

WILMINGTON URBAN AREA Metropolitan Planning Organization

P.O. Box 1810 Wilmington, North Carolina 28402 910.342.2781 910.341.7801 FAX

Members:

City of WILMINGTON Lead Planning Agency

Town of CAROLINA BEACH

Town of KURE BEACH

Town of WRIGHTSVILLE BEACH

NEW HANOVER County

Town of BELVILLE

Town of LELAND

Town of NAVASSA

BRUNSWICK County

PENDER County

CAPE FEAR
Public Transportation
Authority

North Carolina BOARD OF TRANSPORTATION

Technical Coordinating Committee <u>Meeting Agenda</u>

TO: Technical Coordinating Committee Members

FROM: Mike Kozlosky, Executive Director

DATE: January 8, 2010

SUBJECT: January 13, 2010 meeting

A meeting of the WMPO Technical Coordinating Committee will be held on Wednesday, **January 13th** at 10:00 am. The meeting will be held in the Traffic Conference Room on the fourth floor of 305 Chestnut Street in downtown Wilmington.

The following is the agenda for the meeting:

- 1) Call to Order
- 2) Approval of Minutes:
 - a. 12/2/10
- 3) Presentations
 - a. Wake County Corridor Preservation
- 4) Old Business
- 5) New Business
 - a. Opening of the 30-day Public Comment Period for EB-5118, ER-5100 and TO-4733
 - b. Resolution supporting the MTIP/STIP Amendment for the Public Transportation Program
 - Resolution supporting painting of the Cape Fear Memorial Bridge (to be distributed)
 - d. Election of Officers
- 6) Discussion
 - a. Wilmington MPO Legislative Agenda
 - b. Proposed Urban Loop Prioritization Process
- 7) Updates
 - a. Cape Fear Commutes
 - b. City of Wilmington/Wilmington MPO
 - c. Cape Fear Public Transportation Authority
 - d. NCDOT
- 8) Announcements
 - a. Bike/Pedestrian Committee meeting- January 14th at 5:15pm
 - b. Citizen Advisory Committee meeting January 13th at 4pm
 - c. Citizen Advisory Committee meeting January 27th at 4pm
- 9) Next meeting –February 10, 2010

Attachments:

- Minutes 12/2 meeting
- Public Transportation MTIP/STIP Amendments
- Resolution supporting the MTIP/STIP Amendments for the Public Transportation Program
- Proposed MTIP/STIP Amendments for EB-5118, ER-5100 and TO-4733
- Resolution supporting painting of the Cape Fear Memorial Bridge (to be distributed at the meeting)
- Letter from the Wilmington MPO regarding NCDOT's proposed Urban Loop Prioritization Process
- Comments from NCDOT regarding the *Urban Loop Prioritization Process*
- Proposed Urban Loop Prioritization Process- 12/17/09
- NCDOT Project Update

Wilmington Urban Area Technical Coordinating Committee Meeting Notes for December 2, 2009

Members Present:

Mike Kozlosky, City of Wilmington Sam Burgess, New Hanover County Robert Waring, Town of Leland Shane York, NCDOT Allen Pope, NCDOT Coke Gray, NCDOT Patrick Riddle, NCDOT Don Bennett, City of Wilmington Travis Barnes, Town of Navassa Jill Stark, FHWA Eryn Moller, Town of Wrightsville Beach Albert Eby, WAVE Transit

Others Present:

Chad Kimes, NCDOT
Ben Hughes, NCDOT
Joshuah Mello, City of Wilmington

Mr. Allen Pope updated the TCC on the Cape Fear Memorial Bridge painting project. He told members the bridge was last painted in 1985. The proposed preservation work will include cleaning and painting the movable structure of the bridge, rehabbing the span guide rollers, electrical repair and/or replacement of luminaries and the installation of a new HVAC system for the control house. Because the bridge structure contains lead and other hazardous materials that must be contained, the work area must be encapsulated. The project will require a total closure for vehicle traffic during the hours of 7 PM to 6 AM and is scheduled to take place between April 15th and June 15th. The projected cost is \$8 million.

1. Call to Order

Mr. Kozlosky called the meeting to order at 10:18 am.

2. Approval of Minutes

With the correction of adding the letter "s" to word "member" in the first paragraph of item 3.a., the motion to approve the minutes as amended for the October 14, 2009 meeting carried unanimously.

