



AGENDA
Orange Unified Transportation Board
September 18, 2013
7:00 p.m.

You can bring your laptops/tablets if you would like to use them.

Conference Room 004 (Lower Floor) Orange County West Campus
131 West Margaret Lane, Hillsborough

<u>Time</u>	<u>Item</u>	<u>Title</u>
7:00	1.	Call to Order and Roll Call
7:05	2.	Approval of Minutes Minutes from August 21, 2013
7:08	3.	Consideration of Additions to the Agenda Regular Agenda
7:10	4.	Discussion with Dale McKeel, Bicycle & Pedestrian Coordinator, Department of Transportation, City of Durham/DCHC MPO regarding: <ul style="list-style-type: none"> i. Regional bicycle routes, and MPO designation of St. Mary's Road as a regional bicycle route; and ii. Prioritization and funding of bicycle and pedestrian projects under the Strategic Mobility Formula. <p>OUTBoard Action: To receive the information from Dale McKeel and the Orange County Planning staff and provide feedback.</p>
7:45	5.	State, RPO and MPO Project Prioritization <ul style="list-style-type: none"> i. Consider and recommend new projects in the Triangle Area Rural Planning Organization (TARPO) planning area boundary for the TARPO regional priority list and 2016-2022 Statewide Transportation Improvement Program (STIP); and ii. Consider and recommend new projects in the Durham-Chapel Hill-Carrboro Metropolitan Organization (DCHC MPO) planning area boundary for the 2016-2022 Transportation Improvement Program (TIP) and the STIP. <p>OUTBoard Action: To provide a recommendation for new projects in the TARPO and DCHC MPO planning areas for the 2016-2022 STIP.</p>
8:30	6.	Draft Eno Economic Development Area Access Management Plan. The draft Access Management Plan is available on the Orange County Planning Department website at: http://orangecountync.gov/planning/SpecialProjects.asp . OUTBoard Action: This plan has been referred to the OUTBoard by the BOCC for review, with a request that a recommendation be returned to the BOCC in time for its November 19, 2013 regular meeting. The OUTBoard will receive a brief introduction to the Plan at tonight's meeting, and will be the focus of the Board's October 16, 2013 meeting.
8:40	7.	Staff Updates <ul style="list-style-type: none"> a. Board of County Commissioners (BOCC) recommendations for new projects in the Burlington-Graham Metropolitan Planning Organization (BGMPO) for the 2016-2022 Transportation Improvement Program (TIP).

- b. Master Aging Plan Steering Committee meeting September 18, 2013
- c. Planning and Public Health: Bridging the Gap event September 25, 2013
- d. OUTBoard Appointments and Reappointments
- e. OUTBoard items of discussion for Chuck Edwards, NCDOT District Engineer

OUTBoard Action: Receive updates

8:50 8. Upcoming Agenda Items of Interest on Other Regional Transportation Related Board Agendas

OUTBoard Action: Receive information as a handout

8:55 9. Board Comments

OUTBoard Action: Receive comments

8:59 10. Meeting Schedule – The OUTBoard’s next meeting will be October 16, 2013

9:00 11. Adjournment

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MINUTES
ORANGE UNIFIED TRANSPORTATION BOARD
AUGUST 21, 2013

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MEMBERS PRESENT: Paul Guthrie, Chapel Hill Township; Jeff Charles, Bicycle Advocate; Alex Castro, Bingham Township; Annette Jurgelski, Eno Township; Jeff Miles, Pedestrian Access & Safety Advocate; Andrea Rohrbacher, Planning Board Representative; Sam Lasris, Cedar Grove Township; Ted Triebel, Little River Township; Amy Cole, Transit Advocate; Gary Saunders, CFE Representative

MEMBERS ABSENT: Susie Enoch, Cheeks Township; Hillsborough Township - Vacant; Economic Development Commission - Vacant

STAFF PRESENT: Abigaile Pittman, Transportation/Land Use Planner; Bret Martin, Transportation Planner; Tina Love, Administrative Assistant II

OTHERS PRESENT: Meredith Stewart, Orange County Health Dept.

AGENDA ITEM I: CALL TO ORDER AND ROLL CALL

AGENDA ITEM II: APPROVAL OF MINUTES FOR JUNE 19, 2013

The June 19, 2013 OUTBoard Minutes were approved with corrections by consensus.

AGENDA ITEM III: CONSIDERATIONS OF ADDITIONS TO THE AGENDA

AGENDA ITEM IV: REGULAR AGENDA

- a. State and MPO Project Prioritization.
 - i. Review effect of changes to State and MPO project prioritization methodology on County projects, and
 - ii. Consider and recommend new projects in the Burlington-Graham Metropolitan Organization (BGMPO) planning boundary for the 2016-2022 Transportation Improvement Program (TIP)

OUTBoard Action: To receive the information from Orange County planning staff and provide comments and recommendations for new projects in the BGMPO planning area for the 2016-2022 TIP.

Bret Martin: We are setting the stage for the bi-annual prioritization for the state to go through the process of updating its Statewide Transportation Improvement Program. We are working on putting together projects for the Statewide Transportation Improvement Program, to be adopted by the North Carolina Department of Transportation in July 2015, and approved by the Federal Highway Administration in October 2015. We will need to submit projects to each of the transportation planning organizations within Orange County to prioritize at a regional level so the projects that the OUTBoard and the BOCC want to be scored will be scored by the state using their new criteria, and then they will be considered for addition in the statewide transportation improvement program. (Bret reviewed the Abstract).

Alex Castro: The DOT is divided up into divisions. What role do these divisions play in this planning process?

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56 Bret Martin: The money that is being divided up throughout the state for divisions is 30% of the state's transportation
57 money and will go to capital projects. There is a statewide scoring methodology that applies to all projects but all the
58 division projects will be ranked at the division level and then the MPO/RPO level.

59
60 Alex Castro: We are in division 7, Orange County, less the MPO, Durham is in Division 5 so you have cross
61 jurisdictional conflicts, how do you resolve that when the Chapel Hill Durham MPO is partially in Division 7 and
62 partially in Division 5. Do they have to be coordinated by both divisions?

63
64 Bret Martin: Yes, they will.

65
66 Paul Guthrie: Why don't you go through the description because there are other questions?

67
68 Bret Martin: (Continued presentation).

69
70 Paul Guthrie: There is already, if you look at our previous materials from the Triangle Transit, you notice there is a
71 commuter rail link starts in Raleigh and stops in Durham County which is part of a longer plan. One of the
72 motivations is because that is the line where the district ends. I think that is a manifestation of what we will see on
73 more activities as we go along with the plan and have strategy as to how we deal with that.

74
75 Bret Martin: Some of the criticism regarding the equity formula will pop up with this. (Continued presentation).

76
77 Ted Triebel: In this formula, decisions are made at the district level for some things and a regional level for other
78 things. At the district level, we are competing with Greensboro and Burlington/Graham than anything in Orange
79 County. At the regional level, we are competing with Winston Salem and a whole list of towns down to Charlotte.
80 Most of our contacts are now to the east, we are at a disadvantage in being able to fully incorporate ourselves in the
81 Research Triangle under this formula.

82
83 Bret Martin: That is a fair statement.

84
85 Paul Guthrie: When were these divisions set up?

86
87 Bret Martin: Many decades ago to coordinate with prison labor to deal with road maintenance. (Continued
88 presentation).

89
90 Jeff Charles: Do bicycle facilities fall under this?

91
92 Bret Martin: Yes.

93
94 Jeff Charles: The division needs the SR routes which are the regional ones where we want the bike lanes for the
95 most part.

96
97 Bret Martin: I will get to that in a moment. There are specific changes that apply to that.

98
99 Paul Guthrie: 25% of the 50% is local input and the other 25% is DOT Engineer input. The 50% is really 25%.

100
101 Bret Martin: 25% is the division rank and 25% is the local input. The division rank means, how did the project score
102 according to the same criteria within the division as opposed to against. (Continued presentation).

103
104 Jeff Charles: If DOT is going to have 100% statewide; 50% plus the division DOT Engineer's 25%, that is 75%
105 regional control and then in the sub regional they get 50% plus another 25%. It seems the MPO/RPO rank is 0 at the
106 statewide region and 25% at the sub-regional.

107
108 Ted Triebel: Minimal influence.

109

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110 Bret Martin: This is what we worked off of before. At the division level, the MPO/RPO rank has always been a hefty
111 40% which is profound. For quantitative data, this is the scoring criteria.

112
113 Ted Triebel: I appreciate your excellent presentation. Regarding the economic competitiveness under the Statewide
114 Mobility Formula, I understand they are pushing to make that 15% to 20% instead of 10%, have you heard that? The
115 Board of Transportation chair wanted to get that 15% to 20% and this has not yet been approved on Jones Street.

116
117 Bret Martin: I didn't know that.

118
119 Paul Guthrie: It occurs to me that since so many of the projects will require federal involvement and a fairly
120 significant financial investment, has anyone determined if this will pass the environmental impact test?

121
122 Bret Martin: The NEPA process is project level. One of the things I was concerned about was that the original
123 proposal was to do 40/40/20 instead of 40/40/30, and I stated I don't think it is legally possible to do that under
124 federal laws governing what could be done with the portions provided to the states from the federal highway trust
125 fund. That was changed at the division level because a large part of the money they get from the federal government
126 must be divided up by population. They changed it from 40/40/20 to 40/30/30. I don't know how the NEPA process
127 would impact any of this.

128
129 Paul Guthrie: Obviously on a project by project basis.

130
131 Bret Martin: Part of the NEPA process requires for a need and purpose to be established for each project and there
132 has to be a case made before you can use federal money.

133
134 Paul Guthrie: I have a map produced on the daily traffic volumes of US interstate highway systems across the United
135 States and the highest travel routes that I would like to share. I-40/85 from Durham to Winston-Salem is one of the
136 highest peak highway interstate traffic problems in the country from the standpoint of this map. I don't think we are
137 dividing up the money on this formula with that in mind.

138
139 Jeff Miles: How often are the division rank and the MPO/RPO that different?

140
141 Bret Martin: Every MPO/RPO has an internal ranking process. Typically, they have tried to make their scoring
142 methodology similar to that of the state because they don't want to have criterion that works against the state. The
143 division rank is the same criteria as what you see here. (Continued presentation).

144
145 Jeff Charles: DOT controls 75% and the division rank of 25%. The MPO/RPO had 35% before and now it has only
146 25%. From my perspective we have less input under the new system.

147
148 Bret Martin: The division ranking criteria can change. Regions and divisions can devise their own methods.

149
150 Jeff Charles: How do we get our division to do this?

151
152 Bret Martin: We need to get all the MPOs and RPOs in our division to agree to it. You can adopt a variation of
153 scoring factors.

154
155 Abigail Pittman: Do we have to wait until 2015?

156
157 Jeff Charles: Because we didn't do it soon enough we have to wait until 2015.

158
159 Paul Guthrie: We are not be able to change it now but if we wish to get it changed and make an argument at that
160 time that these are the factors we should be using to score the projects we should be funding and be loud enough, it
161 might be effective.

162
163 Bret Martin: Scoring criteria have to be approved by the Board of Transportation. Part of the reason they set a
164 deadline is because they tried to say these are the rules, no more changing. (Continued presentation).

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165 Jeff Miles: Does the 'no right-of-way rule only apply to projects that cost less than a million dollars or for all bike and
166 ped projects?
167

168 Bret Martin: It is for bike/ped projects. Those over a million dollars, that doesn't apply. Those that are over a million
169 dollars are submitted as highway projects, and they will not score well enough to be funded.
170

171 Jeff Charles: Unless we change regionally the way we rank projects in the system.
172

173 Alex Castro: The costs that will no longer be borne by the DOT, what percentage are we talking of a contract?
174

175 Bret Martin: That depends on the projects.
176

177 Alex Castro: 5% to 10% might be a good figure.
178

179 Bret Martin: (Continued presentation).
180

181 Paul Guthrie: Do you have an opinion of how the NC 86 North project would rank?
182

183 Bret Martin: I don't think that is in their system. I know it is a strategic highway.
184

185 Abigail Pittman: I don't believe it was every scored.
186

187 Bret Martin: There is a widening project that has been submitted for NC 86 at the intersection of NC 57. That project
188 will actually rank a little lower. Next month we will come to you with other projects from TARPO and DCHC, and
189 TARPO has already indicated that if we do not have a local match for bike/ped projects under one million dollars that
190 we are not to submit those projects.
191

192 Jeff Charles: Basically the BOCC has to put a new line item in the budget specifically for bike/ped matching funds?
193

194 Bret Martin: Yes. Some local government in Orange County has to pay.
195

196 Jeff Charles: Basically rural Orange County projects will go by the wayside.
197

198 Jeff Miles: How does transit fit into this?
199

200 Bret Martin: Our transit system will not be that affected by this.
201

202 Paul Guthrie: Numbers 1, 2, 3 and 4 are basically correlations with the interstate highway access and to the east the
203 future industrial zone which has Orange County implications. My personal opinion is that I see no problem with
204 particular projects. If they don't make this on any state list, at least three could be justified on necessary
205 improvements to the interstate highway system.
206

207 Bret Martin: The last project on Lebanon Road is to construct four foot bicycle lanes, that is likely over a million
208 dollars so it would need to be submitted as a highway project.
209

210 Jeff Charles: Take if off the list.
211

212 Abigail Pittman: There is a potential new elementary school site related to this project.
213

214 Jeff Charles: That is fine.
215

216 **Motion** made to approve the recommended projects in the Burlington-Graham Metropolitan Planning Area as listed
217 and proposed by staff. Seconded by Jeff Charles.
218

219 Vote: Unanimous

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- AGENDA ITEM V: STAFF UPDATES**
 a. OUTBoard Appointments and Reappointments
 b. OCBRIP public outreach for bus planning
OUTBoard Action: Receive updates

Abigaile Pittman: I have handouts. The first is from the TARPO meeting. NCDOT passed out a list of active projects in Orange County. Reviewed handout. The next topic is OUTBoard appointments and reappointments. We still have two vacant positions. We need a representative from the Economic Development commission and Hillsborough Township.

- AGENDA ITEM VI: UPCOMING AGENDA ITEMS OF INTEREST ON OTHER REGIONAL TRANSPORTATION RELATED BOARD AGENDAS**
OUTBoard Action: Receive information as a handout

Abigaile Pittman: Reviewed information in the handout.

- AGENDA ITEM VII: MEETING SCHEDULE -Next meeting will be September 18, 2013**
 a. Continuation of State and MPO Project Prioritization
 b. Discussion with Dale McKeel, Bicycle & Pedestrian Coordinator, Department of Transportation, City of Durham/DCHC MPO regarding regional bicycle routes, and the designation of St. Mary's Road as a regional bicycle route.

Abigaile Pittman: Chuck Edwards did agree to meet with the OUTBoard but he will need an agenda of questions.

Jeff Charles: One of the key things with Dale McKee should be to address the issues we have talked about with the new transportation prioritization and funding formula. How will he help us address so that we become more like regions one and four. That is high priority. Another question should be, what does he view is the future of recreational cycling under this new rule versus as commuter based cycling. This is a very important issue.

Abigaile Pittman: On the agenda next month, I have the Eno Economic Development Access Management Plan to show the recommendations I am making for access criteria. The BOCC would like the OUTBoard's feedback on it.

- AGENDA ITEM VIII: BOARD COMMENTS**
OUTBoard Action: Receive comments

- AGENDA ITEM IX: ADJOURNMENT**

The meeting was adjourned by consensus.

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**ORANGE COUNTY
ORANGE UNIFIED TRANSPORTATION BOARD (OUTBOARD)**

REGULAR AGENDA ITEM ABSTRACT

Meeting Date: September 18, 2013

**Regular Agenda
Item No.** 4.i.

SUBJECT: Review of St. Mary's Road as a regional bicycle route

DEPARTMENT: Planning and Inspections

PUBLIC HEARING: (Y/N)

No

ATTACHMENT(S):

1. DCHC MPO Draft 2040 Metropolitan Transportation Plan (MTP) On-Road Facilities Map
2. Staff's Comment Letter (4-4-2013)
3. Orange County/NCDOT Bicycle Map
4. NCDOT/Orange County Comprehensive Transportation Plan (CTP) Bicycle Map
5. Town of Hillsborough Community Connectivity Plan Map

INFORMATION CONTACT:

Abigaile Pittman, Transportation/Land Use Planner, 245-2567

PURPOSE: To review the classification of St. Mary's Road as a regional bicycle route, discuss the classification with Dale McKeel, Bicycle & Pedestrian Coordinator, Department of Transportation, City of Durham/Durham-Chapel Hill-Carrboro (DCHC) Metropolitan Planning Organization (MPO), and provide feedback.

BACKGROUND: On May 22, 1013 the OUTBoard reviewed materials related to the bicycle route classification of St. Mary's Road, and provided input to the Planning staff on the preferred regional bicycle route. The OUTBoard noted concerns about the safety of the route, noting that this is the primary reason that it is not used much by cyclists. Comments were also made regarding the drainage ditches and embankments, which would make a bicycle project along this route very expensive. There was discussion that a preferred regional route would be Lawrence Road to St. Mary's Road to New Sharon Church Road. The OUTBoard asked that Dale McKeel be invited to a meeting to discuss this matter, and receive Board feedback.

REVIEW OF THE ISSUE: The DCHC MPO Transportation Advisory Committee (TAC) approved the key components of the 2040 Metropolitan Transportation Plan (MTP), such as the highway, bicycle and transit projects and the financial plan, at their December 2012 meeting. The TAC is the MPO's policy board and is the ultimate decision-making body on MPO plans. Then several months ago the DCHC MPO released the full report for the 2040 Metropolitan Transportation Plan (2040 MTP) and the related Air Quality Analysis/Conformity Determination report (AQ Conformity) for public comment, and the maps related to the MTP (including the On-Road Facilities Map).

Upon review of the DCHC MPO draft Metropolitan Transportation Plan (MTP) On-Road Bicycle Facilities Map (Attachment 1) staff noted that a segment of St. Mary's Road between US 70 Bypass and the Durham County line was identified as a Regional Bicycle Facility. The Planning staff asked that this designation be removed in favor of a preferred alternative consistent with Orange County's and the Town of Hillsborough's approved bicycle routes (Attachments 2, 3, 4 and 5). In response, the DCHC TAC opted to: "Maintain St. Mary's Road as a regional bicycle route in the MTP for the time being. As part of the DCHC MPO Comprehensive Transportation Plan (CTP), review other regional route alternatives to St. Mary's Road. If a route other than St. Mary's Road is selected, amend the MTP to reflect the preferred regional route."

REVIEW OF EXISTING APPROVED ALTERNATE ROUTES: Orange County/NCDOT and Town of Hillsborough bicycle related plans are summarized below. Together, these plans support an alternate route utilizing New Sharon Church Road and Guess Road to connect northern Durham to Hillsborough.

NCDOT/Orange County

The 2010 Orange County/NCDOT Bicycle Map (Attachment 3), reviewed and recommended by the OUTBoard, and approved by the Board of County Commissioners (BOCC) supports a route other than St. Mary's to connect northern Durham to Hillsborough. The map depicts St. Mary's Road to New Sharon Church Road, to Guess Road, to the County line.

The Comprehensive Transportation Plan (CTP) prepared by NCDOT for rural Orange County was reviewed and recommended by the OUTBoard and approved by the BOCC in March. The approved CTP Bicycle Map (Attachment 4) depicts a bicycle route along New Sharon Church Road.

