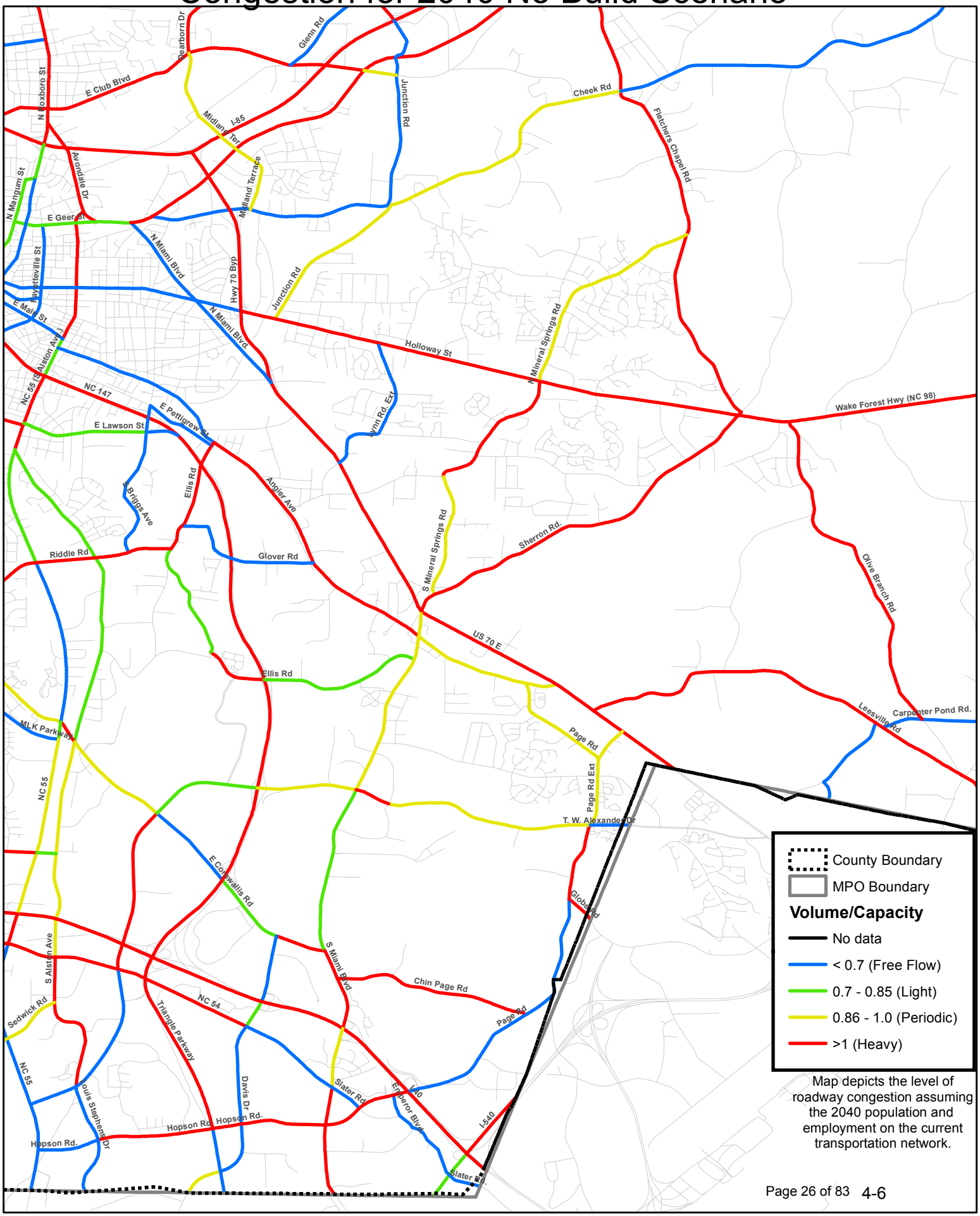
CTP Highways -- Northern Durham County Congestion for 2040 No Build Scenario

Date: 12/8/2014



CTP Highways -- Southeast Durham County
Congestion for 2040 No Build Scenario

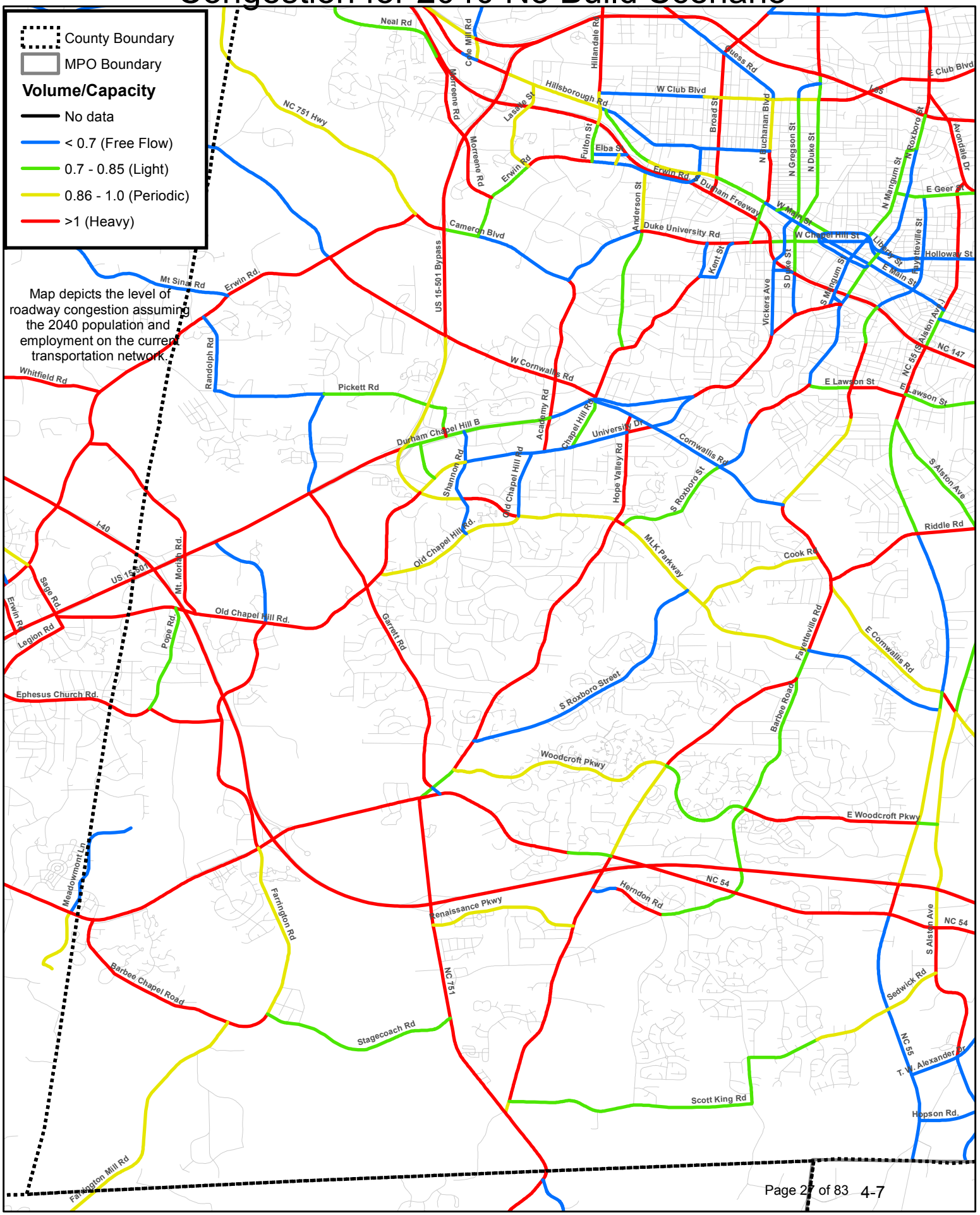
Date: 12/8/2014



Map depicts the level of roadway congestion assuming the 2040 population and employment on the current transportation network.

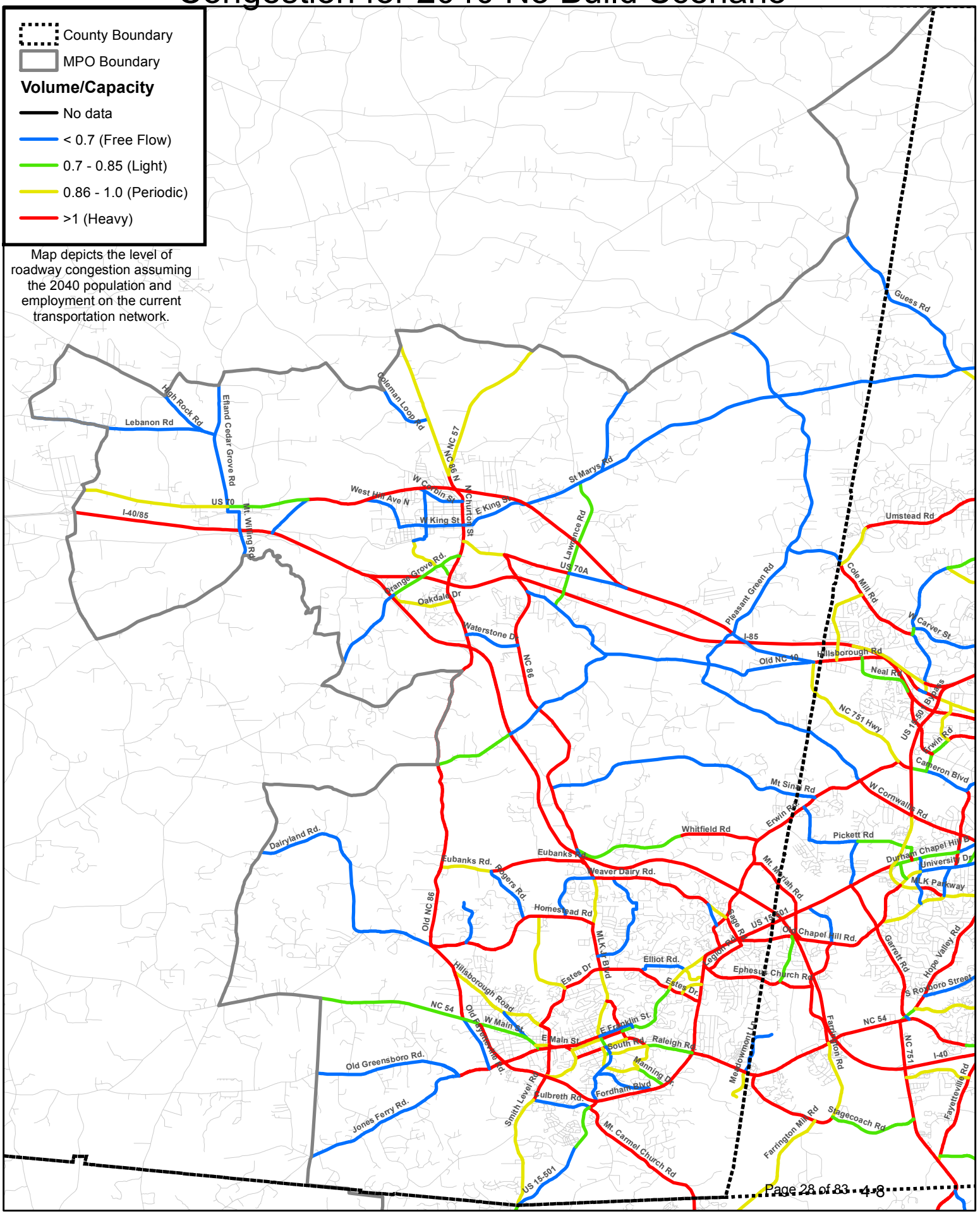
CTP Highways -- Southwest Durham County Congestion for 2040 No Build Scenario

Date: 12/8/2014



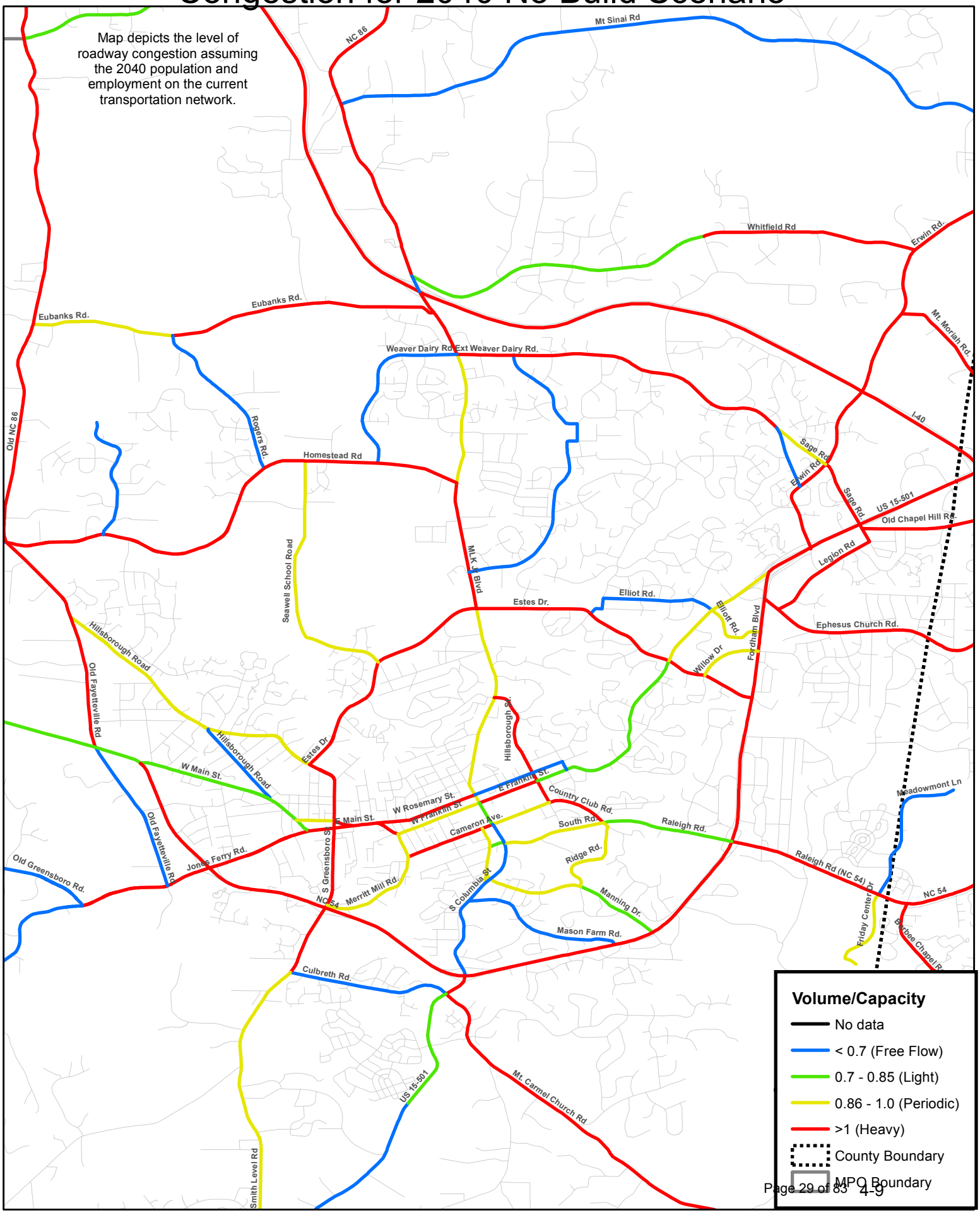
CTP Highways -- Orange County
Congestion for 2040 No Build Scenario

Date: 12/8/2014



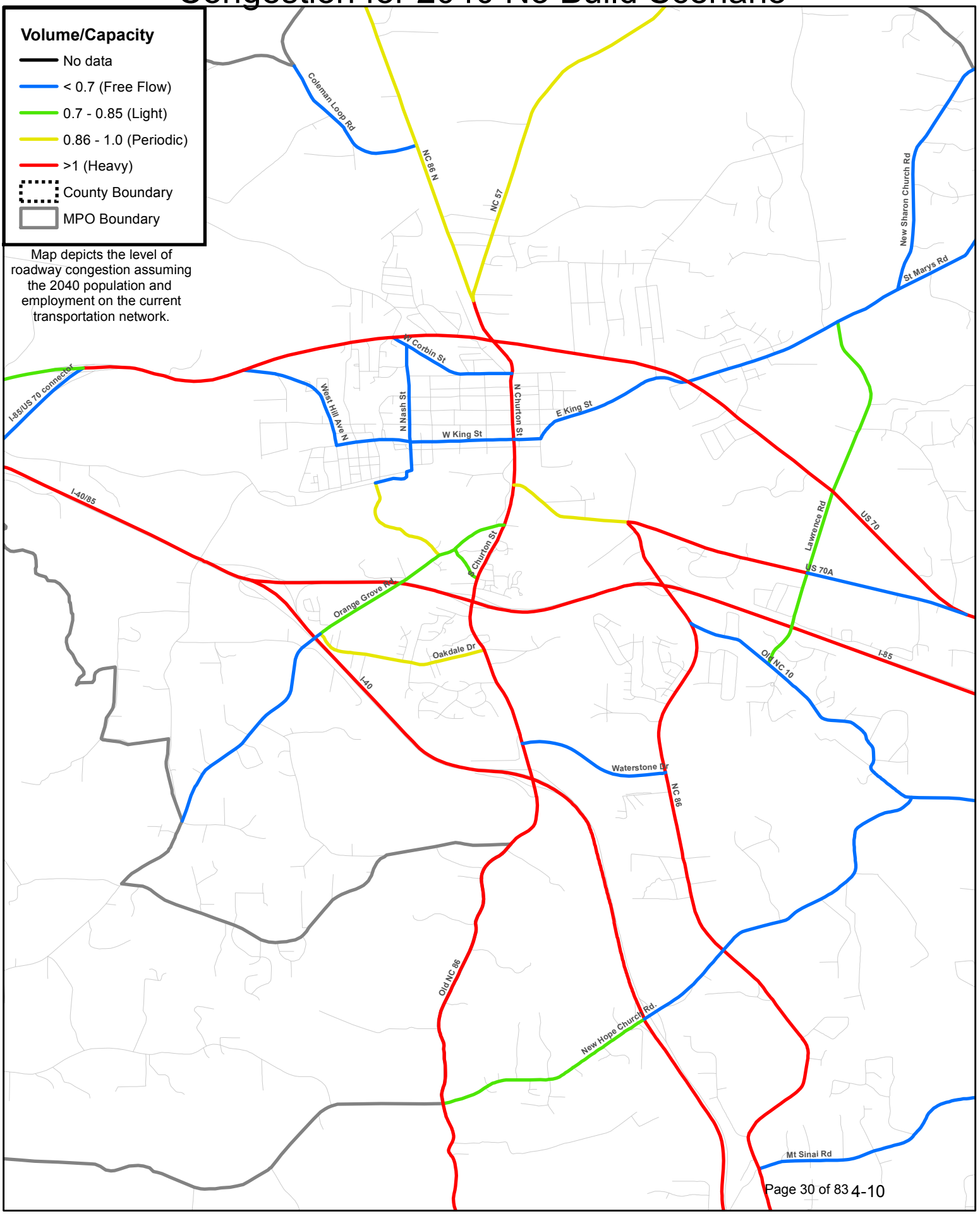
CTP Highways -- Chapel Hill/Carrboro Congestion for 2040 No Build Scenario

Date: 12/8/2014



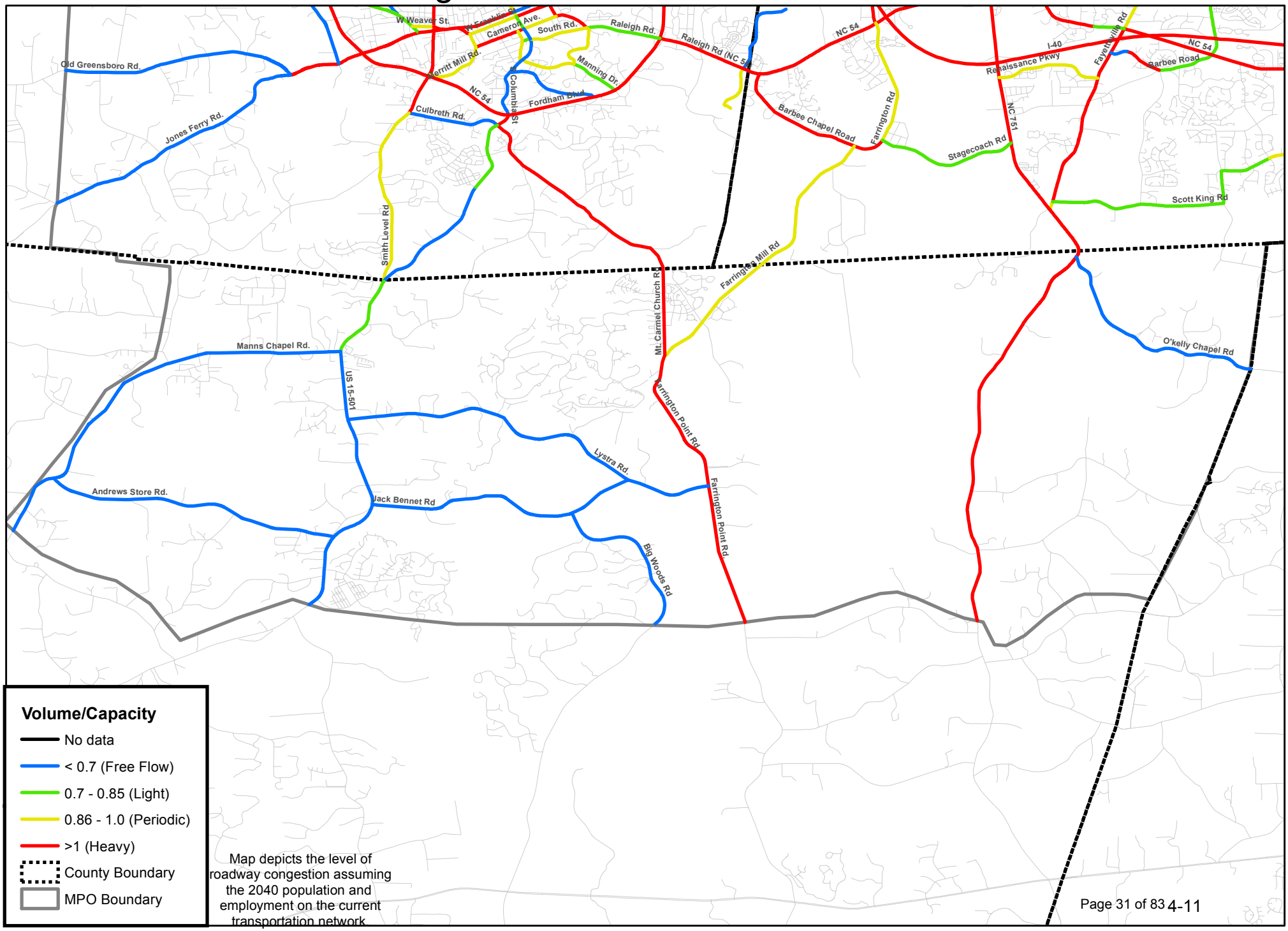
CTP Highways -- Hillsborough Congestion for 2040 No Build Scenario

Date: 12/8/2014



CTP Highways -- Chatham County
Congestion for 2040 No Build Scenario

Date: 12/8/2014



Map depicts the level of roadway congestion assuming the 2040 population and employment on the current transportation network

CTP Highway Table

ID	Roadway Name	From	To	County	LOS D Capacity	Recent Count	2010 TRM Volume	2040 TRM Volume	2040 CTP Volume	CTP V/C
A6304304	Academy Rd	Duke University Rd	Durham Chapel Hill B	Durham	11,600	9,900	8,152	13,540	16,443	1.42
A6304305	Academy Rd	Durham Chapel Hill B	University Dr	Durham	11,600	6,600	3,837	6,850	11,783	1.02
A6301001	Anderson St	Erwin Rd.	Duke University Rd	Durham	11,000	8,200	6,782	9,131	11,040	1.00
A6301002	Anderson St	Chapel Hill Rd	Duke University Rd	Durham	11,600	-	6,887	8,324	8,324	0.72
A6399001	Andrews Chapel Rd	Lynchwick Ln	Leesville Rd	Durham	14,600	2,200	-	-	6,017	0.41
A3701201	Andrews Store Rd.	Manns Chapel Rd.	US 15-501	Chatham	12,400	-	781	2,294	2,294	0.19
A6301301	Angier Ave	S Alston Ave	Ellis Rd	Durham	11,000	5,900	1,952	3,736	7,472	0.68
A6301302	Angier Ave	Ellis Rd	S Miami Blvd	Durham	12,400	7,700	8,361	14,508	13,361	1.08
A6301303	Angier Ave	S Miami Blvd	US 70 E	Durham	12,400	6,500	8,589	15,754	11,922	0.96
A6301601	Avondale Dr	I-85	N Roxboro St	Durham	11,600	20,000	15,352	23,475	30,582	2.64
A6301602	Avondale Dr	E Geer St	I-85	Durham	12,700	16,000	15,430	19,138	19,845	1.56
B6301801	Bahama Rd	Roxboro Road (US 501 N)	Stagville Rd	Durham	12,400	2,800	1,627	2,212	3,807	0.31
B6301802	Bahama Rd	Stagville Rd	Family Dr	Durham	12,400	2,100	1,565	2,094	2,810	0.23
B6302101	Barbee Chapel Road	Farrington Mill Rd	NC 54	Durham	11,600	11,000	9,982	17,294	19,058	1.64
B6302201	Barbee Road	Fayetteville Rd	NC 54	Durham	14,600	8,600	12,305	17,358	12,132	0.83
B6302202	Barbee Road	Herndon Road	NC 54	Durham	14,600	6,200	8,392	15,731	11,622	0.80
B3790001	Big Woods Rd	Jack Bennet Rd	Gallup Rd	Chatham	14,600	-	3,241	3,707	3,707	0.25
B6303601	Broad St	W Carver St	W Murray Ave	Durham	12,900	5,800	11,494	15,796	7,971	0.62
B6303602	Broad St	Guess Rd	W Murray Ave	Durham	11,600	12,000	16,102	20,722	15,443	1.33
B6303603	Broad St	Guess Rd	W Club Blvd	Durham	11,600	12,000	16,839	19,285	13,743	1.18
B6303604	Broad St	W Club Blvd	W Markham Ave	Durham	11,600	13,000	13,684	16,308	15,493	1.34
B6303605	Broad St	W Main St	W Markham Ave	Durham	11,600	13,000	14,519	15,906	14,242	1.23
C3504202	Cameron Ave.	Raleigh St	S Columbia St.	Orange	11,000	-	9,157	10,590	10,590	0.96
C3504203	Cameron Ave.	S Columbia St.	Merritt Mill Rd.	Orange	10,000	16,000	12,471	13,259	17,011	1.70
C6304302	Cameron Blvd	Erwin Rd	US 15-501	Durham	23,500	15,000	22,564	29,504	19,614	0.83
C6304303	Cameron Blvd	Duke University Rd	Erwin Rd	Durham	23,500	9,200	6,248	10,095	14,865	0.63
W6304605	Carpenter Fletcher	NC 55	S Alston Ave	Durham	11,600	4,500	-	-	8,460	0.73
C6304701	Carpenter Pond Rd.	Leesville Rd	Old Creedmoor Rd	Durham	12,400	1,600	1,674	6,197	5,923	0.48
C6305301	Chapel Hill Rd	W Cornwallis Rd	W Chapel Hill St	Durham	12,900	9,300	9,942	14,747	13,795	1.07
C6305301b	Chapel Hill Rd	Morehead Ave	Duke University Rd	Durham	12,900	-	1,656	2,399	2,399	0.19
C6305302	Chapel Hill Rd	W Cornwallis Rd	University Dr	Durham	11,600	6,200	2,812	4,322	8,644	0.75
C6305401	Cheek Rd	E Geer St	US 70 E	Durham	23,500	8,600	6,153	10,884	15,212	0.65
C6305402	Cheek Rd	Junction Rd	US 70 E	Durham	31,600	13,000	12,297	17,512	18,513	0.59
C6305403	Cheek Rd	Burton Rd	Junction Rd	Durham	12,400	4,200	4,550	11,482	10,599	0.85
C6305404	Cheek Rd	Burton Rd	Hereford Rd	Durham	12,400	1,800	1,029	3,809	6,663	0.54
C6311207	Chin Page Rd	Page Rd	S Miami Blvd	Durham	12,400	6,400	4,542	9,645	13,590	1.10
C6306301	Cole Mill Rd	Pleasant Green Rd	Umstead Rd	Orange	12,400	2,200	3,251	6,280	4,250	0.34
C6306302	Cole Mill Rd	Sparger Rd	Umstead Rd	Durham	12,400	8,900	9,540	14,494	13,522	1.09
C6306303	Cole Mill Rd	Rose Of Sharon Rd	Sparger Rd	Durham	12,400	11,000	10,036	14,578	15,978	1.29