3. Old Business

None

4. New Business

<u>a. Opening of 30-day Public Comment Period for STIP Amendments for Public Transportation Program</u>

Mr. Kozlosky told members the TAC will open the 30-day Public Comment Period at their meeting on December 16th. There will be a public hearing at the January TAC meeting on the amendments. The NCDOT will be adopting these amendments at their January meeting.

b. Resolution Opposing Changes to the Transportation Equity Formula

Mr. Kozlosky told members the NC League of Municipalities Metropolitan Mayors Coalition is circulating a resolution requesting endorsement from MPOs, RPOs and local municipalities

December 2, 2009 Page 2 of 3

supporting an evaluation and possible revision of the Transportation Equity Formula. Mr. Kozlosky stated he does not believe that it will have a positive impact on this community. A resolution has been prepared opposing any change to the current equity formula. Mr. Pope told members this proposal will benefit the more urbanized areas where there is a higher population density such as Mecklenburg County. Mr. Eby made the motion to support the resolution opposing any changes to the Transportation Equity Formula and forward to the TAC for consideration. Mr. Burgess seconded the motion and it carried unanimously.

c. Resolution Supporting Bicycle Lanes on Princes Place Drive and South Front Street (US 421 Truck)

Mr. Kozlosky told members the Department of Transportation is preparing to resurface Princess Place Drive and South Front Street. South Front Street has been identified as North Carolina Bicycle and Highway 3 and 5. Mr. Pope asked if it was wise to add a bike lane to South Front Street with it being a designated Truck Route. Mr. Mello stated that it was recently redesignated as an alternative to South Third Street and Burnett Boulevard. Mr. Pope suggested moving the bicycle route to 3rd Street to keep it separate from the truck traffic. Mr. Mello said it was just moved to Front Street as preferable to South Third Street based on volumes and speed of traffic. Mr. Mello said Front Street was also selected because there is the opportunity to add bicycle lanes and you could not on 3rd Street. Mr. Kozlosky said the change was based on the recommendations from the Bicycle and Pedestrian Unit.

Mr. Pope asked if there is room on Princes Place Drive to put standard lanes and bicycle lanes. Mr. Kozlosky stated that staff is working with the department to develop a pavement marking plan that would eliminate the two-way left turn lane. The conversion to add the bicycle lanes is also consistent with the Department's Complete Streets Initiative that was adopted in July.

Mr. Pope suggested that the resolution include a notation that funding has not been identified to widen Front Street to accommodate bicycles and if additional funding is required, the WMPO will pursue that funding.

Mr. Pope made the motion to support bicycle lanes on Princes Place Drive and South Front Street as part of the upcoming resurfacing package with the addition of language regarding funding and forward the revised resolution to the TAC for consideration. Mr. Barnes seconded the motion and it carried unanimously.

d. Adoption of the 2010 Meeting Calendar

Mr. Eby made the motion to adopt the 2010 Meeting Calendar and forward to the TAC for consideration. Mr. Burgess seconded the motion and it carried unanimously.

e. Federal Transportation Rescission

Ms. Jill Stark told members the \$8.7 billion rescission was a way to meet federal budgeting parameters. Rescissions from 2004 through 2007 only affected Interstate Maintenance and Congestion Mitigation and Air Quality programs. For the first time the Continuing Appropriations Resolution signed in February 2007 included a directive rescinding unobligated program balances by program area. The rescission in 2008 included the National Highway System, Equity Bonus, Recreation Trails and Metro Planning. The rescission in 2009 affected the remaining programs of Safe Routes to School, Highway Safety Improvement Program, Railway Highway Crossing, High Risk Rural Roads and Appalachian Development Highway System. In all instances, the impact of the rescission to states varied depending on the amount of unobligated balances of each state. This was the largest rescission in years and we all need to work together to figure out a way to get our obligations up to the maximum so that nothing gets sent back.

December 2, 2009 Page 3 of 3

Mr. Kozlosky told members the Wilmington MPO lost over \$188,000.00. We had not obligated some of our funding in hopes of doing larger planning projects and now the Federal Highway Administration has rescinded our planning dollars so we now have an un-obligated balance of \$0. We are still trying to figure out how we are going to address planning in the future. The big lesson to be learned here is that there needs to be better communication between the Federal Highway Administration, the Department of Transportation and their local partners.

Ms. Kozlosky told members that Mr. John Sullivan will be giving a presentation to the TAC at their next meeting and answer questions regarding the rescission.

5. Updates

a. Cape Fear Commutes 2035 (Citizen Advisory Committee)

Mr. Mello updated the group on Citizen Advisory Committee activities.

b. WMPO Bike/Pedestrian Committee

Mr. Mello updated the group on Bicycle/Pedestrian Committee activities.

c. Cape Fear Public Transportation Authority

Mr. Eby updated the group on Cape Fear Public Transportation Authority activities.

d. Wilmington MPO/City of Wilmington

Mr. Kozlosky updated the group on Wilmington MPO/City of Wilmington activities.

e. NCDOT Project Update

Mr. Pope updated the group on NCDOT activities.