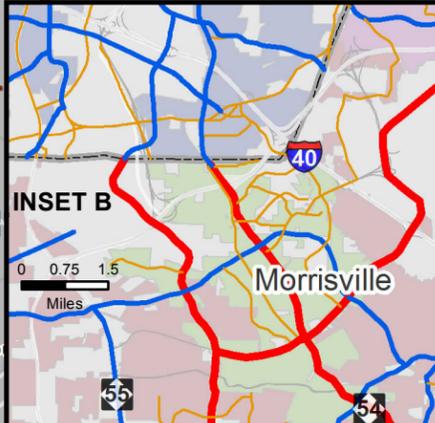
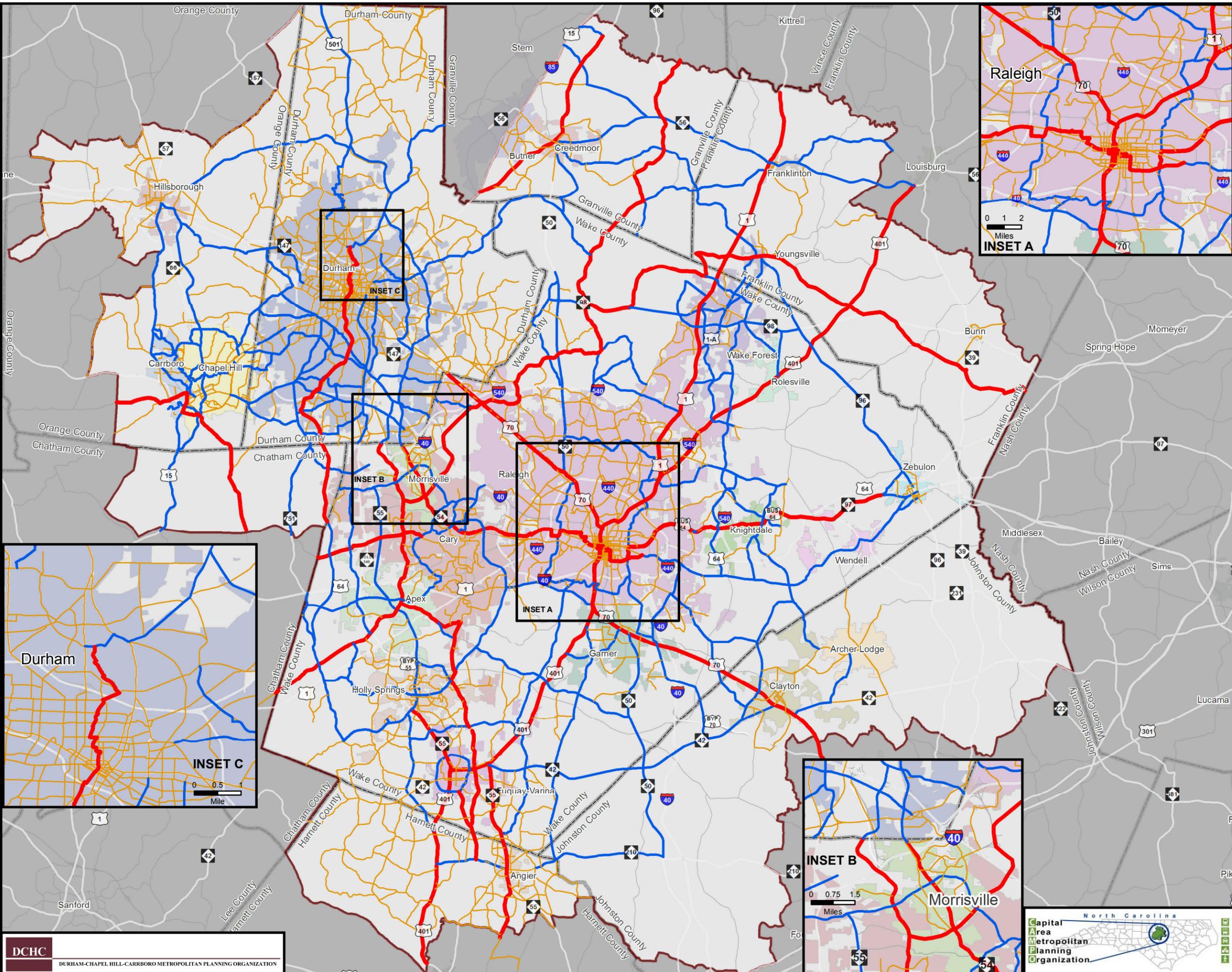
Town of Hillsborough

In 2009 the Town of Hillsborough adopted a Bike Lane and Recommendations Map as part of its Community Connectivity Plan (Attachment 5). The Town's map supports a route other than St. Mary's to connect northern Durham to Hillsborough. The map depicts St. Mary's Road to New Sharon Church Road (which would then connect to Guess Road and then to the County line).

OUTBOARD ACTION: It is the OUTBoard's prerogative to review and comment on the DCHC MPO's designation of St. Mary's Road as a regional bicycle route from Hillsborough to downtown Durham. The staff requests that the OUTBoard provide input to MPO staff consistent with previously approved Orange County/NCDOT and Town of Hillsborough bicycle maps.

2040 Metropolitan Transportation Plan

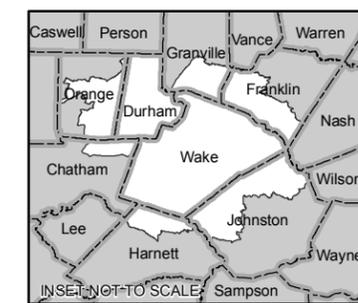
February 28, 2013



On-Road Facilities

- State Bicycle Facilities
- Regional Bicycle Facilities
- Local Bicycle Facilities

*DCHC MPO State and Regional routes are shown on the On-Road Facilities map. Appendix 4 provides a listing of the routes.



This map was compiled using the best available data, however, the Capital Area MPO is not responsible for errors, omissions, and/or misuse. Subject to change.



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ORANGE COUNTY PLANNING & INSPECTIONS DEPARTMENT

Craig N. Benedict, AICP, Director

Current Planning
 (919) 245-2575
 (919) 644-3002 (FAX)
www.orangecountync.gov



131 West Margaret Lane
 P O Box 8181
 Hillsborough,
 North Carolina, 27278

April 4, 2013

Durham-Chapel Hill-Carrboro MPO Technical Advisory Committee
 c/o Andy Henry, Transportation Planner
 City of Durham, Transportation Dept.
 101 City Hall Plaza
 Durham, NC 27701

Durham-Chapel Hill-Carrboro MPO Technical Advisory Committee:

On behalf of Orange County Planning Staff and consistent with County plans, the following comments/requests are offered on bicycle facilities included in the draft 2040 Metropolitan Transportation Plan. Specifically, these comments pertain to the "On-Road Bicycle Facilities Map" as provided on the DCHC MPO website:

<http://www.dchcmo.org/dmdocuments/2040MTPOffRoad.pdf>

1. Old NC 86 segment between New Hope Church and Davis is identified as a Regional Bicycle Facility. Consistent with the County's Comprehensive Transportation Plan (March 2013), we are requesting that this designation be removed. New NC 86 provides the preferred alternate connection to Hillsborough from points south (*If needed, the section of New Hope Church Road, connecting Old NC 86 to New NC 86 and beyond to Old NC 10, could be identified as a Regional Bicycle Facility rather than a Local Bicycle Facility*).
2. St. Mary's Road segment between US 70 Bypass and Durham County line is identified as a Regional Bicycle Facility. Consistent with the County's existing bicycle route system (2010 NCDOT bicycling brochure), we are requesting that this designation be removed. The preferred alternate to Hillsborough from the Durham County line is via Guess Rd., New Sharon Church Rd., Walker Rd., Miller Rd., to Saint Mary's Rd.
3. NC 86 North segment between the intersections with Coleman Loop Road is identified as a Local Bicycle Facility. Consistent with the County's Comprehensive Transportation Plan (March 2013), we are requesting that this designation be removed and Coleman Loop Road be used as the preferred alternate.
4. Orange Grove Road and Dodsons Crossroads Road segments within MPO boundaries could be shown as Regional Bicycle Facilities rather than Local and may provide more of a regional connection south to Chatham County. The Orange County Comprehensive Transportation Plan includes the connections that complete the route.

A sketch map is attached as a reference and key to the above comments.

Orange County Staff will be in attendance at the April 10th TAC Meeting to address any questions it may have.

Thank you,



Tom Altieri, AICP
Orange County Comprehensive Planning Supervisor

Cc:

Craig Benedict, Orange County Planning Director

Frank W. Clifton, Orange County Manager

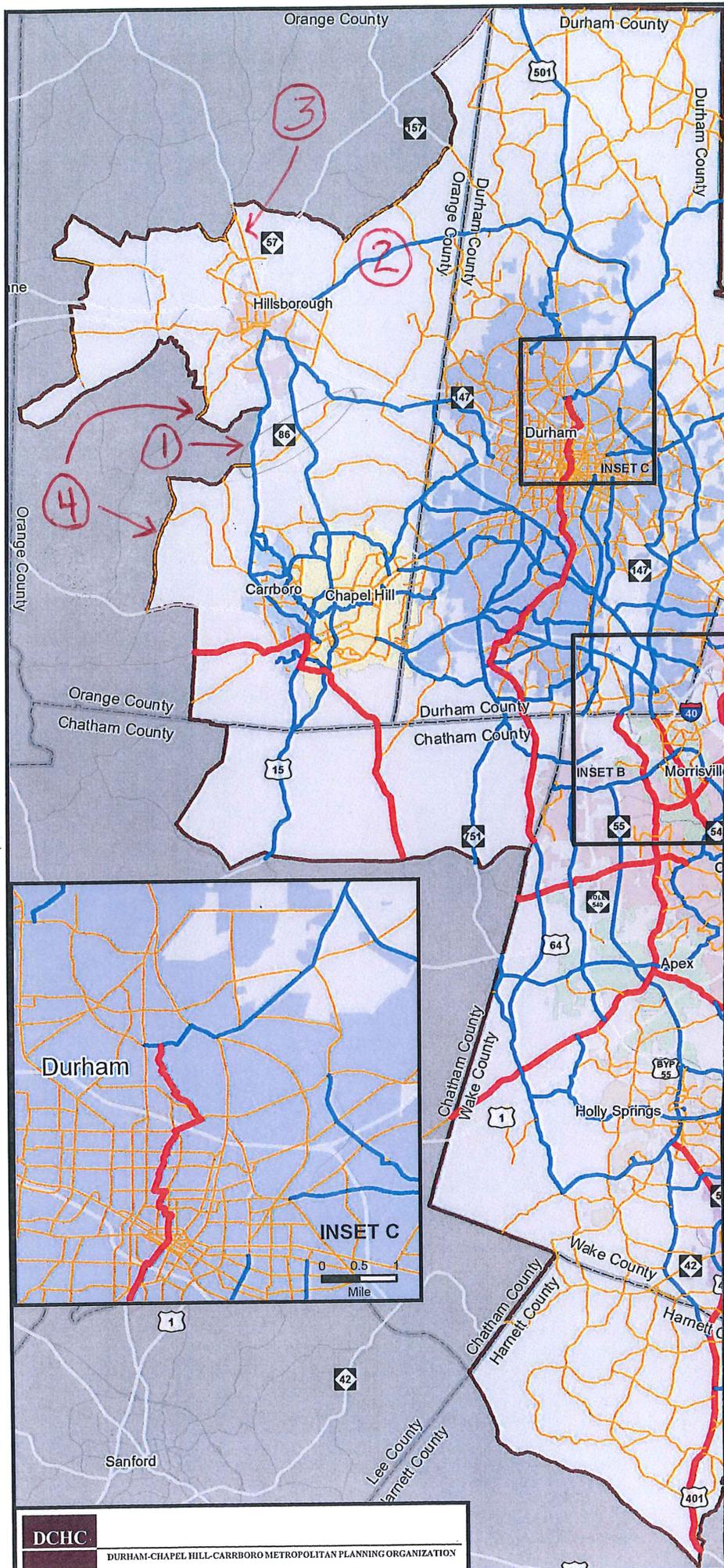
Donna Baker, Clerk to the BOCC

Orange County BOCC, including DCHC MPO TAC member, Alice Gordon

Paul Guthrie, Chair, Orange County Unified Transportation Board

2040 Metropolitan Transportation Plan

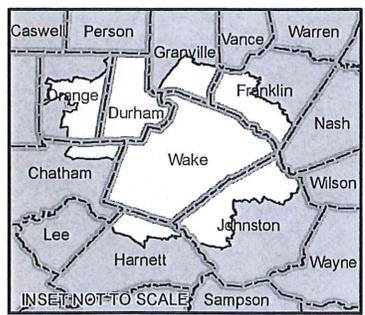
February 28, 2013



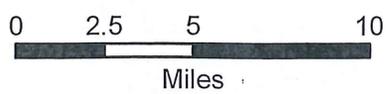
On-Road Facilities

- State Bicycle Facilities
- Regional Bicycle Facilities
- Local Bicycle Facilities

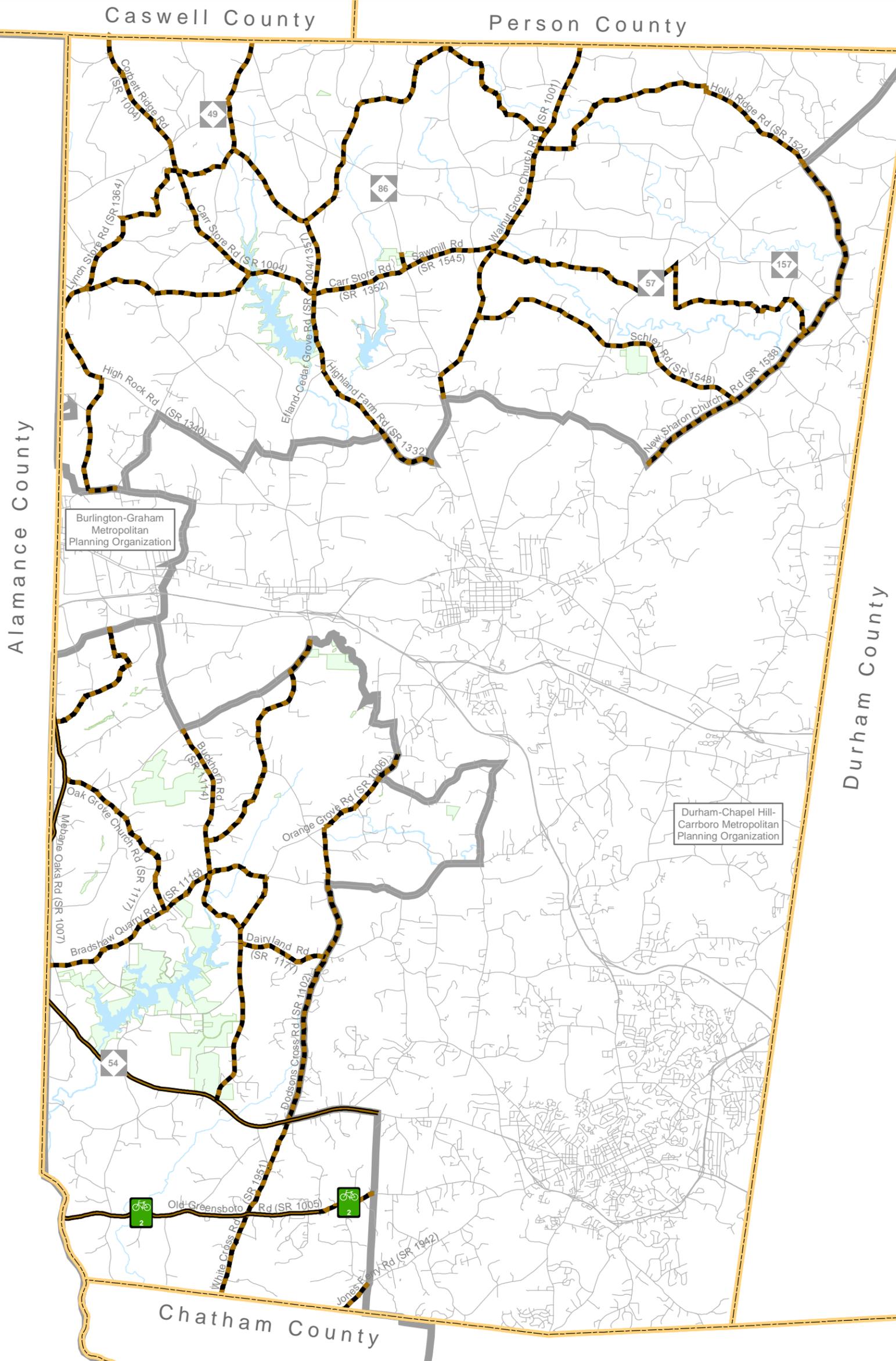
*DCHC MPO State and Regional routes are shown on the On-Road Facilities map. Appendix 4 provides a listing of the routes.



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|-------------------|---------------------------|
| On-road | Multi-Use Paths |
| Existing | Existing |
| Needs Improvement | Needs Improvement |
| Recommended | Recommended |
| Off-road | Existing Grade Separation |
| Existing | Proposed Grade Separation |
| Needs Improvement | North Carolina Bike Route |
| Recommended | |



Figure 1
Sheet 4 of 5

Base map date: April, 2009

Refer to CTP document for more details

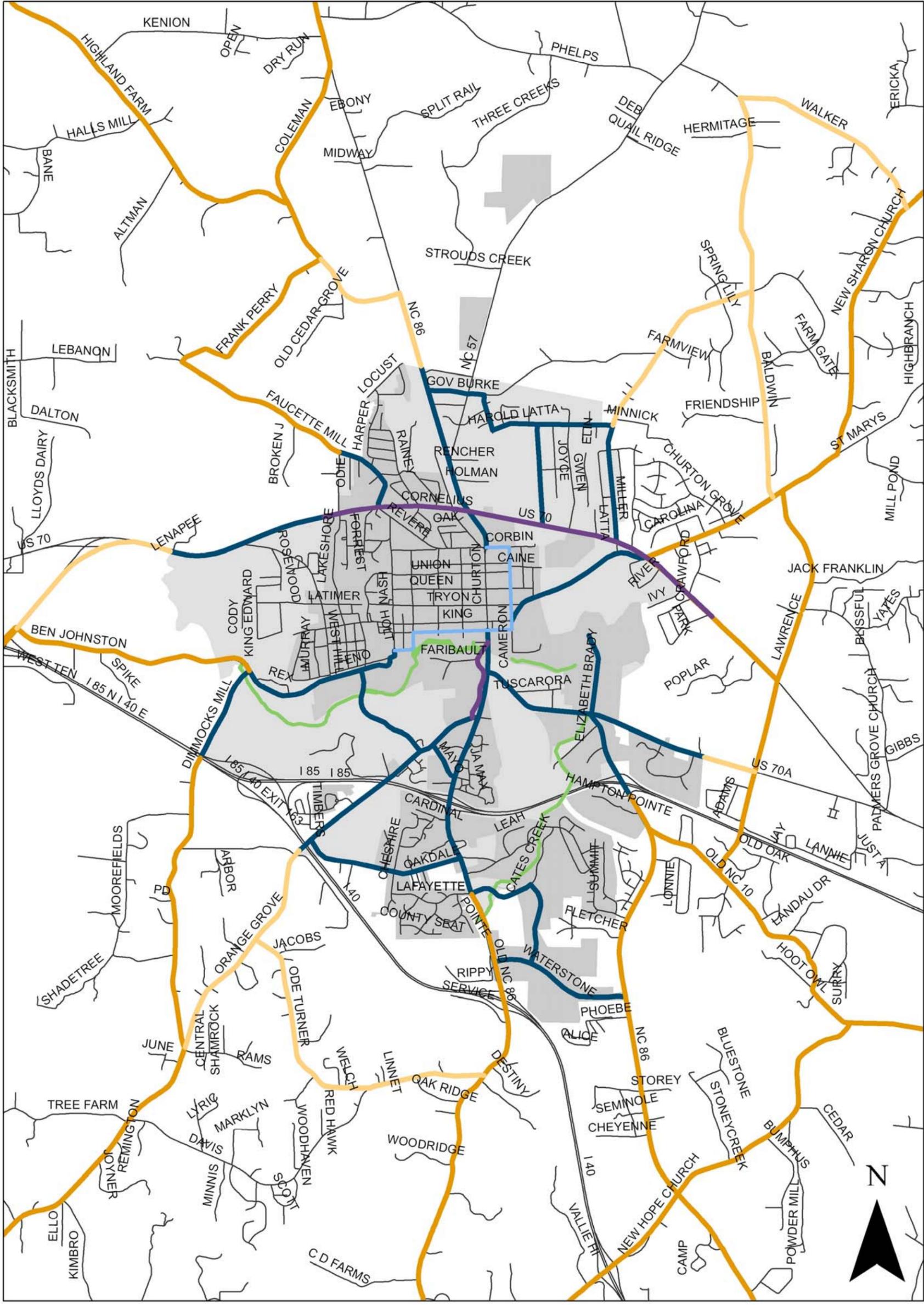
Bicycle Map



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**Orange County
Comprehensive
Transportation Plan**

Plan date: December 11, 2012



Bike Lane and Route Recommendations

- Recommended Additions to Orange County Bike Plan
- Orange County Planned Bike Lanes
- Hillsborough Shared-Use Path Recommendation
- Hillsborough Bike Lane Recommendations
- Hillsborough Marked Bike Route Recommendations
- Greenways
- Town Limits
- Extra Territorial Jurisdiction

Map prepared by Hillsborough Planning Department 9/2008
 Data provided by Orange County Land Records

**ORANGE COUNTY
ORANGE UNIFIED TRANSPORTATION BOARD (OUTBOARD)**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: September 18, 2013

**Action Agenda
Item No. 5**

SUBJECT: Consider and recommend new projects in the Durham-Chapel Hill-Carrboro (DCHC) MPO and Triangle Area Regional Planning Organization (TARPO) planning areas for the 2016-2022 Statewide Transportation Improvement Program (STIP)

DEPARTMENT: Planning and Inspections

PUBLIC HEARING: (Y/N)

No

ATTACHMENT(S):

1. Draft TARPO Project Priority List
2. Orange County Comprehensive Transportation Plan Highway and Bicycle Maps
3. TARPO Project List Map
4. Draft DCHC MPO Project Priority List
5. DCHC Project List Map

INFORMATION CONTACT:

Bret Martin, Transportation Planner,
245-2582
Abigaile Pittman, Transportation/Land
Use Planner, 245-2567

PURPOSE: The Board's objectives for this agenda item are:

- 1) To consider and recommend for approval a list of transportation project priorities within the Triangle Area Regional Planning Organization (TARPO) planning area to be submitted for prioritization scoring and inclusion within the TARPO regional priority list and the 2016-2022 STIP; and
- 2) To consider and recommend for approval a list of transportation project priorities within the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) planning area to be submitted for prioritization scoring and inclusion within DCHC MPO's 2016-2022 Transportation Improvement Program (TIP) and STIP.