CTP Highway Table

ID	Roadway Name	From	To	County	LOS D Capacity	Recent Count	2010 TRM Volume	2040 TRM Volume	2040 CTP Volume	CTP V/C
C6306304	Cole Mill Rd	I-85 N	Rose Of Sharon Rd	Durham	43,600	15,000	19,666	29,473	22,480	0.52
C6306305	Cole Mill Rd	Hillsborough Rd	I-85 N	Durham	26,000	18,000	22,497	31,653	25,326	0.97
C3599910	Coleman Loop Rd	Highland Farm Rd	NC 86 N	Orange	12,400	-	285	526	526	0.04
C6306801	Cook Rd	Fayetteville St	MLK Parkway	Durham	11,600	5,600	4,245	8,691	11,465	0.99
C6306904	Cornwallis Rd	Chapel Hill Rd	University Dr	Durham	31,600	8,100	8,422	12,871	12,379	0.39
C6306904b	Cornwallis Rd	S Roxboro St	Fayetteville St	Durham	31,600	9,300	10,467	18,683	16,600	0.53
C6306904c	Cornwallis Rd	University Dr	S Roxboro St	Durham	31,600	8,600	8,094	14,854	15,783	0.50
C3504201	Country Club Rd.	Raleigh St.	South Rd.	Orange	11,000	12,000	8,317	11,816	17,048	1.55
C3507401	Culbreth Rd.	Smith Level Rd	US 15-501	Orange	11,600	5,300	6,392	8,063	6,686	0.58
D3507601	Dairyland Rd.	Dodsons Crossroads	Old NC 86	Orange	12,400	5,500	1,902	4,001	8,002	0.65
D6390001	Danube Ln	E Carver St	Old Oxford Rd	Durham	14,600	2,800	2,800	5,693	5,693	0.39
D6309401	Davis Dr	E Cornwallis Rd	I-40	Durham	43,600	14,000	20,454	42,283	28,941	0.66
D6309402	Davis Dr	I-40	E NC 54 Hwy	Durham	43,600	20,681	30,890	49,721	33,288	0.76
D6309403	Davis Dr	E NC 54 Hwy	Triangle Parkway	Durham	43,600	18,011	21,066	25,562	21,855	0.50
D6309404	Davis Dr	Triangle Parkway	Wake County Line	Durham	43,600	17,000	19,754	46,540	40,052	0.92
D6309601	Dearborn Dr	E Club Blvd	Old Oxford Rd	Durham	11,600	9,400	3,662	8,770	17,540	1.51
D6310601	Duke University Rd	Academy Rd	Anderson St	Durham	23,500	9,300	6,429	10,494	15,180	0.65
D6310602	Duke University Rd	Anderson St	Kent St	Durham	11,600	-	11,286	15,321	15,321	1.32
D6310801	Durham Chapel Hill B	Chapel Hill Rd	University Dr	Durham	36,600	12,000	16,601	22,149	16,010	0.44
D6310802	Durham Chapel Hill B	Academy Rd	Chapel Hill Rd	Durham	36,600	14,000	19,120	27,249	19,952	0.55
D6310803	Durham Chapel Hill B	Academy Rd	US 15-501	Durham	36,600	17,000	21,773	33,050	25,805	0.71
D6310804	Durham Chapel Hill B	US 15-501	Garrett Rd	Durham	32,700	49,000	59,188	75,681	62,654	1.92
R6312601	Durham Downtown Loop	Holloway St	S Roxboro St	Durham	21,100	5,158	6,298	9,357	7,663	0.36
C6351905	E Carver St	Danube Ln	N Roxboro St	Durham	11,600	-	-	-		
C6306205	E Club Blvd	Midland Ter	N Roxboro St	Durham	11,600	9,100	2,772	6,225	12,450	1.07
C6306206	E Club Blvd	I-85	Midland Ter	Durham	11,600	8,700	3,433	7,879	15,758	1.36
C6306207	E Club Blvd	I-85	E Geer St	Durham	11,600	-	6,805	15,826	15,826	1.36
C6306207b	E Club Blvd	E Geer St	Junction Rd	Durham	11,600	-	3,639	11,389	11,389	0.98
C6311201	E Cornwallis Rd	Fayetteville Rd	NC 55	Durham	12,700	8,100	9,563	13,288	11,255	0.89
C6311202	E Cornwallis Rd	NC 55	S Alston Ave	Durham	12,700	11,000	21,813	28,630	14,438	1.14
C6311203	E Cornwallis Rd	S Alston Ave	T. W. Alexander Dr	Durham	13,800	9,500	20,046	25,938	12,969	0.94
C6311204	E Cornwallis Rd	NC 147	T. W. Alexander Dr	Durham	29,650	9,900	12,087	20,563	16,842	0.57
C6311205	E Cornwallis Rd	Davis Dr	NC 147	Durham	21,800	11,000	22,123	32,055	15,938	0.73
C6311206	E Cornwallis Rd	Davis Dr	S Miami Blvd	Durham	14,600	8,200	10,716	21,284	16,287	1.12
E3516004	E Franklin St.	N Columbia St.	Raleigh St.	Orange	22,100	14,000	13,226	21,290	22,536	1.02
E3516005	E Franklin St.	Estes Dr.	Raleigh St	Orange	31,600	17,000	21,560	31,945	25,189	0.80
E3516006	E Franklin St.	Estes Dr.	US 15-501	Orange	36,600	22,000	20,351	30,008	32,439	0.89
G6311401	E Geer St	I-85	Glenn School Rd	Durham	12,400	5,000	2,717	7,603	13,992	1.13
G6311402	E Geer St	Glenn School Rd	Midland Terrace	Durham	12,400	4,900	2,279	6,405	12,810	1.03

CTP Highway Table

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G6311403	E Geer St	Midland Terrace	Cheek Rd	Durham	11,600	5,600	3,166	7,152	12,650	1.09
G6311403b	E Geer St	Cheek Rd	N Miami Blvd	Durham	11,600	8,100	7,908	12,829	13,140	1.13
G6311404	E Geer St	N Alston Ave	N Miami Blvd	Durham	23,500	11,000	8,933	15,816	19,476	0.83
G6311405	E Geer St	N Alston Ave	N Mangum St	Durham	11,600	5,200	6,164	10,753	9,071	0.78
S6328802	E King St	N Churton St	US 70 Bypass	Orange	11,600	3,500	3,235	6,513	7,047	0.61
L6311801	E Lawson St	Fayetteville St	S Roxboro St	Durham	11,000	-	4,609	7,903	7,903	0.72
L6311802	E Lawson St	Fayetteville St	S Alston Ave (NC 55)	Durham	11,000	7,908	3,980	8,099	16,092	1.46
L6311803	E Lawson St	S Alston Ave (NC 55)	S Briggs Ave	Durham	11,600	-	5,289	8,510	8,510	0.73
L6311804	E Lawson St	S Briggs Ave	NC 147	Durham	10,357	-	2,621	6,747	6,747	0.65
M6311906	E Main St	S. Alston Ave. (NC 55)	N Roxboro St	Durham	11,600	-	2,726	6,258	6,258	0.54
M3516002b	E Main St.	S Greensboro St	Weaver St	Orange	11,300	8,565	10,801	14,761	11,705	1.04
M3516002c	E Main St.	Weaver St	W Rosemary St	Orange	22,100	17,000	12,329	16,790	23,151	1.05
M3516002d	E Main St.	W Rosemary St	Merritt Mill Rd.	Orange	11,300	10,466	11,490	14,582	13,282	1.18
N6312405b	E NC 54 Hwy	S Alston Ave	NC 55	Durham	31,600	21,000	11,273	23,778	44,295	1.40
P6380001	E Pettigrew St	Ellis Rd	S Briggs Ave	Durham	11,600	5,400	9,507	10,850	6,163	0.53
M3542102	E Rosemary St.	N Columbia St.	Hillsborough St.	Orange	10,000	-	455	961	961	0.10
M3542103	E Rosemary St.	E Franklin St.	Hillsborough St	Orange	11,300	-	-	38	38	0.10
W9910001	E Weaver St.	N Greensboro St	E Main St	Orange	11,600	9,300	-	-	12,137	1.05
W6304603	E Woodcroft Pkwy	Barbee Road	Fayetteville Rd	Durham	11,600	6,301	6,038	8,504	8,874	0.76
W6304604	E Woodcroft Pkwy	Barbee Road	NC 55	Durham	11,600	-	9,579	13,689	13,689	1.18
E3513101	Efland Cedar Grove Rd	Brookhollow Rd	US 70	Orange	12,400	3,100	7,866	10,145	5,072	0.41
E6313201	Elba St	Fulton St	Trent Dr	Durham	29,000	-	13,872	17,544	17,544	0.60
E3513302	Elliot Rd.	N Estes Dr.	E Franklin St.	Orange	11,600	4,100	8,787	11,444	5,722	0.49
E3513301	Elliott Rd.	Fordham Blvd	E Franklin St.	Orange	11,100	7,400	11,476	14,587	9,406	0.85
E6313501	Ellis Rd	So Hi Dr	NC 147 (Durham Freeway)	Durham	29,650	9,000	7,682	39,195	45,920	1.55
E6313502	Ellis Rd	NC 147 (Durham Freeway)	S Miami Blvd	Durham	14,600	9,800	12,023	14,343	11,691	0.80
E6313503	Ellis Rd	E Pettigrew St	Glover Rd	Durham	11,600	5,700	3,408	9,198	15,384	1.33
E6313503b	Ellis Rd	Glover Rd	Riddle Rd	Durham	14,600	7,100	5,259	11,967	16,156	1.11
E6313503c	Ellis Rd	Angier Ave	E Pettigrew St	Durham	12,500	-	10,720	13,850	13,850	1.11
E6313504	Ellis Rd	So Hi Dr	Riddle Rd	Durham	11,600	3,700	3,020	6,872	8,419	0.73
E6313601	Emperor Blvd.	Page Rd	Slater Rd.	Durham	23,500	-	6,154	11,557	11,557	0.49
E3500801	Eno Mountain Rd	Dimmocks Mill Rd	Orange Grove Rd.	Orange	11,600	3,300	2,443	8,199	11,075	0.95
E3513901	Ephesus Church Rd.	Fordham Blvd	Pope Rd.	Durham	11,600	9,200	8,146	18,217	20,574	1.77
E3513902	Ephesus Church Rd.	Farrington Rd	Pope Rd.	Durham	12,700	5,900	7,159	18,981	15,643	1.23
E6314001	Erwin Rd	Cameron Blvd	Lasalle St	Durham	26,000	18,000	14,907	17,766	21,452	0.83
E6314005	Erwin Rd	Fulton St	Lasalle St	Durham	26,000	24,000	20,363	23,608	27,825	1.07
E6314015	Erwin Rd	Sage Rd.	US 15-501	Durham	11,600	8,800	10,554	16,973	14,152	1.22
E6314002	Erwin Rd.	Anderson St	Fulton St	Durham	26,000	14,000	21,331	25,518	16,748	0.64
E6314003	Erwin Rd.	Anderson St	W Main St	Durham	23,500	9,100	8,953	11,647	11,838	0.50

CTP Highway Table

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E6314012	Erwin Rd.	NC 751	W Cornwallis Rd	Durham	12,400	10,000	13,446	23,169	17,231	1.39
E6314013	Erwin Rd.	W Cornwallis Rd	Whitfield Rd	Durham	12,400	13,000	13,739	24,723	23,393	1.89
E6314014	Erwin Rd.	Sage Rd	Whitfield Rd	Orange	12,900	7,600	9,096	19,124	15,979	1.24
E3514201	Estes Dr	N Greensboro St	Seawell School Road	Orange	11,600	13,000	13,945	18,796	17,522	1.51
E3514202	Estes Dr	MLK Jr Blvd	Seawell School Road	Orange	12,900	12,000	13,884	16,197	13,999	1.09
E3514203	Estes Dr.	MLK Jr Blvd	E Franklin St.	Orange	11,600	15,000	13,224	19,910	22,584	1.95
E3514204	Estes Dr.	Fordham Blvd	E Franklin St.	Orange	23,500	15,000	9,876	17,301	26,277	1.12
E3514401	Eubanks Rd.	Old NC 86	Rogers Rd.	Orange	12,400	3,800	4,588	12,831	10,627	0.86
E3514402	Eubanks Rd.	MLK Jr Blvd	Rogers Rd.	Orange	12,400	8,000	7,199	19,607	21,789	1.76
F6314701	Farrington Mill Rd	Barbee Chapel Road	Mt. Carmel Church Rd	Durham	12,400	8,200	9,706	13,555	11,452	0.92
F6314702	Farrington Point Rd	Old Farrington Rd	Lystra Rd	Chatham	12,400	-	6,745	14,792	14,792	1.19
F6314703	Farrington Point Rd.	Lystra Rd	Marthas Chapel Rd	Chatham	12,400	5,300	4,839	14,280	15,640	1.26
F6302101	Farrington Rd	Farrington Mill Rd	Stagecoach Rd	Durham	11,600	12,000	18,034	27,830	18,518	1.60
F6302102	Farrington Rd	Dunbrook Dr	Stagecoach Rd	Durham	11,600	-	5,088	10,799	10,799	0.93
F6302102b	Farrington Rd	NC 54	Dunbrook Dr	Durham	14,600	9,000	9,552	14,427	13,593	0.93
F6302103	Farrington Rd	NC 54	I-40	Durham	12,700	11,000	7,355	23,437	35,052	2.76
S6302103	Farrington Rd	Old Chapel Hill Rd	I-40	Durham	12,700	6,800	5,131	16,098	21,334	1.68
F6315105	Fayetteville Rd	E Cornwallis Rd	MLK Parkway	Durham	14,600	15,000	14,960	20,469	20,524	1.41
F6315106	Fayetteville Rd	Barbee Road	MLK Parkway	Durham	32,716	19,000	20,020	28,742	27,278	0.83
F6315107	Fayetteville Rd	Barbee Road	Woodcroft Pkwy	Durham	12,700	17,000	15,307	20,228	22,465	1.77
F6315108	Fayetteville Rd	Woodcroft Pkwy	NC 54	Durham	36,600	26,000	18,090	24,231	34,826	0.95
F6315109	Fayetteville Rd	NC 54	Renaissance Pkwy	Durham	36,600	32,000	26,386	36,054	43,725	1.19
F6315110	Fayetteville Rd	Renaissance Pkwy	Scott King Rd	Durham	12,700	7,000	5,818	12,517	15,060	1.19
F6315111	Fayetteville Rd	NC 751	Scott King Rd	Durham	12,700	-	4,488	11,078	11,078	0.87
F6315101	Fayetteville St	E Geer St	NC 147 (Durham Freeway)	Durham	26,000	-	5,744	8,800	8,800	0.34
F6315102	Fayetteville St	NC 147 (Durham Freeway)	Unstead St	Durham	31,600	17,000	14,802	22,169	25,461	0.81
F6315102b	Fayetteville St	Unstead St	E Lawson St	Durham	11,600	17,000	13,775	19,874	24,527	2.11
F6315103	Fayetteville St	E Cornwallis Rd	Nelson St	Durham	23,500	16,000	11,574	16,464	22,760	0.97
F6315103b	Fayetteville St	Nelson St	E Lawson St	Durham	11,600	13,000	12,886	18,329	18,491	1.59
F6315104	Fayetteville St	E Cornwallis Rd	E Cornwallis Rd	Durham	21,800	19,000	18,529	28,298	29,017	1.33
B6303901	Fletchers Chapel Rd	Patterson Rd	E Geer St	Durham	12,400	6,200	4,638	10,435	13,949	1.12
N6312409	Fordham Blvd	Manning Dr.	Raleigh Rd.	Orange	21,800	51,000	55,227	62,593	57,802	2.65
N6312410	Fordham Blvd	Manning Dr.	US 15-501	Orange	21,800	41,000	38,714	41,086	43,512	2.00
N6312412	Fordham Blvd	E Franklin St.	Raleigh Rd (NC 54)	Orange	21,800	28,000	41,052	54,389	37,097	1.70
M3516202	Friday Center Dr	Skakle Dr	NC 54	Orange	11,600	-	5,998	10,575	10,575	0.91
F6316405	Fulton St	Erwin Rd.	NC 147 (Durham Freeway)	Durham	23,500	17,000	31,282	34,028	18,492	0.79
G6316501	Garrett Rd	Durham Chapel Hill B	Pickett Rd	Durham	13,800	4,800	7,568	11,112	7,048	0.51
G6316502	Garrett Rd	Durham Chapel Hill B	Old Chapel Hill Rd	Durham	13,800	11,000	10,975	15,243	15,278	1.11
G6316503	Garrett Rd	NC 751	Old Chapel Hill Rd	Durham	14,000	19,000	17,612	22,923	24,730	1.77

CTP Highway Table

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G6316503b	Garrett Rd	NC 54	NC 751	Durham	24,100	-	12,352	14,178	14,178	0.59
G6370001	Glenn Rd	E Club Blvd	Glenn School Rd	Durham	12,400	1,500	750	2,433	4,866	0.39
N6332802	Glenn School Rd	Glenn Rd	I-85	Durham	12,400	2,600	1,155	6,351	12,702	1.02
N6332803	Glenn School Rd	I-85	E Geer St	Durham	12,400	2,300	1,843	5,129	6,401	0.52
G6360001	Globe Rd	Wake County Line	Page Rd	Durham	14,000	8,900	16,351	28,369	15,442	1.10
G6317101	Glover Rd	Angier Ave	NC 147 (Durham Freeway)	Durham	11,600	2,600	2,732	6,136	5,840	0.50
G6317102	Glover Rd	Ellis Rd	NC 147 (Durham Freeway)	Durham	11,600	-	2,596	6,601	6,601	0.57
G6317801	Guess Rd	Milton Rd	St Marys Rd	Durham	12,400	8,700	9,710	11,863	10,629	0.86
G6317802	Guess Rd	Milton Rd	Umstead Rd	Durham	14,600	11,000	9,646	13,213	15,068	1.03
G6317803	Guess Rd	Latta Rd	Umstead Rd	Durham	43,600	17,000	19,941	29,044	24,760	0.57
G6317804	Guess Rd	Latta Rd	Rose Of Sharon Rd	Durham	43,600	21,000	20,153	29,978	31,238	0.72
G6317805	Guess Rd	Horton Rd	Rose Of Sharon Rd	Durham	43,600	20,000	19,569	27,956	28,572	0.66
G6317806	Guess Rd	Horton Rd	W Carver St	Durham	31,600	22,000	22,079	26,498	26,403	0.84
G6317807	Guess Rd	W Carver St	I-85	Durham	43,600	23,000	25,356	93,167	84,510	1.94
G6317808	Guess Rd	Broad St	I-85	Durham	23,500	14,000	12,069	14,151	16,415	0.70
G6317809	Guess Rd	Broad St	N Buchanan Blvd	Durham	23,500	9,600	2,766	4,471	15,552	0.66
G6317813	Guess Rd	New Sharon Church Rd	St Marys Rd	Durham	12,400	5,400	6,657	7,180	5,824	0.47
H6318202	Hamlin Rd	Old Oxford Rd	Red Mill Rd	Durham	12,400	4,900	1,924	4,546	9,092	0.73
H6321103	Hebron Rd	Danube Ln	N Roxboro St	Durham	11,600	6,300	10,450	9,761	5,885	0.51
H6321104	Hebron Rd	Danube Ln	Old Oxford Rd	Durham	11,600	5,100	5,173	6,838	6,742	0.58
H6302203	Herndon Rd	Barbee Road	Rossford Ln	Durham	11,600	6,300	5,546	10,295	11,695	1.01
H6302203b	Herndon Road	Rossford Ln	Fayetteville Rd	Durham	23,500	6,600	10,176	15,240	9,884	0.42
H3510001	High Rock Rd	Ira Rd	Lebanon Rd	Orange	12,400	-	859	1,742	1,742	0.14
H6316401	Hillandale Rd	Rose Of Sharon Rd	W Carver St	Durham	11,600	11,000	3,534	5,558	11,116	0.96
H6316402	Hillandale Rd	W Carver St	I-85	Durham	31,600	23,000	16,001	29,854	42,912	1.36
H6316403	Hillandale Rd	I-85	W Club Blvd	Durham	11,600	17,000	15,375	17,876	19,765	1.70
H6316404	Hillandale Rd	W Club Blvd	NC 147 (Durham Freeway)	Durham	23,500	18,000	24,788	29,487	21,412	0.91
H6312001	Hillsborough Rd	Neal Rd	NC 751	Durham	12,700	9,600	5,098	8,670	16,326	1.29
H6312002	Hillsborough Rd	Cole Mill Rd	US 15-501	Durham	24,300	24,000	25,799	33,993	31,623	1.30
H6312003	Hillsborough Rd	Hillandale Rd	US 15-501	Durham	26,000	20,000	7,012	11,187	22,374	0.86
H6312004	Hillsborough Rd	Hillandale Rd	Broad St	Durham	23,500	7,000	3,468	7,054	14,108	0.60
H6312009	Hillsborough Rd	Cole Mill Rd	Neal Rd	Durham	31,600	16,000	12,575	17,377	22,110	0.70
H3517701	Hillsborough Road	Old NC 86	Estes Dr	Orange	11,600	6,500	4,196	7,008	10,856	0.94
H3517706	Hillsborough Road	N Greensboro St	W Main St.	Orange	11,600	2,700	4,407	6,533	4,003	0.35
A3520001	Hillsborough St.	MLK Jr Parkway	E Franklin St.	Orange	10,000	6,800	4,445	7,275	11,129	1.11
H6320101	Holloway St	US 70 E	N Roxboro St	Durham	26,000	12,000	14,118	18,296	15,551	0.60
H6320102	Holloway St	Junction Rd	US 70 E	Durham	26,000	24,000	26,109	42,792	39,335	1.51
H6320103	Holloway St	Junction Rd	S Mineral Springs Rd	Durham	23,500	16,000	15,904	24,479	24,627	1.05
H6320103b	Holloway St	Junction Rd	Lynn Rd Ext	Durham	23,500	20,000	20,103	30,088	29,934	1.27

CTP Highway Table

ID	Roadway Name	From	To	County	LOS D Capacity	Recent Count	2010 TRM Volume	2040 TRM Volume	2040 CTP Volume	CTP V/C
H3520401	Homestead Rd	Rogers Rd	Old NC 86	Orange	11,600	7,100	4,082	8,944	15,557	1.34
H3520401b	Homestead Rd	MLK Jr Blvd	Rogers Rd	Orange	11,600	7,200	7,092	13,425	13,629	1.17
H6320701	Hope Valley Rd	W Cornwallis Rd	MLK Parkway	Durham	11,600	9,500	9,101	11,545	12,051	1.04
H6320702	Hope Valley Rd	MLK Parkway	S Roxboro St	Durham	11,600	9,300	6,516	10,801	15,416	1.33
H6320802	Hopson Rd	Triangel Expressway	Louis Stephens Dr	Durham	15,100	7,400	6,582	16,153	18,160	1.20
H6320801	Hopson Rd.	S Miami Blvd	Triangle Expressway	Durham	15,100	11,000	10,817	19,236	19,561	1.30
H6320802b	Hopson Rd.	Louis Stephens Dr	NC 55	Durham	45,200	5,200	4,457	12,181	14,212	0.31
H6321101	Horton Rd	Guess Rd	Hillandale Rd	Durham	11,600	9,063	2,013	4,347	19,576	1.69
H6321102	Horton Rd	Guess Rd	N Roxboro St	Durham	11,600	13,000	6,828	9,853	18,759	1.62
H6321406	Hwy 70 Byp	East End Ave	I-85	Durham	29,949	46,000	50,926	106,476	96,177	3.21
I3521501	I-40	I-85	Old NC 86	Orange	29,650	58,000	69,350	85,221	71,274	2.40
I3521502	I-40	New Hope Church Rd.	Old NC 86	Orange	29,650	63,000	80,759	92,977	72,531	2.45
I3521503	I-40	NC 86	New Hope Church Rd.	Orange	29,949	66,000	85,286	105,654	81,762	2.73
I3521504	I-40	NC 86	US 15-501	Orange	29,949	72,000	79,791	104,467	94,267	3.15
I3521505	I-40	NC 54	US 15-501	Durham	46,750	85,000	93,223	129,084	117,698	2.52
I3521506	I-40	NC 54	NC 751	Durham	46,750	110,000	129,614	159,220	135,126	2.89
I3521507	I-40	Fayetteville Rd	NC 751	Durham	46,750	109,000	129,606	160,567	135,039	2.89
I3521508	I-40	Fayetteville Rd	NC 55	Durham	46,750	117,000	140,110	168,332	140,567	3.01
I3521509	I-40	NC 147 (Durham Freeway)	NC 55	Durham	46,750	122,000	145,395	173,886	145,907	3.12
I3521510	I-40	Davis Dr	NC 147 (Durham Freeway)	Durham	60,950	157,000	163,466	170,145	163,415	2.68
I3521511	I-40	Davis Dr	S Miami Blvd	Durham	60,950	160,000	160,834	199,594	198,559	3.26
I3521512	I-40	Page Rd	S Miami Blvd	Durham	60,950	169,000	169,741	202,546	201,662	3.31
I3521513	I-40	Wake County Line	Page Rd	Durham	60,950	174,000	173,813	175,096	175,284	2.88
I3521601	I-40/85	Buckhorn Rd	Mt. Willing Rd.	Orange	59,300	89,000	116,280	157,252	120,360	2.03
I3521602	I-40/85	I-85/US 70 Connector	Mt. Willing Rd.	Orange	59,300	94,000	77,956	152,285	183,627	3.10
I3521603	I-40/85	I-40	I-85/US 70 connector	Orange	59,300	92,000	61,685	165,584	246,960	4.16
I18321701	I-540	I-40	Wake County Line	Durham	60,950	32,000	46,033	62,699	43,585	0.72
I18321702	I-540	Wake County Line	I-40	Durham	45,350	76,000	76,931	79,392	78,431	1.73
I3521801	I-85	I-40	S Churton St	Orange	44,500	33,000	59,856	90,380	49,829	1.12
I3521802	I-85	NC 86	S Churton St	Orange	29,650	37,000	57,039	79,544	51,599	1.74
I3521803	I-85	NC 86	US 70	Orange	29,650	36,000	68,605	100,490	52,731	1.78
I3521804	I-85	NC 147 (Durham Freeway)	US 70	Orange	29,650	45,000	79,421	113,266	64,177	2.16
I3521805	I-85	Cole Mill Rd	NC 147 (Durham Freeway)	Durham	44,500	26,000	43,994	69,248	40,925	0.92
I3521806	I-85	Cole Mill Rd	US 15 501	Durham	30,850	31,000	46,526	67,361	44,882	1.45
I3521807	I-85	Hillandale Rd	US 15 501	Durham	62,899	88,000	90,127	143,669	140,278	2.23
I3521808	I-85	Guess Rd	Hillandale Rd	Durham	62,899	85,000	90,983	128,753	120,286	1.91
I3521809	I-85	N Duke Street	Guess Rd	Durham	62,899	76,000	76,503	123,408	122,597	1.95
I3521810	I-85	Duke Street	N Roxboro St	Durham	62,899	80,000	74,145	127,308	137,361	2.18
I3521811	I-85	N Roxboro St	US 70	Durham	62,899	79,000	82,722	143,449	136,995	2.18