6. Announcements

- a. WMPO BikePed Committee meeting- December 10th
- b. Cape Fear Commutes December 16th

7. Adjournment

With no further items, the meeting was adjourned at 11:16 am

PUBLIC TRANSPORTATION PROGRAM STIP ADDITIONS

STIP#	DIV	COUNTY	MUNICIPALITY/ SYSTEM	DESCRIPTION	funds	FY09 (\$000)	FY10 (\$000)	FY11 (\$000)
TA-5119	3	New Hanover	Cape Fear Public Transportation Authority	Expansion bus 35'	FUZST		\$87	
				ANSPORTATION PROGRAM				

STIP MODIFICATIONS

STIP#	DIV	COUNTY	MUNICIPALITY/ SYSTEM	DESCRIPTION	funds	FY09 (\$000)	FY10 (\$000)	FY11 (\$000)
TA-4907	3	New Hanover	Cape Fear Public Transportation Authority	Replacement buses (2) 35' hybrid	FUZST		\$1,100	
TA-5102	3	New Hanover	Cape Fear Public Transportation Authority	Expansion Vans (2) vanpool fleet	FUZST		\$42	
TD-4917	3	New Hanover	Cape Fear Public Transportation Authority	Facility - Transfer/Admin Facility - Cando Street Extension	FUZST		\$650	
TD-4942	3	New Hanover	Cape Fear Public Transportation Authority	Facility - new operations center - environmental review and design	FUZST		\$409	
TG-4796	3	New Hanover	Cape Fear Public Transportation Authority	Routine Capital: automated fuel system, radio system upgrade, shelter and bus stop improvements, computer replacements	FUZST		\$144	
TG-4796	3	New Hanover	Cape Fear Public Transportation Authority	Routine Capital: expansion service vehicle (2) hybrids	FUZST		\$27	
TG-4796	3	New Hanover	Cape Fear Public Transportation Authority	Routine Capital: replace service vehicle - hybrids	FUZST		\$27	

WILMINGTON URBAN AREA METROPOLITAN PLANNING ORGANIZATION TRANSPORTATION ADVISORY COMMITTEE

RESOLUTION SUPPORTING THE AMENDMENT OF THE 2009-2015 METROPOLITAN AND STATE TRANSPORTATION IMPROVEMENT PROGRAMS- PUBLIC TRANSPORTATION IMPROVEMENTS

WHEREAS, the Wilmington Urban Area Metropolitan Planning Organization provides transportation planning services for the City of Wilmington, Town of Carolina Beach, Town of Kure Beach, Town of Wrightsville Beach, Town of Belville, Town of Leland, Town of Navassa, New Hanover County, Brunswick County, Pender County, Cape Fear Public Transportation Authority and the North Carolina Board of Transportation; and

WHEREAS, the Transportation Advisory Committee has found that the Wilmington Urban Area Metropolitan Planning Organization is conducting transportation planning in a continuous, cooperative, and comprehensive manner; and

WHEREAS, the North Carolina Board of Transportation adopted the 2009-2015 State Transportation Improvement Program on June 5, 2008; and

WHEREAS, the North Carolina Department of Transportation proposes to utilize FUZST funds in Fiscal Year 2010 for Expansion bus 35' (TA-5119), Replacement buses (2) 35' (TA-4907), Expansion vans (2) vanpool fleet (TA-5102), Facility-transfer/admin facility-Cando Street extension (TD-4917), Facility- new operations center- environmental review and design (TD-4942), Routine capital: automated fuel system, radio system upgrade, shelter and bus stop improvements, computer replacement (TG-4796), Routine capital: expansion service vehicles (2 hybrids (TG-4796) and Routine Capital: replace service vehicle-hybrids).

WHEREAS, the Wilmington Metropolitan Planning Organization has conducted a 30-day public comment period to receive citizen input on these transportation projects.

NOW THEREFORE, be it resolved by the Wilmington Urban Area Metropolitan Planning Organization's Transportation Advisory Committee supports amending the 2009-2015 Metropolitan and State Transportation Improvement Programs to fund to Expansion bus 35' (TA-5119), Replacement buses (2) 35' (TA-4907), Expansion vans (2) vanpool fleet (TA-5102), Facility-transfer/admin facility-Cando Street extension (TD-4917), Facility- new operations center- environmental review and design (TD-4942), Routine capital: automated fuel system, radio system upgrade, shelter and bus stop improvements, computer replacement (TG-4796), Routine capital: expansion service vehicles (2 hybrids (TG-4796) and Routine Capital: replace service vehicle-hybrids) utilizing FUZST funds in Fiscal Year 2010.