BACKGROUND: At the OUTBoard's August 2013 meeting, Staff reviewed the anticipated effects of changes to the State's project prioritization funding structure and methodology on County projects with the OUTBoard, and the OUTBoard considered and approved for recommendation to the Board of County Commissioners (BOCC) a list of new priority projects to be submitted to the Burlington-Graham Metropolitan Planning Organization (BGMPO) for projects within its planning area. As a continuation of the process of submitting priority projects for consideration and inclusion in the 2016-2022 STIP to the three (3) transportation planning organizations representing Orange County, project priority lists for both TARPO and the DCHC MPO have been developed by staff for the OUTBoard to consider and recommend for BOCC approval. Generally for both priority lists, the starting point for staff was to carry forward those projects submitted as the County's project priorities to both TARPO and the DCHC MPO from the last iteration of project prioritization in 2011.

For the TARPO project priority list (Attachment 1), all projects that were submitted in 2011 were carried forward to this priority list, and two (2) new projects that were not submitted in 2011 were added to the list and prioritized as the top projects. One of these projects (NC 54 widening) is a completely new highway project not previously submitted that is recommended in the newly adopted Orange County Comprehensive Transportation Plan (OCCTP), which is depicted on the OCCTP Highway Map in Attachment 2. The other project (Efland-Cedar Grove Road improvements), also depicted on the OCCTP Highway Map in Attachment 2, was previously submitted for prioritization iterations before 2011 but was removed from that priority list before submission to TARPO and is now being added again for consideration. These two projects were added to the top of the list because they are both OCCTP-recommended projects and are likely to score higher against the State's prioritization scoring criteria giving them a greater chance of being funded and included in the 2016-2022 STIP. The other four (4) projects were shifted down to priorities 3-6 because they are not likely to score as well for consideration in the 2016-2022 STIP as a result of not having added capacity impacts and not as much of an impact on safety to users as the other two (2) projects. These projects are also recommended on the OCCTP Bicycle Map in Attachment 2. Attachment 3 is a map depicting the locations of the draft project priorities for those projects within TARPO's planning area.

For the DCHC MPO project priority list (Attachment 4), all projects that were submitted in 2011 were carried forward to this priority list, and three (3) projects that were not submitted in 2011 were added to the list: NC 54 widening from Neville Road to Old Fayetteville Road, I-40 widening from the I-40/I-85 interchange to the Durham County line, and I-85 widening from the I-40/I-85 interchange to the Durham County line. The NC 54 widening project is a continuation of the recommended NC 54 widening project in the draft TARPO project priority list, while the I-40 and I-85 widening projects were not in previous County priority lists but are projects that have already been included in the STIP and are of statewide significance that will be scored regardless of Orange County's submission. These two widening projects are likely to score higher than many of the other projects recommended for submission. The general order of suggested project ranking in the DCHC MPO list is:

- 1) Added capacity/mobility projects of local significance;
- 2) Added capacity/mobility projects of statewide/regional significance;
- 3) Transit/rail projects;
- 4) Modernization/bikeway projects of local significance exceeding \$1,000,000; and a
- 5) Pedestrian project (the pedestrian project was prioritized last because it would require a 20% local match that the County has not indicated it would provide).

The strategy for this ordering of projects will be explained by staff at the OUTBoard's September 18th meeting. Attachment 5 is a map depicting the locations of the draft project priorities for those projects within the DCHC MPO planning area.

RECOMMENDATION(S): Staff recommends the Board:

- 1) Consider and recommend for approval the list of transportation project priorities in the TARPO planning area for the BOCC's endorsement; and
- 2) Consider and recommend for approval the list of transportation project priorities in the DCHC MPO planning area for the BOCC's endorsement.

Attachment 1: Draft Triangle Area Regional Planning Organization (TARPO) Project Priority List

Map ID #	Project	Project Description/Need	Status (New/Existing Project)	Existing Project Score/Rank	Staff Recommendation
1	NC 54 Widening	<p><u>Description:</u> Widen NC 54 from Orange Grove Road (SR 1006) to Neville Road (SR 1945) (DCHC MPO boundary) from a two (2)-lane, 24-foot undivided thoroughfare to a four (4)-lane divided boulevard type thoroughfare with a travel-prohibitive median to improve mobility and provide better access control. This project is recommended in the Orange County Comprehensive Transportation Plan (OCCTP).</p> <p><u>Need:</u> NCDOT projections reveal that traffic on NC 54 from Orange Grove Road to Neville Road will substantially exceed the existing roadway capacity by 2035, warranting an increase in capacity through widening. NCDOT traffic figures already indicate that traffic along the segment of NC 54 from Butler Road/Dodsons Cross Road to Neville Road is at capacity and will only continue to substantially exceed capacity in future years. Among all projects recommended in the OCCTP, this project would likely score the highest relative to other projects given the improvements the project would provide for both congestion and benefit-cost factors. This project is also eligible for funding at both the regional and divisional tiers, providing it a greater opportunity to be funded than projects that are only eligible for funding at the division tier.</p>	New Highway Project	N/A	Submit to TARPO for SPOT 3.0 scoring and consideration of inclusion in the TARPO regional priority list and STIP as project priority #1 as a new highway project.
2	Efland-Cedar Grove Road (SR 1004)	<p><u>Description:</u> Widen Efland-Cedar Grove Road from Highland Farm Road (SR 1332) to the northern property line of the U.S. Post Office north of Carr Store Road (SR 1004/SR 1352) from a two (2)-lane, 20-foot cross section to a 24-foot cross section with straightening of the roadway where needed, improvements to turn lanes, and the incorporation of bicycle facilities. This project is recommended in the OCCTP.</p> <p>This project proposal overlaps with STIP project W-5143 to improve the horizontal alignment of the curve on Efland-Cedar Grove Road north of its intersection with Highland Farm Road. This project is scheduled for construction in April 2014 and for completion in December 2014.</p> <p><u>Need:</u> The project would improve travel time with an increase in design speed and would improve safety with travel lane straightening and an increase in pavement width. This segment of Efland-Cedar Grove Road is a travel alternative to NC 86 for traffic from northwestern Orange County to access I-40/85, and as such, traffic is projected to continue to increase in future years. This project is not likely to score very high using the State's congestion scoring factor and is only eligible for funding at the division tier.</p>	Existing Highway Modernization Project submitted for scoring in SPOT 2.0. This project was recommended by staff in 2011 to be removed from the project priority list for Orange County and was subsequently removed before submission.	Scored in SPOT 2.0 prioritization as a Subregional Highway Modernization project. Ranked 43/149 for all Subregional Highway Modernization projects scored in the state. Project is anticipated to rank low for SPOT 3.0 because it would not score well with the State's adopted mobility scoring factors.	Submit to TARPO for SPOT 3.0 scoring and consideration of inclusion in the TARPO regional priority list and STIP as project priority #2 as a reprioritized highway project.
3	Dairyland Road paved shoulders*	<p><u>Description:</u> Widen Dairyland Road from Union Grove Church Road to Orange Grove Road to include four (4)-foot paved shoulders. Part of this project is located within the DCHC MPO planning area. The portion of this project within the DCHC MPO planning area is being recommended for inclusion in that priority list. This project is scheduled in the STIP for a feasibility study (STIP # EB-5108). This project is recommended as a bikeway improvement in the OCCTP but will be submitted as a highway project with a cost exceeding \$1,000,000.</p> <p><u>Need:</u> This project would provide one segment of a bikeway connection through western Orange County from Carrboro to the Buckhorn Road and Mebane area and improve the safety of the subject thoroughfare for motorized vehicular travel. The project is not likely to score very high using the State's congestion and benefit-cost scoring factors and is only eligible for funding at the division tier.</p>	Existing Highway Modernization Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as one segment of project priority #1 in 2011. The project was scored in separate segments in SPOT 2.0.	Scored in SPOT 2.0 prioritization as a Subregional Highway Modernization project. Ranked 62/149 for all Subregional Modernization projects scored in the state. Project is anticipated to rank low for SPOT 3.0 because it would not score well with the State's adopted mobility scoring factors.	Submit to TARPO for SPOT 3.0 scoring and consideration of inclusion in the TARPO regional priority list and STIP as project priority #3 as a reprioritized highway project.
4	Orange Grove Road and Buckhorn Road paved shoulders*	<p><u>Description:</u> Widen Orange Grove Road from Dairyland Road to Buckhorn Road and Buckhorn Road from Orange Grove Road to West Ten Road to include four (4)-foot paved shoulders. This project is recommended as a set of bikeway improvements in the OCCTP but will be submitted as a highway project with a cost exceeding \$1,000,000.</p> <p><u>Need:</u> This project would provide one segment of a bikeway connection through western Orange County from Carrboro to the Buckhorn Road and Mebane area and improve the safety of the subject thoroughfare for both bicyclists and motorized vehicular travel. The project is not likely to score very high using the State's congestion and benefit-cost scoring factors and is</p>	Existing Highway Modernization Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as one segment of project priority #1 in 2011. The project was scored in separate segments in SPOT 2.0.	Scored in SPOT 2.0 prioritization as a Subregional Highway Modernization project. Ranked 10/149 for all Subregional Modernization projects scored in the state. In general, project is anticipated to rank low for SPOT 3.0 because it would not score well with the State's adopted mobility	Submit to TARPO for SPOT 3.0 scoring and consideration of inclusion in the TARPO regional priority list and STIP as project priority #4 as a reprioritized highway project.

Attachment 1: Draft Triangle Area Regional Planning Organization (TARPO) Project Priority List

Map ID #	Project	Project Description/Need	Status (New/Existing Project)	Existing Project Score/ Rank	Staff Recommendation
		only eligible for funding at the division tier. However, the project will likely score well using the State's safety scoring factor.		factors.	
5	Old Greensboro Road*	<p><u>Description:</u> Widen Old Greensboro Road from Carrboro's extra-territorial jurisdiction (ETJ) to the Orange/Alamance County line to include four (4)-foot paved shoulders. This project would be a segment of the North Carolina Mountains to Sea Bicycle Route (designated as North Carolina Bike Route 2). Part of this project is located within the DCHC MPO planning area. This project is recommended as a bikeway improvement in the OCCTP but will be submitted as a highway project with a cost exceeding \$1,000,000.</p> <p><u>Need:</u> This project would provide a continuous paved bikeway segment from Carrboro through the southwestern portion of Orange County to connect with other bikeway segments that comprise the state's Mountain to Sea bicycle route. The project is not likely to score very high using the State's congestion and benefit-cost scoring factors and is only eligible for funding at the division tier.</p>	Existing Highway Modernization Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priority # 2 in 2011.	Scored in SPOT 2.0 prioritization as a Subregional Highway Modernization project. Ranked 21/149 for all Subregional Modernization projects scored in the state. In general, project is anticipated to rank low for SPOT 3.0 because it would not score well with the State's adopted mobility scoring factors.	Submit to TARPO for SPOT 3.0 scoring and consideration for inclusion in the TARPO regional priority list and STIP as project priority #5 as a reprioritized highway project.
6	Orange Grove Road from I-40 to Dodsons Cross Road and Dodsons Cross Road from Orange Grove Road to Dairyland Road to Dairyland Road*	<p><u>Description:</u> Widen Orange Grove Road from I-40 to Dodsons Cross Road and Dodsons Cross Road from Orange Grove Road to Dairyland Road to include four (4)-foot paved shoulders. This project is recommended as a set of bikeway improvements in the OCCTP but will be submitted as a highway project with a cost exceeding \$1,000,000.</p> <p><u>Need:</u> This project would provide bicycle facilities to the Grady Brown Elementary School and Cedar Ridge High School from the area south of the schools and connect to a proposed bikeway facility on Orange Grove Road northward into Hillsborough. The project would also improve safety for motorized vehicular travel on this segment of Orange Grove Road. The project is not likely to score very high using the State's congestion and benefit-cost scoring factors and is only eligible for funding at the division tier.</p>	Existing Highway Modernization Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priorities #3 and #4 in 2011.	Scored in SPOT 2.0 prioritization as a Subregional Highway Modernization project. Ranked 27/149 for all Subregional Modernization projects scored in the state. In general, project is anticipated to rank low for SPOT 3.0 because it would not score well with the State's adopted mobility scoring factors.	Submit to TARPO for SPOT 3.0 scoring and consideration for inclusion in the TARPO regional priority list and STIP as project priority #6 as a reprioritized highway project.

*Bike/ped projects that are greater than \$1,000,000 in cost are submitted as highway projects and are scored using the highway scoring methodology. Project will likely exceed \$1,000,000.

NOTES:

1) Other candidate projects to consider for submission as mentioned by the OUTBoard bicycle transportation advocate member include:

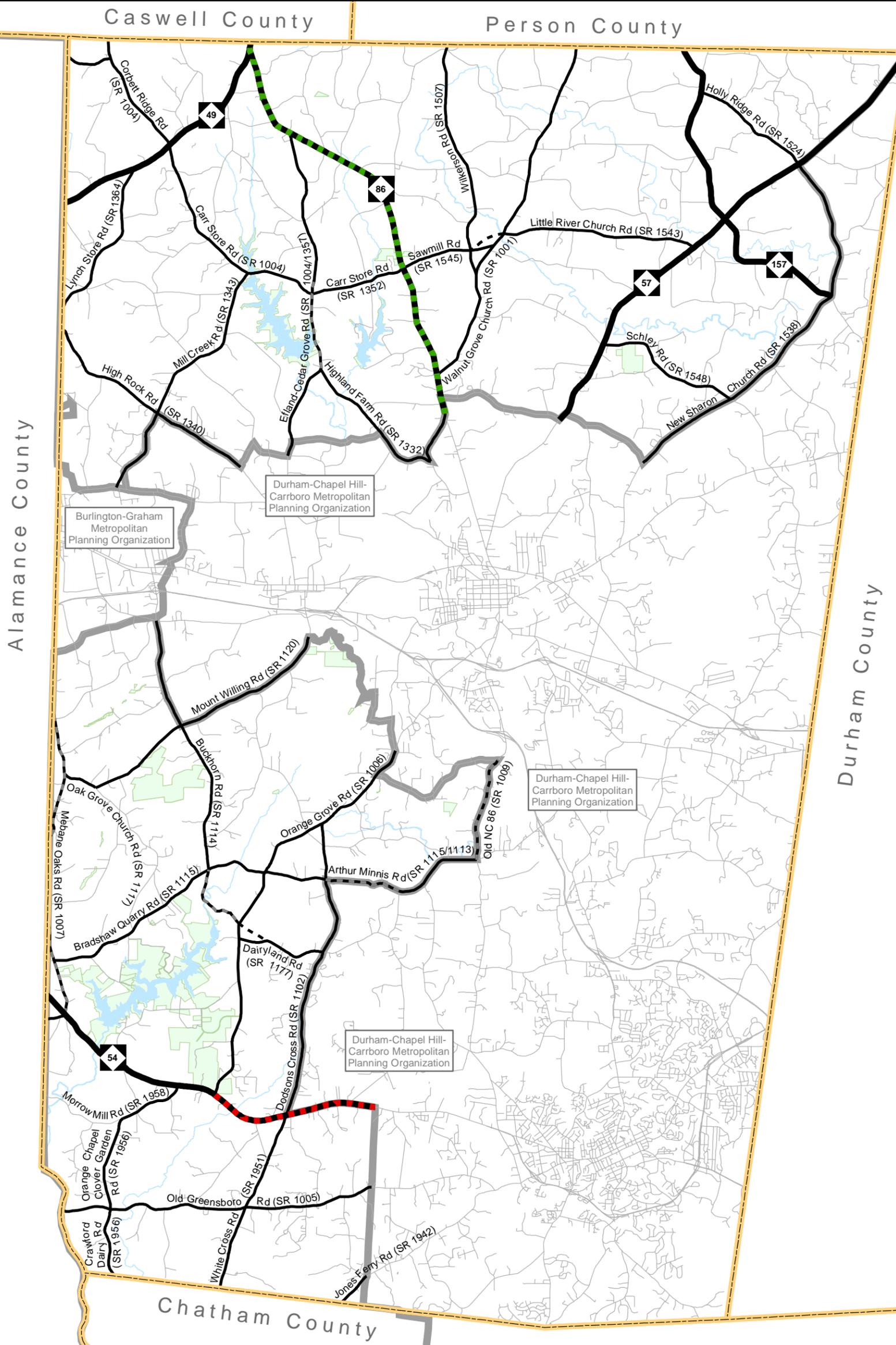
- a) Bikeway improvements on Schley Road from Walnut Grove Church Road to New Sharon Church Road, and
- b) Bikeway improvements on New Sharon Church Road from Walker Road to Schley Road.

2) From a bikeway priority perspective, it has been suggested that the order of prioritization for priorities 3-6 be rearranged in the following order: 3, 6, 5 with priority #4 being removed.

3) All projects previously submitted for consideration of inclusion in the TARPO regional priority list and the STIP are recommended for inclusion in this draft priority list; however, these projects are shifted down in priority given their low likelihood of scoring highly under SPOT 3.0 scoring criteria. The NC 54 project was added to the list as priority #1 given the need for the project, its likelihood of scoring higher than other candidate projects, and its eligibility for funding from both the regional and divisional tiers, which makes it more likely to be funded. Although included as priority #2 in this list, the Efland-Cedar Grove project was removed from Orange County's priority list in 2011 because it did not score well in previous scoring iterations and bikeway improvements were anticipated not to meet the \$1,000,000 threshold for being considered a highway project.

4) The following projects within the TARPO planning area portion of Orange County are currently in the Statewide Transportation Improvement Program (STIP):

- a) Construct four (4)-foot paved shoulders along a five (5)-mile segment on Orange Grove Road from NC 54 to Arthur Minnis Road. This project is programmed in the STIP to be constructed in 2018; however, because the project is programmed for construction after July 2015, it will be subject to reprioritization under the newly adopted SPOT 3.0 process and is listed as a bike project with a total project cost of \$500,000.
- b) Feasibility study for Dairyland Road paved shoulders project.
- c) Construct paved shoulders and rumble strips and make geometric improvements on NC 86 from NC 57 to the Caswell County line a total length of 12.2 miles. This project is underway and is expected to be completed by the end of October 2013.