CTP Highway Table

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I3521812	I-85	E Club Blvd	US 70	Durham	30,850	49,000	58,010	70,091	59,205	1.92
I3521813	I-85	E Club Blvd	Glenn School Rd	Durham	29,650	47,000	51,018	77,355	71,263	2.40
I3521814	I-85	Glenn School Rd	Red Mill Rd	Durham	29,650	45,000	52,024	77,165	66,747	2.25
I3521815	I-85	Granville County Line	Red Mill Rd	Durham	29,650	42,000	51,609	76,901	62,583	2.11
I3522001	I-85/US 70 connector	I-40/85	US 70	Orange	12,400	3,600	2,057	3,595	6,292	0.51
I6324501	Infinity Rd	N Roxboro Road (US 501 N)	Snow Hill Rd	Durham	11,600	7,800	3,685	6,702	13,404	1.16
J3724601	Jack Bennet Rd	Farrington Point Rd	US 15-501	Chatham	12,400	4,800	3,688	5,463	7,110	0.57
J3525001	Jones Ferry Rd.	Ferguson Rd.	Old Greensboro Rd.	Orange	12,400	4,100	6,102	9,045	6,077	0.49
J3525002	Jones Ferry Rd.	NC 54	Old Greensboro Rd.	Orange	12,400	11,000	12,052	16,810	15,343	1.24
J3525003	Jones Ferry Rd.	W Main St.	NC 54	Orange	11,600	8,600	6,821	9,611	12,118	1.04
J6317001	Junction Rd	Cheek Rd	E Geer St	Durham	14,600	3,300	2,694	5,327	6,525	0.45
J6317002	Junction Rd	Cheek Rd	Holloway St	Durham	14,600	5,400	4,610	11,158	13,070	0.90
K6325801	Kent St	W Chapel Hill St	Morehead Ave	Durham	11,000	-	3,783	5,063	5,063	0.46
L3510001	Lake Hogan Farm Rd	Homestead Rd	Legends Way	Orange	11,600	-	2,267	4,223	4,223	0.36
U6350701	Lakewood Ave	S Roxboro St	Vickers Ave	Durham	11,600	13,000	12,815	16,914	17,158	1.48
L6326401	Lasalle St	Erwin Rd	Hillsborough Rd	Durham	12,900	-	9,213	12,509	12,509	0.97
L6324501	Latta Rd	Guess Rd	N Roxboro Road (US 501 N)	Durham	11,600	9,400	7,102	11,761	15,567	1.34
L3526601	Lawrence Rd	Old NC 10	St Marys Rd	Orange	12,400	3,400	2,912	7,657	8,940	0.72
L3526701	Lebanon Rd	Efland Cedar Grove Rd	Doe Run Rd	Orange	12,400	1,800	4,809	6,085	3,042	0.25
L6326802	Leesville Rd	US 70	Wake County Line	Durham	12,400	4,100	4,981	19,330	15,911	1.28
L3527001	Legion Rd	Ephesus Church Rd.	US 15-501	Orange	11,600	5,200	5,743	13,085	11,848	1.02
L6327301	Liberty St	N Elizabeth St	E Chapel Hill St	Durham	12,100	-	618	1,618	1,618	0.13
A6327404	Louis Stephens Dr	Wake County Line	T. W. Alexander Dr	Durham	15,100	2,400	3,800	7,152	4,517	0.30
L6327801	Lynn Rd. Ext	Holloway St	US 70	Durham	11,600	7,100	5,368	6,071	8,030	0.69
L3727901	Lystra Rd.	Jack Bennet Rd	US 15-501	Chatham	12,400	4,800	1,501	3,304	6,608	0.53
M6328101	Mangum-Roxboro conn	S Mangum St	E Lakewood Ave	Durham	11,600	-	-	7,625	7,625	0.66
M3528201	Manning Dr.	Pittsboro St.	Ridge Rd.	Orange	22,100	17,000	16,165	20,288	21,336	0.97
M3528202	Manning Dr.	Fordham Blvd	Ridge Rd.	Orange	22,100	15,000	21,506	23,856	16,639	0.75
M3728301	Manns Chapel Rd.	Great Ridge Pkwy	Denny Circle	Chatham	12,400	-	2,281	3,261	3,261	0.26
M3728301b	Manns Chapel Rd.	US 15-501	Great Ridge Pkwy	Chatham	12,400	6,400	7,163	8,038	7,182	0.58
M3528601	Mason Farm Rd.	Fordham Blvd	S Columbia St	Orange	11,300	6,700	1,840	3,746	7,492	0.66
M6328801	Mason Rd	Guess Rd	N Roxboro Rd (US 501 N)	Durham	12,400	3,800	3,498	6,952	7,552	0.61
M3529001	Mayo St.	S Churton St	Orange Grove Rd.	Orange	11,600	4,400	6,027	11,942	8,718	0.75
M3529101	McCaulley St.	Pittsboro St.	S Columbia St	Orange	11,000	-	6,840	8,151	8,151	0.74
M3516201	Meadowmont Ln	NC 54	Park Bluff Dr	Orange	31,600	-	5,128	8,818	8,818	0.28
M3529401	Merritt Mill Rd.	S Greensboro St	W Cameron Ave	Orange	14,000	11,000	12,440	15,217	13,456	0.96
M3529401b	Merritt Mill Rd.	W Cameron Ave	E Main St	Orange	10,000	6,400	6,699	9,680	9,248	0.92
M6309602	Midland Ter	E Club Blvd	E Geer St	Durham	11,600	4,000	2,382	6,434	10,804	0.93
M6309603	Midland Terrace	Cheek Rd	E Geer St	Durham	11,600	4,600	2,717	5,796	9,813	0.85

CTP Highway Table

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M6330001	Milton Rd	Guess Rd	Tom Wilkinson	Durham	12,900	3,500	3,405	5,152	5,296	0.41
M6330001b	Milton Rd	Tom Wilkinson	Roxboro Road (501N)	Durham	12,900	7,800	8,777	13,017	11,568	0.90
A3500401	MLK Jr Blvd	E Franklin St.	Estes Dr.	Orange	31,600	21,000	26,024	37,252	30,060	0.95
A3500402	MLK Jr Blvd	Estes Dr.	Homestead Rd	Orange	36,600	28,000	38,842	55,714	40,163	1.10
A3500403	MLK Jr Blvd	Homestead Rd	Weaver Dairy Rd Ext	Orange	36,600	24,000	33,093	45,962	33,333	0.91
A3500404	MLK Jr Blvd	Weaver Dairy Rd Ext	I-40	Orange	36,600	28,000	40,216	59,145	41,179	1.13
M6328502	MLK Parkway	Shannon Rd	University Dr	Durham	31,600	15,901	9,379	17,022	28,859	0.91
M6328503	MLK Parkway	Old Chapel Hill Rd	Shannon Rd	Durham	23,500	14,000	12,280	22,609	25,776	1.10
M6328504	MLK Parkway	Hope Valley Rd	Old Chapel Hill Rd	Durham	36,600	19,000	25,941	43,018	31,508	0.86
M6328505	MLK Parkway	Fayetteville Rd	Archdale	Durham	36,600	23,000	26,341	41,399	36,148	0.99
M6328505b	MLK Parkway	Archdale	Hope Valley Rd	Durham	36,600	-	33,050	52,578	52,578	1.44
M6328506	MLK Parkway	Fayetteville Rd	NC 55	Durham	36,600	13,000	22,152	34,867	20,462	0.56
M6385001	Moores Mill Rd	Person County Line	US 501 N (N Roxboro Road)	Durham	12,400	-	2,093	2,646	2,646	0.21
M6307301	Morehead Ave	Chapel Hill Rd	Kent St	Durham	11,600	4,900	9,884	15,379	7,624	0.66
M6330402	Morreene Rd	US 15-501	Neal Rd	Durham	11,600	9,400	4,201	6,363	12,726	1.10
M6330409	Morreene Rd	Campus Walk	US 15-501	Durham	10,000	13,300	9,933	13,626	18,245	1.82
M6330409b	Morreene Rd	Erwin Rd	Campus Walk	Durham	10,000	8,100	1,788	3,363	15,228	1.52
M6306901	Mt Hermon Church Rd	US 70	Old NC 10	Orange	12,400	2,300	1,556	5,819	8,601	0.69
M3530901	Mt Sinai Rd	Erwin Rd.	NC 86	Orange	12,400	2,700	1,479	4,240	7,740	0.62
M3507401	Mt. Carmel Church Rd	Old Farrington Rd	US 15-501	Orange	11,600	9,600	10,895	17,788	15,674	1.35
M3531101	Mt. Moriah Rd.	Old Chapel Hill Rd.	US 15-501	Durham	11,600	5,400	8,757	22,804	14,062	1.21
M3531102	Mt. Moriah Rd.	Erwin Rd.	US 15-501	Durham	11,600	5,100	5,346	14,072	13,424	1.16
M3531201	Mt. Willing Rd.	I-40/85	US 70	Orange	14,600	6,600	11,920	16,015	8,867	0.61
M3531202	Mt. Willing Rd.	I-40/85	MPO Boundary	Orange	11,600	2,200	3,809	9,144	5,281	0.46
G6317810	N Buchanan Blvd	W Club Blvd	W Markham Ave	Durham	11,600	6,536	5,787	8,679	9,802	0.85
G6317811	N Buchanan Blvd	W Main St	W Markham Ave	Durham	11,600	9,400	5,613	7,893	13,218	1.14
N3502403	N Churton St	Cornelius St	W King St	Orange	11,600	13,000	11,608	14,495	16,233	1.40
D6310501	N Duke St	N Roxboro St	W Carver St	Durham	36,600	29,000	30,930	39,250	36,801	1.01
D6310502	N Duke St	W Carver St	Stadium Dr	Durham	36,600	29,000	30,421	39,748	37,891	1.04
D6310503	N Duke St	Stadium Dr	I-85	Durham	30,850	34,000	39,694	50,062	42,881	1.39
D6310504	N Duke St	I-85	W Club Blvd	Durham	14,100	9,600	10,584	11,793	10,697	0.76
D6310505	N Duke St	W Club Blvd	W Main St	Durham	14,100	9,800	11,825	13,446	11,143	0.79
H3517702	N Greensboro St	Estes Dr	E Main St.	Orange	11,600	14,000	11,710	14,643	17,507	1.51
G6332301	N Gregson St	N Duke St	W Club Blvd	Durham	31,600	16,000	15,145	19,041	20,116	0.64
G6332302	N Gregson St	W Club Blvd	W Main St	Durham	14,100	9,300	12,053	13,038	10,060	0.71
M6332601	N Mangum St	N Roxboro St	W Morgan St	Durham	14,100	7,500	8,241	12,355	11,244	0.80
M6329501	N Miami Blvd	E Geer St	Holloway St.	Durham	23,500	6,700	2,921	4,736	9,472	0.40
M6329502	N Miami Blvd.	Holloway St	US 70 Bypass	Durham	23,500	7,100	4,523	4,367	6,855	0.29
M6332801	N Mineral Springs Rd	Fletchers Chapel Rd	Wake Forest Hwy	Durham	11,600	8,700	3,523	5,530	11,060	0.95

CTP Highway Table

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N3509801	N Nash St	Revere Rd	Allison St	Orange	11,600	1,900	1,178	4,087	6,592	0.57
R6301401	N Roxboro Rd (US 501 N)	Snow Hill Rd	Person County Line	Durham	36,600	16,000	10,974	15,425	22,490	0.61
R6301401b	N Roxboro Rd (US 501 N)	Infinity Rd	Milton Rd	Durham	36,600	29,000	26,046	37,666	41,938	1.15
R6301401c	N Roxboro Rd (US 501 N)	Milton Rd	Snow Hill Rd	Durham	36,600	19,000	16,554	24,283	27,871	0.76
R6301402	N Roxboro Rd (US 501 N)	N Duke St	Infinity Rd	Durham	36,600	35,000	33,139	45,160	47,696	1.30
R6301403	N Roxboro St	N Duke St	E Carver St	Durham	36,600	17,000	12,549	19,570	26,511	0.72
R6301404	N Roxboro St	Old Oxford Rd	E Carver St	Durham	26,000	23,000	16,905	22,539	30,665	1.18
R6301405	N Roxboro St	Old Oxford Rd	E Club Blvd	Durham	22,200	28,000	21,218	32,453	42,826	1.93
R6301406	N Roxboro St	I-85	E Club Blvd	Durham	23,500	31,000	16,843	23,097	42,511	1.81
R6301407	N Roxboro St	E Geer St	I-85	Durham	12,900	6,800	15,999	20,943	10,472	0.81
R6301407b	N Roxboro St	E Geer St	Markham Ave	Durham	12,900	5,100	8,083	10,092	6,368	0.49
R6301408	N Roxboro St	E Geer St	Holloway St	Durham	14,100	7,200	9,737	13,017	9,625	0.68
R6301409	N Roxboro St	Holloway St	NC 147 (Durham Freeway)	Durham	21,100	11,000	9,511	13,717	15,864	0.75
D6310908	NC 147	NC 55 (Alston Ave.)	Fayetteville St	Durham	30,850	79,000	90,130	98,987	86,763	2.81
D6310909	NC 147	NC 55 (Alston Ave.)	S Briggs Ave	Durham	29,650	67,000	85,798	83,305	65,053	2.19
D6310910	NC 147	S Briggs Ave	Ellis Rd	Durham	29,650	39,500	77,300	100,940	51,580	1.74
D6310911	NC 147	Ellis Rd	T. W. Alexander Dr	Durham	29,650	67,000	72,828	105,518	97,074	3.27
D6310912	NC 147	E Cornwallis Rd	T. W. Alexander Dr	Durham	29,650	52,000	64,909	96,713	77,479	2.61
D6310913	NC 147	E Cornwallis Rd	I-40	Durham	46,750	68,000	72,870	82,215	76,720	1.64
N6312401	NC 54	W Main St	MPO Boundary	Orange	36,600	17,000	10,866	18,022	28,196	0.77
N6312402b	NC 54	W Main St.	Jones Ferry Rd	Orange	21,800	24,000	15,817	23,964	36,362	1.67
N6312402c	NC 54	Smith Level Rd	Jones Ferry Rd	Orange	21,800	30,000	30,351	34,902	34,498	1.58
N6312402d	NC 54	Smith Level Rd	US 15-501	Orange	21,800	30,000	29,257	35,522	36,424	1.67
N6312403	NC 54	Garrett Rd	Rollingwood	Durham	13,800	16,000	15,622	19,334	19,802	1.43
N6312403b	NC 54	Fayetteville Rd	Rollingwood	Durham	36,600	23,000	26,184	32,961	28,953	0.79
N6312404	NC 54	Barbee Road	NC 55	Durham	12,700	21,000	17,108	22,864	28,065	2.21
N6312405	NC 54	Davis Dr	S Alston Ave	Durham	36,600	16,000	12,478	31,017	39,772	1.09
N6312406	NC 54	Davis Dr	S Miami Blvd	Durham	43,600	7,900	7,876	26,698	26,779	0.61
N6312408	NC 54	Barbee Road	Fayetteville Rd	Durham	46,750	16,000	11,113	39,309	56,595	1.21
N6312413	NC 54	I-40	Friday Center Dr	Durham	36,600	43,000	52,512	58,347	47,778	1.31
N6312414	NC 54	I-40	NC 751	Orange	12,700	18,000	16,422	22,383	24,534	1.93
N6300906	NC 55	S Alston Ave.	Riddle Rd	Durham	36,600	22,000	23,622	32,585	30,348	0.83
N6300907	NC 55	E Cornwallis Rd	Riddle Rd	Durham	45,200	19,000	19,572	30,298	29,413	0.65
N6300908	NC 55	E Cornwallis Rd	MLK Pkwy	Durham	43,600	22,000	27,166	43,906	35,557	0.82
N6300909	NC 55	I-40	MLK Pkwy	Durham	43,600	25,000	31,916	51,938	40,683	0.93
N6300910	NC 55	I-40	E NC 54 Hwy	Durham	43,600	35,000	45,065	64,121	49,800	1.14
N6300911	NC 55	E NC 54 Hwy	Hopson Rd	Durham	43,600	18,000	29,768	45,623	27,587	0.63
N6300912	NC 55	Hopson Rd.	Wake County Line	Durham	43,600	17,000	35,815	51,064	25,532	0.59
A6300901	NC 55 (N Alston Ave)	Avondale Dr	Holloway St	Durham	12,900	14,000	15,404	17,572	15,970	1.24

CTP Highway Table

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A6300902	NC 55 (N Alston Ave.)	Holloway St	E Main St	Durham	12,900	18,000	17,648	17,508	17,857	1.38
A6300903	NC 55 (S Alston Ave.)	E Main St	NC 147	Durham	31,600	20,000	21,631	27,088	25,046	0.79
A6300904	NC 55 (S Alston Ave.)	E Lawson St	NC 147	Durham	23,500	27,000	27,625	36,653	35,824	1.52
A6300905	NC 55 (S Alston Ave.)	E Lawson St	Cecil St	Durham	23,500	26,000	26,921	37,227	35,953	1.53
N3534101	NC 57	NC 86	Phelps Rd	Orange	12,700	6,600	3,839	6,759	11,620	0.91
H6320703	NC 751	S Roxboro St	Woodcroft Pkwy	Durham	11,600	15,000	11,207	17,001	22,755	1.96
H6320704	NC 751	NC 54	Woodcroft Pkwy	Durham	31,600	18,000	17,532	25,055	25,724	0.81
H6320705	NC 751	I-40	NC 54	Durham	12,700	15,000	7,512	15,311	30,622	2.41
H6320706	NC 751	I-40	Renaissance Pkwy	Durham	12,700	26,618	14,240	22,225	41,544	3.27
H6320707	NC 751	Renaissance Pkwy	Stagecoach Rd	Durham	12,700	12,000	12,734	19,925	18,777	1.48
H6320708	NC 751	Fayetteville Rd	Stagecoach Rd	Durham	12,700	9,400	10,441	19,738	17,770	1.40
H6320709	NC 751	Marthas Chapel Rd	O'kelly Chapel Rd	Chatham	12,400	7,500	6,193	11,501	13,928	1.12
H6320710	NC 751	Fayetteville Rd	O'kelly Chapel Rd	Durham	12,400	11,000	12,798	24,885	21,389	1.72
N6304300	NC 751 Hwy	Erwin Rd	US 15-501	Durham	12,400	13,000	18,490	33,476	23,536	1.90
N6304301	NC 751 Hwy	Erwin Rd.	Hillsborought Rd (US 70)	Durham	12,400	4,800	5,025	13,020	12,437	1.00
N3500401	NC 86	Whitfield Rd	New Hope Church Rd.	Orange	14,600	6,400	2,389	8,859	17,718	1.21
N3500401b	NC 86	I-40	Whitfield Rd	Orange	36,600	-	6,982	16,726	16,726	0.46
N3500402	NC 86	New Hope Church Rd.	OLD NC 10	Orange	12,400	10,000	3,259	14,860	29,720	2.40
N3500403	NC 86	I-85	OLD NC 10	Orange	12,400	9,900	5,299	17,478	32,654	2.63
N3500404	NC 86	I-85	US 70A	Orange	12,400	10,000	11,106	20,599	18,548	1.50
N3502401	NC 86 N	Coleman Loop (N)	NC 57	Orange	12,700	10,000	10,724	12,991	12,114	0.95
N3502402	NC 86 N	NC 57	Cornelius St	Orange	12,900	15,424	14,388	18,934	20,297	1.57
N6375001	Neal Rd	Hillsborough Rd	Morreene Rd	Durham	11,600	6,400	3,813	5,661	9,502	0.82
N3501501	New Hope Church Rd.	I-40	Old NC 86	Orange	12,400	3,423	3,291	9,192	9,561	0.77
N3501502	New Hope Church Rd.	I-40	OLD NC 10	Orange	12,400	1,900	1,825	6,653	6,926	0.56
N3535101	New Sharon Church Rd	Walker Rd	St Marys Rd	Orange	12,400	2,200	1,103	2,502	4,990	0.40
E6314004	Ninth Street	Hillsborough Rd	W Main St	Orange	11,000	-	2,420	3,736	3,736	0.34
E3535701	Oakdale Dr	Old NC 86	Orange Grove Rd.	Orange	12,400	3,800	3,400	10,285	11,495	0.93
O3735601	O'kelly Chapel Rd	NC 751	Yates Store Rd	Chatham	12,400	4,100	6,615	13,343	8,270	0.67
O6335904	Old Chapel Hill Rd	MLK Pkwy	University Dr	Durham	11,600	4,300	4,552	6,336	5,985	0.52
O6335901	Old Chapel Hill Rd.	Scarlette Dr.	SW Durham Pkwy	Orange	11,600	9,900	10,970	21,730	19,610	1.69
O6335902	Old Chapel Hill Rd.	Garrett Rd	SW Durham Pkwy	Durham	11,600	16,000	13,209	26,062	31,569	2.72
O6335903	Old Chapel Hill Rd.	MLK Pkwy	University Dr	Durham	11,600	6,800	8,441	12,752	10,273	0.89
N3502410	Old Fayetteville Rd	Hillsborough Road	NC 54	Orange	12,900	8,700	5,368	11,122	18,026	1.40
N3502411	Old Fayetteville Rd.	Jones Ferry Rd.	NC 54	Orange	11,600	3,900	1,798	3,873	7,746	0.67
O3536401	Old Greensboro Rd.	Jones Ferry Rd	MPO Boundary	Orange	12,400	4,600	4,380	6,205	6,517	0.53
O3536601	Old NC 10	NC 86	Hillsborough Rd (US 70 Bus)	Orange	12,400	2,400	1,839	5,977	7,800	0.63
N3502406	Old NC 86	I-40	I-85	Orange	11,600	17,000	13,542	17,372	21,808	1.88
N3502407	Old NC 86	Eubanks Rd.	I-40	Orange	12,400	4,800	2,996	9,572	15,336	1.24

CTP Highway Table

ID	Roadway Name	From	To	County	LOS D Capacity	Recent Count	2010 TRM Volume	2040 TRM Volume	2040 CTP Volume	CTP V/C
N3502408	Old NC 86	Dairyland Rd.	Eubanks Rd	Orange	12,400	7,300	6,328	15,547	17,935	1.45
N3502409	Old NC 86	Dairyland Rd.	Hillsborough Rd	Orange	13,800	11,000	7,173	15,486	23,748	1.72
O6336901	Old Oxford Hwy.	Granville County Line	Red Mill Rd	Durham	12,400	6,000	6,107	12,668	12,446	1.00
O6336901b	Old Oxford Hwy.	Red Mill Rd	Snow Hill Rd	Durham	12,400	4,700	4,618	8,963	9,122	0.74
O6336902	Old Oxford Rd	Hamlin Rd	Snow Hill Rd	Durham	12,400	7,800	5,679	11,957	16,423	1.32
O6336903	Old Oxford Rd	Hamlin Rd	N Roxboro St	Durham	11,600	16,000	7,824	11,889	23,778	2.05
O6336501	Olive Branch Rd	Carpenter Pond Rd.	Wake Forest Hwy	Durham	12,400	2,200	1,829	10,730	12,907	1.04
O6347703	Olympic Ave	N Duke Street	N Roxboro St	Durham	11,600	-	5,376	7,008	7,008	0.60
O6335501	Orange Factory Rd	Roxboro Road (US 501 N)	Stagville Rd	Durham	12,400	2,100	3,140	7,476	5,000	0.40
O3537601	Orange Grove Rd.	Oakdale Dr	S Churton St	Orange	11,600	3,200	4,134	11,816	9,146	0.79
O3537602	Orange Grove Rd.	Oakdale Dr	Dimmocks Mill Rd	Orange	12,400	3,586	2,983	6,448	7,751	0.63
P6320801	Page Rd	Globe Rd	I-40	Durham	29,300	6,600	4,362	13,524	20,463	0.70
P6320802	Page Rd	S Miami Blvd	Emporer Blvd	Durham	36,600	16,026	5,219	21,195	42,390	1.16
P6320802b	Page Rd	Emporer Blvd	I-40	Durham	29,300	-	13,504	42,610	42,610	1.45
P6320805	Page Rd	Globe Rd	T. W. Alexander Dr	Durham	12,400	12,000	15,136	27,724	21,980	1.77
P6320807	Page Rd	Angier Ave	Page Rd Ext	Durham	12,400	2,900	2,624	9,650	10,665	0.86
P6320806	Page Rd Ext	E US 70 Hwy	T. W. Alexander Dr	Durham	21,800	10,000	10,624	21,688	20,414	0.94
P6338001	Parker St	NC 147 (Durham Freeway)	Vickers Ave	Durham	10,357	-	5,188	5,370	5,370	0.52
P6338501	Pickett Rd	Garrett Rd	Randolph Rd	Durham	11,600	3,900	4,683	9,538	7,943	0.68
P6338502	Pickett Rd	Garrett Rd	Tower Blvd	Durham	11,600	5,300	7,785	12,667	8,624	0.74
P3570001	Piney Mountain Rd.	MLK Jr Blvd	Weaver Dairy Rd.	Orange	11,600	3,500	3,716	7,540	7,102	0.61
P3538801	Pittsboro St.	Cameron Ave.	S Columbia St	Orange	12,700	9,100	11,213	13,721	11,135	0.88
P6306901	Pleasant Green Rd	New Sharon Church Rd	US 70	Orange	12,400	3,500	2,149	3,810	6,205	0.50
P3565001	Pope Rd.	Ephesus Church Rd.	Old Chapel Hill Rd	Durham	12,700	3,600	4,601	12,708	9,943	0.78
Q6339801	Quail Roost Rd	Bahama Rd	US 501 (N Roxboro Rd)	Durham	11,600	2,700	2,350	2,843	3,266	0.28
N6312411	Raleigh Rd (NC 54)	Fordham Blvd	Meadowmont Ln	Orange	55,000	46,000	61,168	75,484	56,766	1.03
R3529101	Raleigh Rd.	Country Club Rd.	Fordham Blvd	Orange	31,600	21,000	24,367	28,617	24,663	0.78
A3520002	Raleigh St.	Cameron Ave.	Franklin St.	Orange	10,000	-	13,338	17,215	17,215	1.72
R6340201	Randolph Rd	Erwin Rd.	Pickett Rd	Durham	11,600	3,972	3,295	5,337	6,434	0.55
H6350001	Range Rd	Bahama Rd	Granville County Lime	Durham	12,400	-	862	1,067	1,067	0.09
R6340401	Red Mill Rd	Old Oxford Hwy.	I-85	Durham	12,400	8,900	4,242	8,437	16,874	1.36
R6340001	Redwood Rd	Cheek Rd	I-85	Durham	12,400	320	335	2,213	2,114	0.17
R6340701	Renaissance Pkwy	Fayetteville Rd	NC 751	Durham	31,600	18,100	4,957	7,982	29,141	0.92
R6341001	Riddle Rd	Ellis Rd	NC 55	Durham	11,600	7,900	6,168	13,066	16,735	1.44
R6341002	Riddle Rd	Fayetteville St	NC 55	Durham	11,600	10,000	10,164	15,481	15,231	1.31
R3541201	Ridge Rd.	Manning Dr	South Rd.	Orange	11,000	8,000	2,509	5,245	10,490	0.95
R3541801	Rogers Rd.	Eubanks Rd.	Homestead Rd	Orange	12,400	2,600	3,123	8,120	6,760	0.55
R6342001	Rose Of Sharon Rd	W Carver St	Hillandale Rd	Durham	12,400	4,200	5,486	10,206	7,814	0.63
R6342001b	Rose Of Sharon Rd	Cole Mill Rd	W Carver St	Durham	12,400	5,800	8,150	14,707	10,466	0.84