<p>Freeways</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended <p>Expressways</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended <p>Boulevards</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended 	<p>Other Major Thoroughfares</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended <p>Minor Thoroughfares</p> <ul style="list-style-type: none"> Existing Needs Improvement Recommended <p>Interchanges and Grade Separations</p> <ul style="list-style-type: none"> Existing Interchange Proposed Interchange Existing Grade Separation Proposed Grade Separation
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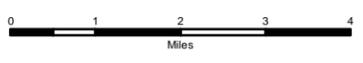


Figure 1
Sheet 2 of 5

Base map date: April, 2009

Refer to CTP document for more details

Highway Map

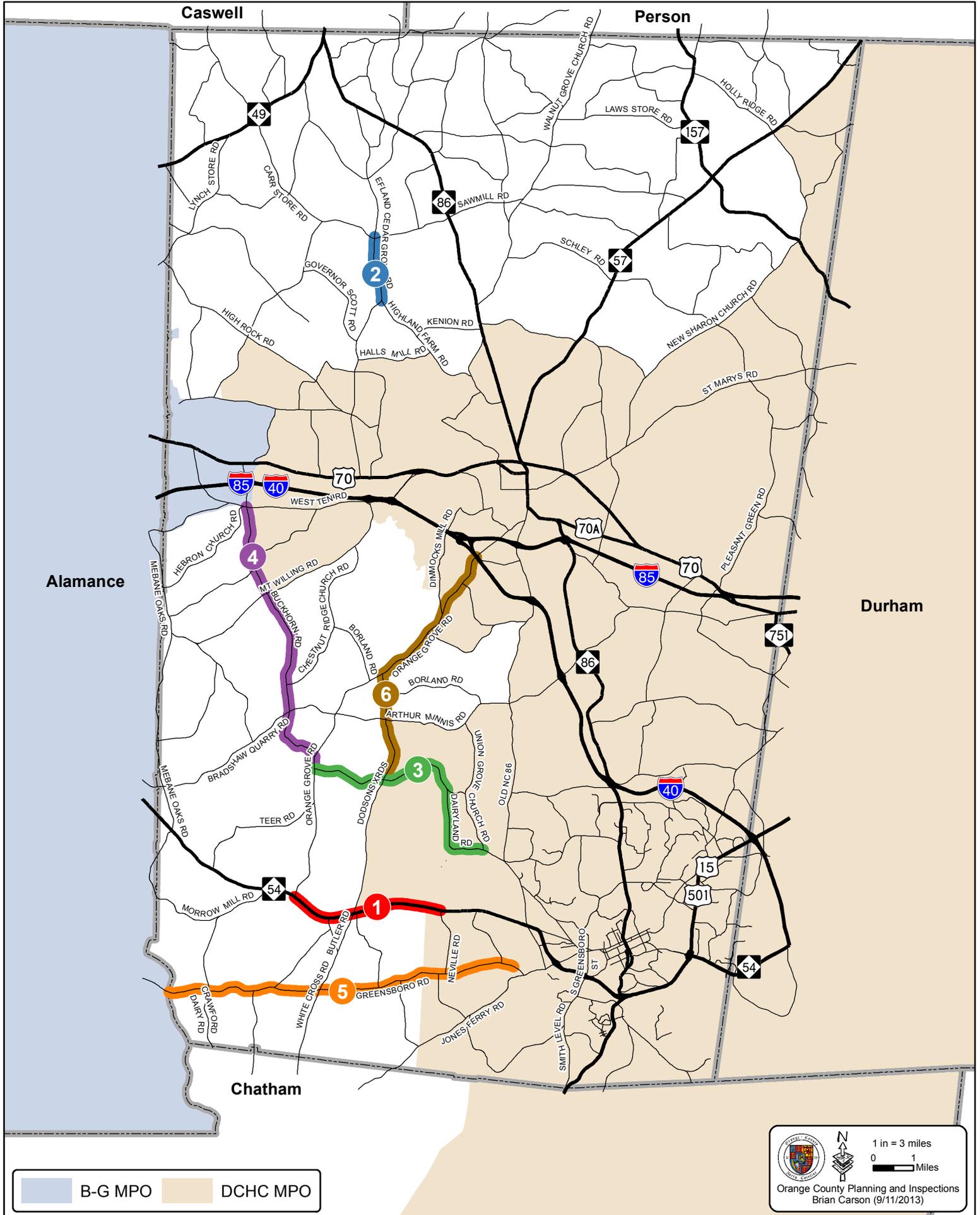


DRAFT

**Orange County
Comprehensive
Transportation Plan**

Plan date: January 28, 2013

Attachment 3: TARPO Project List Map



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Attachment 4: Draft Durham-Chapel Hill-Carrboro (DCHC) MPO Project Priority List

Map ID #	Project	Project Description/Need	Status (New/Existing Project)	Existing Project Score/ Rank	Staff Recommendation
1	South Churton Street (Old NC 86) Improvements	<p><u>Description:</u> Develop congestion management, limited access, bicycle and pedestrian improvements, and aesthetic and capacity improvements along South Churton Street (Old NC 86) from I-40 to U.S. 70 Business. More specifically, the project would widen South Churton Street along this segment to multiple lanes with a landscaped median and would widen the railroad bridge. This project is recommended in the DCHC MPO Metropolitan Transportation Plan (MTP). The feasibility study completed by NCDOT in February 2002 recommends a four (4)-lane divided curb and gutter cross section with a 16-foot median for the entire segment. Orange County will stress the need to study improvements within the current right-of-way (ROW) for the segment north of I-85 because of the significant built constraints along the corridor and its proximity to the Town of Hillsborough's historic district. Orange County will request that, where conditions do not prevent the addition of frontage roads, the feasibility study include the addition of frontage roads with limited access from the corridor.</p> <p><u>Need:</u> Traffic counts along South Churton Street (Old NC 86) indicate that the corridor is near capacity for average annual daily counts and over capacity for peak periods. Capacity improvements would ease congestion and improve travel time along this primary north-south corridor connecting the Town of Hillsborough and northern Orange County to I-40 and I-85. This project scored the highest among subregional mobility projects in Orange County for SPOT 2.0 and ranked 52/382 among those in the state within that category. Although the project is anticipated to rank the same or lower for SPOT 3.0, it is still projected to be among the highest scoring projects that are only eligible in the division funding tier.</p>	Existing Highway Mobility Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priority # 2 in 2011.	Scored in SPOT 2.0 prioritization as a Subregional Highway Mobility project. Ranked 52/382 for all Subregional Highway Mobility projects scored in the state. Project was ranked 38/71 by the MPO for highway projects scored in SPOT 2.0. The project is anticipated to rank about the same or slightly lower in SPOT 3.0 prioritization.	Submit to DCHC for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #1 as a reprioritized highway project.
2	U.S. 70 East/I-85 Connector	<p><u>Description:</u> Modify the I-85 Connector interchange at U.S. 70 to provide access from all directions. The existing Connector just east of Efland is not accessible to traffic on eastbound U.S. 70 and there is no access to westbound U.S. 70 from the Connector. This project is recommended in the DCHC MPO MTP.</p> <p><u>Need:</u> The project would enable traffic from northwestern Orange County to access I-85 more easily without risking the many points of traffic conflict through Efland. Traffic has increased on Efland-Cedar Grove Road as an alternative to NC 86. Much of that traffic currently "dog-legs" through Efland via Forrest Avenue to Mt. Willing Road to access I-85. Traffic counts reveal that traffic has increased approximately 40% over the past 10 years on Mt. Willing Road just south of Forrest Avenue, while traffic on U.S. 70 east of Efland-Cedar Grove Road has increased only 2%.</p> <p>The project would dramatically improve travel time for traffic from northwestern Orange County to I-85 and would dramatically ease congestion during peak periods in Efland. This project did not score very high for SPOT 2.0 prioritization but is projected to score higher for SPOT 3.0 because of the added emphasis on both benefit-cost/travel time and safety. It is also anticipated that the project will be eligible at both the regional and divisional funding tiers.</p>	Existing Highway Mobility Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priority #5 in 2011.	Scored in SPOT 2.0 prioritization as a Regional Highway Mobility project. Ranked 208/268 for all Regional Highway Mobility projects scored in the state. Project was ranked 66/71 by the MPO for highway projects scored in SPOT 2.0. Project is anticipated to rank higher for SPOT 3.0 but will likely not rank in the top tier of projects within the regional and divisional funding tiers.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #2 as a reprioritized highway project.
3	Orange Grove Road Extension	<p><u>Description:</u> Extend Orange Grove Road from the east side of Churton Street (SR 1009) to U.S. 70 Business. This project is recommended in the DCHC MPO MTP.</p> <p><u>Need:</u> This project would ease excess congestion on South Churton Street between Orange Grove Road and U.S. 70 Business and reduce travel time by providing a direct connection from Orange Grove Road to U.S. 70 Business. The project would also provide access to a potential site for the proposed Hillsborough train station. This project scored relatively well for SPOT 2.0 and ranked 77/382 for all subregional mobility projects in the state. Although the project is expected to rank the same or lower for SPOT 3.0, it is still projected to be among the higher scoring projects that are only eligible in the division funding tier.</p>	Existing Highway Mobility Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priority #7 in 2011.	Scored in SPOT 2.0 prioritization as a Subregional Highway Mobility project. Ranked 77/382 for all Subregional Mobility projects scored in the state. Project was ranked 35/71 by the MPO for highway projects scored in SPOT 2.0. The project is anticipated to rank about the same or slightly lower for SPOT 3.0 prioritization.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #3 as a reprioritized highway project.

Attachment 4: Draft Durham-Chapel Hill-Carrboro (DCHC) MPO Project Priority List

Map ID #	Project	Project Description/Need	Status (New/Existing Project)	Existing Project Score/ Rank	Staff Recommendation
4	NC 86 Improvements north of Hillsborough	<p><u>Description:</u> Widen NC 86 from U.S. 70 bypass to north of NC 57 to four (4) lanes with intersection improvements at U.S. 70 bypass and NC 57. Improvements at the NC 86/U.S. 70 intersection should include extending the queuing lane for traffic turning east onto U.S. 70 bypass from northbound Churton Street/NC 86. Improvements at the NC 86/NC 57 intersection should include a crosswalk and provide a safe crossing for pedestrians with a sidewalk connecting the intersection of NC 86 and NC 57 to Rencher Street. This project is not provided in the DCHC MPO MTP but is recommended in the DCHC MPO CTP.</p> <p><u>Need:</u> The segment of NC 86 between NC 57 and U.S. 70 is highly congested. Traffic counts indicate that this segment of NC 86 is over capacity for average annual daily counts. Capacity improvements would ease congestion and improve travel time along this primary north-south corridor connecting the Town of Hillsborough to NC 57 and northern Orange County. This project scored well for SPOT 2.0 and ranked 60/306 for all statewide mobility projects in the state. The project will be scored as a regional and/or division tier project for SPOT 3.0 and is anticipated to be among the higher scoring projects within these tiers with the added emphasis on congestion and benefit-cost.</p>	Existing Highway Mobility Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priority #12 in 2011. For this project to be funded, it would need to be added to the DCHC MPO MTP.	Scored in SPOT 2.0 prioritization as a Statewide Highway Mobility project. Ranked 60/306 for all Statewide Mobility projects scored in the state. Project ranked 49/71 by the MPO for highway projects scored in SPOT 2.0. In general, project is anticipated to rank about the same or slightly lower for SPOT 3.0 prioritization.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #4 as a reprioritized highway project.
5	NC 54 Widening	<p><u>Description:</u> Widen NC 54 from Neville Road to Old Fayetteville Road from a two (2)-lane thoroughfare to a four (4)-lane divided boulevard type thoroughfare with a travel-prohibitive median to improve mobility and provide better access control. This project would continue the NC 54 widening project recommended in the OCCTP into Carrboro; however, this project is not recommended in the DCHC MPO MTP or CTP.</p> <p><u>Need:</u> NCDOT projections west of these project limits reveal that traffic on NC 54 is at capacity, implying that traffic along these project limits is likely at or above capacity, which warrants an increase in capacity through widening. The project would improve congestion and reduce travel time along the corridor. As such, the project is likely to score relatively well against the congestion and benefit-cost scoring factors, and the project is eligible for funding at both the regional and divisional tiers.</p>	New Highway Project	N/A	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO MTP, TIP and the STIP as project priority #5 as a new highway project.
6	I-40 Widening	<p><u>Description:</u> Widen I-40 from four (4) lanes to six (6) lanes from the I-40/I-85 interchange to the Durham County line. The project is recommended in the DCHC MPO MTP.</p> <p><u>Need:</u> According to data from NCDOT, traffic along this corridor is near capacity and is expected to exceed capacity in future years. The project would reduce congestion and travel time and will likely score relatively well when compared to other projects submitted because of the added emphasis on congestion and benefit-cost. This project is eligible for funding at the statewide, regional and divisional tiers.</p>	Existing Highway Mobility Project submitted for scoring in SPOT 2.0. This project was not submitted by Orange County in 2011 but is already in the DCHC MPO TIP and the STIP and is considered a project of regional significance.	Scored in SPOT 2.0 prioritization as a Statewide Highway Mobility project. Ranked 54/306 for all Statewide Mobility projects scored in the state. Project ranked 63/71 by the MPO for highway projects scored in SPOT 2.0. Project is anticipated to rank higher for SPOT 3.0 prioritization among highway projects throughout the state.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #6 as a reprioritized highway project.
7	I-85 Widening	<p><u>Description:</u> Widen I-85 from four (4) lanes to six (6) lanes from the I-40/I-85 interchange to the Durham County line and reconstruct interchanges and bridge structures. The project is recommended in the DCHC MPO MTP.</p> <p><u>Need:</u> The project would reduce congestion and travel time along the corridor during peak periods. This project is eligible for funding at the statewide, regional and divisional tiers.</p>	Existing Highway Mobility Project submitted for scoring in SPOT 2.0. This project was not submitted by Orange County in 2011 but is already in the DCHC MPO TIP and the STIP and is considered a project of regional significance.	Scored in SPOT 2.0 prioritization as a Statewide Highway Mobility project. Two separate segments scored for the project ranked 150/306 and 220/306 for Statewide Mobility projects scored in the state. Project ranked 68/71 by the MPO for highway projects scored in SPOT 2.0. Project is anticipated to rank higher for SPOT 3.0 prioritization among highway projects throughout the state but will likely not rank high enough to be funded at the Statewide tier.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #7 as a reprioritized highway project.

Attachment 4: Draft Durham-Chapel Hill-Carrboro (DCHC) MPO Project Priority List

Map ID #	Project	Project Description/Need	Status (New/Existing Project)	Existing Project Score/Rank	Staff Recommendation
8	Hillsborough Train Station	<p><u>Description:</u> Construct a train station in Hillsborough and implement AMTRAK service as designated in <i>Hillsborough's Rail Station Small Area Plan</i> and in the <i>Orange County Bus and Rail Investment Plan</i>. The train station could also serve future commuter rail operations and anchor a multimodal transportation hub in Hillsborough.</p> <p><u>Need:</u> A revenue and ridership study conducted by NCDOT and AMTRAK has indicated there is enough potential ridership to make a stop in Hillsborough financially feasible. The station and service in Hillsborough would fill a sizable gap in area served along the rail line between Burlington and Durham.</p>	Will be considered a new transit and/or rail project**	N/A	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #8 as a new transit and/or rail project.
9	Buckhorn Economic Development District (EDD) Park-and-Ride	<p><u>Description:</u> Construct a park-and-ride facility to be located in the I-85/Buckhorn Road Economic Development District (EDD) to collect ridership in eastern Alamance and western Orange Counties.</p> <p><u>Need:</u> The park-and-ride facility would provide a transit connection to an area with a growing commuting presence to and from the Triangle region.</p>	New Transit Project**	Ranked 10/17 among all DCHC MPO transit projects scored in 2011. Final rank with MPO scores and Transportation Advisory Committee (TAC)-assigned points was 14/17. Project received no points from the TAC for the DCHC MPO draft 2014-2020 TIP priority list.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #9 as a new transit project.
10	Eno Mountain Road and Mayo Street at Orange Grove Road intersection realignment and safety improvements	<p><u>Description:</u> Realign the intersection of Eno Mountain Road and Mayo Street with Orange Grove Road and make safety improvements. This project is not provided/recommended in the DCHC MPO MTP.</p> <p><u>Need:</u> The project would improve safety, reduce travel time, and improve traffic flow between residential and commercial areas in the Town of Hillsborough.</p>	Existing Highway Modernization project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priority #8 in 2011.	Scored in SPOT 2.0 prioritization as a Subregional Highway Modernization project. Ranked 59/149 for all Subregional Modernization projects scored in the state. Ranked 16/71 by the MPO for highway projects scored in SPOT 2.0. Project is anticipated to rank low among all projects scored in the division tier.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #10 as a reprioritized highway project.
11	Homestead Road bike lane and sidewalk installation*	<p><u>Description:</u> Improve Homestead Road from Old NC 86 (SR 1009) to NC 86 to include bicycle lanes and sidewalks in sections of the corridor where those facilities do not exist. This project is provided/recommended in the DCHC MPO MTP</p> <p><u>Need:</u> There are three (3) schools in the vicinity of Homestead Road: Chapel Hill High School, Smith Middle School, and Seawell Elementary School. Many students live within walking and biking distance of Chapel Hill High School and must walk or cycle along or across Homestead Road on a daily basis. Provision of bikeway and pedestrian facilities is necessary to give students a comfortable and safe place to travel separate from that of motorized vehicular traffic. Homestead Road is also a commuting route for adult utilitarian bicyclists connecting residential areas to other arteries serving employment centers.</p>	Existing Highway Modernization project for submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priority #9 in 2011.	Scored in SPOT 2.0 prioritization as a Subregional Highway Modernization project. Ranked 75/149 for all Subregional Modernization projects scored in the state. Ranked 19/71 by the MPO for highway projects scored in SPOT 2.0. Project is anticipated to rank low among all projects scored in the division tier.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #11 as a reprioritized highway project.
12	Eubanks Road bike lane installation*	<p><u>Description:</u> Construct bicycle lanes on Eubanks Road from Old NC 86 (SR 1009) to NC 86. This project would likely exceed \$1,000,000, and as such, would be submitted as a highway project. This project is provided/recommended in the DCHC MPO MTP.</p> <p><u>Need:</u> This project would provide a separate facility for both recreational and commuter bicyclists to reduce/eliminate the bike/automobile modal conflict along this corridor. The project would also provide access to the Morris Grove Elementary School on Eubanks Road.</p>	Existing Highway Modernization Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priority #10 in 2011.	Scored in SPOT 2.0 prioritization as a Subregional Highway Modernization project. Ranked 19/149 for all Subregional Modernization projects scored in the state. Ranked 6/71 by the MPO for highway projects scored in SPOT 2.0. Project is anticipated to rank low among all projects scored in the division tier.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #12 as a reprioritized highway project.

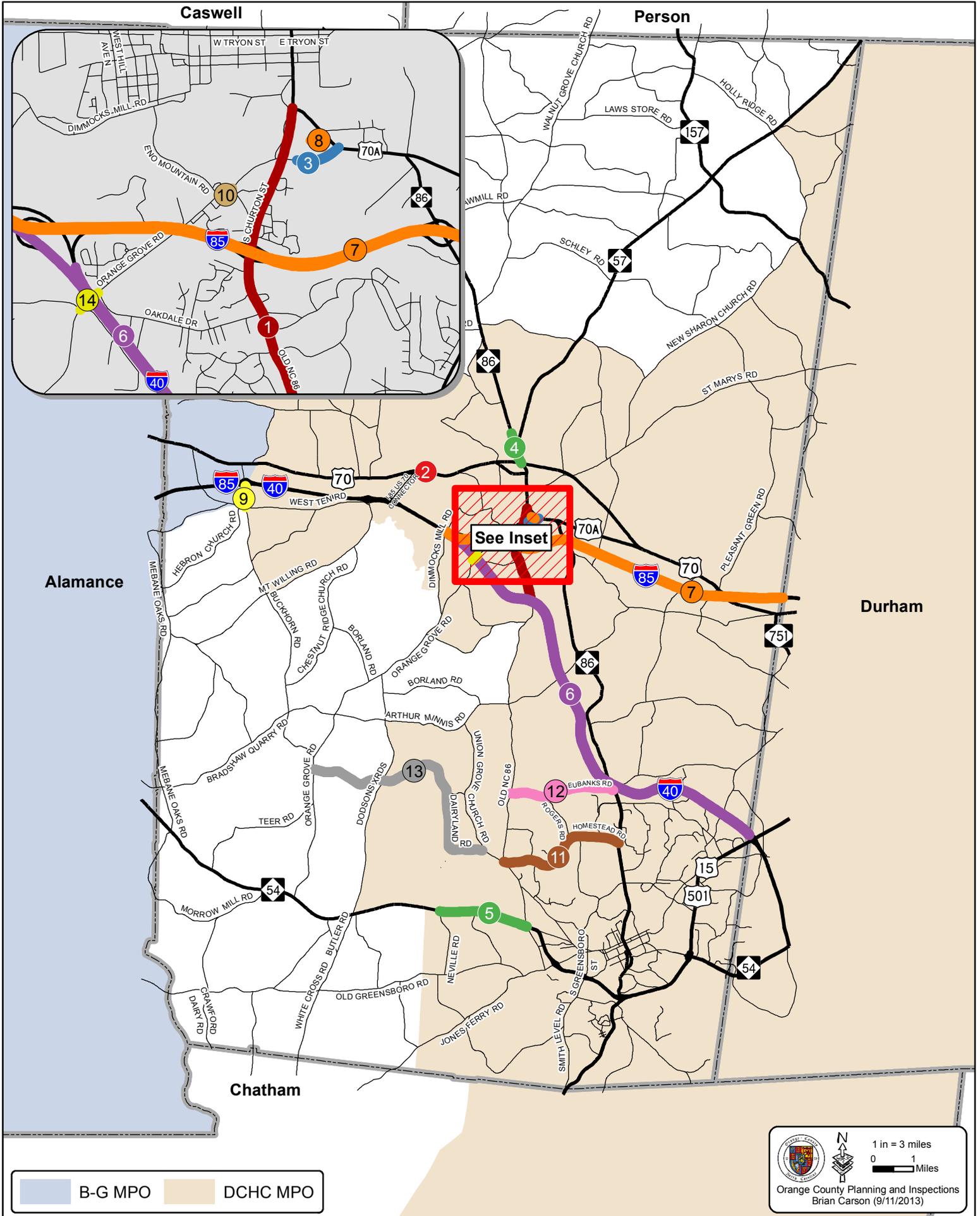
Attachment 4: Draft Durham-Chapel Hill-Carrboro (DCHC) MPO Project Priority List

Map ID #	Project	Project Description/Need	Status (New/Existing Project)	Existing Project Score/Rank	Staff Recommendation
13	Dairyland Road paved shoulders*	<p><u>Description:</u> Widen Dairyland Road from Union Grove Church Road to Orange Grove Road to include four (4)-foot paved shoulders. Part of this project is located within the TARPO planning area. The portion of this project within the TARPO planning area is being recommended for inclusion in that priority list. This project is scheduled in the STIP for a feasibility study (STIP # EB-5108). This project is provided/recommended in the DCHC MPO MTP.</p> <p><u>Need:</u> This project would provide one segment of a bikeway connection through western Orange County from Carrboro to the Buckhorn Road and Mebane area and improve the safety of the subject thoroughfare for both bicyclists and motorized vehicular travel. The project is not likely to score very high using the State’s congestion and benefit-cost scoring factors and is only eligible for funding at the division tier.</p>	Existing Highway Modernization Project submitted for scoring in SPOT 2.0. This project was submitted by Orange County as project priority #11 in 2011	Scored in SPOT 2.0 prioritization as a Subregional Highway Modernization project. Ranked 62/149 for all Subregional Modernization projects scored in the state. Ranked 21/71 by the MPO for highway projects scored in SPOT 2.0. Project is anticipated to rank low among all projects scored in the division tier.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #13 as a reprioritized highway project.
14	Orange Grove Road/I-40 Pedestrian Bridge***	<p><u>Description:</u> Construct a pedestrian bridge over I-40 alongside Orange Grove Road and construct a sidewalk along the north side of Orange Grove Road from the bridge to Timbers Drive.</p> <p><u>Need:</u> I-40 separates two schools, Grady Brown Elementary and Cedar Ridge High School, from residential areas north of I-40. The schools are within walking distance from residential areas, but bicyclists and pedestrians must share the roadway with motor vehicles crossing the existing narrow two (2)-lane bridge that carries Orange Grove Road over I-40. The bridge is too narrow to accommodate a pedestrian walkway. Lack of an adequate pedestrian crossing presents an unsafe environment for students to walk to the schools. The <i>Orange County Safe Routes to School Action Plan</i> identifies the pedestrian bridge as the central element in the plan for Grady Brown Elementary School. The school system has committed to construct a trail from the bridge across Cedar Ridge High School property to the entrance of Cedar Ridge High School.</p>	New Pedestrian Project**	Scored in SPOT 2.0 prioritization as a Pedestrian project. Ranked 559/629 for all bike/ped projects scored in the state. Ranked 24/24 by the MPO for pedestrian projects scored in SPOT 2.0. Project is anticipated to rank low among all bike/ped projects scored in the division tier.	Submit to DCHC MPO for SPOT 3.0 scoring and consideration of inclusion in the DCHC MPO TIP and the STIP as project priority #14 or higher as a new pedestrian project if the County can commit to provide the 20% local match, acquire any necessary right-of-way, and locally administer/manage the project.

*Bike/ped projects that are greater than \$1,000,000 in cost are submitted as highway projects and are scored using the highway scoring methodology. Project will likely exceed \$1,000,000.
 **Bike/ped and transit projects will be considered new projects for SPOT 3.0 scoring. Previous bike/ped and transit projects submitted for scoring will not automatically be scored for SPOT 3.0.
 ***Pedestrian projects less than \$1,000,000 in cost or that do not consist of on-road improvements require a 20% local match and must be locally administered. Right-of-way acquisition is also not a permissible cost to be funded by NCDOT for these projects.

- NOTES:**
- 1) The I-85 and I-40 widening projects are already scheduled for reprioritization at the Statewide tier, and staff is suggesting that they be added to the priority list to provide a guide for staff and elected officials to determine to which Orange County projects they should assign points in the event that these projects are not funded at the statewide tier and become eligible at the regional or divisional funding tiers.
 - 2) Other candidate projects to consider for submission as mentioned by the OUTBoard bicycle transportation advocate member include:
 - a) Four (4)-foot paved shoulders for bicycle use on Lawrence Road from Old NC 10 to St. Mary’s Road to New Sharon Road;
 - b) Four (4)-foot paved shoulders for bicycle use on Whitfield Road/Erwin Road from I-40 to Kerley Road/Durham County line; and
 - c) Lebanon Road from Mill Creek to Brookhollow Road.
 - 3) One project was removed from the priority list submitted in 2011: Old NC 86 bikeway improvements from Hillsborough Road in Carrboro to I-40. All other projects submitted in 2011 are included; however, the staff-suggested order of prioritization for those projects has changed.
 - 4) The following projects within the DCHC MPO planning area portion of Orange County are currently in the Statewide Transportation Improvement Program (STIP):
 - a) I-40 widening
 - b) I-85 widening
 - c) Feasibility study for Dairyland Road paved shoulders project.

Attachment 5: DCHC MPO Project List Map



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**ORANGE COUNTY
ORANGE UNIFIED TRANSPORTATION BOARD (OUTBOARD)**

REGULAR AGENDA ITEM ABSTRACT

Meeting Date: September 18, 2013

Action Agenda

Item No. 6

SUBJECT: Eno Economic Development District (EDD) Access Management Plan

DEPARTMENT: Planning and Inspections

PUBLIC HEARING: (Y/N)

No

ATTACHMENT(S):

1. Draft Eno EDD Access Management Plan

INFORMATION CONTACT:

Abigaile Pittman, Transportation/Land Use Planner, 245-2567

PURPOSE: To receive a brief introduction to the Draft Eno EDD Access Management Plan for establishing transportation connectivity as the study area develops in the future.

BACKGROUND: The Eno Economic Development District (EDD) Area Small Area Plan (adopted June 24, 2008; amended February 3, 2009) recommended the approval of an access management program for US 70 and Old NC Highway 10 to provide better transportation systems and capacities as development proceeds in the area.

Since adoption, Plan recommendations have been implemented in preparation for economic development in the Eno EDD area including:

- Land Use Plan Map amendments
- Pre-zoning of land
- Unified Development Ordinance (UDO) amendments for EDD districts
- An inter-local utility service agreement with Durham
- Work has begun on a public water and sewer master plan
- Planning for a cross-county bus route
- Striping of two-foot bike lanes along Old NC 10/Old Hillsborough Road
- I-85/US 70 interchange concept plan was drafted by NCDOT
- I-85 widening project and US 70 interchange project have been entered in the State's Transportation Improvement Program (TIP) for implementation in a post development program.

The study area for the proposed access management plan comprises approximately 980 acres of land in the vicinity of US Highway 70 and Old NC Highway 10 (near Durham County). As properties are developed for non-residential land uses within the Eno EDD, transportation interconnectivity and access will become increasingly important, enhancing the importance of a formally adopted access management plan for the area. Formally adopted transportation plans are necessary to procure federal and state funding for projects and to require developer action and contribution in providing transportation infrastructure consistent with a master plan. Adopted access management plans can also be incorporated into regional transportation plans, which will enhance Orange County's collaboration with the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO).

The proposed access management plan examines the US 70 and Old NC Highway 10 corridors within the Eno EDD and recommends an access management concept to best meet local conditions and the needs of businesses and residents while maintaining the functionality of these important arterial facilities for current and future traffic. The improvement of the functionality of these arterials to both serve commuting and travelling traffic together with serving the businesses and residences along these routes is of high local and strategic importance as future development proceeds in the Eno EDD.

Attachment 1 is the Draft Eno Economic Development District (EDD) Access Management Plan. The Eno EDD Access Management Plan is also available on the Orange County Planning Department website at: <http://orangecountync.gov/planning/SpecialProjects.asp> .

Public Outreach:

In an effort to better inform interested persons in an informal setting, a Public Information Meeting/Open House was held on September 4, 2013 from 4:30 – 6:30 p.m. at the Shared Visions Retreat Center (historic Murphey School), 3717 Murphey School Road, Durham, NC (in Orange County).

BOCC Public Hearing:

The Board of County Commissioners (BOCC) and Planning Board held a public hearing on the Plan at the September 9, 2013 Quarterly Public Hearing. Staff will provide an update on the public hearing at the meeting.

RECOMMENDATION(S): Staff recommends the OUTBoard:

1. Receive Staff's introduction to the Access Management Plan and begin its review at home in preparation for the October 16th meeting.



ORANGE COUNTY ENO ECONOMIC

DEVELOPMENT DISTRICT (EDD)

ACCESS MANAGEMENT PLAN

Draft

September 9, 2013

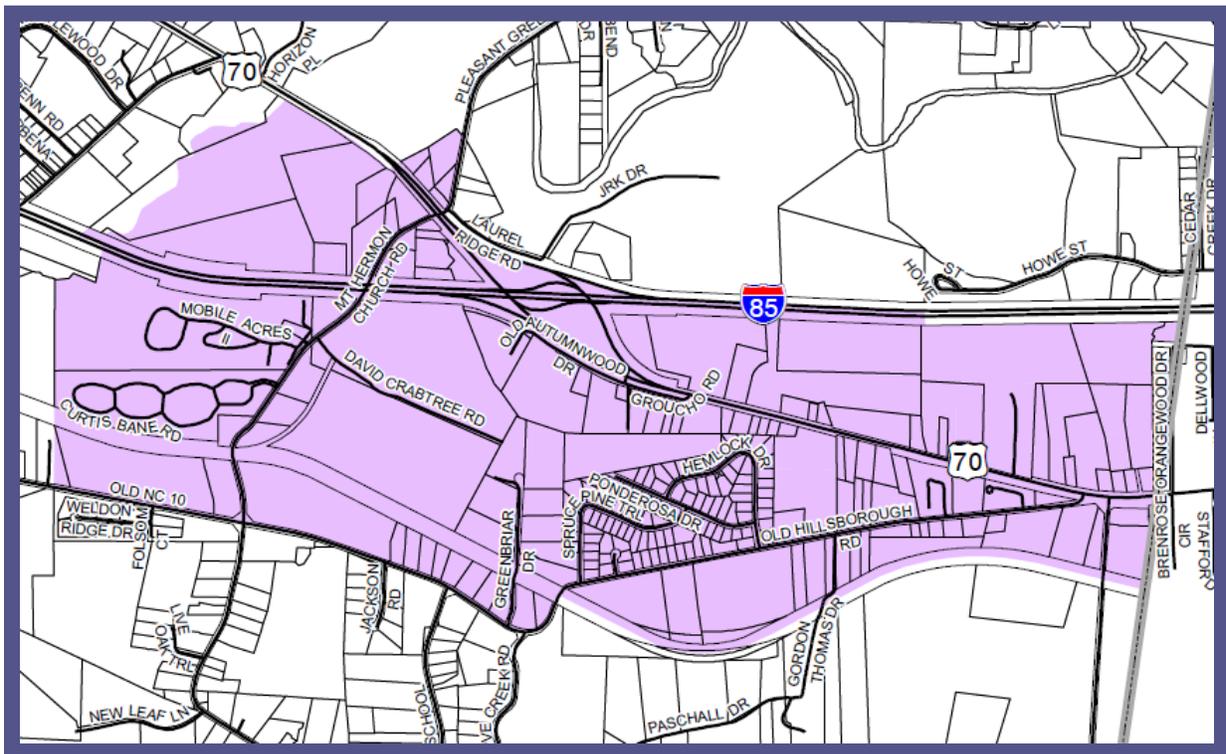


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Eno Economic Development District (EDD) Access Management Plan

Introduction

The Study Area for the Draft Eno EDD Access Management Plan is the area depicted as Economic Development Transition on the Orange County Future Land Use Map. The Study area contains approximately 980 acres and is primarily bounded by the NCRR /Norfolk Southern (NS) Railway to the south, I-85 to the north, US 70 to the northwest, and properties in the vicinity of Mt. Herman Church Road to the west. The I-85/US 70 interchange is located within the north/central part of the Study Area. The Whispering Pines residential subdivision, comprising approximately 67 acres, is included in the Study Area and is designated as a 10-year Transition Area on the Future Land Use Map. Maps of the Study Area follow on pages 2 and 3.

The majority of the area has been designated as an urban growth area since 1981 because of its proximity to I-85, US 70, the interchange of the two, and the NCRR/Norfolk Southern (NS) Railway.

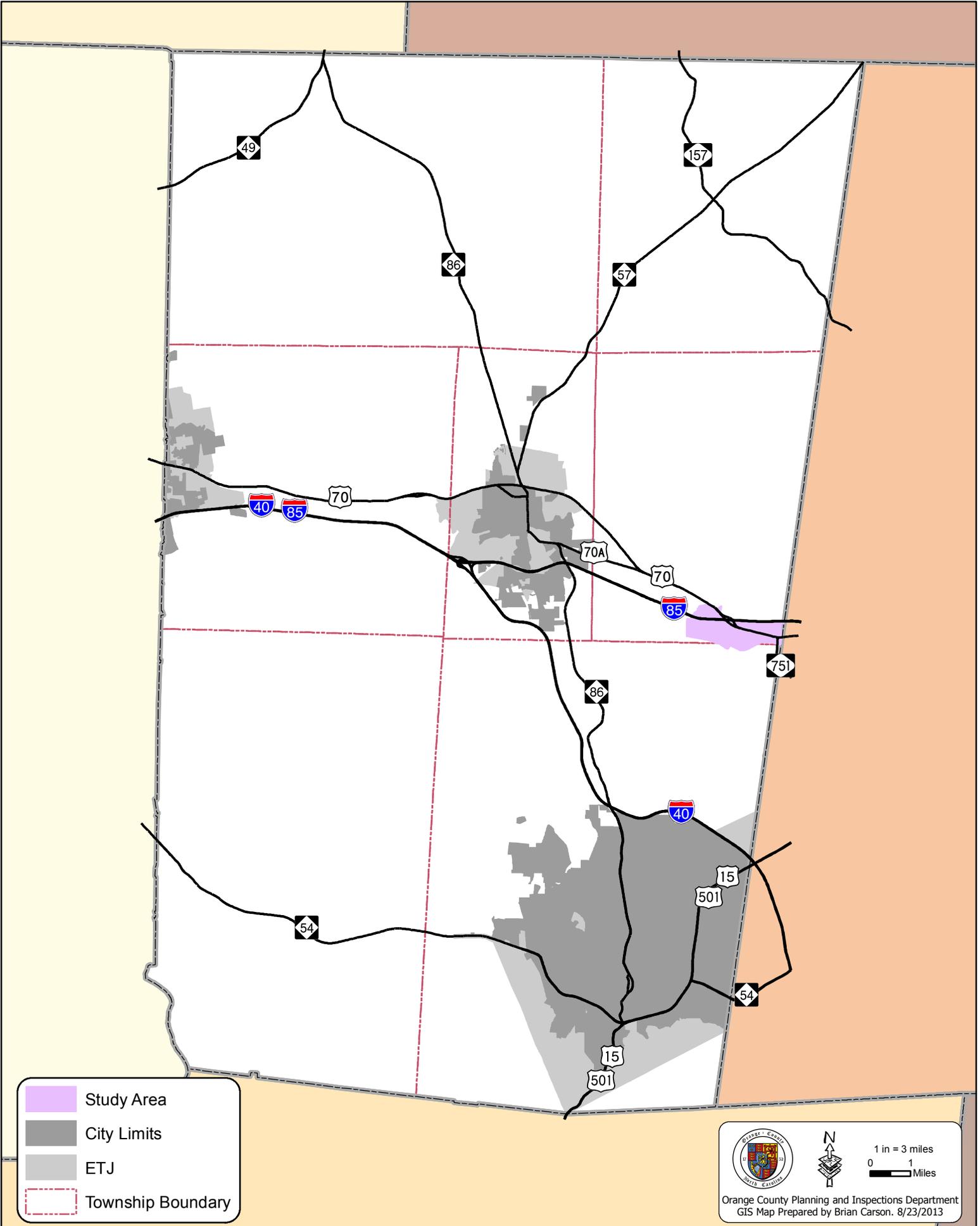
The future of the area for urban growth was originally defined by the 1981 Orange County Land Use Plan, and reinforced by the 2030 Comprehensive Plan (2008), and economic development land use and zoning amendments for the majority of the area in 1994. Envisioned land uses included non-residential commercial, office and industrial, with some higher density housing.

In 2006 the Orange County Board of County Commissioners (BOCC) approved the formation of a citizen Task Force to work with Economic Development and Planning Staff in developing a plan for the Eno EDD. The *Eno Economic Development District (EDD) Area Small Area Plan* was developed over the next two years as a collaborative effort by community representatives, elected officials, and staff of the Orange County Planning Department, and Durham City/County Planning Department. The Small Area Plan (adopted June 24, 2008; amended February 3, 2009) contains numerous recommendations in the following topic areas:

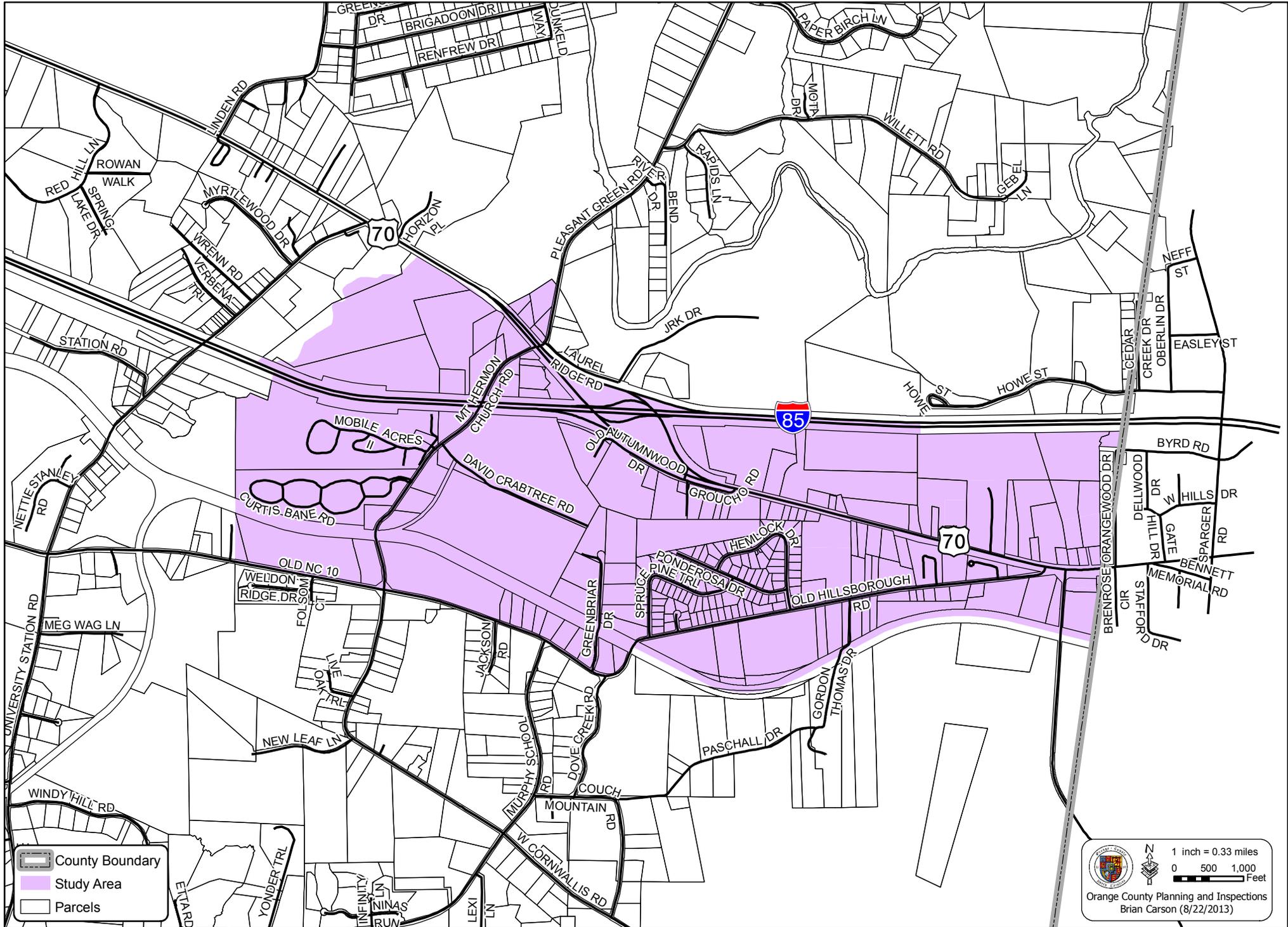
- Water and Sewer
- Land Use and Zoning
- Transportation
- Housing
- Parks, Recreation, and Open Space
- Communications
- Intergovernmental Issues
- Other Recommendations, including:
 - Potential Strategic Growth and Rural Conservation (SGRC Program)
 - Plan Updates
 - Implementation

The analysis within the Eno EDD Small Area Plan explains and supports the importance of this general area for higher intensity activity while preserving environmental and cultural resources of the Eno River to the north and Stoney Creek Basin to the west.

Eno EDD - Vicinity Map



Eno EDD - Access Management Plan Study Area



Since adoption, several Eno EDD Small Area Plan recommendations have been implemented including:

1. Land Use Plan Map amendments designating the development potential categories of the Eno EDD (which was included in the 2008 Comprehensive Plan, and amended through September, 2012);
2. The 'pre-zoning' of land to promote the economic development land use program (current zoning adopted in September, 2012);
3. Unified Development Ordinance (UDO) amendments for the creation and regulation of uses and development standards for the Eno EDD (which was included in the UDO adopted in 2011, and amended through January, 2013). The purpose of these amendments was to more strongly encourage quality, non-residential development in the EDD while balancing any adverse impacts to adjacent properties and the environment;
4. Development of a long range Capital Improvement Program (CIP) for all economic development zones;
5. The continued development of Orange County's Economic Development program;
6. There has been progress with the Plan's water and sewer recommendations:
 - An inter-local utility service agreement with the City of Durham was adopted in January, 2012 to further the area's economic development potential; and
 - A consultant (CDM Smith) is currently working on a preliminary engineering study for a public water and sewer master plan for the area;
7. The County is working cooperatively with Triangle Transit Authority to plan for options for a new bus services outlined in the Orange County Bus and Rail Investment Plan, including a possible cross-county route through the Eno Study Area;
8. Triangle Transit Authority has evaluated the best location for a future commuter rail transit stop within the Eno EDD area;
9. Bike lanes approximately two-foot in width have been striped along Old NC 10;
10. The North Carolina Department of Transportation (NCDOT) prepared a draft concept plan for the re-design of the I-85/US 70 interchange in 2009; and
11. Projects for the widening of I-85 from I-40 to the Durham County line, including the re-design of the US 70 interchange, have been entered in the State's Transportation Improvement Program (TIP) for implementation in the future developmental program (post 2020); however, the State's new project prioritization process (currently under development) may allow the project to be funded sooner.