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R6342001c	Rose Of Sharon Rd	Hillandale Rd	Guess Rd	Durham	12,400	4,200	2,703	6,039	9,384	0.76
A6327401	S Alston Ave	E Cornwallis Rd	NC 55 Hwy	Durham	11,600	4,800	2,086	4,766	9,532	0.82
A6327402	S Alston Ave	E Cornwallis Rd	E NC 54 Hwy	Durham	12,900	8,300	2,997	6,379	12,758	0.99
A6327403	S Alston Ave	E NC 54 Hwy	T. W. Alexander Dr	Durham	12,900	7,900	4,162	8,660	16,438	1.27
B6331501	S Briggs Ave	E Pettigrew St	NC 147	Durham	23,500	9,200	7,472	8,114	9,990	0.43
B6331502	S Briggs Ave	NC 147	E Lawson St	Durham	23,500	11,000	10,423	13,737	14,497	0.62
B6331502b	S Briggs Ave	E Lawson St	Riddle Rd	Durham	11,600	2,347	2,336	5,231	5,256	0.45
G6317812	S Buchanan Blvd	W Chapel Hill St	W Main St	Durham	11,600	-	6,337	8,484	8,484	0.73
N3502404	S Churton St	W King St	US 70A	Orange	11,600	20,000	17,587	21,537	24,492	2.11
N3502405	S Churton St	I-85	US 70A	Orange	12,900	17,000	12,715	16,036	21,440	1.66
S3506701	S Columbia St	Manning Dr.	US 15-501	Orange	26,000	13,000	22,815	30,646	17,462	0.67
S3506702	S Columbia St.	Manning Dr	South Rd	Orange	21,100	8,500	9,620	14,029	12,396	0.59
S3506702b	S Columbia St.	W Cameron Ave	South Rd	Orange	21,100	9,700	17,002	19,772	11,280	0.53
S3506702c	S Columbia St.	W Cameron Ave	E Franklin St	Orange	24,200	15,000	25,055	30,445	18,227	0.75
D6310506	S Duke St	W Main St	NC 147 (Durham Freeway)	Durham	21,100	12,000	13,188	16,774	15,263	0.72
D6310507	S Duke St	NC 147 (Durham Freeway)	University Dr	Durham	14,100	5,400	3,719	4,502	6,537	0.46
D6310901	S Durham Freeway	Hwy 15 501	I85 N	Durham	30,850	45,000	35,958	44,098	55,187	1.79
D6310902	S Durham Freeway	Elba St	Hwy 15 501	Durham	30,850	42,000	45,991	41,931	38,292	1.24
D6310903	S Durham Freeway	Anderson St	Elba St	Durham	30,850	42,000	67,783	56,422	34,960	1.13
D6310904	S Durham Freeway	Swift Ave	Anderson St	Durham	30,850	57,000	68,104	85,768	71,784	2.33
D6310905	S Durham Freeway	Swift Ave	Vickers Ave	Durham	30,850	61,000	67,299	89,775	81,372	2.64
D6310906	S Durham Freeway	Vickers Ave	Blackwell St	Durham	30,850	62,000	74,793	96,373	79,889	2.59
D6310907	S Durham Freeway	Blackwell St	Fayetteville St	Durham	30,850	71,000	67,497	80,091	84,248	2.73
H3517703	S Greensboro St	E Main St.	NC 54	Orange	11,600	12,000	12,251	15,599	15,279	1.32
G6332303	S Gregson St	Parker St	W Main St	Durham	21,100	9,200	10,624	12,745	11,037	0.52
M6332602	S Mangum St	W Morgan St	NC 147 (Durham Freeway)	Durham	28,133	8,600	8,831	12,866	12,529	0.45
M6332603	S Mangum St	NC 147 (Durham Freeway)	W Lakewood Ave	Durham	21,100	3,400	7,933	12,118	6,059	0.29
M6343901	S Miami Blvd	E US 70 Hwy	T. W. Alexander Dr	Durham	43,600	31,000	29,138	35,562	37,835	0.87
M6343902	S Miami Blvd	E Cornwallis Rd	T. W. Alexander Dr	Durham	43,600	23,000	19,560	30,849	36,274	0.83
M6343903	S Miami Blvd	E Cornwallis Rd	I-40	Durham	43,600	27,000	22,813	43,086	50,994	1.17
M6343904	S Miami Blvd	I-40	Slater Rd	Durham	36,600	21,000	19,434	33,755	36,475	1.00
M6343905	S Miami Blvd	Hopson Rd.	Slater Rd	Durham	45,200	21,000	17,769	44,600	52,710	1.17
M6343906	S Miami Blvd	Wake County Line	Page Rd	Durham	45,200	21,000	20,271	53,634	55,563	1.23
N6332804	S Mineral Springs Rd	Wake Forest Hwy	Pleasant Dr	Durham	11,600	10,000	10,728	15,021	14,002	1.21
N6332805	S Mineral Springs Rd	Pleasant Dr	Sherron Rd	Durham	11,600	7,200	9,784	13,439	9,890	0.85
R6301410	S Roxboro St	E Lawson St	NC 147 (Durham Freeway)	Durham	21,100	6,500	6,060	10,791	11,575	0.55
R6301411	S Roxboro St	E Lawson St	Summit St	Durham	11,600	8,300	8,553	14,885	14,445	1.25
R6301411b	S Roxboro St	Summit St	E Cornwallis Rd	Durham	31,600	9,300	5,821	12,442	19,878	0.63
R6301412	S Roxboro St	E Cornwallis Rd	MLK Jr Pkwy	Durham	11,600	5,400	7,418	13,169	9,586	0.83

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R6342502	S Roxboro Street	Hope Valley Rd	MLK Pkwy	Durham	31,600	7,000	5,625	9,002	11,202	0.35
S3544502	Sage Rd	Erwin Rd.	Weaver Dairy Rd.	Orange	12,900	-	-	12,013	12,013	0.93
S3544501	Sage Rd.	Erwin Rd.	Fordham Blvd (US 15-501 By	Orange	12,900	7,400	8,640	17,956	15,379	1.19
S6344901	Scott King Rd	Fayetteville Rd	NC 55	Durham	11,600	6,700	1,259	4,371	8,742	0.75
S6344901b	Scott King Rd	Revere Rd	NC 55	Durham	11,600	6,700	7,999	11,769	9,858	0.85
S3545001	Seawell School Road	Estes Dr	Homestead Rd	Orange	12,900	3,700	1,738	5,724	11,448	0.89
S6344902	Sedwick Rd	NC 55	S Alston Ave	Durham	12,700	4,100	2,483	6,621	10,933	0.86
S6345401	Shannon Rd	Durham Chapel Hill B	Old Chapel Hill Rd	Durham	31,600	11,000	5,225	8,296	16,592	0.53
S6338203	Sherron Rd	S Mineral Springs Rd	US 70	Durham	23,500	18,000	20,458	39,817	35,033	1.49
S6338201	Sherron Rd.	Stallings Rd	S Mineral Springs Rd	Durham	12,400	12,000	9,459	21,769	27,617	2.23
N6312407	Slater Rd	S Miami Blvd	Page Rd	Durham	43,600	5,200	6,415	23,658	19,177	0.44
S6345701	Slater Rd.	Emperor Blvd.	Wake County Line	Durham	12,700	3,100	3,849	8,253	6,647	0.52
H3517704	Smith Level Rd	Culbreth Rd.	NC 54	Orange	12,900	16,000	18,031	25,855	22,943	1.78
H3517705	Smith Level Rd	Culbreth Rd.	US 15-501	Orange	12,400	7,800	11,764	17,928	11,887	0.96
S6328803	Snow Hill Rd	N Roxboro Rd (us 501 N)	Old Oxford Hwy	Durham	12,400	4,600	2,550	5,989	10,804	0.87
S3529101	South Rd.	Country Club Rd.	S Columbia St	Orange	11,100	10,000	13,798	15,014	10,881	0.98
S6347101	Sparger Rd	Cole Mill Rd	Hillsborough Rd (US 70)	Durham	11,600	6,000	2,917	5,543	11,086	0.96
S6328800	St Marys Rd	Guess Rd	Pleasant Green Rd	Durham	12,400	2,900	3,275	7,770	6,880	0.55
S6328801	St Marys Rd	Pleasant Green Rd	US 70 Bypass	Orange	12,400	2,400	3,066	7,625	5,969	0.48
S6348001	Stagecoach Rd	Farrington Rd	NC 751	Durham	14,600	7,500	14,986	24,168	12,095	0.83
S6339802	Stagville Rd	Bahama Rd	Old Oxford Hwy	Durham	12,400	3,600	4,493	8,415	6,742	0.54
S6302102	SW Durham Pkwy	Old Chapel Hill Rd.	US 15-501	Durham	21,800	6,626	-	-	11,529	0.53
B6303606	Swift Ave	W Main St	NC 147 (Durham Freeway)	Durham	11,600	17,000	19,214	22,856	20,222	1.74
T6300601	T. W. Alexander Dr	E NC 54 Hwy	NC 55	Durham	15,100	9,000	11,599	10,596	8,222	0.54
T6300602	T. W. Alexander Dr	E Cornwallis Rd	E NC 54 Hwy	Durham	12,700	13,000	6,465	18,824	37,648	2.96
T6300603	T. W. Alexander Dr	E Cornwallis Rd	NC 147 (Durham Freeway)	Durham	36,600	12,000	15,150	32,953	26,101	0.71
T6300604	T. W. Alexander Dr	NC 147	S Miami Blvd	Durham	36,600	26,000	34,976	46,398	34,491	0.94
T6300605	T. W. Alexander Dr	Page Rd	Presidential Dr	Durham	36,600	23,000	23,976	32,690	31,359	0.86
T6300605b	T. W. Alexander Dr	Presidential Dr	S Miami Blvd	Durham	36,600	-	29,696	39,165	39,165	1.07
T6300606	T. W. Alexander Dr	Page Rd	Wake County Liine	Durham	36,600	19,000	19,376	24,736	24,256	0.66
T6349601	Tower Blvd	US 15-501 entrance ramp	Pickett Rd	Durham	11,600	-	6,774	9,590	9,590	0.83
T6349601b	Tower Blvd	Durham Chapel Hill B	US 15-501 entrance ramp	Durham	11,600	-	9,300	15,275	15,275	1.32
T6349801	Trent Dr	Elba St	Erwin Rd	Durham	11,600	9,300	18,446	20,201	10,185	0.88
D6310914	Triangle Parkway	Hopson Rd.	I-40	Durham	29,650	13,000	11,144	45,777	53,401	1.80
D6310915	Triangle Parkway	Hopson Rd.	Wake County Line	Durham	90,700	7,100	7,100	31,641	31,641	0.35
U6350301	Umstead Rd	Craig Rd	Bivins Rd	Durham	12,400	7,300	3,696	6,338	12,518	1.01
U6350301b	Umstead Rd	Cole Mill Rd	Craig Rd	Durham	12,400	7,900	8,789	13,719	12,331	0.99
U6350301c	Umstead Rd	Bivins Rd	Guess Rd	Durham	12,400	8,200	7,939	12,683	13,100	1.06
U6350702	University Dr	Durham Chapel Hill B	Vickers Ave	Durham	12,900	16,000	17,028	20,242	19,020	1.47

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U6350703	University Dr	W Cornwallis Rd	Durham Chapel Hill B	Durham	11,600	7,200	5,202	5,800	8,028	0.69
U6350704	University Dr	W Cornwallis Rd	Hope Valley Rd	Durham	11,600	9,700	5,547	8,981	15,705	1.35
U6350705	University Dr	Hope Valley Rd	Shannon Rd	Durham	26,000	15,000	3,600	8,926	17,852	0.69
U6350706	University Dr	MLK Jr Pkwy	Shannon Rd	Durham	26,000	17,000	6,085	11,897	23,794	0.92
U6350707	University Dr	Garrett Rd	MLK Jr Pkwy	Durham	26,000	19,000	15,935	24,565	29,290	1.13
U3515701	US 15-501	Smith Level Rd	Market St	Orange	36,600	17,000	14,730	22,048	25,446	0.70
U3515702b	US 15-501	Market St	Bennett Rd	Orange	36,600	23,000	22,765	30,012	30,322	0.83
U3515702c	US 15-501	Bennett Rd	Culbreth Rd	Orange	36,600	23,000	22,765	30,012	30,322	0.83
U3515703	US 15-501	Culbreth Rd.	Fordham Blvd	Orange	26,000	32,000	42,032	54,787	41,711	1.60
U3515704	US 15-501	Manns Chapel Rd.	MPO Boundary	Chatham	45,200	20,000	20,616	32,407	31,439	0.70
U3515706	US 15-501	I-40	Garrett Rd	Durham	21,157	44,000	59,297	88,724	65,836	3.11
U3515707	US 15-501	Smith Level Rd	Manns Chapel Rd	Chatham	45,200	22,000	23,803	36,909	34,113	0.75
U3515710	US 15-501	E Franklin St.	I-40	Durham	18,300	41,000	46,267	52,740	46,736	2.55
U3515708	US 15-501 Bypass	W Cornwallis Rd	University Dr	Durham	30,850	22,000	53,798	58,512	29,256	0.95
U3515709	US 15-501 Bypass	Cameron Blvd	W Cornwallis Rd	Durham	30,850	58,000	61,173	86,164	81,695	2.65
U3515711	US 15-501 Bypass	Hillsborough Rd	Morreene Rd	Durham	30,850	31,000	24,847	39,831	49,695	1.61
U3515712	US 15-501 Bypass	Hillsborough Rd	I-85	Durham	30,850	-	42,031	62,170	62,170	2.02
U3515713	US 15-501 Bypass	Cameron Blvd	Morreene Rd	Durham	46,750	55,000	54,941	80,200	80,286	1.72
U3551201	US 70	N Churton St	US 70A	Orange	12,400	12,000	9,177	17,013	22,246	1.79
U3551202	US 70	N Churton St	West Hill Ave N	Orange	12,700	9,800	5,845	11,721	19,652	1.55
U3551203	US 70	Mt Hermon Church Rd	US 70A	Orange	12,400	12,000	13,890	22,872	19,760	1.59
U3551204	US 70	NC 751	Pleasant Green Rd	Orange	29,650	6,800	6,566	16,841	17,441	0.59
U3551205	US 70	I-85/US 70 Connector	West Hill Ave N	Orange	12,400	8,800	4,261	8,578	17,156	1.38
U3551206	US 70	Efland Cedar Grove Rd	I-85/US 70 Connector	Orange	12,400	4,400	3,430	7,155	9,178	0.74
U3551207	US 70	Ffland Cedar Grove Rd	MPO Boundary	Orange	12,400	6,700	6,013	10,010	11,154	0.90
H6321404	US 70 E	Sherron Rd	East End Ave	Durham	59,900	37,000	46,987	80,833	63,652	1.06
H6321405	US 70 E	Wake County Line	S Mineral Springs Rd	Durham	45,200	31,000	42,083	66,810	49,215	1.09
U3551501	US 70A	Elizabeth Brady Rd	S Churton St	Orange	12,400	9,200	7,099	9,330	12,091	0.98
U3551502	US 70A	Lawrence Rd	Elizabeth Brady Rd	Orange	12,400	6,700	4,421	9,133	13,841	1.12
U3551503	US 70A	Lawrence Rd	US 70	Orange	12,400	2,500	2,740	5,241	4,782	0.39
V6332304	Vickers Ave	Parker St	University Dr	Durham	14,100	4,200	2,949	3,983	5,673	0.40
C6351901	W Carver St	Hillandale Rd	Rose Of Sharon Rd	Durham	11,600	2,300	2,827	6,795	5,528	0.48
C6351902	W Carver St	Guess Rd	Hillandale Rd	Durham	11,600	10,000	8,860	15,564	17,567	1.51
C6351903	W Carver St	Broad St	Guess Rd	Durham	11,600	9,500	6,547	11,582	16,806	1.45
C6351903b	W Carver St	N Duke Street	Broad St	Durham	11,600	11,000	14,817	21,648	16,071	1.39
C6351904	W Carver St	N Duke Street	N Roxboro St	Durham	11,600	10,000	8,347	16,207	19,417	1.67
C6310603	W Chapel Hill St	Kent St	S Durham Freeway	Durham	11,600	12,000	14,129	18,887	16,041	1.38
C6310604	W Chapel Hill St	S Durham Freeway	W Ramseur St	Durham	24,300	14,000	15,241	20,988	19,279	0.79
C6310605	W Chapel Hill St	Liberty St	W Ramseur St	Durham	14,100	3,800	1,700	2,751	5,502	0.39

CTP Highway Table

ID	Roadway Name	From	To	County	LOS D Capacity	Recent Count	2010 TRM Volume	2040 TRM Volume	2040 CTP Volume	CTP V/C
C6306201	W Club Blvd	Ninth St	Hillandale Rd	Durham	11,600	5,700	7,951	9,180	6,581	0.57
C6306201b	W Club Blvd	Broad St	Ninth St	Durham	11,600	9,339	10,944	13,506	11,525	0.99
C6306202	W Club Blvd	Broad St	N Buchanan Blvd	Durham	11,600	7,600	7,909	10,940	10,513	0.91
C6306203	W Club Blvd	N Buchanan Blvd	N Duke St	Durham	23,500	15,521	8,452	12,360	22,698	0.97
C6306204	W Club Blvd	N Duke St	N Roxboro St	Durham	11,600	8,600	5,735	9,260	18,520	1.60
R3540901	W Corbin St	N Churton St	Cornelius St (US 70)	Orange	11,600	2,400	1,742	3,401	4,686	0.40
C6306902	W Cornwallis Rd	Erwin Rd.	US 15-501	Durham	15,000	3,300	3,811	21,452	18,576	1.24
C6306903	W Cornwallis Rd	Chapel Hill Rd	US 15-501	Durham	11,600	8,800	5,317	8,969	14,844	1.28
C6306909	W Cornwallis Rd	Erwin Rd.	Old NC 10	Durham	12,400	1,400	1,340	4,867	5,085	0.41
E3516003	W Franklin St	N Columbia St.	Church St	Orange	22,100	13,000	15,188	23,310	19,952	0.90
E3516003b	W Franklin St	Church St	Merritt Mill Rd.	Orange	22,100	13,000	12,727	19,041	19,449	0.88
K3511501	W King St	West Hill Ave	N Churton St	Orange	11,300	1,700	1,567	2,763	2,998	0.27
M6311901	W Main St	Hillsborough Rd	Fifteenth St	Durham	11,600	6,300	2,361	4,469	8,938	0.77
M6311902	W Main St	Fifteenth St	Broad St	Durham	23,500	14,000	5,679	11,162	22,324	0.95
M6311903	W Main St	Broad St	N Buchanan Blvd	Durham	23,500	11,000	7,455	12,860	18,975	0.81
M6311904	W Main St	N Buchanan Blvd	Great Jones St	Durham	22,100	8,000	2,777	6,187	12,374	0.56
M6311905	W Main St	N Roxboro St	W Chapel Hill St	Durham	10,000	4,600	2,084	3,274	6,548	0.65
M6311907	W Main St	Great Jones St	W Chapel Hill St	Durham	11,600	4,600	3,427	4,567	6,130	0.53
M3516001	W Main St.	Jones Ferry Rd	NC 54	Orange	11,300	5,900	3,590	5,754	9,456	0.84
M3516001b	W Main St.	S Greensboro St	Jones Ferry Rd	Orange	11,300	14,000	10,277	13,900	18,935	1.68
M6312006	W Markham Ave	Broad St	N Buchanan Blvd	Durham	11,000	-	2,659	3,807	3,807	0.35
M6312201	W Morgan St	W Main St	Great Jones St	Durham	11,100	4,800	3,835	6,908	8,646	0.78
M6312301	W Murray Ave	Broad St	N Duke St	Durham	11,600	-	3,461	4,340	4,340	0.37
M6312302	W Murray Ave	N Duke Street	N Roxboro St	Durham	11,000	2,000	808	1,348	2,696	0.25
M3542101	W Rosemary St.	N Columbia St.	E Main St	Orange	10,000	8,700	1,343	2,960	19,140	1.91
W3599101	W Weaver St.	W Main St	N Greensboro St	Orange	11,600	6,900	-	-	9,833	0.85
H6320104	Wake Forest Hwy (NC 98)	Wake County Line	S Mineral Springs Rd	Durham	15,100	12,000	13,625	22,783	20,066	1.33
W3535001	Waterstone Dr	NC 86	Old NC 86	Orange	13,800	-	266	2,195	2,195	0.16
W3554203	Weaver Dairy Rd Ext	MLK Jr Blvd	Homestead Rd	Durham	21,800	-	4,489	8,036	8,036	0.37
W3554201	Weaver Dairy Rd.	MLK Jr Blvd	Sunrise Rd	Orange	12,900	12,000	7,816	17,109	26,268	2.04
W3554202	Weaver Dairy Rd.	Sage Rd	Sunrise Rd	Orange	12,900	11,000	6,156	16,041	28,663	2.22
W3554202b	Weaver Dairy Rd.	Erwin Rd	Sage Rd	Orange	12,900	4,931	7,685	7,489	4,805	0.37
H3515001	West Hill Ave N	US 70 W	W King St	Orange	10,200	1,500	1,058	2,861	4,056	0.40
W6354901	Westgate Dr	Durham Chapel Hill B	University Dr	Durham	31,600	7,500	4,089	13,580	24,908	0.79
W3555101	Whitfield Rd	Sunrise Rd	NC 86	Orange	12,400	4,000	1,974	5,232	10,464	0.84
W3555101b	Whitfield Rd	Erwin Rd.	Sunrise Rd	Orange	12,400	4,700	4,360	14,808	15,963	1.29
W3558301	Willow Dr	Estes Dr.	Fordham Blvd	Orange	11,600	7,200	-	-	11,088	0.96
W6304602	Woodcroft Pkwy	Fayetteville Rd	Hope Valley Rd	Durham	11,600	8,100	5,583	7,300	10,591	0.91

5 – Crashes

Purpose

The crash safety data identifies intersections and roadway sections that are possibly deficient in terms of safety. At a minimum, the final CTP will identify these intersections and roadway sections in the problem statements of the roadways that are selected for improvements. In addition, the MPO and NCDOT will consider creating a list of individual intersections for further study and possible improvements.

Background

This crash data is from the North Carolina Highway Safety Improvement Program (HSIP). Using data from 2009 through 2013, it shows intersections and roadway sections that meet at least one of several warrants to be classified as potentially hazardous (PH).

It is helpful to understand the purpose of HSIP while considering how the CTP might use this safety information. The purpose of the HSIP is to provide a systematic process that identifies, reviews and addresses specific traffic safety concerns on NCDOT roadways. The basic program steps include:

- A system of safety warrants is developed to identify locations that are possibly deficient.
- Locations that meet warrant criteria are categorized as potentially hazardous (PH) locations.
- Detailed crash analyses are performed on the PH locations with the more severe and correctable crash patterns.
- The Regional Traffic Engineering staff completes engineering field investigations, cost studies and other reviews to develop safety recommendations.
- Depending on the cost and nature of the countermeasures, the investigations may result in requesting adjustments or repairs, developing Spot Safety or Hazard Elimination projects, making adjustments to current TIP project plans or using other funding sources to initiate countermeasures.
- Selected projects are evaluated to determine the effectiveness of countermeasures.

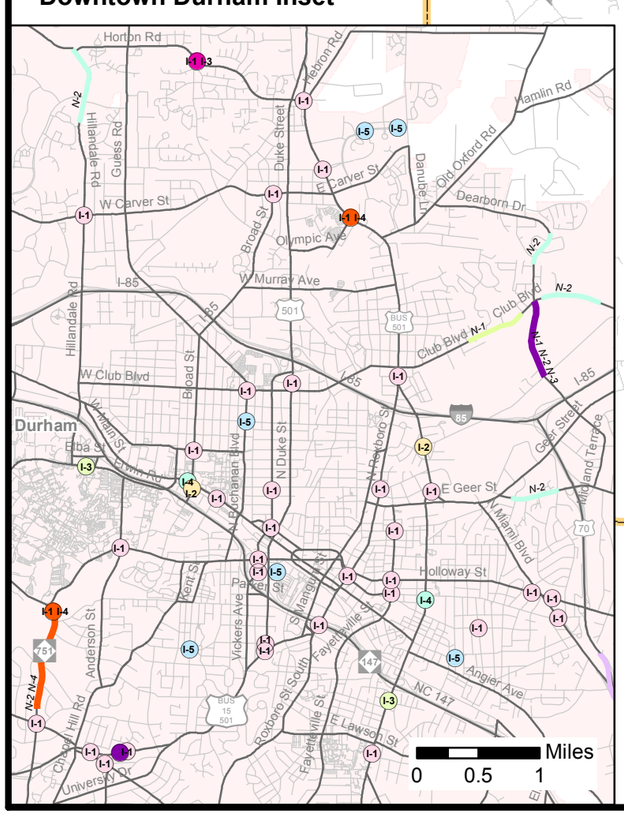
Additional HSIP information can be found at the Web page for the 2014 NC Highway Safety Improvement Program (HSIP) report -- http://tinyurl.com/2014safetyreport (See pages 5-7 for Safety Warrant descriptions.)

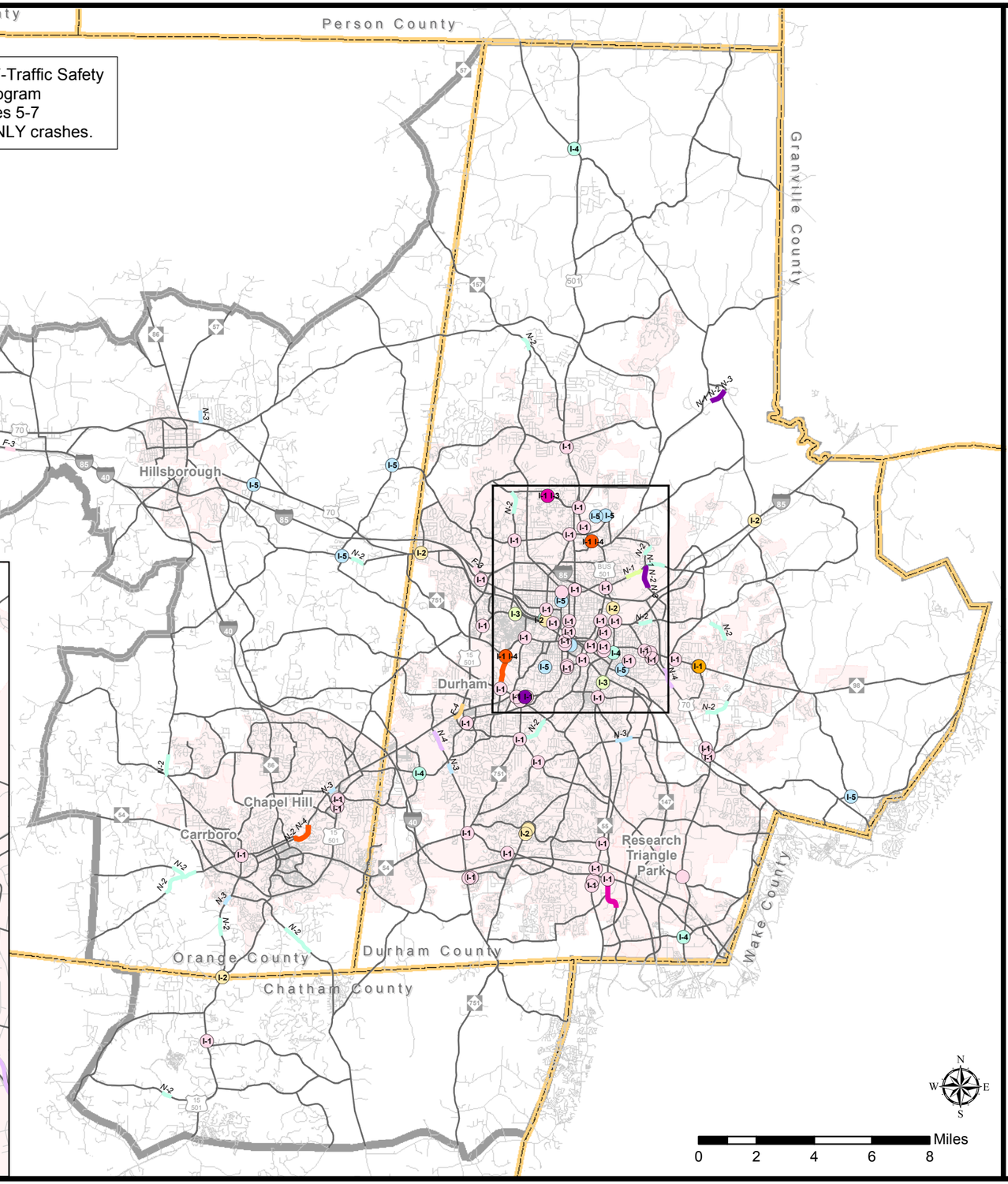
Content

- The crash map is on page 5-3.
- The table of intersections is on page 5-4 through 5-6.
- The table of roadway sections is on page 5-7 through 5-8.
- The following link provides an interactive online map of this crash data sponsored by NCDOT -- http://tinyurl.com/mo2okgq

NOTE: Crash Crash location information is from the NCDOT-Traffic Safety Systems Section, 2014 NC Highway Safety Improvement Program (HSIP) report (http://tinyurl.com/2014safetyreport). See pages 5-7 for Safety Warrant descriptions. This map indicate AUTO ONLY crashes.