These initiatives are in preparation for economic development in the Eno EDD area. Land development in the EDD is intended to occur through coordination between Orange County and the City of Durham, who will be the service provider of public water and sewer. Properties will be annexed by the City if/when served public water/sewer. The purpose of adopted amendments accomplished in 2012 was to align Orange County land use and zoning classifications with the City of Durham's Urban Growth Area located within Orange County.

Additionally, NCDOT is currently proceeding with the closing of a private rail crossing closure on Greenbriar Drive that will re-route the access of properties on Greenbriar Drive north of the NCR/Norfolk Southern (NS) Railway through the Whispering Pines Subdivision.

The adopted objective of the Eno EDD Small Area Plan was the provision of an efficient, multi-modal transportation system. The first recommendation for the implementation of this objective is the approval of an access management program for US 70 and Old Highway 10 to provide better transportation systems and capacities as development proceeds in the area.

As properties are developed for non-residential land uses within the Eno EDD, transportation interconnectivity and access will become increasingly important, enhancing the importance of a formally adopted access management plan for the area. Formally adopted transportation plans are necessary to procure federal and state funding for projects and to require developer action and contribution in providing transportation infrastructure consistent with a master plan. Adopted access management plans can also be incorporated into regional transportation plans, which will enhance Orange County's collaboration with the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO).

This report examines the US 70 and Old Highway 10 corridors within the area of the Eno EDD and recommends an access management concept to best meet local conditions and the needs of businesses and residents while maintaining the functionality of these important arterial facilities for current and future traffic. The improvement of the functionality of these arterials to both serve commuting and travelling traffic together with serving the businesses and residences along these routes is of high local and strategic importance as future development proceeds in the Eno EDD.

Existing Zoning and Land Use

Existing Land Use

The Study Area contains a variety of residential uses ranging from mobile home parks to modest single family homes on smaller lots, to large single family homes located on several acres of land. Additionally, the Study Area contains numerous commercial and industrial uses along Highway 70 and Mt. Herman Church Road. Five (5) parcels of land within the Focus Area are in the Agricultural Use Value program.

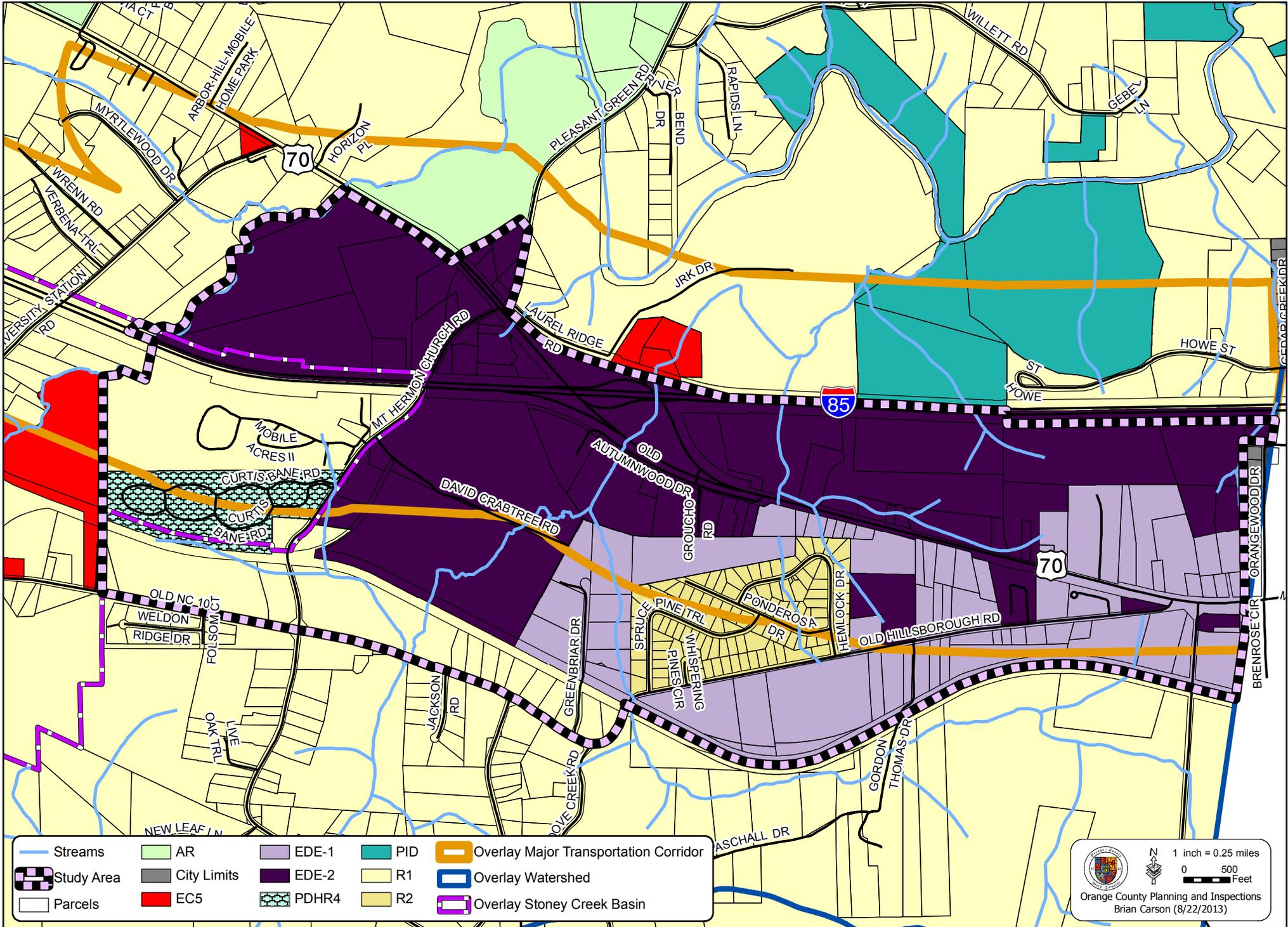
Existing Zoning

The existing zoning for the Study Area, derived from the Unified Development Ordinance (UDO) is depicted on the *Eno EDD - Zoning Map* on page 7. The Study Area is currently zoned EDD-1 (Economic Development Eno Lower Intensity) and EDE-2 (Economic Development Eno Higher Intensity). The Whispering Pines subdivision is currently zoned R2 (Low and Medium Intensity Residential). Remaining areas of the Study Area are currently zoned R1 (Rural Residential). Additionally, the Study Area is within the Major Transportation Corridor (MTC) zoning overlay district. The MTC, which measures approximately 1,250 feet from the edge of I-85 and US 70, requires higher developments standards for setbacks, buffering and landscaping within the district.

The following table describes the existing zoning districts found in the Study Area:

Existing Zoning District	Description
EDE-1 Economic Development Eno Lower Intensity	The purpose of the EDE-1 District is to provide locations for a range of lower intensity non-residential uses in the designated Eno Economic Development District.
EDE-2 Economic Development Eno Higher Intensity	The purpose of the EDE-2 District is to provide locations for a range of light industrial, distribution, retail, office, and service uses in the designated Eno Economic Development District.
R-1 Rural Residential	The purpose of the R-1 District is to provide locations for rural non-farm residential development, at very low intensities, in areas where the short and long-term solutions to domestic water supply and sewage disposal shall be individual wells and ground absorption system.
R-2 Low Intensity Residential	The purpose of the R-2 District is to provide locations for low intensity residential development and supporting recreational community service and educational uses in areas where urban services are available or are to be provided as part of the development process.
MTC Major Transportation Corridor	The intent of the MTC Overlay District is to protect and enhance important natural and environmental features through the provision of special controls of development along major transportation corridors.

Eno EDD - Zoning



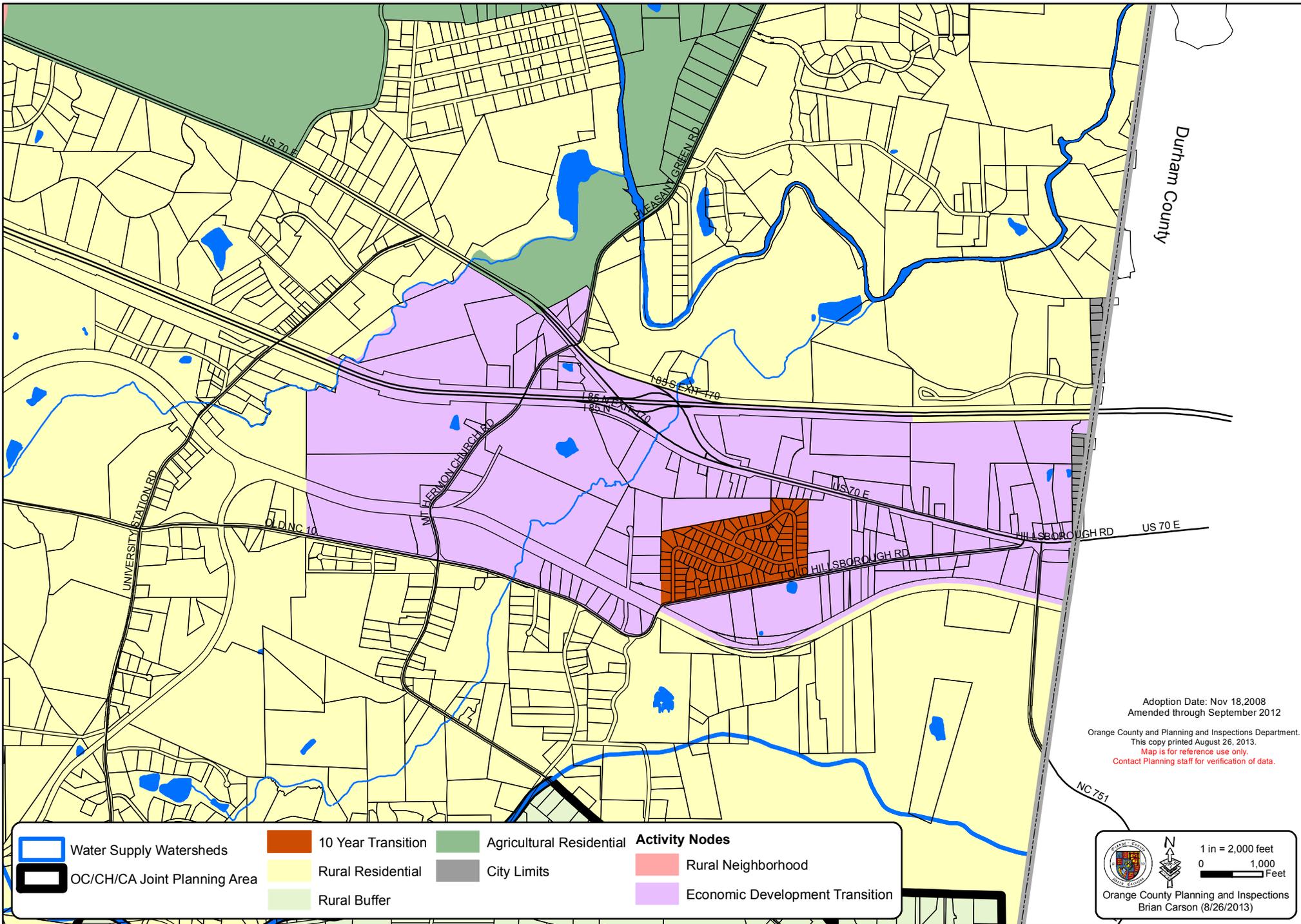
Future Land Use Designations

Future development of properties within the Study Area will be guided by the Eno EDD - *Future Land Use Map of the 2030 Orange County Comprehensive Plan*, depicted on page 9. As a component of the Comprehensive Plan, the Future Land Use Map provides the framework for long-range decision-making regarding the area's growth and development.

The following table describes the adopted future land use categories found in the Study Area:

Future Land Use Designation	Description
Economic Development Activity Node	Land in areas of the County which has been specifically targeted for economic development activity consisting of light industrial, distribution, office, service/retail uses, and flex space (typically one-story buildings designed, constructed, and marketed as suitable for use as offices but able to accommodate other uses such as a warehouse, showroom, manufacturing assembly, or similar operations.) Such areas are located adjacent to interstate and major arterial highways, and subject to special design criteria and performance standards.
10-Year Transition	Land located in areas that are in the process of changing from rural to urban densities and/or intensities, that are suitable for higher densities and/or intensities and could be provided with public utilities and services within the first 10 year phase of the Plan update, or where such utilities and services are already present or planned. Non-residential uses implemented in accordance with small area plans and/or overlay districts may be appropriate.
Resource Protection Area	Designated Primary Conservation Areas which contain sensitive environmental resources, historically significant sites, and features considered unbuildable because of their limitations or unsuitability for development. Includes wetlands and floodplains along drainage tributaries, steep slope areas (15% or greater), natural areas, wildlife habitats and corridors, and significant historic and archaeological sites.

Eno EDD - Future Land Use Map of the Orange County 2030 Comprehensive Plan



	Water Supply Watersheds		10 Year Transition		Agricultural Residential	Activity Nodes	
	OC/CH/CA Joint Planning Area		Rural Residential		City Limits		Rural Neighborhood
			Rural Buffer				Economic Development Transition

Adoption Date: Nov 18, 2008
 Amended through September 2012
 Orange County and Planning and Inspections Department.
 This copy printed August 26, 2013.
 Map is for reference use only.
 Contact Planning staff for verification of data.

1 in = 2,000 feet
 0 1,000 Feet

Orange County Planning and Inspections
 Brian Carson (8/26/2013)

Environmental Considerations for Access Management in the Study Area

The Eno EDD – Environmental Map on page 11 depicts the topography, floodplains, and wetlands in the Study Area. These environmental considerations will in some locations provide challenges to the development of access management strategies recommended in the Study Area.

Topography

The Study Area has gradual changes in topography except in the northwest and northeast portions. Elevation within the Study Area ranges from 340 feet above sea level to 550 feet above sea level. Slopes are not particularly steep even in the vicinity of drainageways except in the previously noted portions.

Floodplains

Floodplains are located within the Study Area predominantly along Rhodes Creek. Floodplains indicate areas of past and potential future flooding.

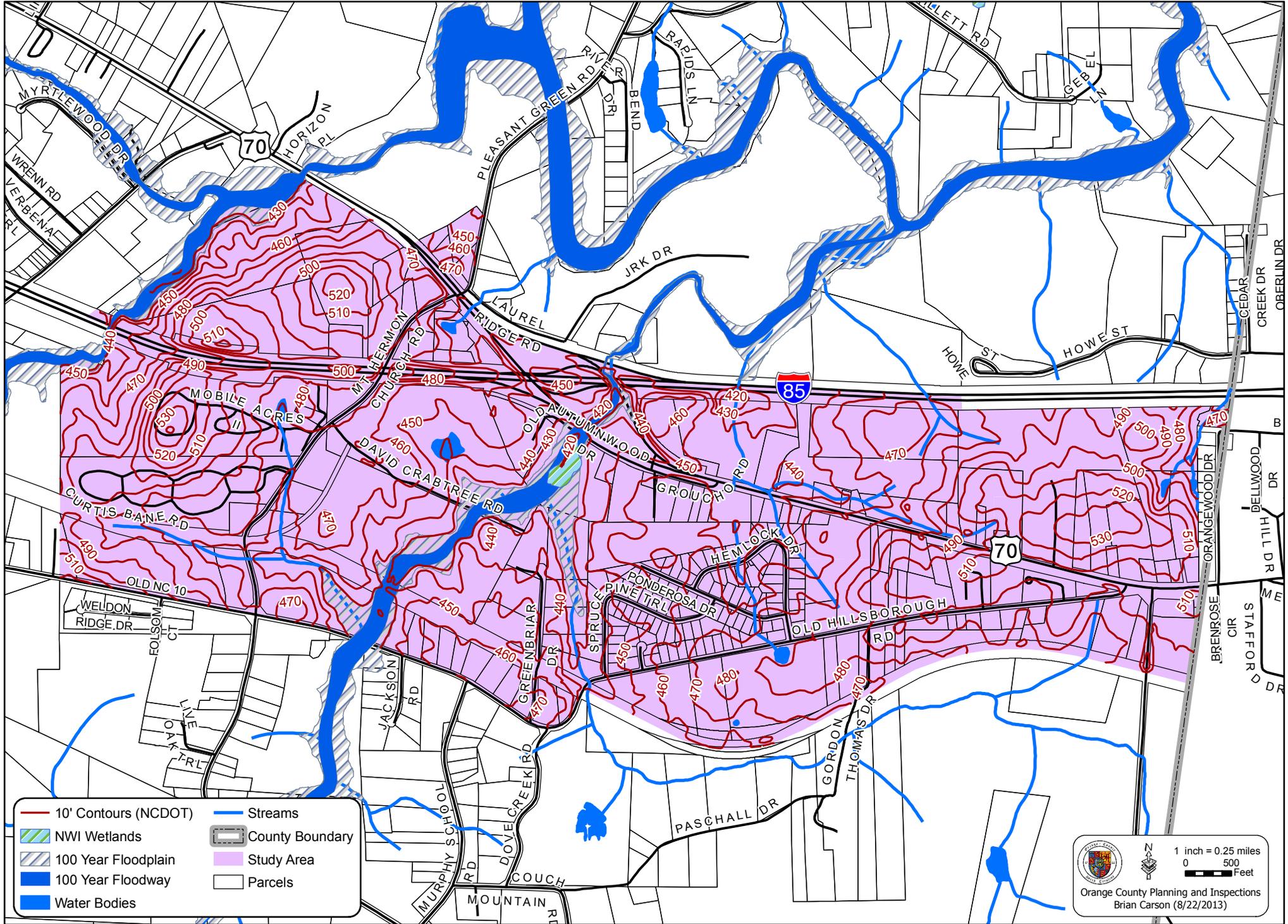
Wetlands

Potential wetlands have also been identified throughout the Study Area by using the presence of Bottomland Hardwood Forest vegetation as an indicator for the presence of wetlands. Wetlands are generally unsuitable for development and normally require additional regulatory oversight and permitting by the U.S. Army Corps of Engineers.

Environmental Benefit of Access Management

From an environmental perspective, improved traffic flow afforded through an access management plan for the Eno EDD area could also translate into greater fuel efficiency and reduced vehicular emissions along the I-85, US 70 and Old NC 10 corridors.

Eno EDD - Environmental Map



Existing Transportation Conditions

Functional Classification of Roads within the Eno Economic Development District (EDD)

Roads within the Eno EDD have been classified using a road classification system refined from the NC Department of Transportation's classification system.

Category	General Description
Interstate	Major traffic-carrying facilities that are part of the Federal Interstate Highway system; trip length characteristics are predominantly long-distance intra- and inter-state. Right-of-way width is a minimum of 230-feet and can increase to over 300-feet, depending on the number of lanes.
Arterial	The primary traffic-carrying facilities in the county; trip length and travel density characteristics of substantial inter-county travel or of serving urban-type development; typically would include rural freeways. Right-of-way width is typically 70- to 110-feet, depending on the number of lanes and whether bicycle lanes are provided.
Collector	Facilities that generally service intra-county travel. Provides the network connection between local roads and the arterial system. Shorter lengths, lower volumes, and more land access than the arterial system. Right-of-way width is typically 60- to 100-feet, depending on the number of lanes and whether bicycle lanes are provided.
Local	Primarily serves as access to adjacent land use. Any traffic is local in nature; therefore volumes and length are relatively low. Local roads comprise all remaining public roads not classified as a higher function. Right-of-way width is typically 60- to 80-feet.

The Eno EDD – NCDOT Road Functional Classification Map on page 13 depicts the following road classifications in the Eno EDD. The Map also provides sub-classifications of the primary classifications listed above.