Downtown Durham Inset





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Crash Locations that Exceed One Safety Warrant
2009-2013

Durham-Chapel Hill-Carrboro MPO

Map date: December 5, 2014

Legend

Intersection Safety Warrants

- I-1: Frontal Impact; I-2: Last Year Increase
- I-1: Frontal Impact; I-3: Frequency with a Severity Index Minimum
- I-1: Frontal Impact; I-4: Night Location
- I-2: Last Year Increase; I-4: Night Location
- I-1: Frontal Impact
- I-2: Last Year Increase
- I-3: Frequency with a Severity Index Minimum
- I-4: Night Location
- I-5: Chronic Crossing Pattern

Section Safety Warrants

- N-1: Run Off Road during Wet Road Conditions; N-2: Run Off Road; N-3: Wet Road Condition (Non-Freeway)
- N-2: Run Off Road; N-3: Wet Road Condition (Non-Freeway)
- N-2: Run Off Road; N-4: Non-Intersection Night Location (Non-Freeway)
- F-3: Wet Road Condition (Freeway)
- F-4: Night Location (Freeway)
- N-1: Run Off Road during Wet Road Conditions (Non-Freeway)
- N-2: Run Off Road (Non-Freeway)
- N-3: Wet Road Condition (Non-Freeway)
- N-4: Non-Intersection Night Location (Non-Freeway)
- DCHC MPO Planning Boundary
- County Boundary
- Municipal Boundary

Base map date: September 18, 2009

2014 HSIP - Potentially Hazardous Intersection Locations

Crash Locations that Potentially Exceed at Least One Safety Warrant (2009-2013)

INTERSECTION LOCATIONS

					Warrant				
					I-1	I-2	I-3	I-4	I-5
No.	Road A	Road B	No. Crashes	Severity Index	Frontal Impact	Last Year Increase	Frequency with a Severity Index Minimum	Night Location	Chronic Crossing Pattern
CHATHAM									
1	US 15	LYSTRA RD (SR 1721)	25	4.55	Y				
DURHAM									
2	ANDERSON ST	DUKE UNIVERSITY RD	30	2.97	Y				
3	ARCHDALE DR (SR 2295)	MARTIN LUTHER KING JR PKWY	39	2.9	Y				
4	BROAD ST (SR 1322)	W MARKHAM AVE	33	2.35	Y				
5	CARPENTER POND RD (SR 1901)	OLIVE BRANCH RD (SR 1905)	26	7.33					Y
6	DOWD ST	N ELIZABETH ST	31	5.35	Y				
7	E CORNWALLIS RD (SR 1121)	S MIAMI BLVD (SR 1959)	40	3.59	Y				
8	ERWIN RD (SR 1320)	TRENT DR	37	6.3			Y		
9	FAYETTEVILLE RD (SR 1118)	GENEVA DR	29	3.55		Y			
10	HILLANDALE RD (SR 1321)	W CARVER ST (SR 1407)	32	2.39	Y				
11	HORTON RD (SR 1443)	STADIUM DR	50	6.4	Y		Y		
12	HYDE PARK AVE	E MAIN ST	32	4.24					Y
13	I 85	RED MILL RD (SR 1632)	35	4.17		Y			
14	JACKSON ST	WILLARD ST	30	2.73					Y
15	KENT ST	W LAKEWOOD AVE	41	4.25					Y
16	MARTIN LUTHER KING JR PKWY	ROXBORO ST	59	4.54	Y				
17	MEDICAL PARK DR	BEN FRANKLIN BLVD	20	3.59					Y
18	MORREENE RD (SR 1317)	ERWIN RD (SR 1320)	53	3.23	Y				
19	N BUCHANAN BLVD	W KNOX ST	48	4.4					Y
20	N DRIVER ST	TAYLOR ST	26	2.99	Y				
21	N DUKE ST (SR 1445)	W CLUB BLVD	56	3.25	Y				
22	N ELIZABETH ST	LIBERTY ST	28	3.38	Y				
23	N GREGSON ST (SR 1327)	W TRINITY AVE	28	3.38	Y				
24	NC 54	HOPSON RD (SR 1978)	34	4.05				Y	
25	NC 54	SOUTHPOINT CROSSING DR	26	2.99	Y				
26	NC 54	S ALSTON AVE (SR 1945)	30	1.99	Y				
27	NC 54	GARRETT RD	55	2.88	Y				
28	NC 55	CAMDEN AVE (SR 1671)	26	1.28		Y			
29	NC 55	SR 2205	29	5.14	Y				
30	NC 55	MEREDITH DR	61	2.21	Y				
31	NC 55	PARK FORTY PLAZA	38	2.75	Y				

*Any ranking of locations are for analysis and investigation purposes ONLY.
This list is not an effective "Top Ten Most Dangerous Locations in the State" type of list.

2014 HSIP - Potentially Hazardous Intersection Locations

Crash Locations that Potentially Exceed at Least One Safety Warrant (2009-2013)

INTERSECTION LOCATIONS

					Warrant				
					I-1	I-2	I-3	I-4	I-5
No.	Road A	Road B	No. Crashes	Severity Index	Frontal Impact	Last Year Increase	Frequency with a Severity Index Minimum	Night Location	Chronic Crossing Pattern
32	NC 55	SR 1182	36	3.26	Y				
33	NC 55	DAYTON ST	42	6.02	Y				
34	NC 55	LINWOOD AVE	59	6.86			Y		
35	NC 55	LIBERTY ST	52	4.45				Y	
36	NC 55	AVONDALE DR (SR 1357)	46	3.41	Y				
37	NC 751	DUKE UNIVERSITY RD	27	1.82	Y			Y	
38	NC 751	W CORNWALLIS RD (SR 1308)	27	4.01	Y				
39	NC 98	HARDEE ST	45	3.8	Y				
40	NC 98	ADAMS ST	28	4.7	Y				
41	NC 98	LYNN RD EXT (SR 1919)	61	5.03	Y				
42	NC 98	SR 1844	28	3.38		Y		Y	
43	RENAISSANCE PKWY	LEONARDO DR	27	2.64	Y				
44	S DUKE ST (SR 1445)	W LAKEWOOD AVE	30	1.99	Y				
45	S GREGSON ST (SR 1361)	JACKSON ST	33	2.35	Y				
46	SW DURHAM PKWY (SR 1110)	OLD CHAPEL HILL RD (SR 2220)	35	4.22				Y	
47	SWIFT AVE (SR 1322)	W PETTIGREW ST	43	2.03		Y			
48	UNIVERSITY DR	WESTGATE DR	38	3.14	Y				
49	US 15BUS	W CORNWALLIS RD (SR 1308)	51	4.95	Y				
50	US 15BUS	S DUKE ST (SR 1445)	36	3.06	Y				
51	US 15BUS	S ROXBORO ST (SR 1365)	55	3.96	Y				
52	US 15BUS	NC 98	28	5.49	Y				
53	US 15BUS	E TRINITY AVE	33	3.69	Y				
54	US 15BUS SB COUPLET	S ROXBORO ST (SR 1365)	103	3.87	Y				
55	US 15BUS SB COUPLET	SR 1364	26	4.13	Y	Y			
56	US 501	OMEGA RD	37	2.8	Y				
57	US 501	QUAIL ROOST FARM RD (SR 1468)	23	2.61				Y	
58	US 501BUS	DAVIDSON AVE	53	2.4	Y				
59	US 501BUS	OLYMPIC AVE	27	5.73	Y			Y	
60	US 501BUS	FRASIER ST	28	2.59	Y				
61	US 501BUS	HORTON RD (SR 1443)	93	3.17	Y				
62	US 70	MARLY DR (SR 1957)	45	4.99	Y				
63	US 70	PEYTON AVE (SR 1957)	55	3.99	Y				
64	US 70BUS	SPARGER RD (SR 1400)	31	3.86		Y			

*Any ranking of locations are for analysis and investigation purposes ONLY.
This list is not an effective "Top Ten Most Dangerous Locations in the State" type of list.

2014 HSIP - Potentially Hazardous Intersection Locations

Crash Locations that Potentially Exceed at Least One Safety Warrant (2009-2013)

INTERSECTION LOCATIONS

					Warrant				
					I-1	I-2	I-3	I-4	I-5
No.	Road A	Road B	No. Crashes	Severity Index	Frontal Impact	Last Year Increase	Frequency with a Severity Index Minimum	Night Location	Chronic Crossing Pattern
65	US 70BUS	CHRISTIAN AVE	59	1.88	Y				
66	US 70BUS	BUCHANAN BLVD	35	2.48				Y	
67	US 70BUS	N GREGSON ST (SR 1327)	54	2.64	Y				
68	US 70BUS	N ELIZABETH ST	26	2.71	Y				
69	US 70BUS	RAYNOR ST	40	3.04	Y				
70	US 70BUS	LIBERTY ST	30	3.47	Y				
71	US 70BUS WB COUPLET	N GREGSON ST (SR 1327)	56	2.59	Y				
72	W CARVER ST (SR 1407)	BROAD ST	28	3.38	Y				
73	W CHAPEL HILL ST (SR 1127)	S GREGSON ST (SR 1327)	35	3.33	Y				
74	W CLUB BLVD	GUESS RD	34	2.74	Y				
75	W CORNWALLIS RD (SR 1158)	HOPE VALLEY RD	36	3.26	Y				
ORANGE									
76	MAIN ST (SR 1010)	HILLSBOROUGH RD (SR 1772)	26	2.99	Y				
77	OLD NC 10 (SR 1710)	MT HERMON CHURCH RD (SR 1713)	20	8.86					Y
78	PLEASANT GREEN RD (SR 1567)	COLE MILL RD (SR 1569)	20	7.38					Y
79	US 15	SMITH LEVEL RD (SR 1919)	36	2.44		Y			
80	US 15	WILLOW DR	67	4.89	Y				
81	US 15	ELLIOT RD	52	3.13	Y				
82	US 70BUS	LAWRENCE RD (SR 1709)	36	4.08					Y

NOTE: Crash location information is from the NCDOT-Traffic Safety Systems Section, 2014 NC Highway Safety Improvement Program (HSIP) report (http://tinyurl.com/2014safetyreport). See pages 5-7 for Safety Warrant descriptions.

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2014 HSIP - Potentially Hazardous Section Locations

Crash Locations that Potentially Exceed at Least One Safety Warrant (2009-2013)

SECTION LOCATIONS

					Warrant							
					F-1	F-2	F-3	F-4	N-1	N-2	N-3	N-4
					Freeway				Non-Freeway			
No.	Road A	Road B	No. Crashes	Severity Index	Run Off Road during Wet Road Conditions	Run Off Road	Wet Road Condition	Night Location	Run Off Road during Wet Road Conditions2	Run Off Road2	Wet Road Condition2	Non-Intersection Night Location
CHATHAM												
1	ANDREWS STORE RD (SR 1528)	PARKER HERNDON RD (SR 1526)	16	3.78						Y		
DURHAM												
2	**COOK RD**	**DUNN AVE**	80	3.22						Y		
3	**GLENBROOK DR**	**DUBONNETT PL**	20	2.11						Y		
4	I 85	COLE MILL RD (SR 1401)	30	1.99			Y					
5	NC 147	E CORNWALLIS RD (SR 1121)	30	2.23			Y					
6	NC 157 (GUESS RD)	MILTON RD (SR 1456)	15	14.6						Y		
7	NC 751 (ACADEMY RD)	PINECREST RD	34	4.97						Y		Y
8	GARRETT RD (SR 1116)	CAVALIER AVE	24	2.54							Y	
9	GARRETT RD (SR 1116)	MILLENNIUM DR	19	1.78								Y
10	RIDDLE RD (SR 1171)	S BRIGGS AVE	28	2.59							Y	
11	HILLANDALE RD (SR 1321)	PEPPERTREE ST	36	3.06						Y		
12	DEARBORN DR (SR 1666)	DEER RUN	19	4.51						Y		
13	E CLUB BLVD (SR 1669)	JONES PARK DR	15	2.97						Y		
14	E CLUB BLVD (SR 1669)	KISS DR	30	3.71					Y			
15	MIDLAND TERRACE (SR 1709)	CUSTOM DR	26	3.85					Y	Y	Y	
16	TEKNIKA PKWY (SR 1794)	RED MILL RD (SR 1632)	15	3.96					Y	Y	Y	
17	CHEEK RD (SR 1800)	ANDOVER DR	18	3.47						Y		
18	S MINERAL SPRINGS RD / PLEASANT DR (SR 1815)	S MINERAL SPRINGS RD (SR 1917)	27	4.01						Y		
19	**CLAYTON RD (SR 1825)**	**GLENROSE DR**	21	7.43						Y		
20	S ALSTON AVE (SR 1945)	SEDWICK RD (SR 1977)	37	3.2						Y	Y	
21	S ROXBORO ST / ARCHDALE DR (SR 2295)	OAK RIDGE BLVD	25	3.07						Y		
22	US 15	US 15BUS SB COUPLET	33	1.9				Y				
23	US 70	US 70BUS WB COUPLET	25	1.89								Y
24	W WOODCROFT PKWY	SANDSTONE RIDGE DR	22	3.69							Y	
ORANGE												
25	FRANKLIN ST (SR 1010)	CAROLINA AVE	61	3.18						Y		Y
26	FRANKLIN ST (SR 1010)	MILTON AVE	41	2.62							Y	
27	I 40	BUCKHORN RD (SR 1114)	43	4.31				Y				

* Any ranking of locations are for analysis and investigation purposes ONLY.
This list is not an effective "Top Ten Most Dangerous Locations in the State" type of list.

2014 HSIP - Potentially Hazardous Section Locations

Crash Locations that Potentially Exceed at Least One Safety Warrant (2009-2013)

28	I 40	MT WILLING RD (SR 1120)	30	2.97			Y					
29	JONES FERRY RD (SR 1942)	CRYSTAL SPRINGS CT	29	2.79						Y		
30	JONES FERRY RD / OLD GREENSBORO RD (SR 1005)	OLD SCHOOL RD (SR 1941)	26	15.5						Y		
31	MT CARMEL CHURCH RD (SR 1008)	PARKER RD (SR 1916)	31	5.12						Y		
32	OLD NC 10	MURPHY SCHOOL RD (SR 1714)	17	2.74						Y		
33	OLD NC 86	STONEY HILL RD	18	3.06						Y		
34	ORANGE HIGH SCHOOL RD (SR 1588)	US 70	17	6.76							Y	
35	SMITH LEVEL RD (SR 1919)	ROCK HAVEN RD	15	3.47							Y	
36	SMITH LEVEL RD (SR 1919)	NORTHSIDE DR (SR 1964)	15	2.97						Y		

BOLD = Section locations that are not included in the CTP Study Roads.

Yellow fille = Not shown on map.

NOTE: Crash location information is from the NCDOT-Traffic Safety Systems Section, 2014 NC Highway Safety Improvement Program (HSIP) report (http://tinyurl.com/2014safetyreport).
See pages 5-7 for safety warrant details.

* Any ranking of locations are for analysis and investigation purposes ONLY.
This list is not an effective "Top Ten Most Dangerous Locations in the State" type of list.

6 – Deficient Bridges

Purpose

The deficient bridge data identifies bridges that are structurally deficient or functionally obsolete. The fact that a bridge is designated as deficient does not mean that it is unsafe. The designation attracts continued monitoring and makes the bridge eligible for federal and/or state repair or replacement funding if its sufficiency rating meets a certain threshold. The final CTP will identify these bridges in the problem statements of the roadways that are selected for improvements and include them in an appendix, but it is unlikely that the final CTP will have a separate section with future bridge improvements identified.

Content

- Details on bridge definitions and process are on page 6-2.
- Maps of deficient bridges are on pages 6-3 and 6-4.
- A table of deficient bridges are on pages 6-5 through 6-7.

Appendix F
Bridge Deficiency Assessment

The Transportation Improvement Program (TIP) development process for bridge projects involves consideration of several evaluation methods in order to prioritize needed improvements. A sufficiency index is used to determine whether a bridge is sufficient to remain in service, or to what extent it is deficient. The index is a percentage in which 100 percent represents an entirely sufficient bridge and zero represents an entirely insufficient or deficient bridge. Factors evaluated in calculating the index are listed below.

- structural adequacy and safety
- serviceability and functional obsolescence
- essentiality for public use
- type of structure
- traffic safety features

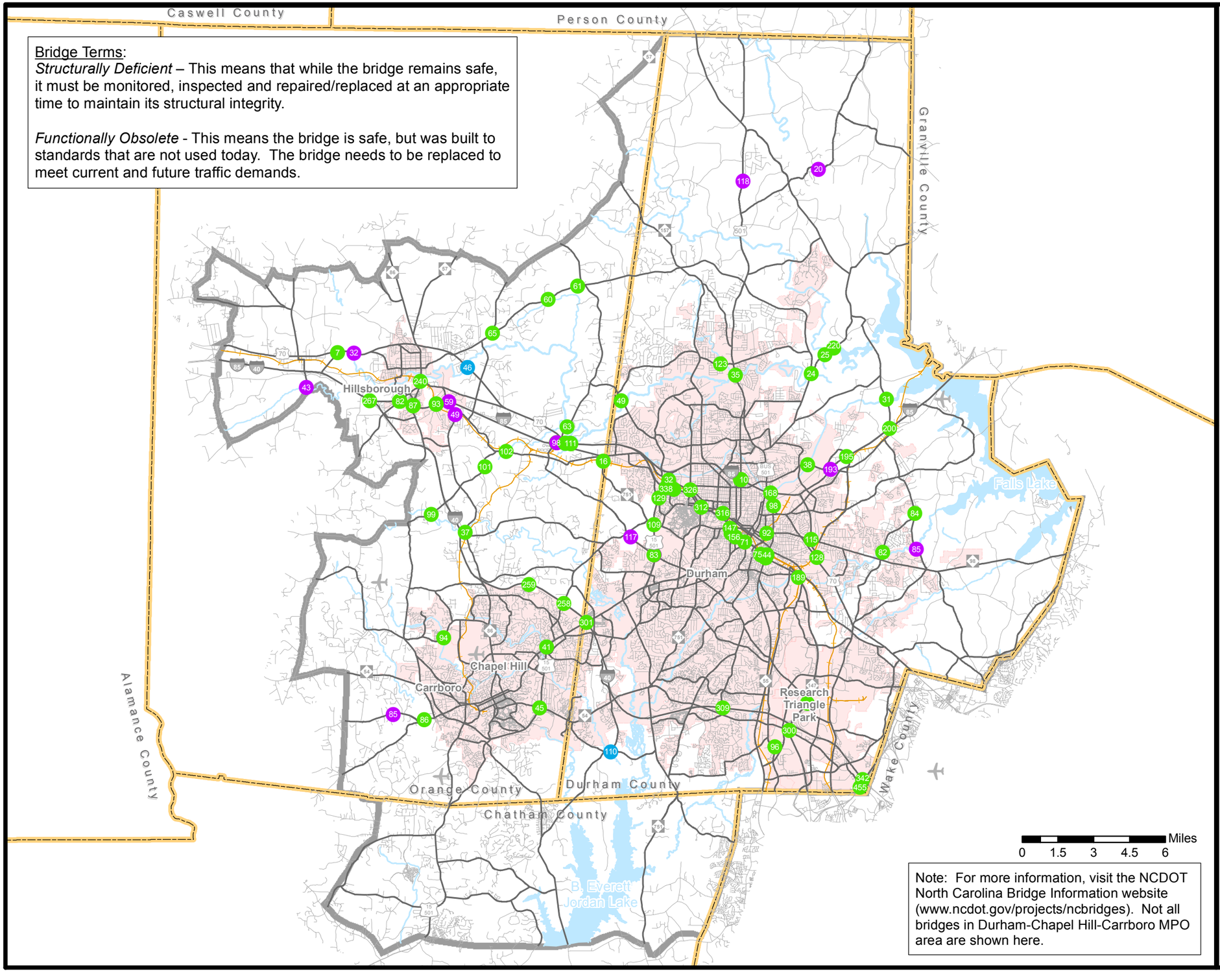
The NCDOT Structures Management Unit inspects all bridges in North Carolina at least once every two years. A sufficiency rating for each bridge is calculated and establishes the eligibility and priority for replacement. Bridges having the highest priority are replaced as federal and state funds become available.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO). Structurally deficient means there are elements of the bridge that need to be monitored and/or repaired. The fact that a bridge is "structurally deficient" does not imply that it is likely to collapse or that it is unsafe. It means the bridge must be monitored, inspected and repaired/replaced at an appropriate time to maintain its structural integrity. A functionally obsolete bridge is one that was built to standards that are not used today. These bridges are not automatically rated as structurally deficient, nor are they inherently unsafe. Functionally obsolete bridges are those that do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand or to meet the current geometric standards, or those that may be occasionally flooded.

A bridge must be classified as deficient in order to qualify for federal replacement funds. Additionally, the sufficiency rating must be less than 50% to qualify for replacement or less than 80% to qualify for rehabilitation under federal funding. Deficient bridges located on roads evaluated as a part of the CTP are listed in Table 3. For more details on deficient bridges within the planning area, contact the Structures Management Unit using the information in Appendix A.

Bridge Terms:
Structurally Deficient – This means that while the bridge remains safe, it must be monitored, inspected and repaired/replaced at an appropriate time to maintain its structural integrity.

Functionally Obsolete - This means the bridge is safe, but was built to standards that are not used today. The bridge needs to be replaced to meet current and future traffic demands.



Note: For more information, visit the NCDOT North Carolina Bridge Information website (www.ncdot.gov/projects/ncbridges). Not all bridges in Durham-Chapel Hill-Carrboro MPO area are shown here.

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Deficient Bridges

Durham-Chapel Hill-Carrboro MPO

Chatham, Durham and Orange Counties
North Carolina

Comprehensive Transportation Plan

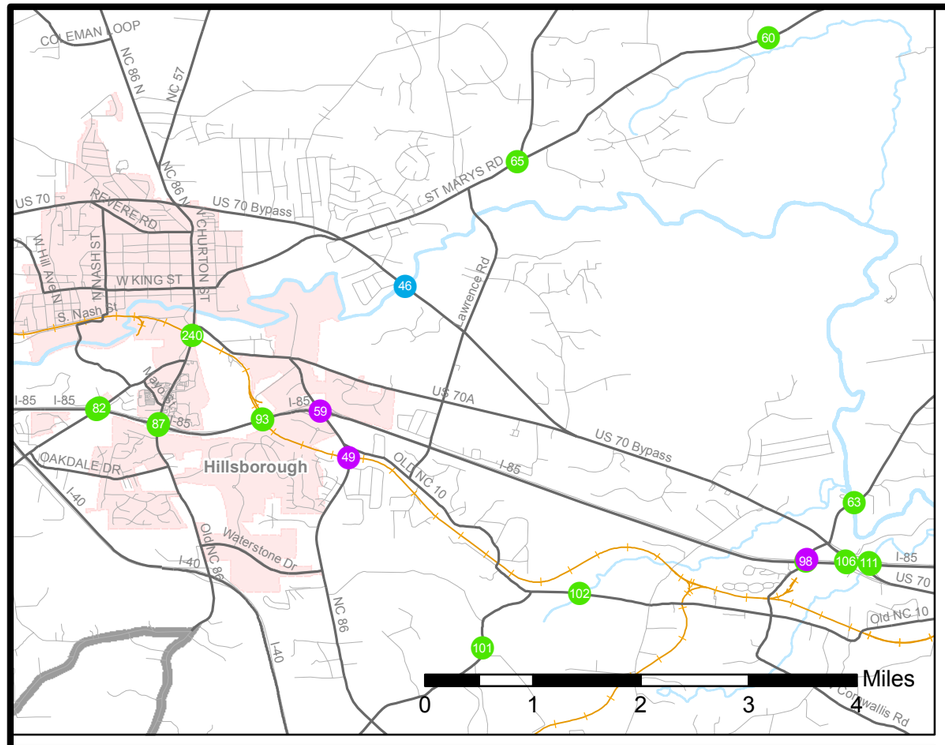
Map date: December 4, 2014

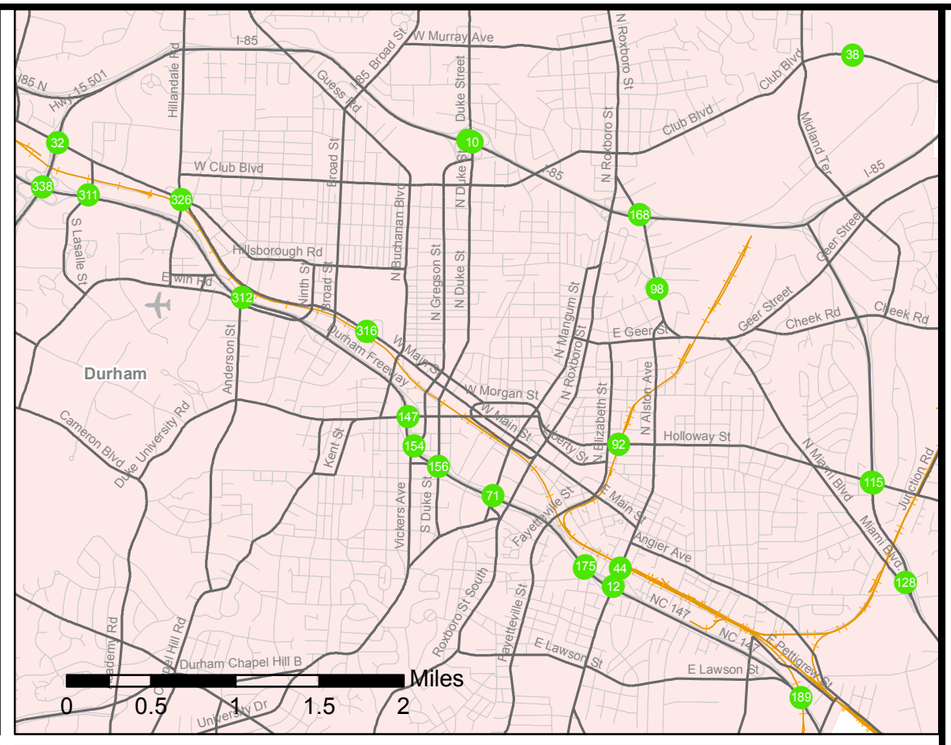
Legend

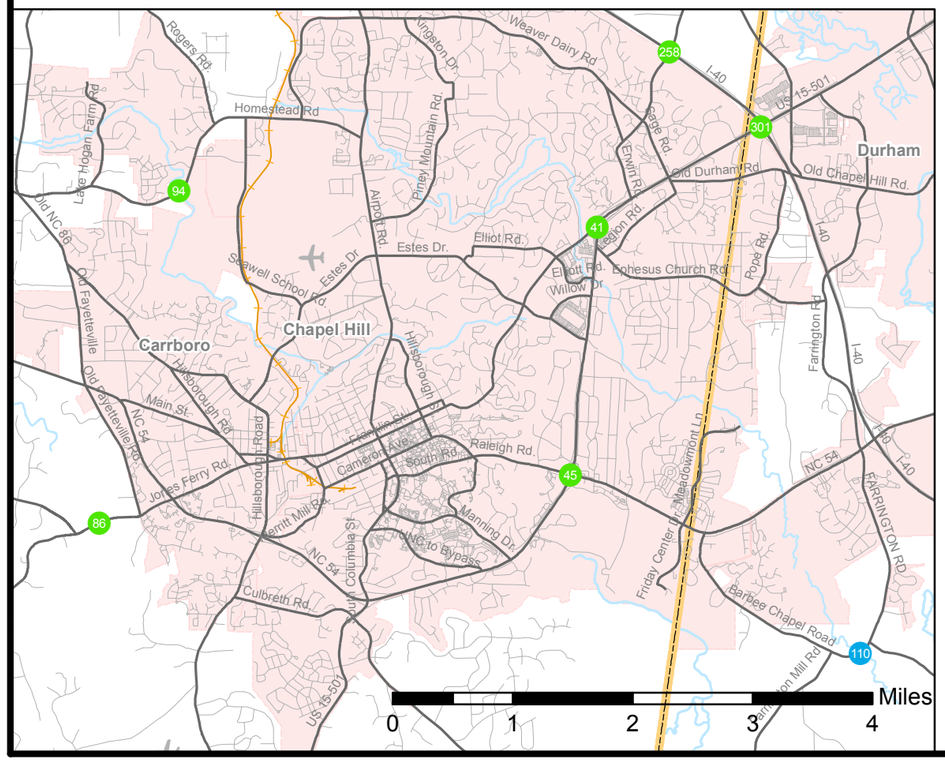
Bridge Condition

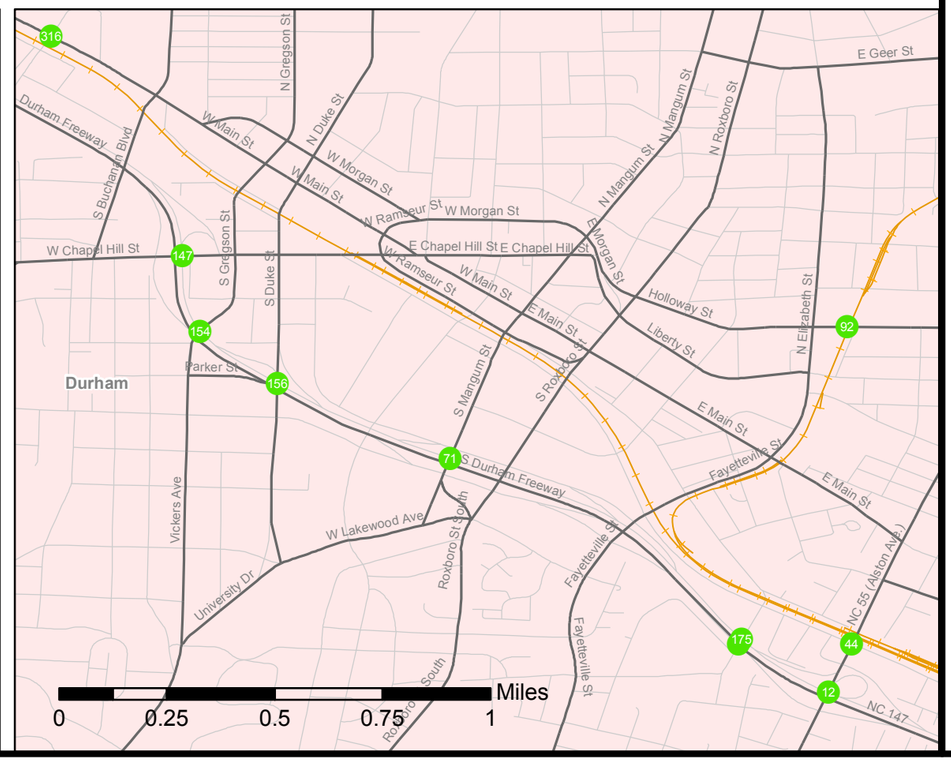
- Functionally Obsolete (# Bridge Number)
- Structurally Deficient (# Bridge Number)
- Structurally Deficient & Functionally Obsolete (# Bridge Number)
- Airports
- Study Roads
- Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundaries
- County Boundary
- MPO Planning Boundary