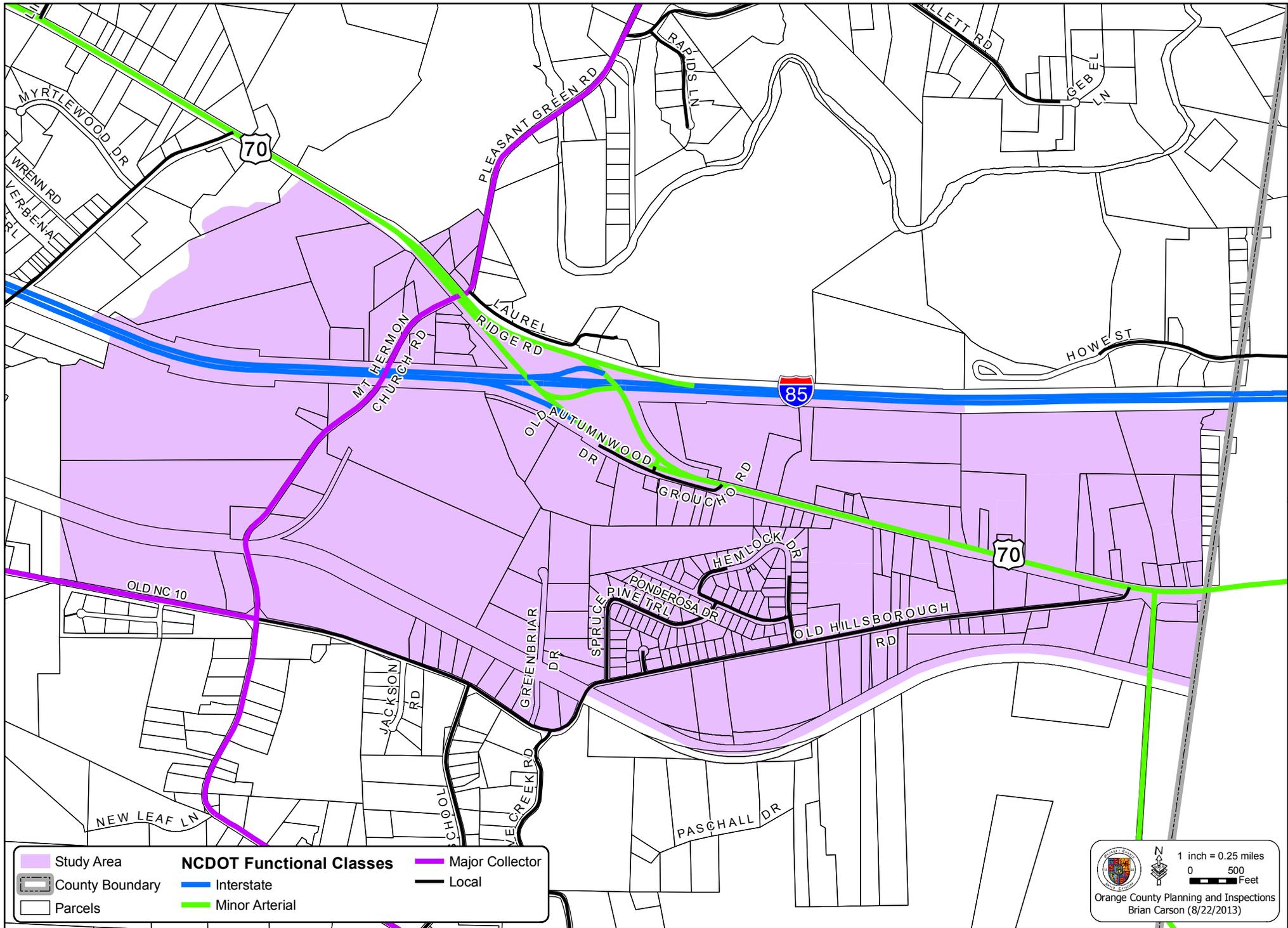
- I-85 through the Study Area is classified as an Interstate.
- US 70 is classified as a Minor Arterial through the Study Area.
- Old NC 10 is a two-lane Major Collector road west of Mt. Herman Church Road. Mt. Herman Church Road and Pleasant Green Road area also two-lane Major Collector road.
- Old NC 10 east of Mt. Herman Church Road, the US 70 frontage road, and several surrounding streets area classified as Local roads.

Medians - There are existing medians in the vicinity of the I-85/US 70 interchange.

Signalized/Unsignalized Intersections – The majority of the intersections in the Study Area are currently unsignalized. There are three existing signalized intersections:

1) US 70/NC 751; 2) US 70/Mr. Herman Church Road; and 3) Old NC 10/Mr. Herman Church Road.

Eno EDD - NCDOT Road Functional Classification



Traffic Counts

The table below shows the Annual Average Daily Traffic (AADT) counts collected by the North Carolina Department of Transportation (NCDOT) in 2011 and 2012. NCDOT does not collect traffic count data at every collection site every year. Years for which no data was collected at a specific point do not have a value in the chart showing the count. The *Eno EDD and Surrounding Area – AADT Traffic Counts* Map on page 15 depicts the points at the corresponding ID numbers provided in the table.

Annual Average Daily Traffic Counts
2011-2012

ID	Location	2011 AADT	2012 AADT
A	US 70 west of Seven Springs Road	12,000	12,000
B	I-85 east of the NC 86 interchange and west of the US interchange	36,000	39,000
C	Old NC 10 between New Hope Church Road and University Station Road	2,400	
D	University Station Road at Windy Hill Road	960	
E	Old NC 10 between University Station Road and Mt. Hermon Church Road	2,400	
F	Mt. Herman Church Road between I-85 and US 70	2,300	
G	Pleasant Green Road north of US 70	3,500	
H	Old Hillsborough Road between Hemlock Drive and NC 751	2,200	
I	US 70 between I-85 and NC 751	6,800	
J	NC 751 south of US 70	4,800	
K	US 70 between NC 751 and the Durham County line	8,500	
L	Sparger Road immediately north of US 70	6,000	
M	Sparger Road west of Cole Mill Road	4,200	
N	I-85 in Durham County east of Sparger Road	45,000	49,000
O	US 70 east of the Durham County line	8,600	
P	NC 751 east of the Durham County line	2,100	

Traffic Level of Service (LOS)

Average Daily Traffic relates directly to a concept called “Level of Service” (LOS). LOS is a measure used by traffic engineers to determine the effectiveness of elements of transportation infrastructure. LOS is most commonly used to analyze highways by categorizing traffic flow with corresponding safe driving conditions. LOS calculations attempt to describe the traffic conditions of a given roadway as it relates to the carrying capacity of the road. The following are descriptions of LOS:

Level of Service	Description of Operating Condition
A	Free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and maneuver within the traffic stream is extremely high (< 10.0 second delay per vehicle).
B	Stable flow but the presence of other users in the traffic stream begins to be noticed. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream (10.0-15.0 second delay per vehicle).
C	Stable flow but marks the beginning of the range in flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. Selection of speed affected and maneuvering within the traffic stream requires substantial vigilance on the part of the user (15.1-25.0 second delay per vehicle).
D	High-density but stable flow. Speed and freedom to maneuver are severely restricted. Small increases in traffic flow will generally cause operational problems at this level (25.1 to 35.0 second delay per vehicle).
E	Operating conditions at or near the capacity level. Speeds are reduced to a low, but relatively uniform level. Freedom to maneuver within the traffic stream is extremely difficult (35.1 to 20.0 second delay per vehicle).
F	Forced or breakdown flow. In the extreme, speed can be reduced to zero (Delay in excess of 50.0 seconds per vehicle).

Source: Highway Capacity Manual, Transportation Research Board, 2010.

For reference, many municipal governments adopt policies requiring that new development not decrease LOS below level C or D. Whether Level C or D is chosen depends upon the individual policy decision of the local government and/or the jurisdiction having maintenance control. In North Carolina, municipalities maintain roads but counties, such as Orange, do not. Determining the LOS for a given roadway involves complex calculations taking into account factors such as roadway grades and lane width. However, generalized tables have been developed to serve as a guide in determining LOS using Average Daily Traffic (ADT) counts.

The following table depicts the information relevant to the planning area:

Average Daily Traffic and Generalized Level of Service					
Total Number of Lanes	A	B	C	D	E
Freeways in Urbanizing Areas					
4	23,500	38,700	52,500	62,200	69,100
6	36,400	59,800	81,100	96,000	106,700
8	49,100	80,900	109,600	129,800	144,400
State Two-Way Arterials (Less than 2 signalized intersections per mile)					
2, Undivided	*	4,000	13,100	15,500	16,300
State Two-Way Arterials (2 to 4.5 signalized intersections per mile)					
2, Undivided	*	*	10,500	14,500	15,300
Major County Roadways					
2, Undivided	*	*	7,000	13,600	14,600
Signalized Intersections on Major County Roadways					
2, Undivided	*	*	4,400	9,400	12,000

* - Not Determined

Source: *Eno Economic Development District (EDD) Area Small Area Plan (2008)*

The Orange County/North Carolina DOT road classifications that correspond to the categories shown above are as follows:

Interstate: Freeways in Urbanizing Areas
 Arterial: State Two-Way Arterials
 Collector: Major County Roadways
 Local: (not addressed)

Comparison of Average Daily Traffic (ADT) Counts and Generalized Level of Service shows that all roadways within the Focus Area are operating at Level of Service (LOS) C or better. ID Points B, N, K and I are the areas with LOS at or just slightly better than "C."

High Frequency Crash Locations

High frequency crash locations within the Study Area from 2007-2011 are depicted on the *Eno EDD and Surrounding Area – High Frequency Crash Locations Map* on page 19. The data was obtained from the North Carolina Department of Transportation (NCDOT) and is meant to provide a broad overview of existing accident rates for sections of roadway and intersections within the Study Area.

Crashes have been grouped by number in the following five categories, identified on the map in different colors:

1. 4-9
2. 10-19
3. 20-29
4. 40-49
5. 50 and above

The categories identify both intersections and sections of roadways.

The highest number of crashes, 50 and above, were on the sections of I-85 west and east of the US 70 interchange, dropping in number across the Durham County line to the east to between 40-49 crashes.

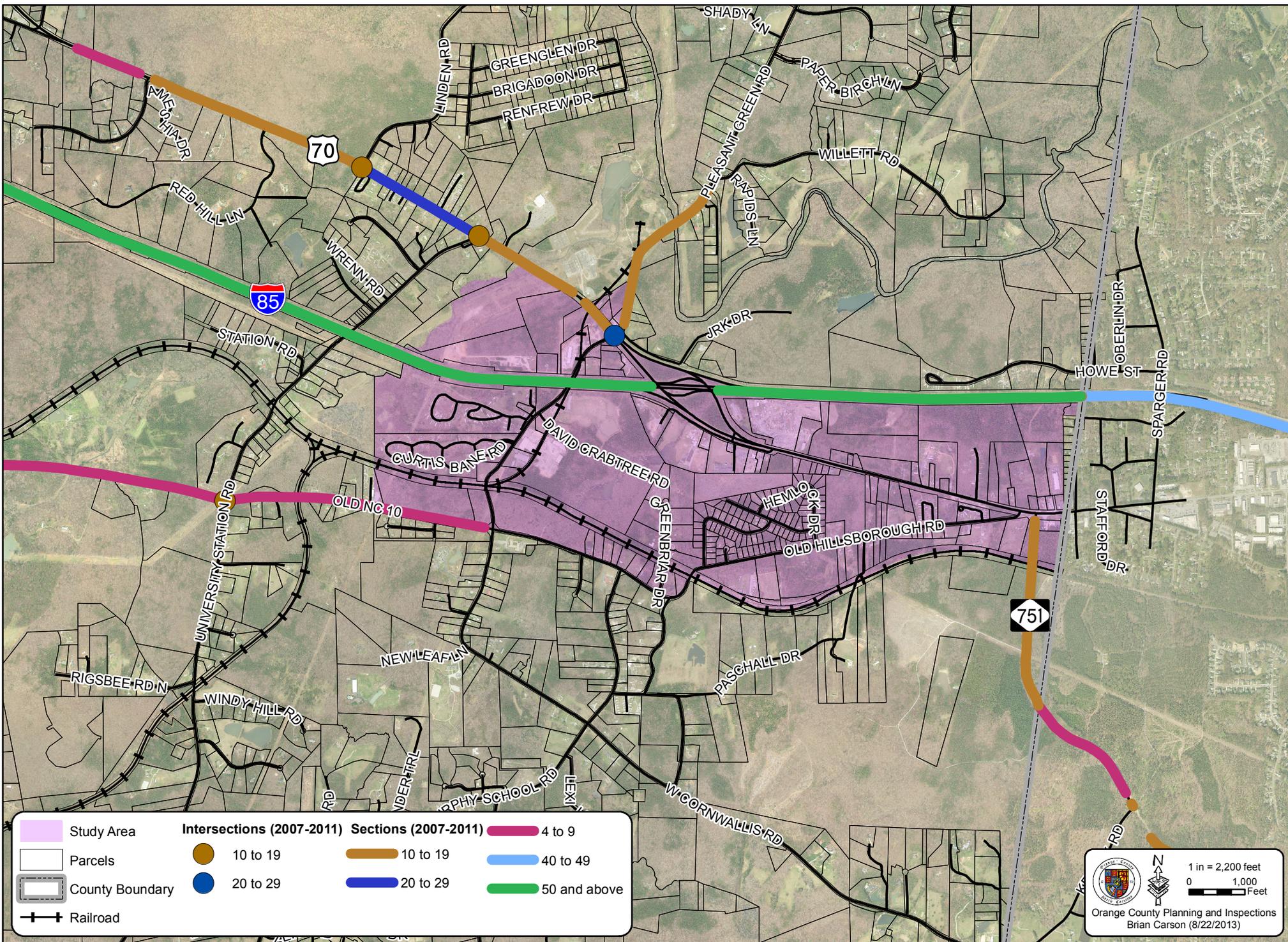
A section of US 70, between University Station Road and Linden Road, had between 20-29 crashes, with these two intersections and the adjacent sections of US 70 having between 10-19 crashes. Pleasant Green Road north of US 70 and NC 751 south of US 70 also had between 20-29 crashes.

Old NC 10 west of Mt. Herman Church Road, NC 751 across the county line to the east, and US 70 west of Ameshia Drive has between 4-9 crashes.

The purpose of the North Carolina Highway Safety Improvement Program (HSIP) is to provide a continuous and systematic process that identifies, reviews and addresses specific traffic safety concerns, including crash data. The analysis of crash data is used to identify where, when, and why crashes are occurring, which can then lead to mitigation of the crash issues through a determination of potential access management countermeasures including the following:

- Installation/adjustment of auxiliary lanes (left turn, right turn, etc.)
- Installation or removal of a traffic signal
- Adjustment of signal phasing, timing, and/or system
- Installation or widening of shoulders
- Installation of median islands, leftovers, etc.

Eno EDD and Surrounding Area - High Frequency Crash Locations



Interstate Interchange

The I-85/US 70 interchange is located within the north/central part of the Study Area. Because interchanges invite development and traffic, it is essential to have requirements in place that address issues of compatibility and function. Access management plans and regulations help to preserve the safety and efficiency of interchange areas as development occurs.

NCDOT has long range plans to redesign the I-85/US 70 interchange and designed a concept plan for the redesign in 2009. The conceptual design will impact access management concepts for the Eno EDD area, particularly the potential location of frontage roads and the spacing of access points from interchange ramps. The redesign of the interchange is currently included with a multi-phase project for the widening of I-85 from I-40 to the Durham County line. The projects have been entered in the State's Transportation Improvement Program (TIP) for implementation in the future developmental program (post 2020); however, the State's new project Strategic Mobility Formula prioritization process may allow the project to be funded sooner.

The *Eno EDD – NCDOT Draft Interchange Concept Map* follows on page 22.

Rail

Although rail traffic has decreased considerably in North Carolina, the NCRR/Norfolk Southern (NS) Railway, which is the southerly boundary of the Study Area, is still used for general rail transport and intrastate commuter service provided by Amtrak. Additionally, there is a rail spur line to Chapel Hill in the western portion of the Study Area, east of University Station Road that is still used for deliveries to the UNC campus. There is also a rail spur that is in private use, east of Herman Church Road.

The North Carolina Railroad's (NCRR) Long Range Capital Plan identifies a corridor beginning east of Old NC Highway 10 stretching until approximately University Station Road to be double tracked to increase freight capacities. This is currently an unfunded project.

The Triangle Transit Authority (TTA) completed final plans for Phase I of its regional commuter rail service in the Triangle and attempted to procure Federal funding to implement Phase I service that would link Raleigh, Cary and Durham. However, due to changes in federal cost-effectiveness guidelines, the project has been shelved for the near future. At this time, the future of Triangle commuter rail service is uncertain due to funding considerations.

Historically, University Station was located near the spur rail line that reaches to Chapel Hill. UNC students, faculty, and visitors would have used University Station in their travels to and from campus and other areas. If the Region pursues commuter rail in the future, the spur line to Chapel Hill would likely become an important connector within the rail network. Triangle Transit Authority has identified a recommended location for a future passenger rail stop within the Study Area (west of Greenbriar Drive).

Pedestrians and Bicycles

Approximate two-foot bike lanes have been striped along Old NC 10 and Old Hillsborough Road. These bicycle facilities are consistent with the rural expressway character of the roads. A bike lane project is proposed on NC 751 at the eastern edge of the Study Area. The project is included in the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) Metropolitan Transportation Plan (MTP). This bike lane would provide connectivity with the lanes along Old NC 10 and Old Hillsborough Road.

Many of the arterials and collector roadways in the Eno EDD area do not currently have continuous pedestrian or bicycle facilities. As these existing rural areas transition to urbanized areas, pedestrian and bicycle facilities will be encouraged for the surrounding arterial and collector streets.

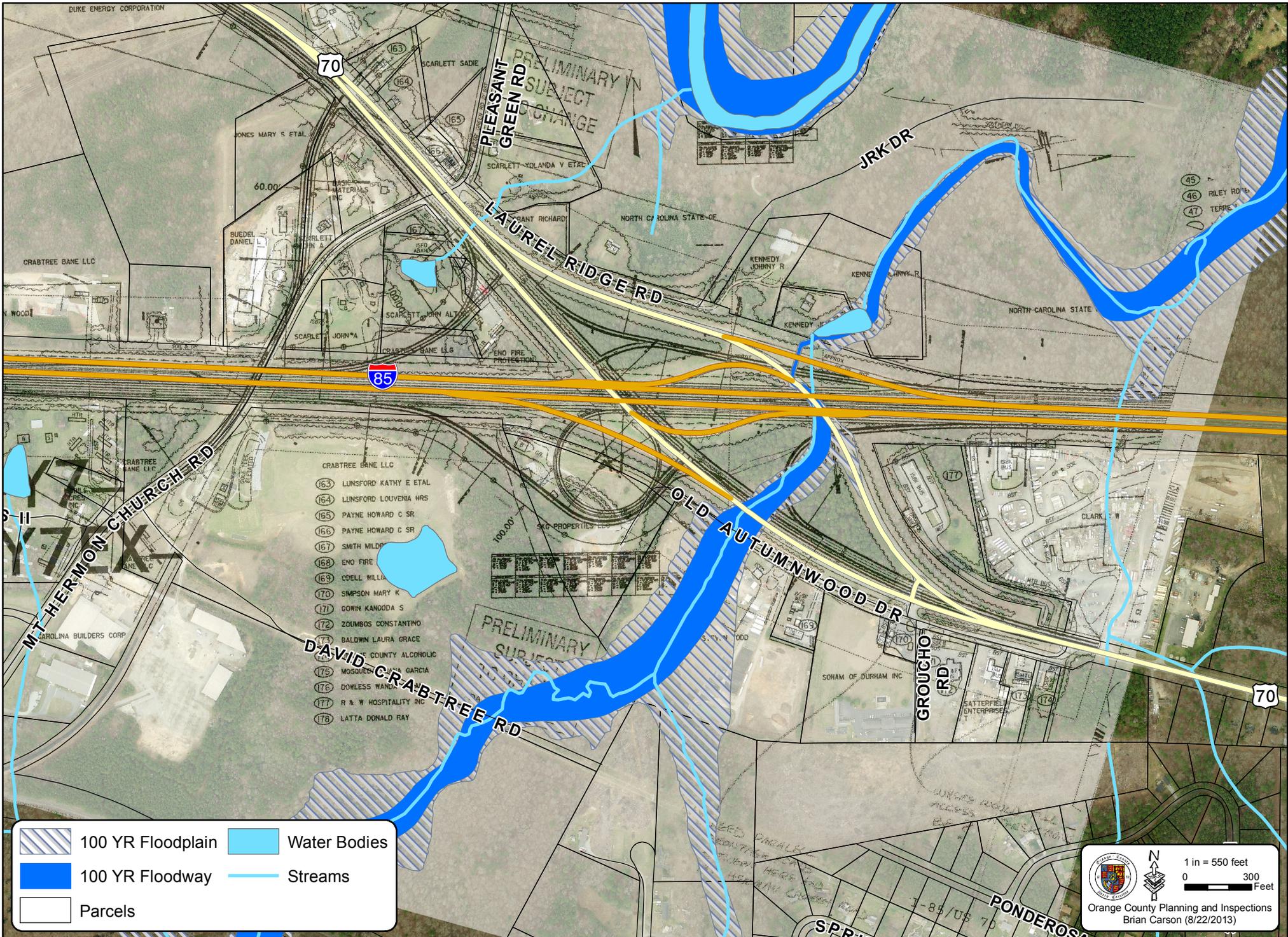
Bus, Car/Van Pool, and Park-and-Ride Lots

General bus services do not serve the Eno EDD area at this time. However, Orange Public Transit (OPT) provides social service transit service for area senior citizens and low income residents who can arrange for transportation to and from medical appointments through OPT.

OPT and Triangle Transit Authority (TTA) are currently in a planning phase for new bus services included in the adopted Orange County Bus and Rail Investment Plan (OCBRIP). A cross-county route, with stops along the way, is one of the initial regional routes being planned. This route will cross through the Eno EDD area on its way to Durham.

Triangle Transit Authority (TTA) operates a ridesharing matching service for commuters who are interested in carpooling. In addition, TTA operates vanpools that are made up of at least seven commuters who live and work near each other and who share approximately the same work hours. One leg of the vanpool's trip must begin or end in Wake, Durham, or Orange County. TTA provides the van, pays for gas and insurance; and arranges, oversees, and pays for all maintenance. Riders pay a monthly fare based on the average daily round-trip mileage. Commuters who are interested in joining a vanpool may contact TTA to inquire about joining an existing vanpool or starting a new vanpool.

At the present time, there are no official park-and-ride lots located in the Eno EDD area.



	100 YR Floodplain		Water Bodies
	100 YR Floodway		Streams
	Parcels		

1 in = 550 feet
 0 300 Feet
 Orange County Planning and Inspections
 Brian Carson (8/22/2013)

Access Management Strategies

Access management is the systematic control of the location, spacing, design and operation of driveways, median openings, interchanges and street connections to a roadway. The chief goal of access management planning is to reduce the number and severity of conflicts between through moving traffic and traffic attempting to turn. Successfully managing these conflicts can result in fewer automobile and pedestrian accidents, reduced congestion and preservation of public investment in the road network. Access management strategies attempt to reduce and combine access points along major roadways while still encouraging complete circulation systems. The result is a street system that functions safer and more efficiently.

As development grows along a roadway, there must be an effective plan to manage street access to increase public safety, extend the life of the roadway, reduce congestion, and support alternative modes of transportation, and improve the overall appearance of the roadway. Better mobility expands the market reach of businesses and enhances the efficient movement of people and goods. With the absence of access management, arterial roadways can deteriorate functionally and aesthetically as well as affect economic, physical, social and environmental characteristics in the following ways:

- Increased vehicular accidents
- Collisions involving pedestrians and cyclists
- Reduction in roadway efficiency
- Unattractive strip non-residential development
- Decay of scenic views
- Dispersion of higher traffic volumes on adjacent lower class (local) streets
- Increase in commute times, fuel consumption, emissions, area of paved surfaces

Some of the specific ways that the functionality of roadways can be improved in the Study Area is through the application of planning, regulatory, and design strategies relating to access management. The following strategies are excerpted from the Access Management Program adopted by the Board of County Commissioners on November 15, 2011:

- Policies, guidelines and regulations issued by state and local agencies having permit authority on development and roadway infrastructure improvements;
- State and county regulations, codes, plans and guidelines that are enforceable;
- Land development regulations by state and local jurisdictions that address property access and related issues;
- Understanding of access implications by property owners, developers, and businesses;
- The spacing and location of driveways;
- Driveway consolidation;
- Driveway width;
- Guidelines for adequate sight distance;
- Protection of the functional area of intersections and interchanges;
- The redesign of poorly functioning intersections and interchanges;

- Intersection spacing and traffic signal spacing;
- Construction of right and left turn lanes;
- The development of strategically placed raised medians;
- The control of median openings;
- Median U-turn treatments or directional crossover to control turning movements
- Strategic connectivity to other roadways;
- The development of auxiliary lanes such as frontage roads; and
- The long-term development of multi-modal options;

Eno EDD - Access Management Concept Map and Criteria

The *Eno EDD – Access Management Concept Map* has been prepared utilizing land use, zoning, environmental, transportation data, and evaluating the desired access management strategies for the area. The map provides a concept for future locations and public street connections for properties and streets within the Study Area. The intent of the map is to guide the design of site-access driveways and internal circulation routes for properties located within the management area that are likely to be developed at some point in the future.

For those properties that may not be redeveloped by the time the I-85/US-70 interchange is redesigned, the Plan will also be useful for evaluating how access to those sites should continue to be served. Given that development proposals may be years in the future and the details of their layout is unknown, the conceptual access management map focuses on depicting criteria for development of the future transportation network within the Study Area.

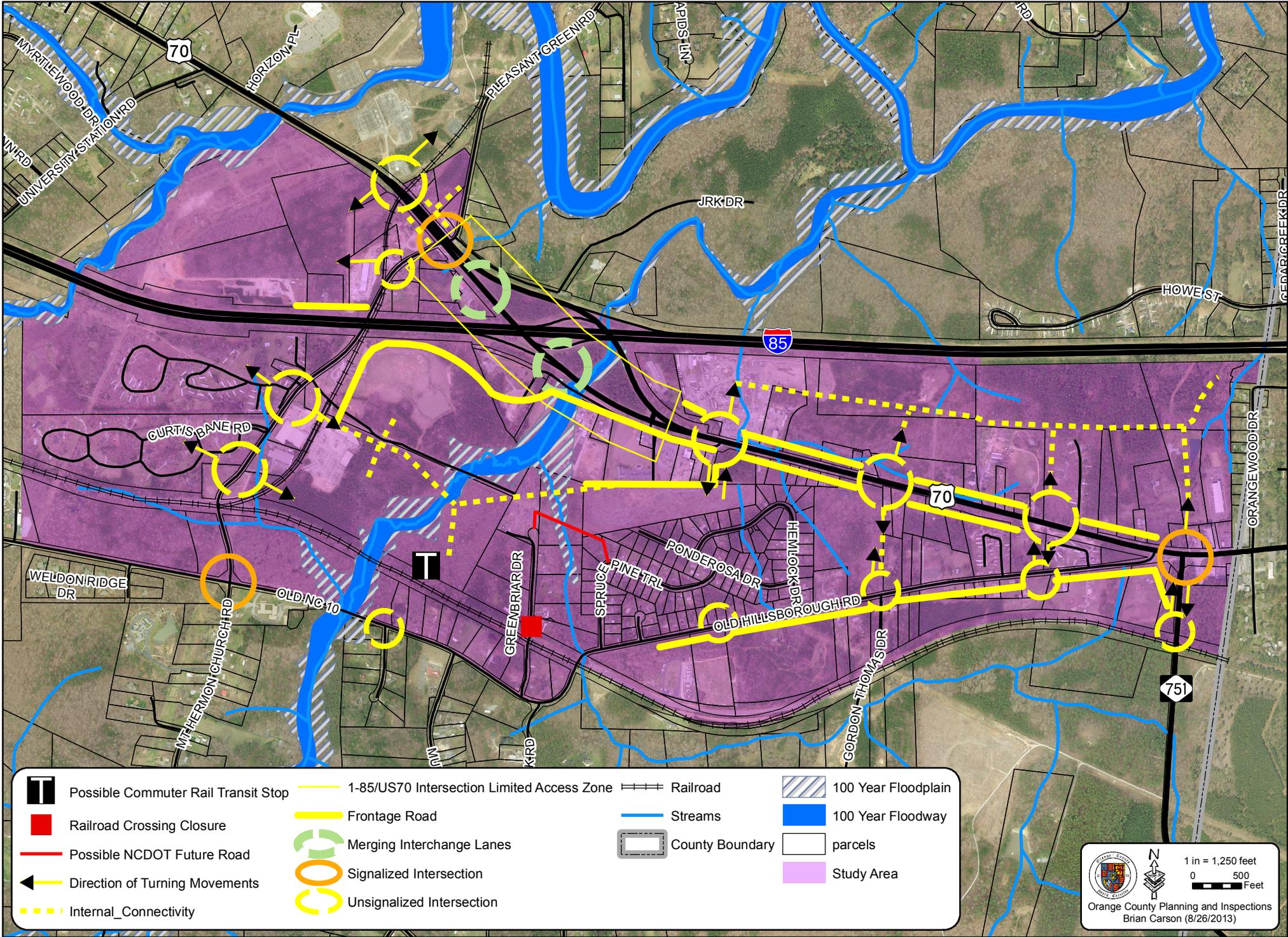
Accompanying the *Eno EDD – Access Management Concept Map* is a set of written access management criteria to guide interpretation and implementation of the map. The Map follows the policies on page 25.

Access Management Criteria – A Guide to Interpreting and Implementing the Eno EDD Access Management Map

Through the following criteria the *Eno EDD – Access Management Concept Map* supports transportation and land use objectives articulated in adopted plans:

1. Restrict access where possible from the functional area of intersections and the I-85/US 70 interchange.
2. Control turning movements at entrances:
 - a. Where recommended by a traffic study, right-in/right-out entrance design prevents left ingress and egress turning movements.
 - b. Limit access to a defined point of ingress and egress through the development of an entrance that prevent vehicles from backing up on to the highway and enhances on-site circulation.
3. Space intersections and driveway access points to plan for reduced traffic conflict points as traffic congestion increases:
 - a. Align major intersections.
 - b. Align minor entrances with positive offset(s) to increase safety.
 - c. Provide a limited number of strategically located median crossovers on US 70.
 - d. Add exclusive turn lanes where required by NCDOT.
4. Provide adequate separation between traffic signals to expand road's traffic capacity and simplify signal synchronization. [Note: the Access Management Concept Map depicts existing signalized (and unsignalized) intersections. As development progresses, some unsignalized intersections may be required to be signalized by the NCDOT.]
5. Where feasible along arterials and collectors, share joint entrance(s) with adjoining property owner(s) through the recordation of joint access easements with maintenance provisions with adjoining property owner(s).
6. Where feasible along arterials, provide vehicular and pedestrian connections between adjoining properties through the recordation of access easement(s) with maintenance provisions, and construct connection(s) to the boundary with adjoining undeveloped parcel(s).
7. As properties develop, establish connectivity between the US 70 Frontage Road and future non-residential development to the south.
8. Provide frontage roads with non-residential development/redevelopment to increase safety on arterials and collector roads, and promote non-residential development for economic benefit.
9. Provide an interconnected street network in the Study Area as generally indicated on the map.
10. Provide an interior access network from identified primary access points along arterial and collector roads.
11. There shall be no access by non-residential development through the 10-year Transition Area until the area commences a transition in urban densities and/or intensities that are suitable for higher densities and/or intensities.
12. Accommodate transit, bicyclists and pedestrians on roadways in the Study Area.
13. Limit perennial stream crossings, and impacts to wetlands and steep topographical areas.

Eno EDD - Access Management Concept Map



- | | | | |
|-------------------------------------|--|-----------------|---------------------|
| Possible Commuter Rail Transit Stop | 1-85/US70 Intersection Limited Access Zone | Railroad | 100 Year Floodplain |
| Railroad Crossing Closure | Frontage Road | Streams | 100 Year Floodway |
| Possible NCDOT Future Road | Merging Interchange Lanes | County Boundary | parcels |
| Direction of Turning Movements | Signalized Intersection | Study Area | |
| Internal Connectivity | Unsignalized Intersection | | |

1 in = 1,250 feet

 0 500 Feet

 Orange County Planning and Inspections

 Brian Carson (8/26/2013)

Implementation

Coordination

The North Carolina Department of Transportation (NCDOT) lacks authority over the land development process, and Orange County lacks authority over access permitting decisions on state highways. Together, these factors make coordination essential and to create consistent standards and procedures in the Study Area. Coordination between NCDOT and the County must consider the effects of its decisions on the entire Eno EDD Study Area if the partnership is to work efficiently. Because each agency has authority over a different part of the process, they can achieve far more through mutual cooperation than either agency can achieve alone. Coordination is also beneficial to the public and the developer or property owner whose financial investment is at stake.

Role/Responsibility of the NCDOT

The North Carolina Department of Transportation (NCDOT) is responsible for regulating the location, design, construction, and maintenance of street and driveway connections on the State Highway system. The NCDOT recognizes landowners have certain reasonable rights of access consistent with their needs. However, access connections are a major contributor to traffic congestion and poor roadway facility operations that can result in decreased highway capacity, and increased safety hazards.

Early NCDOT review of development proposals help ensure conformance with access management requirements and provides NCDOT an opportunity to suggest changes prior to local plat approval, which may occur well in advance of a request for a driveway permit. The NCDOT Access Management Group (of the Congestion Management Section of the Traffic Engineering and Safety Systems Branch) examines the potential safety and capacity impacts that new or expanding traffic generations may have on the state roadway system and provides recommendations based on the analysis. This process typically requires the completion of a Traffic Impact Study by the Developer/Property Owner/Applicant Other recommendations may range from denying access, to requiring the developer to construct additional travel or turn lanes, access restrictions, internal traffic pattern operations or installing new traffic signals to minimize the traffic impact.

Role/Responsibility of Orange County

Several sections of the Orange County Unified Development Ordinance (UDO) (adopted 2011) will assist with implementation of the Eno EDD Access Management Plan. The UDO requires site plans to comply with County adopted access management, transportation and/or connectivity plans and denote the location of future roadway(s) and access easements, whether public or private, and to ensure and encourage future connectivity. The UDO also provides additional requirements for Economic Development Districts as well as the Major Transportation Corridor Overlay District (MTC), to ensure that a development proposal complies with EDD and MTC policies, procedures and regulations.

An important implementation tool for access management is the UDO requirement of a traffic impact study for all special use permits, subdivisions, conditional zoning applications, and site plans that exceed 800 trips per day, or 80 or more dwelling units for residential development. Additionally, a traffic impact study may be required when a road capacity or safety issue exists. The purpose of the traffic impact analysis is to insure that proposed developments do not adversely affect the highway network and to identify any traffic problems associated with access from the site to the existing transportation network. The objective of the traffic impact study is to identify solutions to potential problems and to present improvements to be incorporated into the proposed development.

As individual developments occur in the Eno EDD Study Area, permits can be issued that conform to the access management plan, or permits outlining conditions (whether through conditional or special use zoning, or site plans) can be issued so that the development will ultimately be in conformance. NCDOT representatives encourage this process by providing technical assistance and support.

Orange County can assist the NCDOT by attaching conditions to development approvals to require actions from the developer that support access management. This may include conditions that require unified access and circulations systems, alternative access roads, or joint and cross access.

Continued intergovernmental coordination with the City of Durham will be important to realizing desired development and access management within the Study Area since the City will be the service provider of public water and sanitary sewer. Parcels within the area are within the City's future annexation area and will be annexed if/when served by public water/sewer.

Role/Responsibility of the Developer /Property Owner/Applicant

A development applicant, such as the property owner and/or developer, is required to coordinate with Orange County and the NCDOT to identify possible conflicts with local, state or federal regulations and plans, including an adopted Eno EDD Access Management Plan. A traffic impact study may be required to be prepared by the applicant's engineer, to determine any traffic problems associated with access from the site to the existing transportation network, and identify solutions to potential problems to be incorporated into the proposed development. Additionally, prior to beginning any development work, the applicant is responsible for obtaining all applicable permits required for construction within the highway right-of-way resulting from development, including but not limited to, a Street and Driveway Access Permit issued by the NCDOT District Engineer, and all applicable environmental permits (i.e., erosion control, water quality, and wetlands).

In the event that other new developments are in the vicinity of the proposed development, the applicant is required to coordinate with any other involved agencies, including other local governments to identify conflicting or overlapping access issues.

APPENDIX

Goals, Transportation Objective and Recommendations of the Eno Economic Development District (EDD) Area Small Area Plan, 2008

SAP Goal: In the future, the Focus Area should be well served by reliable infrastructure to accommodate orderly, planned growth. An efficient multi-modal transportation system will operate in the area and commercial and light industrial uses will provide job opportunities to area and County residents.

Transportation Objective: Provision of an efficient, multi-modal transportation system.

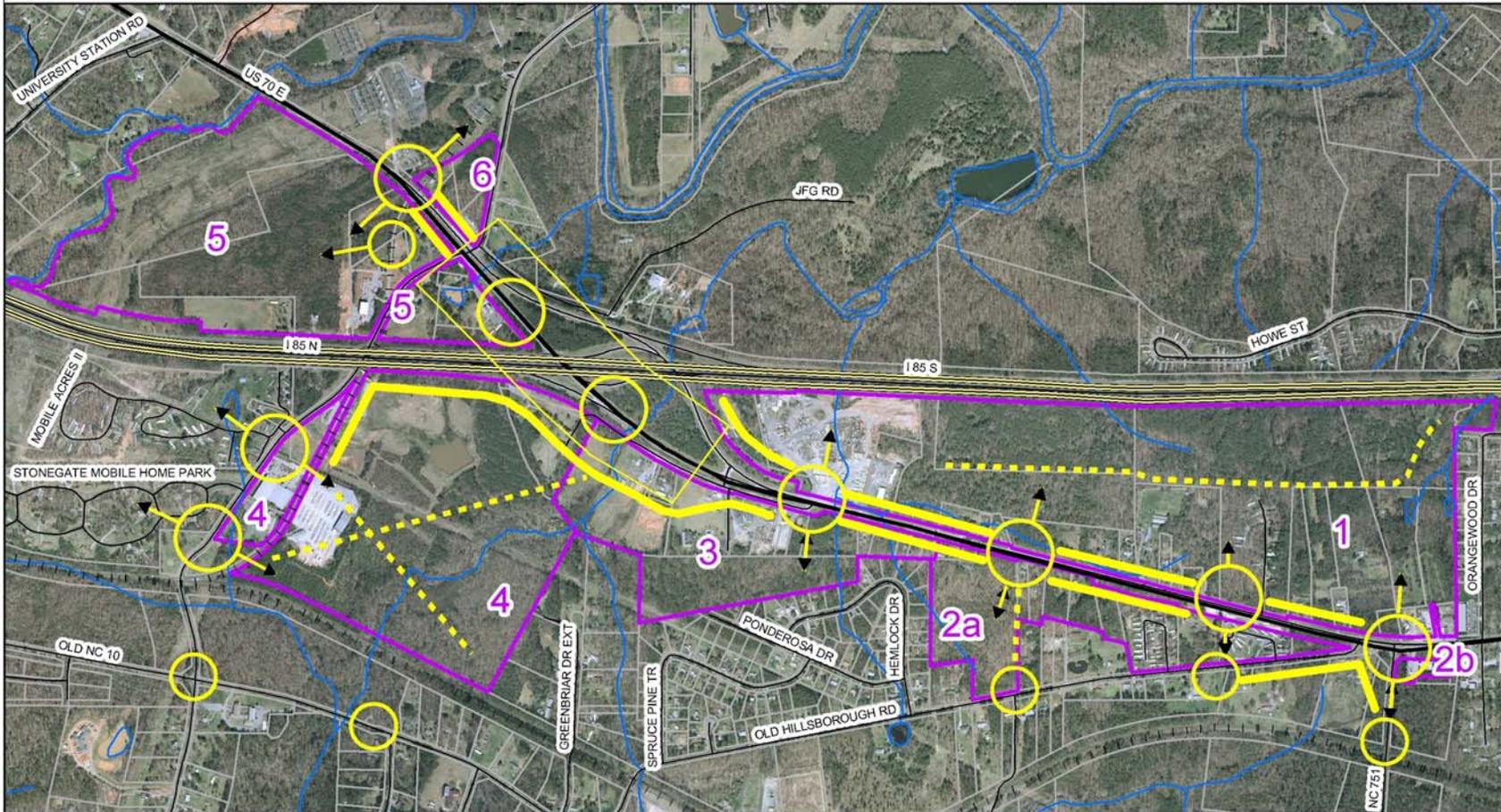
The vehicular transportation system in the planning area generally functions well, but there are some concerns, especially regarding motorized vehicle flows during peak traffic hours. However, some peak hour congestion is also to be expected in an urban or suburban area. The key is managing the transportation system such that it can function as safely and efficiently as possible.

Sidewalks and bicycles lanes do not exist anywhere in the Focus area. The shoulders along Highway 70 are paved 1 to 2 feet beyond the automobile travel lane and people use these paved shoulders as informal bicycle lanes. Broadening transportation alternatives beyond the passenger car is important. "Alternative" transportation modes such as pedestrian, bicycle, and mass transit are part of an intermodal transportation system.

The following are recommendations pertaining to transportation:

1. Approve an access management program for US 70 and Old Highway 10 as shown on Map 23. This will provide better transportation systems and capacities as development proceeds in the area. (See Appendix B for an explanation of access management techniques).
2. Support the proposed future improvements by NCDOT that will redesign the I-85/US 70 interchange. Limited access near the interchange will prompt an enhanced service road and access system to ensure equitable access to defined full access intersections. NCDOT should be strongly encouraged to incorporate bridge designs that allow wildlife to cross safely under the bridge and that allow pedestrian passage along any existing or planned trail-system connectors.
3. Evaluate the feasibility of providing bicycle lanes along Old NC 10.
4. Evaluate the feasibility and need to provide sidewalks along Highway 70 as the area develops.
5. The ability to have a commuter train station in the future should be explored. A station could serve the existing Amtrak service or a station could be incorporated into the future Triangle commuter rail system.
6. The county should work cooperatively with Triangle Transit Authority (TTA) to provide bus service in the area.

Eno EDD Transportation Access Management Concept Plan



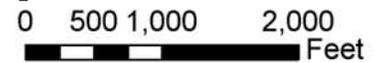
From the Eno Economic Development District (EDD) Area Small Area Plan, Adopted June 24, 2008

Legend



- Eno EDD Areas
- I-85/US70 Intersection Limited Access Zone
- Frontage
- Internal Connectivity
- Primary Intersections

- Area 1 - 186 acres
- Area 2a - 40 acres
- Area 2b - 2 acres
- Area 3 - 52 acres
- Area 4 - 115 acres
- Area 5 - 106 acres
- Area 6 - 7 acres



Orange County Planning and Inspections Department
 GIS Map Prepared by Miriam Coleman, April 09, 2008
 Projection: North Carolina State Plane (feet)
 Datum: North American 1983