Base map date: September 18, 2009









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Deficient Bridges
(Insets)

Durham-Chapel Hill-Carrboro MPO
Chatham, Durham and Orange Counties
North Carolina

Comprehensive Transportation Plan

Map date: December 4, 2014

Legend

Bridge Condition

- Functionally Obsolete (# Bridge Number)
- Structurally Deficient (# Bridge Number)
- Structurally Deficient & Functionally Obsolete (# Bridge Number)
- Airports
- Study Roads
- Roads
- Railroads
- Rivers and Streams
- Water Bodies
- Municipal Boundaries
- County Boundary
- MPO Planning Boundary

N W E S

Base map date: September 18, 2009

Table 3 - Deficient Bridges

Bridge Number	Facility	Feature	Condition	Local ID
	Durham County			
10	US 501 N	I-85 & US 501	FO	
12	NC 55	NC 147	FO	
20	BAHAMA RD (SR 1616)	DIAL CREEK (LAKE MICHIE)	SD & FO	
24	OLD OXFORD RD (SR 1004)	ENO RIVER	FO	
25	OLD OXFORD RD (SR 1004)	LITTLE CREEK	FO	
31	RED MILL RD (SR 1632)	ELLERBEE CREEK	FO	
32	US 70 BUS	US 15 BYP/US 501 BYP	FO	
35	US 501	ENO RIVER	FO	
38	E CLUB BLVD (SR 1669)	ELLERBEE CREEK	FO	
44	PETTIGREW ST	NC 55	FO	
49	COLE MILL RD (SR 1401)	ENO RIVER	FO	
71	US 15/501 S	NC 147	FO	
80	US 15/US 501 NBL	W CORNWALLIS RD (SR 1308)	SD & FO	
82	N MINERAL SPRINGS (SR 1815)	LICK CREEK	FO	
83	US 15/US 501	W CORNWALLIS RD (SR 1308)	FO	
84	FLETCHERS CHAPEL RD (SR 1815)	CHUNKY PIPE CREEK	FO	
85	STALLINGS RD (SR 1814)	LITTLE LICK CREEK	SD & FO	
92	US 70 BUS & NC 98	NORFOLK & WESTERN RR	FO	
96	S ALSTON AVE (SR 1945)	BURDENS CREEK	FO	
98	NC 55	NORFOLK & SOUTHER	FO	
106	US 70 EBL	NC 98	FO	
109	US 15 BYP/US 501 NBL	NC 751	FO	
110	FARRINGTON RD (SR 1110)	LITTLE CREEK	SD	
115	US70 WBL	NC 98	FO	
117	W CORNWALLIS RD (SR 1308)	MUD CREEK	SD & FO	
118	US 501	POND	SD & FO	
123	LATTA RD (SR 1448)	CREEK	FO	
128	US 70 BUS WB	US 70 BYP EBL	FO	
129	MORREENE RD (SR 1317)	US 15 BYP/US 501 BYP	FO	
147	W CHAPEL HILL ST (SR 1127)	NC 147	FO	
154	VICKERS AVE (SR 1361)	NC 147	FO	
156	S DUKE ST (SR 1445)	NC 147	FO	
168	I-85 SB & US 15 SB	NC 55	FO	
173	NC 147 SBL	GRANT ST	FO	
175	NC 147 NBL	GRANT ST	FO	
189	NC 147 NBL	SOUTHERN RAILROAD	FO	
193	E CLUB BLVD (SR 1671)	I-85/US15	SD & FO	
195	GLENN SCHOOL RD (SR 1675)	I-85	FO	

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Bridge Number	Facility	Feature	Condition	Local ID
200	I-85 NBL & US 15	RED MILL RD (SR 1632)	FO	
206	E CORNWALLIS RD (SR 1121)	NC 147	FO	
220	OLD OXFORD RD (SR 1004)	CREEK	FO	
300	NC 54	NC 147	FO	
301	US 15/501	I-40	FO	
309	BARBEE RD (SR 1106)	I-40	FO	
311	LASALLE ST	NC 147	FO	
312	ANDERSON ST	NC 147	FO	
316	US 70 BUS (W MAIN ST)	CAMPUS DRIVE	FO	
326	US 70 BUS (HILLSBOROUGH RD)	HILLANDALE RD (SR 1321)	FO	
338	NC 147 N	US 15/501 BYP	FO	
342	I-540	I-40 & NW EXPRESSWAY	FO	
425	US 501 (N GREGSON ST)	I-85	FO	
455	SLATER RD (SR 2104)	I-540	FO	
	Orange County			
7	US 70 EBL	I-85/US 70 CONNECTOR WBL (SR 1239)	FO	
16	NC 751	SOUTHERN RAILROAD	FO	
32	US 70	ENO RIVER	SD & FO	
37	NC 86	NEW HOPE CREEK	FO	
41	E FRANKLIN ST NBL (SR 1010)	US 15/501 SBL	FO	
43	MT WILLING RD (SR 1120)	SEVEN MILE CREEK	SD & FO	
45	US 15/501 SBL	NC 54	FO	
46	US 70	ENO RIVER	SD	
49	NC 86	SOUTHERN RAILWAY	SD & FO	
59	NC 86	I-85	SD & FO	
60	ST MARYS RD (SR 1002)	CREEK	FO	
61	ST MARYS RD (SR 1002)	CREEK	FO	
63	PLEASANT GREEN RD (SR 1567)	ENO RIVER	FO	
65	ST MARYS RD (SR 1002)	PRONG ENO RIVER	FO	
81	I-85 NBL	ORANGE GROVE RD (SR 1006)	FO	
82	I-85 SBL	ORANGE GROVE RD (SR 1006)	FO	
83	I-85 NBL	OLD NC 86 (SR 1009)	FO	
85	OLD GREENSBORO RD (SR 1005)	PHIL'S CREEK	SD & FO	
86	JONES FERRY RD (SR 1005)	UNIVERSITY LAKE	FO	
87	I-85 SBL	OLD NC 86 (SR 1009)	FO	
91	I-85 NBL	SOUTHERN RAILROAD	FO	
93	I-85 SBL	SOUTHERN RAILROAD	FO	
94	HOMESTEAD RD (SR 1777)	BOLIN CREEK	FO	
98	I-85 NBL	MT HERMAN CHURCH RD (SR 1713)	FO	

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Bridge Number	Facility	Feature	Condition	Local ID
99	NEW HOPE CHURCH RD (SR 1723)	NEW HOPE CREEK	FO	
100	I-85 SBL	MT HERMAN CHURCH RD (SR 1713)	SD & FO	
101	NEW HOPE CHURCH RD (SR 1723)	STONEY CREEK	FO	
102	OLD NC 10 (SR 1710)	STONEY CREEK	FO	
103	I-85 NBL	US 70 EBL	FO	
106	I-85 SBL	US 70 EBL	FO	
110	I-85 SBL & US 70 EBL	US 70 BUS WBL	FO	
111	I-85 SBL	US 70 BUS WBL	FO	
240	S CHURTON ST (SR 1009)	SOUTHERN RAILROAD	FO	
258	ERWIN RD (SR 1734)	I-40	FO	
259	SUNRISE LN (SR 1732)	I-40	FO	
267	I-85 RAMP	I-40 EBL & I-85	FO	

7 – Transit

Purpose

The transit supply and demand data will assist planners, citizens and MPO board members in identifying new or improved transit services in the MPO planning area. This data and any subsequent analysis is not intended to supplant the detailed studies and recommendations of the various transit operators for new and modified bus routes, stops and amenities, or the ongoing environmental analysis for light rail. Rather, the purpose of this CTP deficiency analysis is to define more general and long-range transit themes.

Content

- The transit supply information, maps and tables are on pages 7-2 through 7-9.
- The transit demand information and map (based on population and employment densities) are on pages 7-10 through 7-12.
- The transit demand information and map (based on mean income) are on pages 7-13 and 7-14.

7 – Transit

Supply

Method

The transit supply map shows the routes and frequency of current bus transit service in the MPO planning area including service provided by Durham Area Transit Authority (DATA), Chapel Hill Transit (CHT), Triangle Transit (TTA), Orange Public Transit (OPT) and Duke University Transit. The frequency of service shows how many minutes transpire between the arrival of any transit bus along that particular roadway segment. Thus, if four buses that each cover a different route travel up that corridor at the same time every sixty minutes, the frequency will be sixty minutes. The frequency would not be 15 minutes, i.e., sixty minutes divided by four buses.

The two maps show peak and off-peak bus service, and the tables that follow provide the detailed route attributes and the assumed peak and off-peak periods of each transit provider.

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Public Transportation Map: Existing Bus Routes and Peak Frequency

Durham-Chapel Hill-Carrboro MPO

Chatham, Durham and Orange Counties
North Carolina

Map date: December 19, 2014

Legend

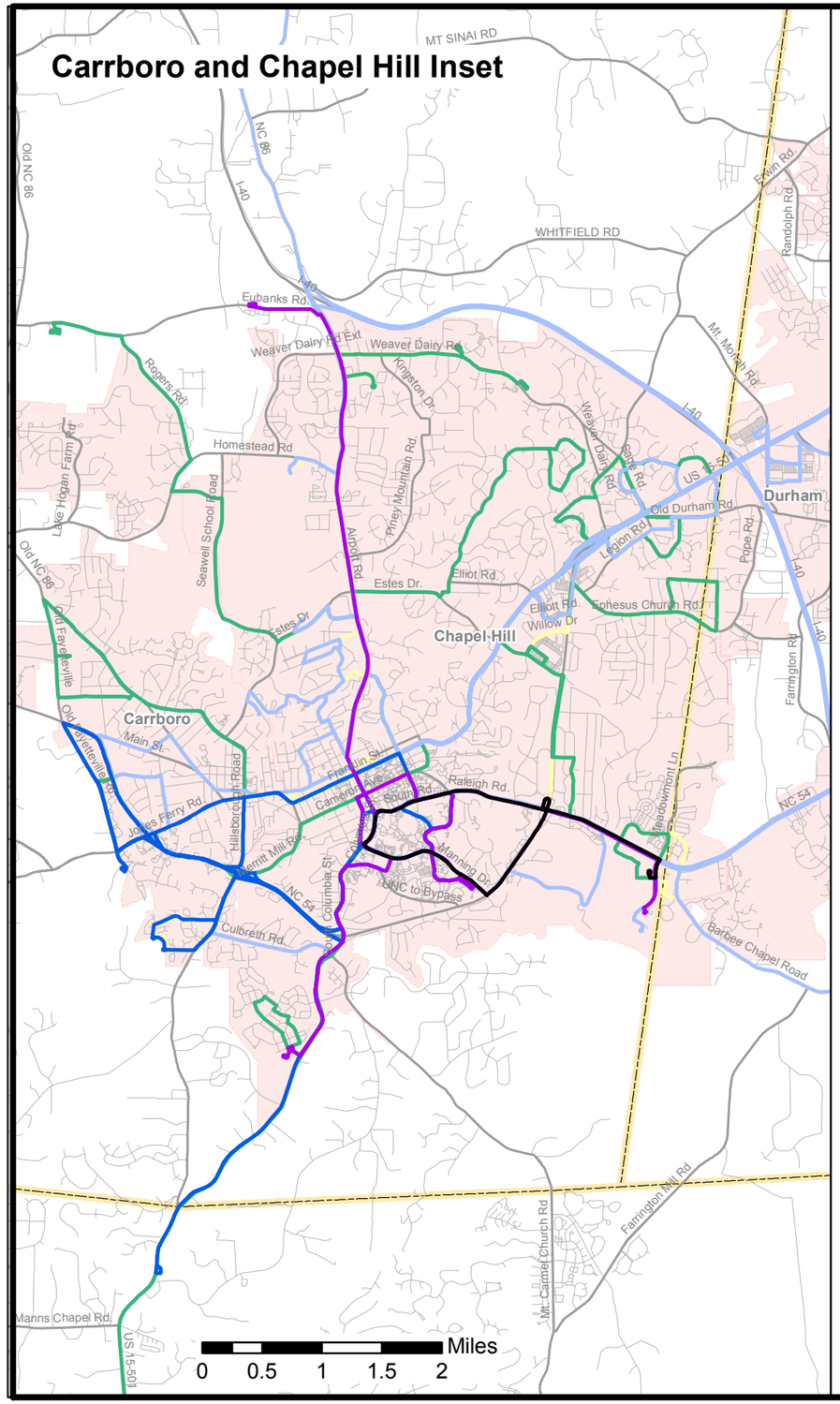
Peak Frequency, Buses per hr. (Headway, min.)

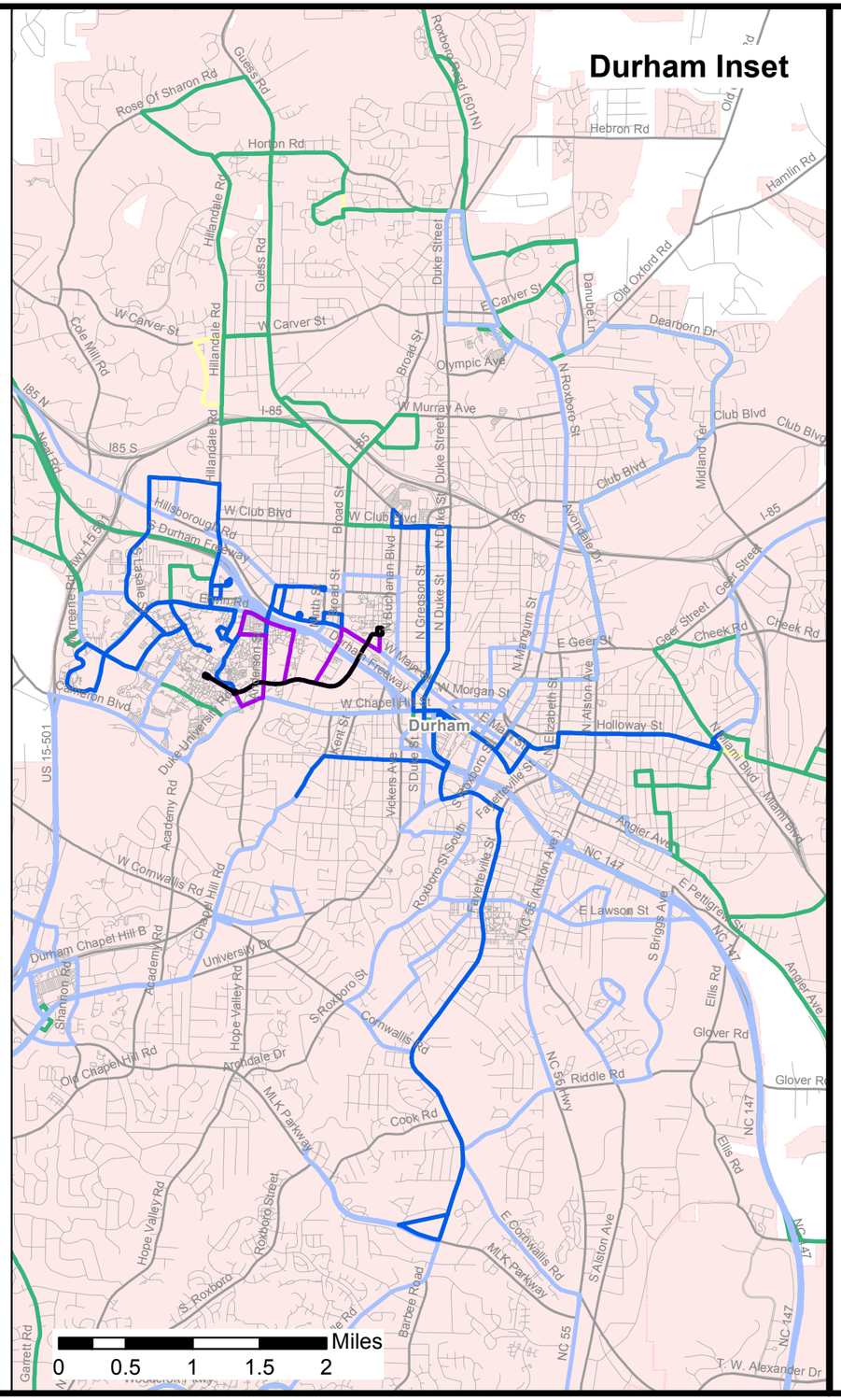
- 12.0 (5 min.)
- 6.0 - 11.9 (6 - 10 min.)
- 4.0 - 5.9 (11 - 15 min.)
- 2.0 - 3.9 (16 - 30 min.)
- 1.0 - 1.9 (31 - 60 min.)
- 0.1 - 0.9 (> 60 min.)
- 0.0 (Non-Peak Service)
- Study Roads
- Roads
- Municipal Boundaries
- County Boundary
- MPO Planning Boundary

0 1 2 3 4 Miles

N W E S

Base map date: September 18, 2009





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Public Transportation Map: Existing Bus Routes and Peak Frequency
(Insets)

Durham-Chapel Hill-Carrboro MPO

Chatham, Durham and Orange Counties
North Carolina

Map date: December 19, 2014

Legend

Peak Frequency, Buses per hr. (Headway, min.)

- 12.0 (5 min.)
- 6.0 - 11.9 (6 - 10 min.)
- 4.0 - 5.9 (11 - 15 min.)
- 2.0 - 3.9 (16 - 30 min.)
- 1.0 - 1.9 (31 - 60 min.)
- 0.1 - 0.9 (> 60 min.)
- 0.0 (Non-Peak Service)
- Study Roads
- Roads
- Municipal Boundaries
- County Boundary
- MPO Planning Boundary

N
W E
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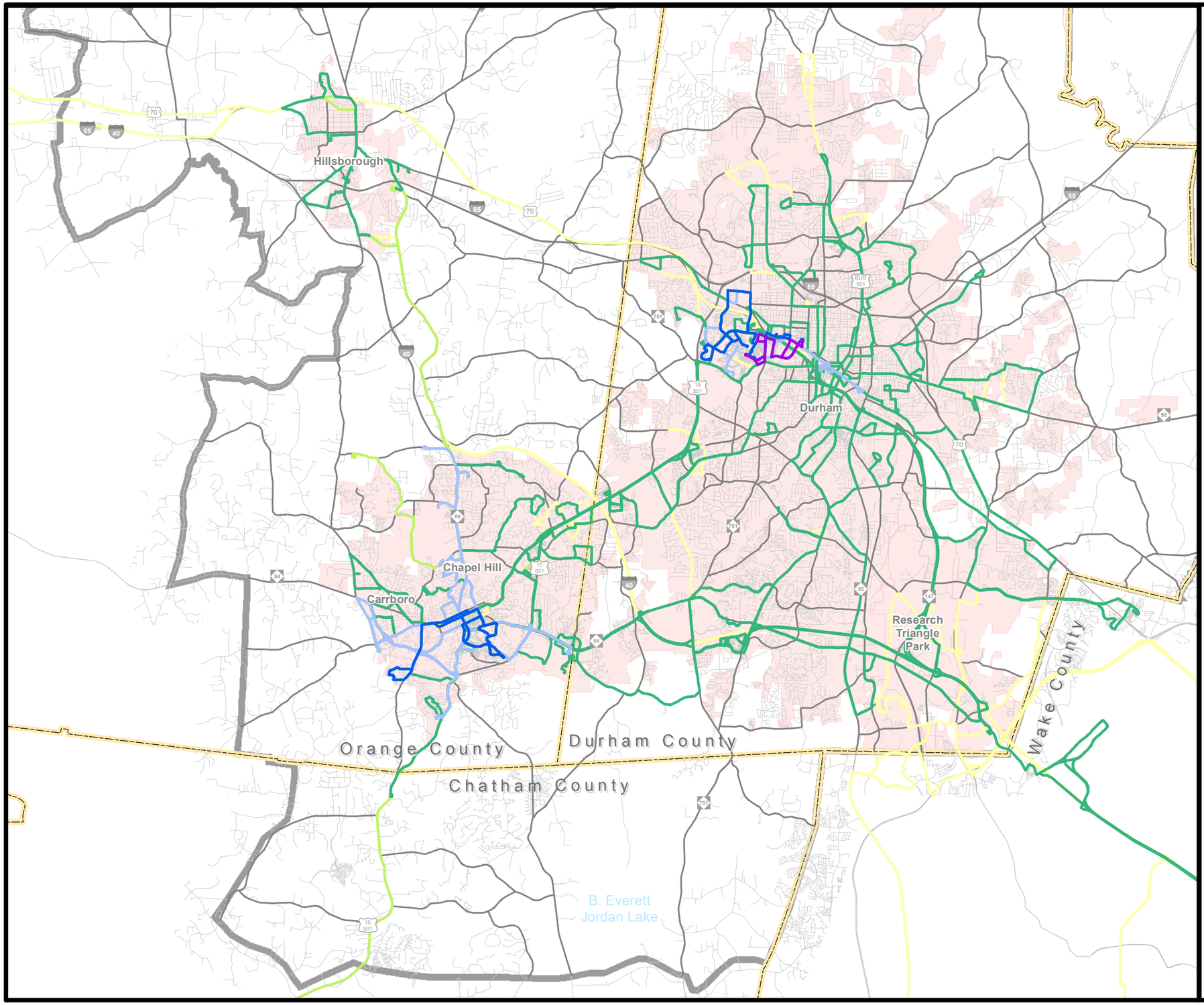
Base map date: September 18, 2009



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Public Transportation Map: Existing Bus Routes and Off-Peak Frequency

Durham-Chapel Hill-Carrboro MPO

Chatham, Durham and Orange Counties
North Carolina

Map date: December 19, 2014

Legend

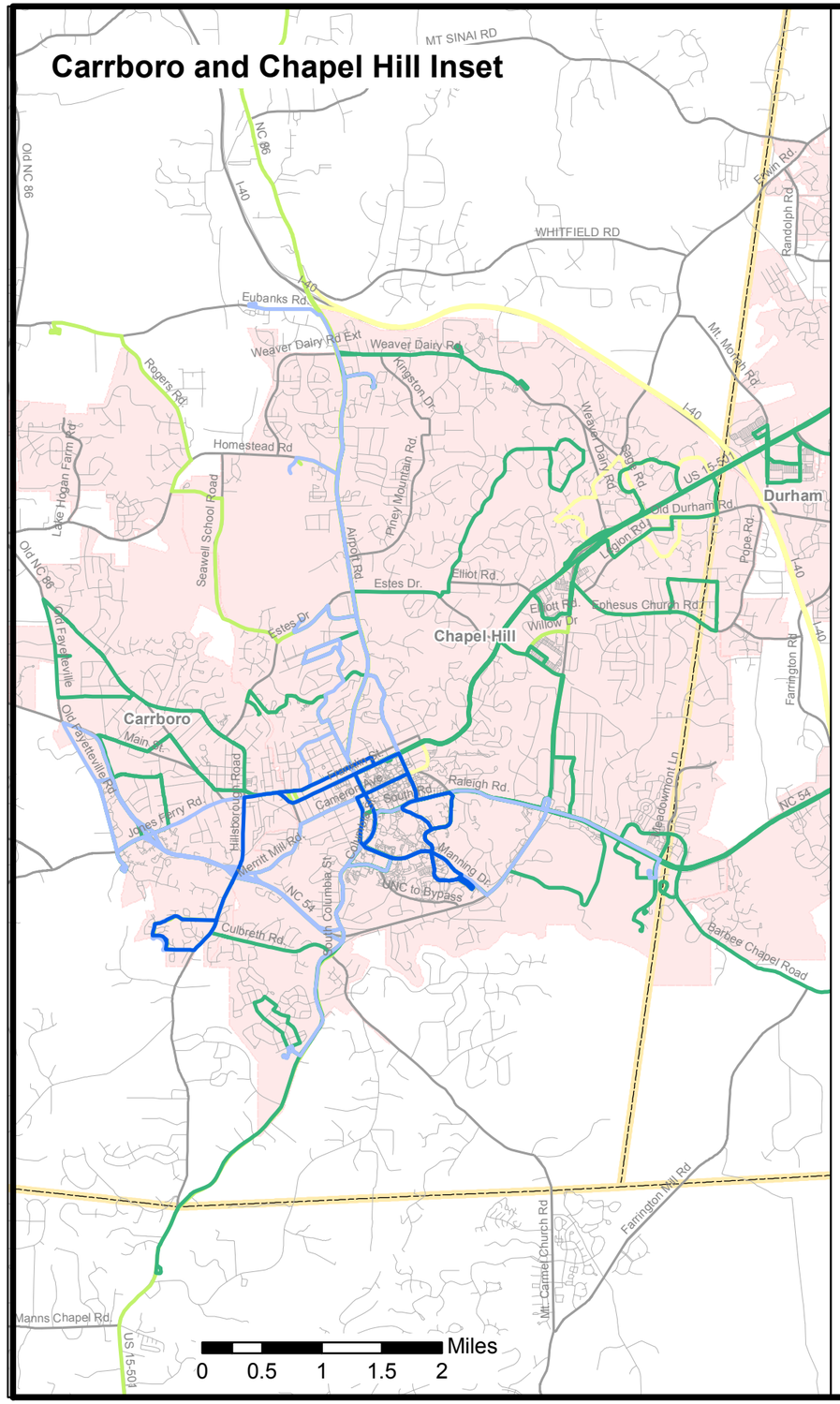
Off-Peak Frequency, Buses per hr. (Headway, min.)

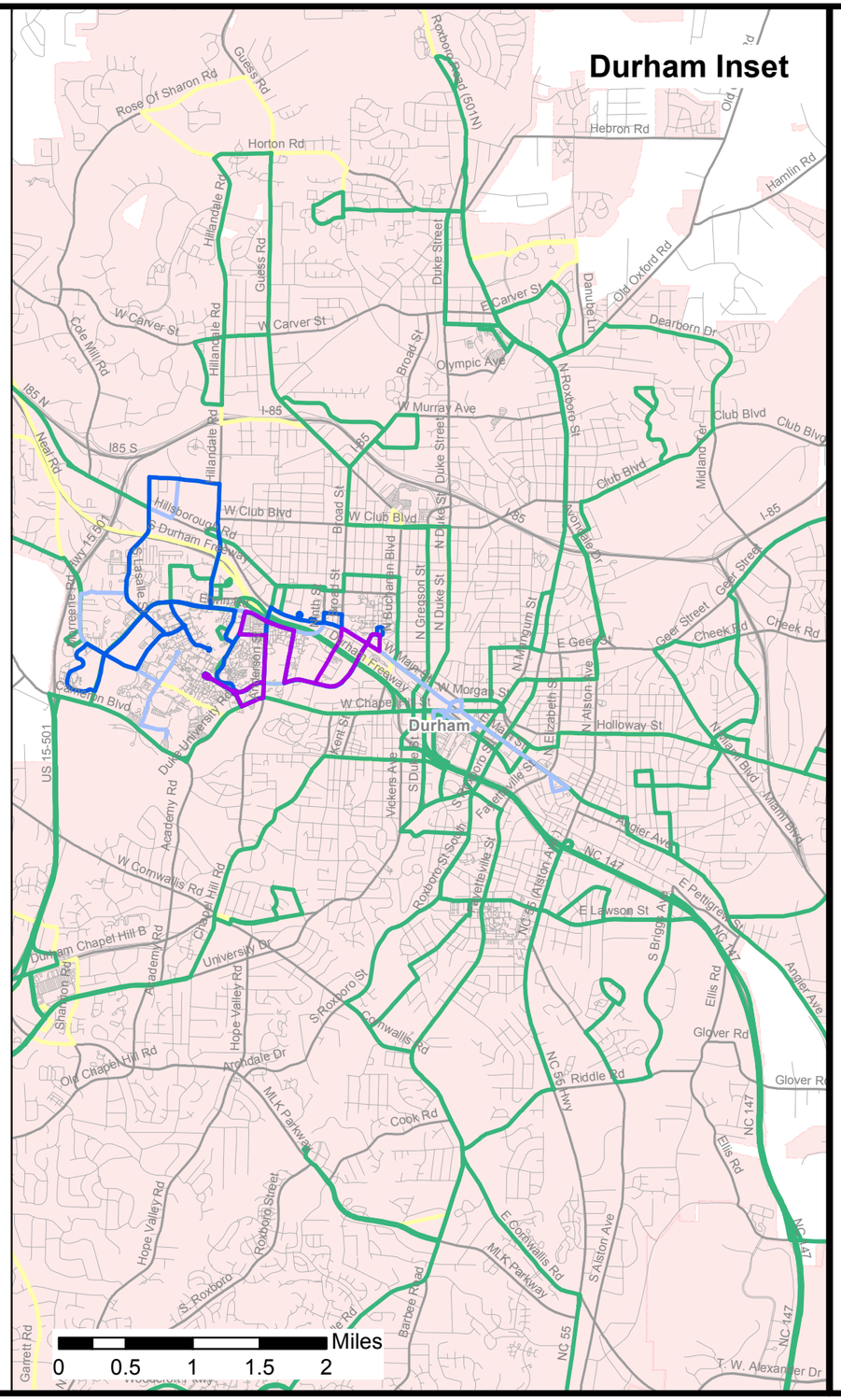
- 12.0 (5 min.)
- 6.0 - 11.9 (6 - 10 min.)
- 4.0 - 5.9 (11 - 15 min.)
- 2.0 - 3.9 (16 - 30 min.)
- 1.0 - 1.9 (31 - 60 min.)
- 0.1 - 0.9 (> 60 min.)
- 0.0 (Peak-Only Service)
- Study Roads
- Roads
- Municipal Boundaries
- County Boundary
- MPO Planning Boundary

Miles
0 1 2 3 4

N W E S

Base map date: September 18, 2009





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Public Transportation Map: Existing Bus Routes and Off-Peak Frequency
(Insets)

Durham-Chapel Hill-Carrboro MPO

Chatham, Durham and Orange Counties
North Carolina

Map date: December 19, 2014

Legend

Off-Peak Frequency, Buses per hr. (Headway, min.)

- 12.0 (5 min.)
- 6.0 - 11.9 (6 - 10 min.)
- 4.0 - 5.9 (11 - 15 min.)
- 2.0 - 3.9 (16 - 30 min.)
- 1.0 - 1.9 (31 - 60 min.)
- 0.1 - 0.9 (> 60 min.)
- 0.0 (Peak-Only Service)
- Study Roads
- Roads
- Municipal Boundaries
- County Boundary
- MPO Planning Boundary

N W E S

Base map date: September 18, 2009

Existing Bus Route Frequency within DCHC MPO

					Frequency (Buses/Hr.)		Frequency (Min./Bus)	
Agency	**Route**	**Route Segment**	**Service Type**	**Peak Period**	**Peak2**	**Off-Peak**	**Peak3**	**Off-Peak4**
OPT	H Circ	--	Weekday, Circulator	Off-Peak	0	1	0	60
OPT	420	--	Weekday, Midday	Off-Peak	0	0.333	0	180
Duke	C-1	--	Weekday, Saturday	Peak and Off-Peak	12	3	5	20
Duke	C-1X	--	Weekday, Express	Peak	6	0	10	0
Duke	C-1/Smith (CSW)	--	Weekday	Peak	3	0	20	0
Duke	C-2	--	Weekday, Weekend	Peak and Off-Peak	6	6	10	10
Duke	C-3	--	Weekday	Peak	1.500	0	40	0
Duke	CCX	--	Weekday, Weekend, Express	Off-Peak	0	4	0	15
Duke	H-2	--	Weekday	Peak and Off-Peak	5	1.667	12	36
Duke	H-5	--	Weekday	Peak and Off-Peak	4	4	15	15
Duke	H-6	--	Weekday	Peak and Off-Peak	5	5	12	12
Duke	LL	--	Weekday	Peak and Off-Peak	2	2	30	30
Duke	PR-1	--	Weekday	Peak and Off-Peak	2.069	2.500	29	24
CHT	A	--	Weekday	Peak and Off-Peak	2	2	30	30
CHT	CCX	--	Weekday, Express	Peak and Off-Peak	4	1.500	15	40
CHT	CL	--	Weekday	Peak	1	0	60	0
CHT	CM	--	Weekday	Peak and Off-Peak	1.200	1.200	50	50
CHT	CPX	--	Weekday, Express	Peak	4	0	15	0
CHT	CW	--	Weekday	Peak and Off-Peak	2	1	30	60
CHT	D	--	Weekday	Peak and Off-Peak	3	1.333	20	45
CHT	DX	--	Weekday, Express	Peak	1.333	0	45	0
CHT	F	--	Weekday	Peak and Off-Peak	1.429	1	42	60
CHT	FCX	--	Weekday, Express	Peak and Off-Peak	12	2	5	30
CHT	G	--	Weekday	Peak and Off-Peak	1.200	1.200	50	50
CHT	HS	--	Weekday	Peak and Off-Peak	1.200	0.500	50	120
CHT	HU (Express)	--	Weekday, Express	Peak and Off-Peak	3.333	1.500	18	40
CHT	J	--	Weekday	Peak and Off-Peak	4	3	15	20
CHT	JFX	--	Weekday, Express	Peak and Off-Peak	4	2	15	30
CHT	N	--	Weekday	Peak and Off-Peak	2	1	30	60
CHT	NS	--	Weekday	Peak and Off-Peak	6	3	10	20
CHT	NU	--	Weekday	Peak and Off-Peak	3	2.400	20	25
CHT	PX (part by Chatham Transit)	--	Weekday, Express	Peak	1.395	0.286	43	210
CHT	S	--	Weekday	Peak and Off-Peak	6	1.714	10	35
CHT	T	--	Weekday	Peak and Off-Peak	1.714	1.714	35	35
CHT	U	--	Weekday, Campus Shuttle	Peak and Off-Peak	4	4	15	15
CHT	RU	--	Weekday, Campus Shuttle	Peak and Off-Peak	6	4	10	15
CHT	V	--	Weekday	Peak and Off-Peak	1.538	1.333	39	45
CHT	CM (Saturday)	--	Saturday	Off-Peak	0	2	0	30
CHT	CW (Saturday)	--	Saturday	Off-Peak	0	1	0	60
CHT	D (Saturday) (DM)	--	Saturday	Off-Peak	0	0.923	0	65
CHT	FG (Saturday)	--	Saturday	Off-Peak	0	0.750	0	80
CHT	JN (Saturday)	--	Saturday	Off-Peak	0	0.800	0	75
CHT	NU (Weekend)	--	Weekend	Off-Peak	0	1.333	0	45
CHT	U (Weekend)	--	Weekend	Off-Peak	0	2.400	0	25
CHT	T (Saturday)	--	Saturday	Off-Peak	0	1	0	60
CHT	J (Safe Ride)	--	Thu-Sat, Safe Ride	Off-Peak	0	4	0	15
CHT	G (Safe Ride)	--	Thu-Sat, Safe Ride	Off-Peak	0	1	0	60
CHT	T (Safe Ride)	--	Thu-Sat, Safe Ride	Off-Peak	0	2	0	30
TT	CRX	--	Weekday, Express	Peak	2.400	0	25	0
TT	DRX	--	Weekday, Express	Peak	2	0	30	0
TT	ODX	--	Weekday, Express	Peak	1	0	60	0
TT	ODX (ext2015)	--	Weekday, Express	Peak	1	0	60	0
TT	100	--	Weekday, Weekend, Regional	Peak and Off-Peak	2	1	30	60
TT	105	--	Weekday, Regional	Peak	2	0	30	0

Existing Bus Route Frequency within DCHC MPO

					Frequency (Buses/Hr.)		Frequency (Min./Bus)	
Agency	**Route**	**Route Segment**	**Service Type**	**Peak Period**	**Peak2**	**Off-Peak**	**Peak3**	**Off-Peak4**
TT	201	--	Weekday, Regional	Peak	2	0	30	0
TT	301	--	Weekday, Regional	Peak	2	0	30	0
TT	311	--	Weekday, Regional	Peak	2	0	30	0
TT	400	--	Weekday, Weekend, Regional	Peak and Off-Peak	2	1	30	60
TT	405	--	Weekday, Regional	Peak	2	0	30	0
TT	420	--	Weekday, Regional	Peak	2	0	30	0
TT	700	--	Weekday, Weekend, Regional	Peak and Off-Peak	2	1	30	60
TT	800	--	Weekday, Weekend, Regional	Peak and Off-Peak	2	1	30	60
TT	805	--	Weekday, Regional	Peak and Off-Peak	2	1	30	60
TT	42	--	Weekday, Shuttle	Peak	2	0	30	0
TT	46	--	Weekday, Shuttle	Peak	2	0	30	0
TT	47	--	Weekday, Shuttle	Peak	2	0	30	0
TT	49	--	Weekday, Shuttle	Peak	2	0	30	0
DATA	1-1A-1B-1N	1A	Mon-Sat	Peak	1	0	60	0
DATA	1-1A-1B-1N	1B	Mon-Sat	Peak	1	0	60	0
DATA	1-1A-1B-1N	1N	Mon-Sat	Peak	2	0	30	0
DATA	1-1A-1B-1N	1A & 1B & 1N*	Mon-Sat	Peak	4*	0	15*	0
DATA	1-1A-1B-1N	1	Mon-Sat, Sunday	Off-Peak	0	1	0	60
DATA	2-2A-2B	2A	Mon-Sat	Peak	1	0	60	0
DATA	2-2A-2B	2B	Mon-Sat, Sunday	Peak and Off-Peak	1	1	60	60
DATA	2-2A-2B	2A & 2B*	Mon-Sat	Peak	2*	0	30*	0
DATA	2-2A-2B	2	Mon-Sat, Sunday	Off-Peak	0	1	0	60
DATA	4	--	Mon-Sat, Sunday	Peak and Off-Peak	2	1	30	60
DATA	5-5K-14	5	Mon-Sat	Peak and Off-Peak	2	1	30	60
DATA	5-5K-14	5K	Mon-Sat	Peak	2	0	30	0
DATA	5-5K-14	5 & 5K*	Mon-Sat	Peak	4*	0	15*	0
DATA	5-5K-14	14	Mon-Sat, Sunday	Off-Peak	0	1	0	60
DATA	6-6B	6	Mon-Sat, Sunday	Peak and Off-Peak	1	1	60	60
DATA	6-6B	6B	Mon-Sat	Peak	1	0	60	0
DATA	6-6B	6 & 6B*	Mon-Sat	Peak	2*	0	30*	0
DATA	7	--	Mon-Sat, Sunday	Peak and Off-Peak	2	1	30	60
DATA	8	--	Mon-Sat, Sunday	Peak and Off-Peak	2	1	30	60
DATA	9-9A-9B	9A	Mon-Sat	Peak	1	0	60	0
DATA	9-9A-9B	9B	Mon-Sat	Peak	1	0	60	0
DATA	9-9A-9B	9A & 9B*	Mon-Sat	Peak	2*	0	30*	0
DATA	9-9A-9B	9	Mon-Sat, Sunday	Off-Peak	0	1	0	60
DATA	10-10A-10B-10L	10A	Mon-Sat	Peak	2	0	30	0
DATA	10-10A-10B-10L	10B	Mon-Sat	Peak	2	0	30	0
DATA	10-10A-10B-10L	10A & 10B*	Mon-Sat	Peak	4*	0	15*	0
DATA	10-10A-10B-10L	10	Mon-Sat, Sunday	Off-Peak	0	1	0	60
DATA	10-10A-10B-10L	10L	Weekday (school days only)	Peak	1.622	0	37	0
DATA	11	--	Mon-Sat, Sunday	Peak and Off-Peak	2	1	30	60
DATA	12-14	12	Mon-Sat, Sunday	Peak and Off-Peak	2	1	30	60
DATA	12-14	14	Mon-Sat	Peak	1	0	60	0
DATA	15	--	Mon-Sat, Sunday	Peak and Off-Peak	1	1	60	60
DATA	16-16A-16B-3	16A	Mon-Sat	Peak	1	0	60	0
DATA	16-16A-16B-3	3	Mon-Sat, Sunday	Peak and Off-Peak	2	1	30	60
DATA	16-16A-16B-3	16B	Mon-Sat	Peak	1	0	60	0
DATA	16-16A-16B-3	16A & 16B & 3*	Mon-Sat	Peak	4*	0	15*	0
DATA	16-16A-16B-3	16	Mon-Sat, Sunday	Off-Peak	0	1	0	60
DATA	BCC	--	Mon-Sat	Peak and Off-Peak	3	2.400	20	25
DATA	RSX	--	Weekday, Weekend, Express	Peak and Off-Peak	2	1	30	60

*Some Route Segments align to increase frequency for a few stops along that Route during the Peak hours.

Peak-Hour Periods per Agency

Agency	Route	AM Peak Hours	Off-Peak Hours	PM Peak Hours	Days
OPT	H Circ	n/a	Off Peak ONLY	n/a	Mon-Fri
OPT	420 Midday	n/a	Off Peak ONLY	n/a	Mon-Fri
Duke	C Routes	8am-6pm	n/a	8am-6pm	Mon-Fri
Duke	C Routes	n/a	Off Peak ONLY	n/a	Sat-Sun
Duke	H Routes	6am-9am	9am-3pm	3pm-6pm	Mon-Fri
Duke	LL Route	8:30am-10:30am	10:30am-4pm	4pm-6pm	Mon-Fri
Duke	PR1 Route	7:30am-10:30am	10:30am-3:30pm	3:30pm-6:30pm	Mon-Fri
CHT	all	7am-10am	10am-3pm	3pm-7pm	Mon-Fri
CHT	all	n/a	Off Peak ONLY	n/a	Sat-Sun
DATA	all	5am-6:30pm	6:31pm-midnight	5am-6:30pm	Mon-Sat
DATA	all	n/a	Off Peak ONLY	n/a	Sun
TT	all	5am-9am	9:01am-3:29pm	3:30pm-6:29pm	Mon-Fri
TT	all	n/a	Off Peak ONLY	n/a	Sat-Sun

Rhode Island Public Transit Authority Example:

TABLE 1 | POPULATION AND EMPLOYMENT DATA RELATED TO TRANSIT DEMAND

Transit Mode/ Service Frequencies	Population/ Acre	Jobs/ Acre
Flex Bus	0.5	
Community Circulator	2	
Local Bus		
60 minutes	8-16	4-8
30 minutes	16-31	8-16
15 minutes	31-47	16-24
10 minutes	47-92	24-48
<=5 minutes	>92	>48
Bus Rapid Transit	26-52	>13
Light Rail Transit	31-78	>15

Frequency Conversion

hrs/bus	minutes/ bus	buses/hr
0.083	5	12.000
0.167	10	6.000
0.200	12	5.000
0.250	15	4.000
0.300	18	3.333
0.333	20	3.000
0.400	24	2.500
0.417	25	2.400
0.483	29	2.069
0.500	30	2.000
0.583	35	1.714
0.600	36	1.667
0.617	37	1.622
0.650	39	1.538
0.667	40	1.500
0.700	42	1.429
0.717	43	1.395
0.750	45	1.333
0.833	50	1.200
0.917	55	1.091
1.000	60	1.000
1.083	65	0.923
1.250	75	0.800
1.333	80	0.750
1.500	90	0.667
2.000	120	0.500
2.500	150	0.400
3.000	180	0.333
3.500	210	0.286

NOTES:
When the route frequency is entirely irregular, the average within the peak period is used.
When the route frequency is inconsistent, the most prevalent or consistent frequency within the peak period is used.
If the service is primarily in the Peak periods with only an hour in the Off-Peak, the route is considered "Peak ONLY."
If the service is primarily in the Off-Peak periods with only an hour in the Peak periods, the route is considered "Off-Peak ONLY."

7 – Transit

Demand (Density)

Method

The transit demand maps show the total population and jobs per acre thresholds by Traffic Analysis Zone (TAZ) in the year 2040. In the first map, CTP (Bus Transit Demand) the different thresholds suggest the level of fixed-route bus service for a TAZ's density, which is calculated by adding the total population and the doubling of the employment. Thus, a density from one to eight would use some type of circulator or demand-responsive transit, while a fixed-route service with 30-minute headways is suggested for areas with a density from 31 to 47.

In the second map, CTP (Fixed-Guideway Transit Demand), the different thresholds suggests bus rapid transit or light rail transit service based on the TAZ's density, using the same methodology as described above to calculate the density.

The population and employment data provide a rough guide in estimating trip generation (residential location) and trip attraction (job location). However, the reviewer should keep in mind that it does not show high volume travel corridors such as NC 54 and US 15-501 between Durham and Chapel Hill, and I-40, NC 147 and US 70 between Durham, the Research Triangle Park (RTP) and Raleigh.

The maps also show areas of restricted parking in which automobile travelers have to either pay for parking or parking supply is limited in relationship to parking demand. You can assume that transit demand is likely to be higher at these areas given that driving an automobile has increased costs (i.e., parking) or is simply not feasible.

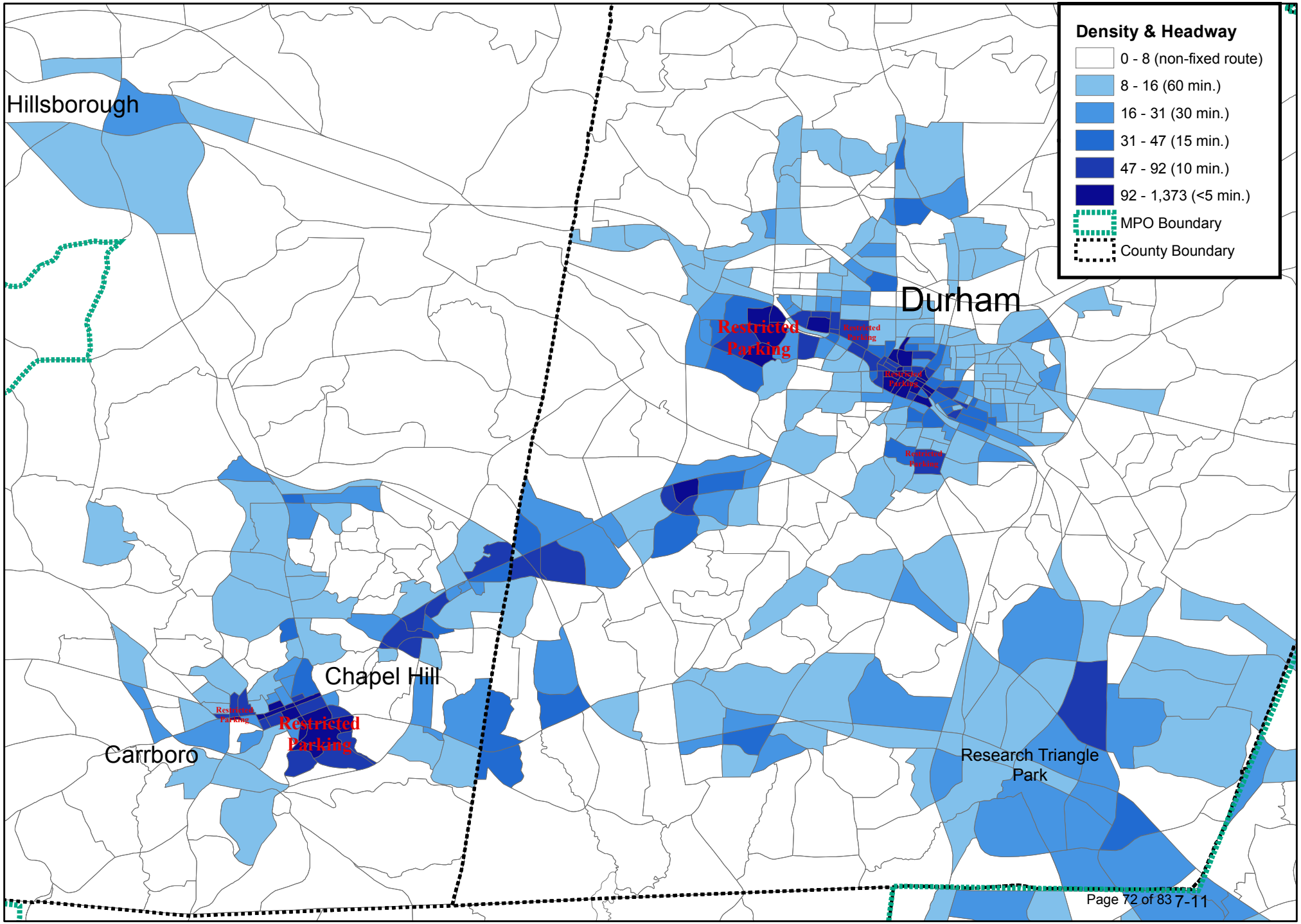
This methodology and the suggested headways are from a Rhode Island Public Transit Authority study. We have used the Rhode Island study because of the simplicity of the methodology and not because these thresholds are some type of commonly accepted transit metrics. We used density because it is a common factor driving transit demand. As an example, a recent transit study connected with Wake County, NC (by HDR Engineering) showed that density was the most important single factor in transit demand, at 37%, followed by zero vehicle housing units at 22%.

CTP (BusTransit Demand)

Population and Employment Density per Acre -- and -- Suggested Transit Service

Date: 12/3/2014

Based on 2040 projected population and employment.

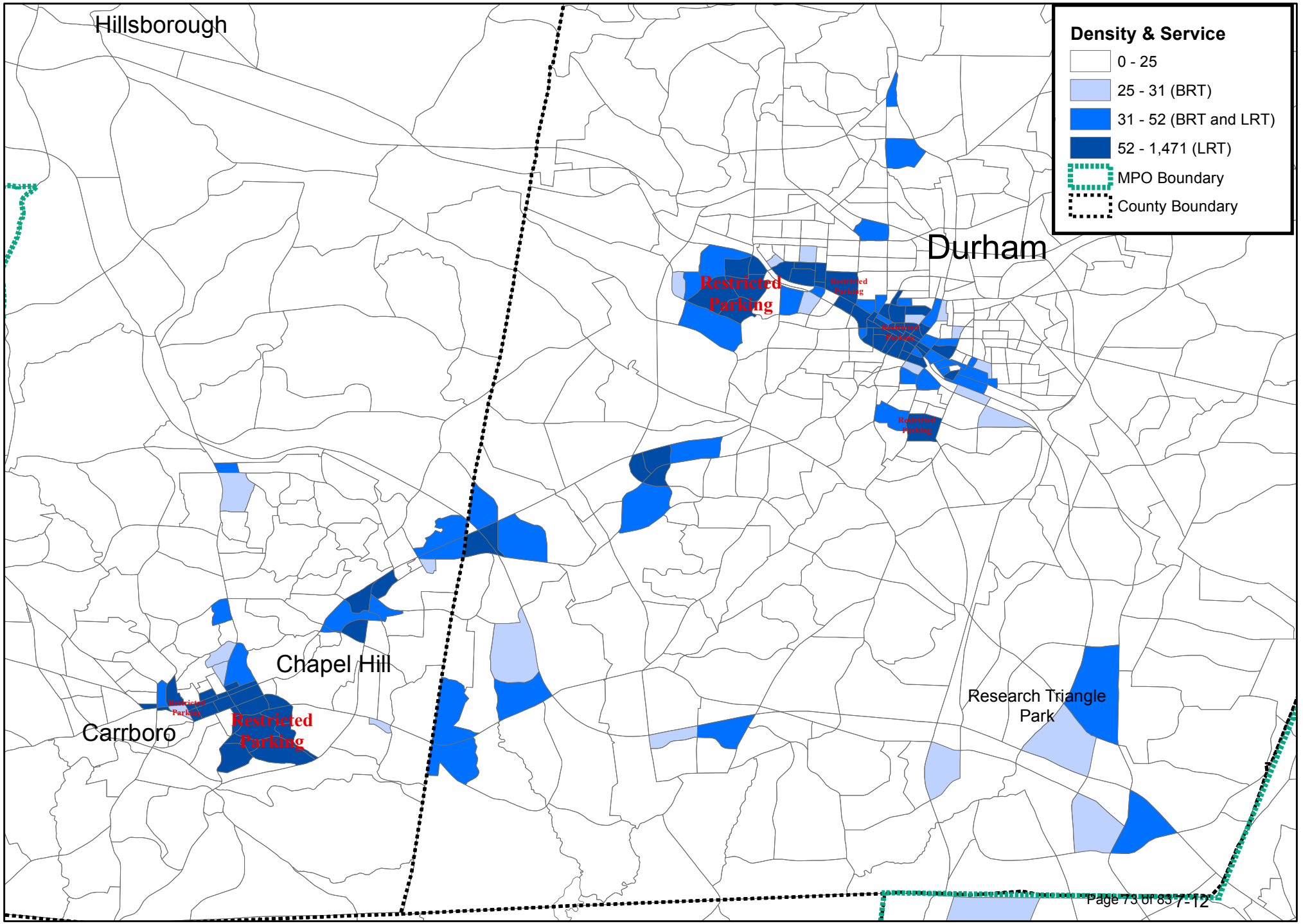


CTP (Fixed-Guideway Transit Demand)

Based on 2040 projected population and employment.

Date: 12/3/2014

Pop. and Emp. Density per Acre - and - Suggested Fixed-Guideway Service



7 – Transit

Demand (Income)

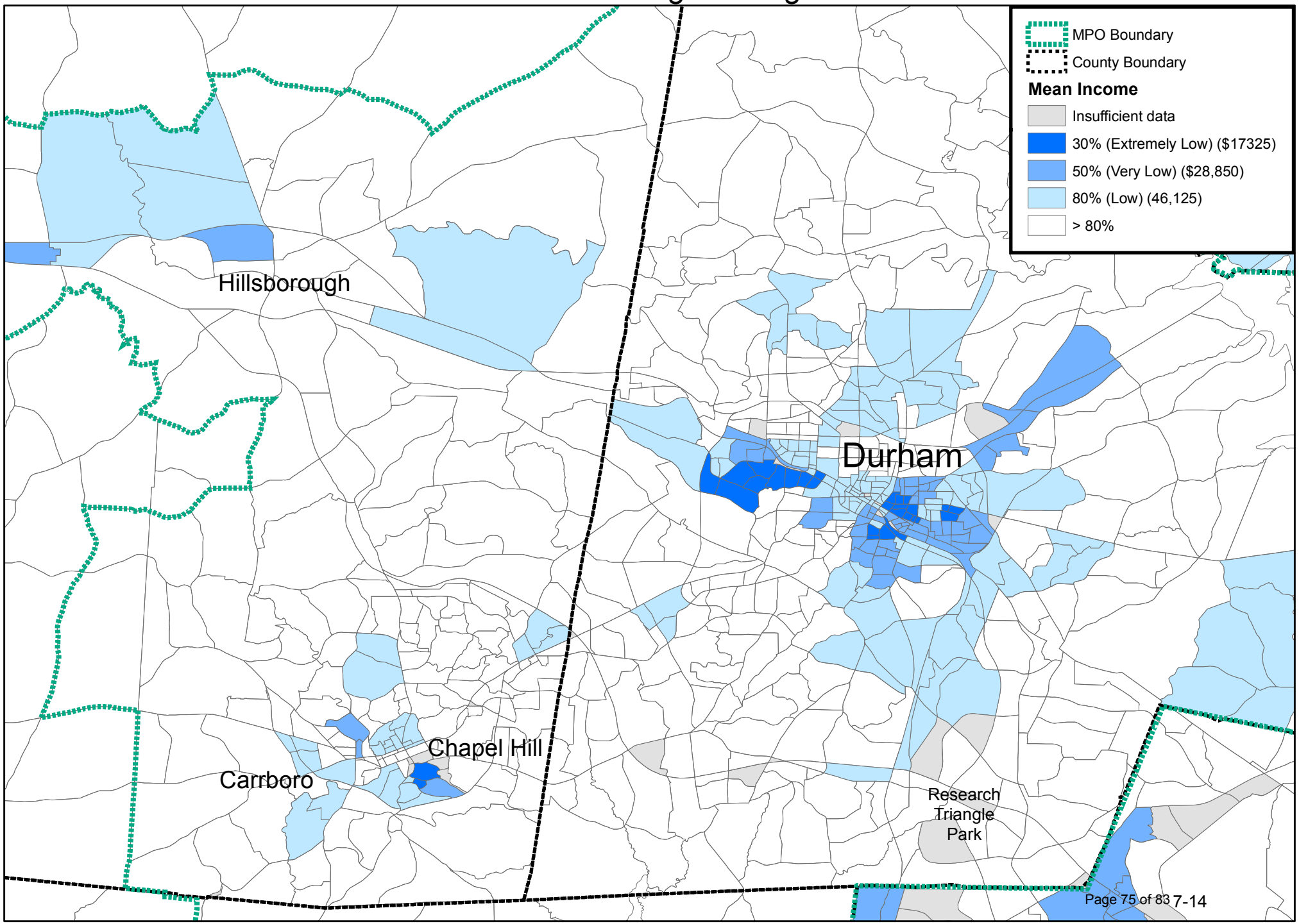
Method

The transit demand map shows low-income TAZs. It compares the TAZ's mean income (based on the Census Bureau's American Community Survey – ACS) and different thresholds for the median income (based on Housing and Urban Development income limits for a four-person household in the Durham-Chapel Hill Metropolitan Area). As the percentage of the mean income declines, it is assumed that transit demand will increase given lower levels of vehicle ownership.

CTP Transit

TAZ Mean Income as Percentage of Regional Median Income

Date: 12/4/2014



8 – Rail and Truck

Purpose

The tables and maps in this section do not present rail and truck route deficiencies. However, the level and type of activity on the rail lines and the current designation of highway truck routes will be useful information in the development of the CTP and therefore is included in this deficiency analysis.

Content

- The level and type of rail line activity is on page 8-2;
- A data table for active and inactive rail lines is on page 8-3; and,
- A map of the rail lines and truck routes is on page 8-4.

The following NCDOT Web page has detailed information on the various truck route designations and restrictions: http://bit.ly/1rSB7rk

The following ArcGIS site has an interactive map of the North Carolina truck route designations and state maintained roads: http://bit.ly/1pP67XY

Comprehensive Transportation Plan Rail Data

CTP Name: Durham-Chapel Hill-Carrboro MPO **Date: 8/20/2014**

County: Durham, Orange, Chatham **NCDOT Division #: 5 & 7**

Rail Div. Contact Name: Cheryl Hannah Phone: 919-707-4706 Email: cwhannah@ncdot.gov

Name of Railroad(s) operator located within study area, e.g.: (CSX, NS, NCRR, Shortlines): See Attached

Current number of freight trains operation within study area: 5-6 per day

Current number of passenger trains operation within study area: 6 per day

Is area part of the Federally-designated Southeastern High Speed Rail Corridor?
Yes ☒ No ☐

Is area part of a future intra-state passenger rail corridor, e.g.: (Salisbury-Asheville, Charlotte-Wilmington, Raleigh/Fayetteville/Wilmington or Raleigh/Goldsboro/Wilmington)? Yes ☐ No ☒

Is area part of a future commuter rail corridor, e.g.: (TT, Charlotte, Winston-Salem/Greensboro)? Triangle Transit Yes ☒ No ☐

Are there any abandoned/out-of-service rail corridors? Duke Beltline Yes ☒ No ☐

Existing or proposed Rails-to-Trails projects: American Tobacco Trail
Existing Trail ☒ Proposed Trail ☐

Railroad Right-of-Way (ROW) width in feet: approx. 200’ on NCRR corridor, others Unk

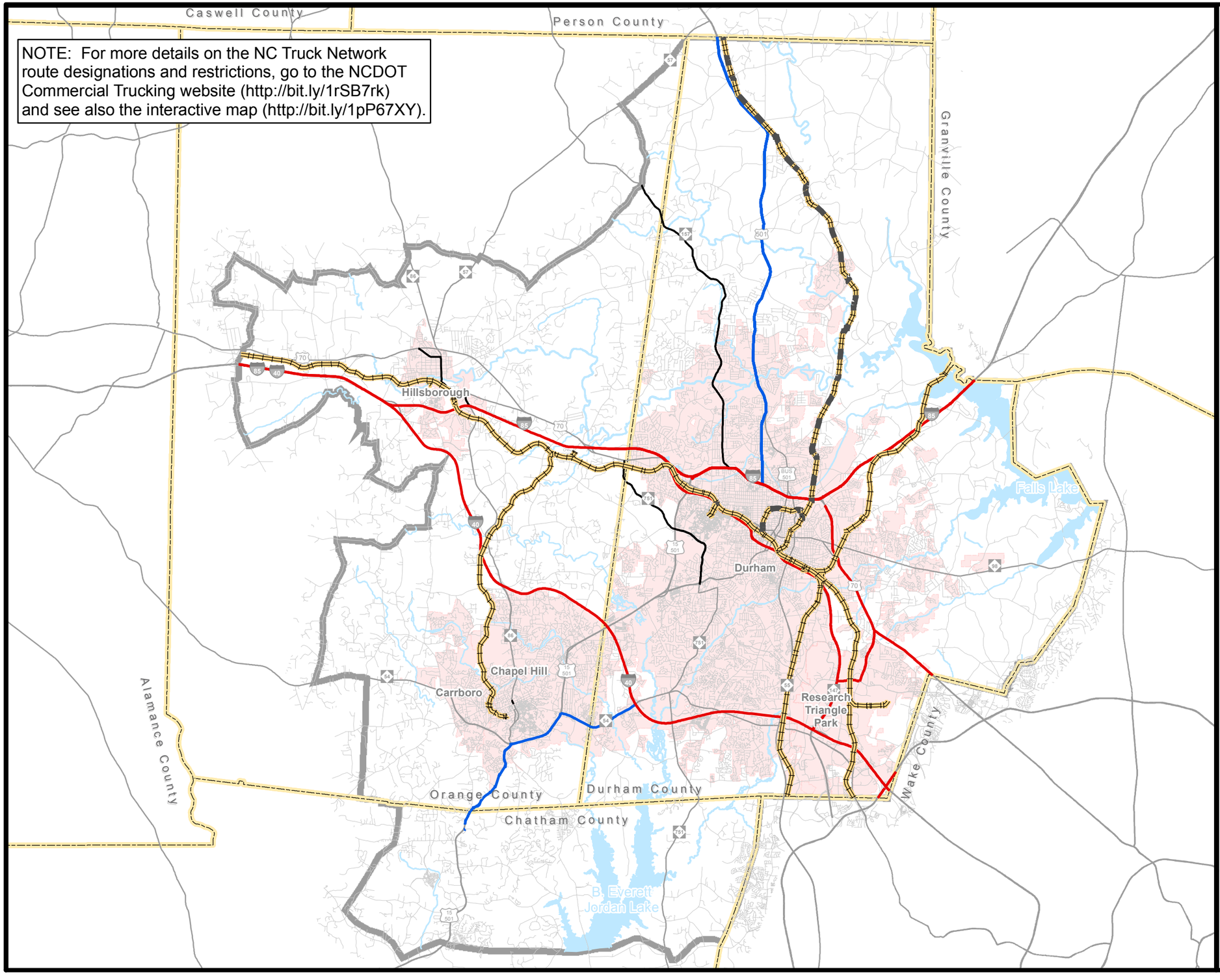
NC GIS Rail maps on GO!NC portal
https://ncdot.maps.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=50b9f6e65f1b4ce09ef5c84a6f20a291

Active/Inactive Rail Corridor Data

DRAFT

Railroad Line/Corridor Durham/Chapel Hill MPO	Active/Inactive	Freight/Passenger	Total Length	From-To	R/W Width	Railroad Class	Timetable Speed	Service Frequency through Study Area	Additional Notes
NS-operator (NCRR H-line)	Active	Freight & Passenger	33.5	Wake/Durham line to Orange/Alamance line MP H65.5-H32	approx 200'	Class 1	40-55 mph	5-6 trains per day	STRACNET corridor
NS	Active	Freight	2.5	Oxford-East Durham MP D53.15-D86.4	Unknown	Class 1	25-35 mph		Branch line
NS-operator State University Railroad (SUR)	Active	Freight	10.2	Glenn to Carrboro MP H46-J10	Unknown	short line	10 mph		Branch line
NS (Duke Beltline)	Inactive		2	Blackwell St to Avondale Dr in downtown Durham	Unknown		N/A	none	Inactive
NS (Timberlake corridor)	Inactive		23	downtown Durham paralleling NC 501 to Durham/Person line	Unknown		N/A	none	Inactive
CSX (Joyland Lead)	Active	Freight	4	W Chapel Hill St to Joyland MP SB151.0-SB154.9	Unknown	Class 1	10 mph		
CSX (D&S Spur)	Active	Freight	8	Genlee to East Durham NS Crossing MP SDS10.7-SDS2.3	Unknown	Class 1	10 mph		

NOTE: For more details on the NC Truck Network route designations and restrictions, go to the NCDOT Commercial Trucking website (http://bit.ly/1rSB7rk) and see also the interactive map (http://bit.ly/1pP67XY).



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Rail Map and Truck Routes

Durham-Chapel Hill-Carrboro MPO

Chatham, Durham and Orange Counties
North Carolina

Map date: December 5, 2014

Legend

Rail Corridor

- Active
- Inactive

NC Truck Network

- Non-Designated Primary Highways, 53-foot trailers only
- Truck Route Reasonable Access, for twins and/or 53-foot trailers with NCDOT approval letter
- Truck Route Unrestricted, designated for STAA dimensioned vehicles
- Truck Route Restricted, see NC Truck Restrictions table
- Roads
- County Boundary
- Rivers and Streams
- Water Bodies
- Municipal Boundary
- MPO Planning Boundary

Miles
0 1 2 3 4

N W E S

Base map date: September 18, 2009

9 – Bicycle and Pedestrian

Purpose

The bicycle and pedestrian maps show the general demand for non-motorized trips and potentially hazardous travel areas for those trips. The local governments in the MPO area have already carried out in-depth planning processes and produced detailed plans for bicycle and pedestrian facilities, and thus this high level CTP deficiency review cannot replace those plans. The CTP deficiency analysis, however, can provide a general check on the coverage of those plans.

Methodology

The first map shows the bicycle and pedestrian trips generated per square mile base on the projected 2040 SE Data (i.e., population and employment) and the Triangle Regional Model (TRM). It is assumed that the great majority of those trips will originate and end in the same TAZ or an adjacent TAZ. Thus, the greatest demand for bicycle and pedestrian facilities will be in the darkest shaded TAZs, i.e. those TAZs with the highest non-motorized trip generation.

The second map and table identify eight intersections in the MPO area that potentially meet the safety warrant for bicycle and pedestrian travel. The warrant requires a minimum of five bicycle or pedestrian crashes reported in the last ten years and a minimum of 50% of all those crashes mush have occurred in the last five years.

The crash data is from the NCDOT Highway Safety Improvement Program (HSIP). The HSIP Web page on the following link provides more detailed information and maps, and descriptions of warrants and methodology: http://bit.ly/1tN0DbM

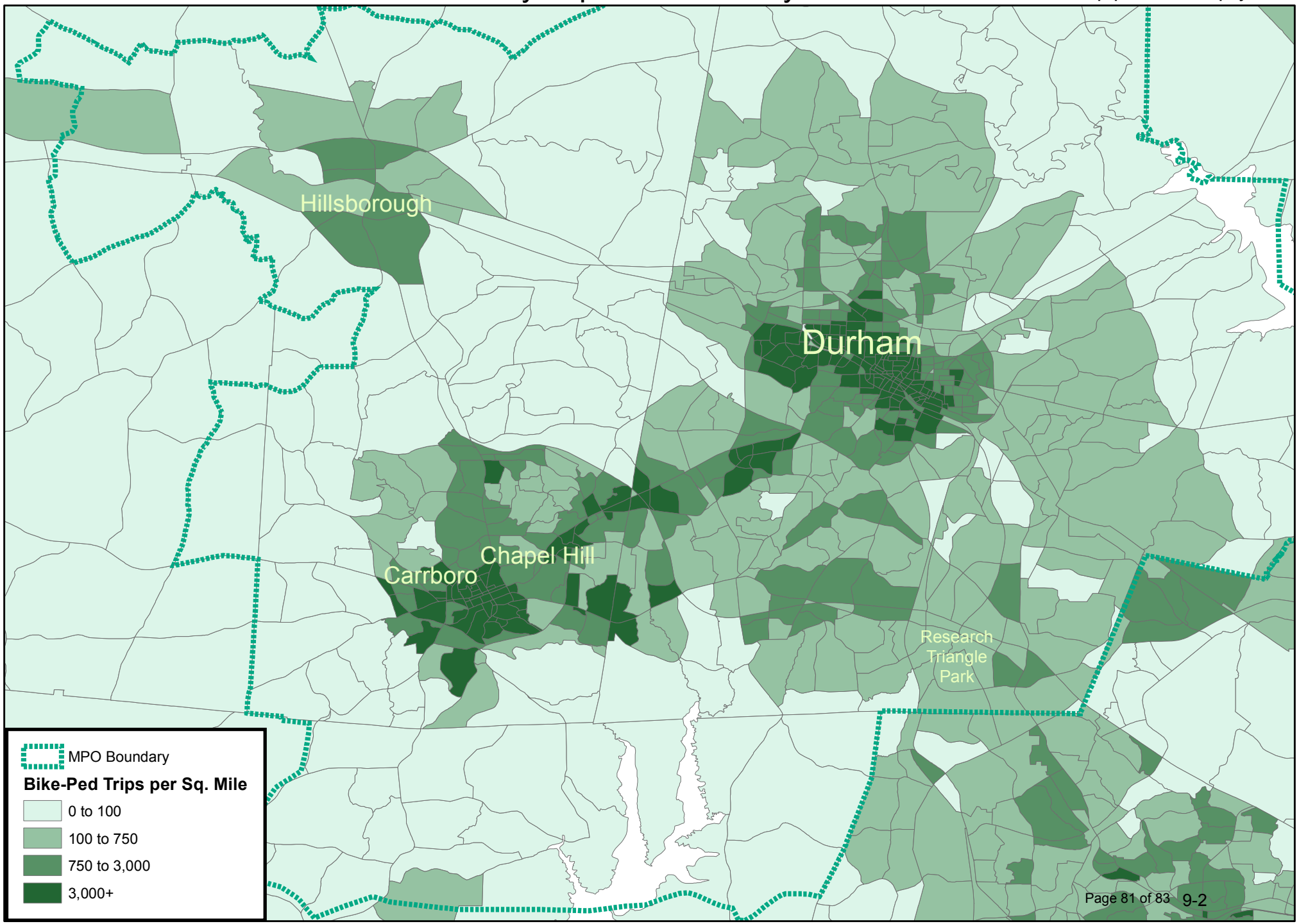
Content

- The bicycle and pedestrian trip generation map is on page 9-2;
- The bicycle and pedestrian crash data map and table are on pages 9-3 and 9-4.

CTP Bicycle and Pedestrian Daily Trip Generation by TAZ

Date: 12/3/2014

Based on projected 2040 population and employment.

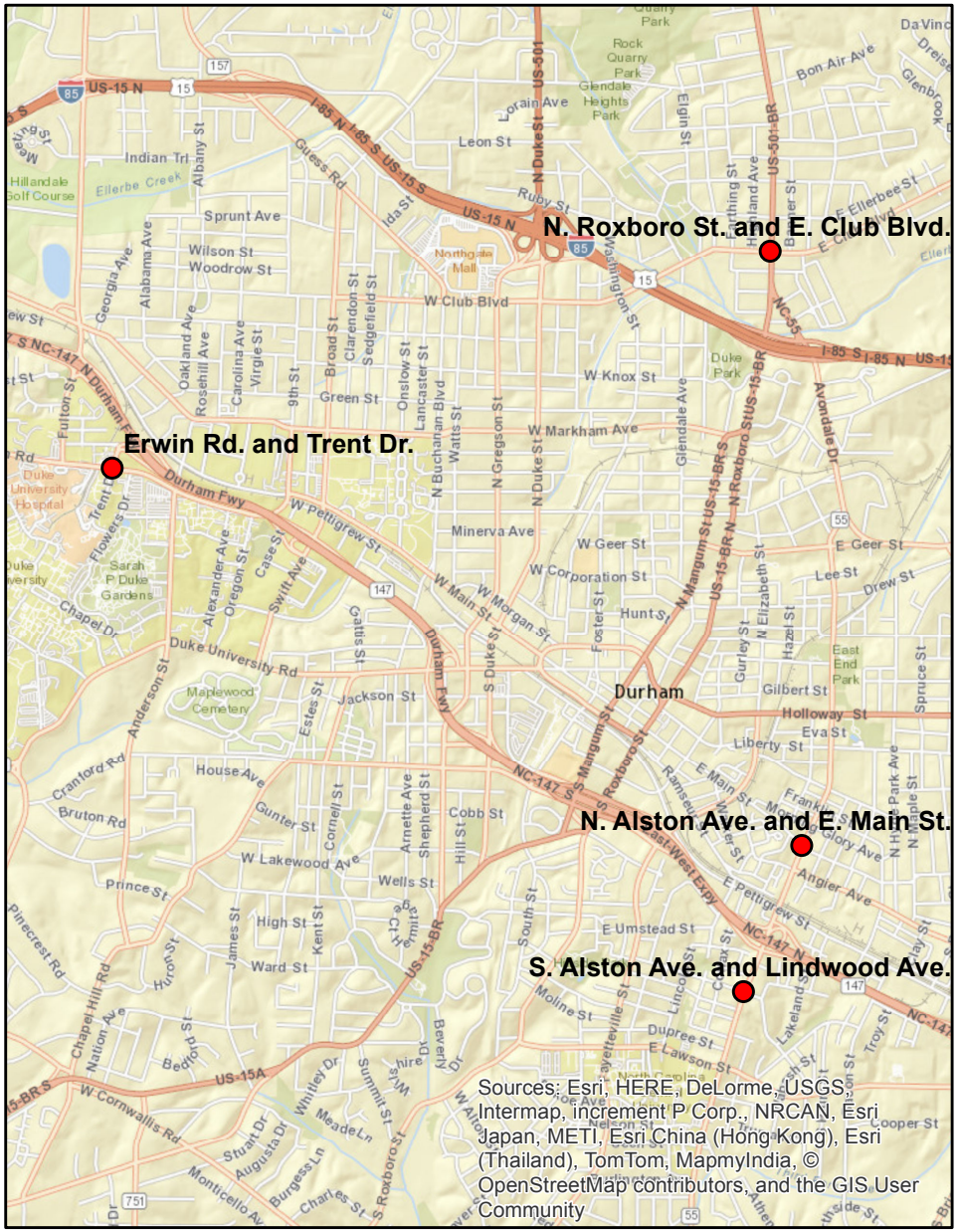


CTP -- Bicycle and Pedestrian Potentially Hazardous Intersections

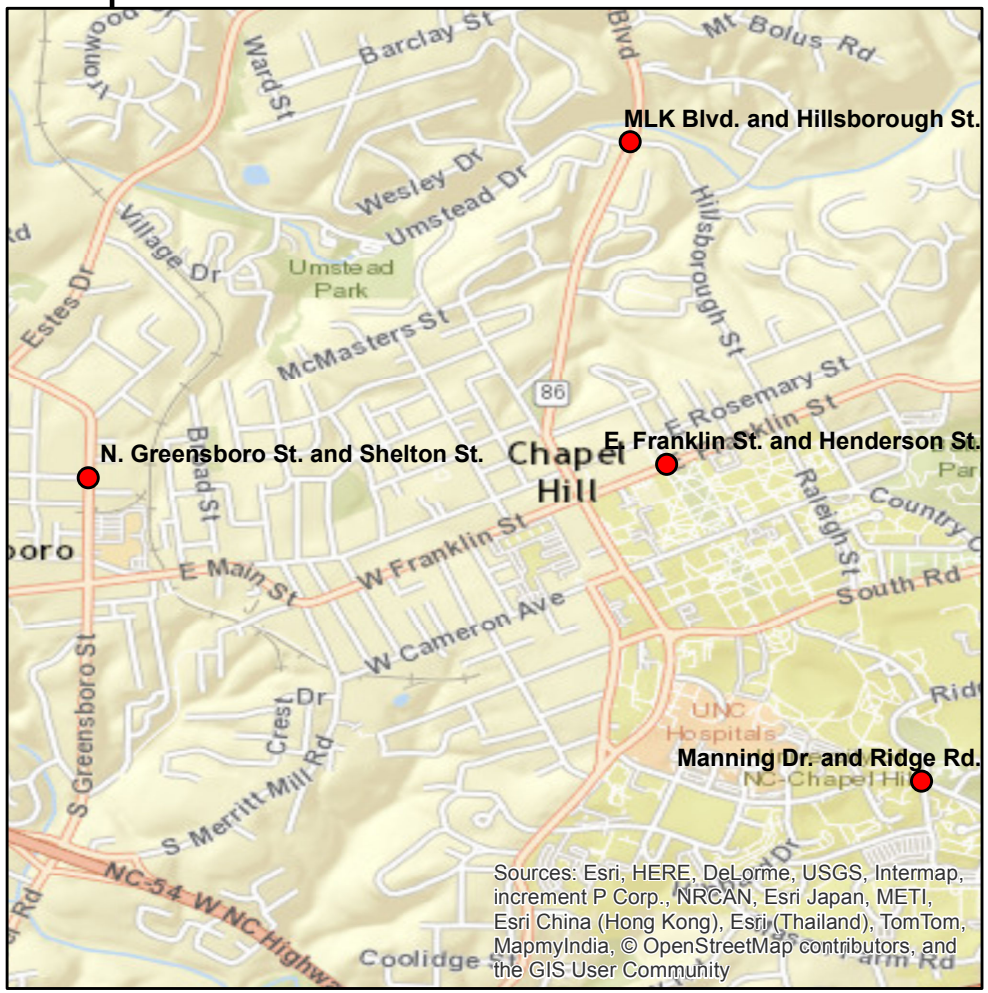
Date: 12/3/2014

Pedestrian/Bicycle Crash Intersection

Durham



Chapel Hill - Carrboro



These are crash intersections that potentially exceed one safety warrant.

Data is for five a five-year period, 7/1/09 -6/30/14.

Bicycle and Pedestrian Safety

Potentially Hazardous Crash Intersections

City Name	On Road	From Road	Toward Road	Severity	Date/Time
1--					
DURHAM	NC 55	LINWOOD	MASSEY	A	9-Sep-12
DURHAM	ALSTON	LINWOOD	MINT	B	10-Jan-12
DURHAM	ALSTON	LINWOOD	MINT	C	8-Nov-10
DURHAM	ALSTON	LINWOOD	NC 147	A	30-Mar-13
DURHAM	ALSTON	LINWOOD	*	B	28-Apr-14
2--					
DURHAM	ERWIN RD	TRENT DR	*	C	12-Aug-11
DURHAM	TRENT	IRWIN	FLOWER	C	30-Jul-10
DURHAM	TRENT	IRWIN	FLOWER	B	18-Nov-11
DURHAM	TRENT	IRWIN	EMERGENCY	C	20-Feb-12
DURHAM	TRENT	IRWIN	FULTON	A	22-Mar-12
3--					
DURHAM	ALSTON AVE	MAIN	*	B	13-Aug-09
DURHAM	ALSTON AVE	MAIN	STOKES	C	11-Aug-10
DURHAM	ALSTON AVE	MAIN	MORNING GLORY	C	13-Apr-11
DURHAM	ALSTON AVE	MAIN	*	B	3-Oct-12
DURHAM	ALSTON AVE	MAIN	LIBERTY	C	1-Mar-13
DURHAM	MAIN	ALSTON	*	B	11-Dec-09
4--					
DURHAM	CLUB	ROXBORO	BANNER	C	23-Sep-11
DURHAM	CLUB	ROXBORO	FARTHING	B	8-Nov-11
DURHAM	ROXBORO	ELLERBE	CLUB	B	11-Apr-11
5--					
CHAPEL HILL	MARTIN LUTHER KING	HILLSBORO	*	C	18-May-12
CHAPEL HILL	MARTIN LUTHER KING	HILLSBORO	*	B	5-Nov-12
CHAPEL HILL	MARTIN LUTHER KING	HILLSBORO	LONGVIEW	C	12-Nov-13
6--					
CHAPEL HILL	FRANKLIN	HENDERSON	PICARD	C	15-Nov-12
CHAPEL HILL	FRANKLIN	HENDERSON	RALEIGH	C	18-Oct-10
CHAPEL HILL	FRANKLIN	PICARD	HENDERSON	B	17-Oct-10
7--					
CARRBORO	GREENSBORO	SHELTON	PLEASANT	C	20-May-11
CARRBORO	SHELTON	GREENSBORO	OAK	B	28-Feb-12
8--					
CHAPEL HILL	MANNING	PAUL HARDIN	*	B	29-Jan-12
CHAPEL HILL	MANNING	PAUL HARDIN	RIDGE	B	7-Sep-11
CHAPEL HILL	MANNING	PAUL HARDIN	RIDGE	B	11-Apr-12

* Data not available.

Note: Any ranking of locations that might occur would be for analysis purposes ONLY.
It would not be a "Top Ten Most Dangerous…" list.

Note: Franklin Street is missing two crash entries; Greensboro Rd is missing one crash entry.