ADOPTED at a regular meeting of the Wilmington Urban Area Metropolitan Planning Organization Transportation Advisory Committee on January 27, 2010.

Lanny Wilson, Chairman	
Fransportation Advisory Committee	
Mike Kozlosky, Secretary	

STIP/MTIP Amendments- February 2010

STATEWIDE

EB-5118 Various Routes, Statewide Bike and Pedestrian Construction FFY 10 \$2,000,000 (STE)

facility development. Added construction in

FFY 10 not previously programmed.

ER-5100 Various Locations. Landscaping and tree Construction FFY 10 -\$5,500,000 (ST)

planting. Added construction in FFY 10 not

previously programmed.

PUBLIC TRANSPORTATION PROGRAM STIP MODIFICATIONS

STIP#	DIV	COUNTY	MUNICIPALITY/ SYSTEM	DESCRIPTION	funds	FY09 (\$000)	FY10 (\$000)	FY11 (\$000)
TO-4733	3	New Hanover	Cape Fear Public Transportation Authority	Operating Assistance	FUZST		\$139	



WILMINGTON URBAN AREA Metropolitan Planning Organization

P.O. Box 1810 Wilmington, North Carolina 28402 910 341 3258 910 341 7801 FAX

Members:

City of WILMINGTON Lead Planning Agency

Town of CAROLINA BEACH

Town of KURE BEACH

Town of WRIGHTSVILLE BEACH

NEW HANOVER County

Town of BELVILLE

Town of LELAND

Town of NAVASSA

BRUNSWICK County

PENDER County

CAPE FEAR
Public Transportation
Authority

North Carolina BOARD OF TRANSPORTATION November 25, 2009

Mr. Don Voelker North Carolina Department of Transportation Strategic Prioritization Office of Transportation 1501 Mail Service Center Raleigh, North Carolina 27699-1501

Re: Urban Loop Strategic Prioritization Process

Dear Mr. Voelker:

The Urban Loops program designation and funding were established by the 1989 Highway Trust Fund as part of the Intrastate Highway System. Today there are 10 Urban Loop in North Carolina (Asheville, Charlotte, Winston-Salem, Greensboro, Durham, Raleigh, Wilmington, Fayetteville, Greenville and Gastonia). The Urban Loop Program currently totals 353 miles, 140 of which are open to traffic. The estimated cost to complete the remaining loops is now around \$5.5 billion.

Based on Governor Purdue's Executive Order #2, the Department of Transportation is required to implement a professional approval process for highway projects and addressing "transportation needs and the alternative means for these needs through an integrated transportation system." Additionally, the 21st Century Committee's final report included a policy objective to "enhance mobility and reduce congestion by accelerated investment and completion of all planned urban loops with priorities established based on measurable transparent criteria." The Department of Transportation is currently proposing to develop a scoring system to prioritize the Urban Loops in the state of North Carolina and have requested feedback on the proposed *Urban Loop Prioritization Process* by November 30, 2009.

The Wilmington Metropolitan Planning Organization's Transportation Advisory Committee received a presentation from NCDOT's Strategic Prioritization Office of Transportation on October 28, 2009 regarding the proposed *Urban Loop Prioritization Process*. The new proposed *Urban Loop Prioritization Process* could have a significant impact on the Wilmington Bypass (R-2633 A/B), one of the ten urban Loops in the state. The Wilmington Bypass is currently the number #1 priority for the Wilmington MPO and will have a significant regional transportation impact to help improve mobility and safety throughout the community. The "Record of Decision" has been reached in the environmental review process and to allow the environmental document to lapse would not be a prudent decision by NCDOT. The preferred route has been selected and the NC Board of Transportation has already authorized the acquisition of right of way for both Section "A" and Section "B". The Wilmington MPO recently voted to re-allocate \$38 million from the College Road/Oleander Drive/intersection improvements and allocate

these funds to the Wilmington Bypass (R-2633A). Additionally, the MPO also supported an amendment to the State and Metropolitan Transportation Improvement Program to utilize American Recovery and Reinvestment Act funding, traditional let funds and GARVEE bonds to complete Section "A" of the Wilmington Bypass. These funds are non-loop dollars that the Wilmington MPO has allocated to a loop fund eligible project. The community and TAC have demonstrated a commitment to this important transportation project by placing equity formula funds on a loop funded project. The Wilmington Urban Loop is the next urban loop to be funded behind the Fayetteville Urban Loop that is now under construction. To change the rules in the middle of the game seems unfair and could significantly impact NCDOT's ability to complete the Wilmington Bypass. Given the aforementioned reasons, the Transportation Advisory Committee endorsed a resolution suggesting the Wilmington Bypass not be considered in the *Urban Loop Prioritization Process*.

After review of the proposed *Urban Loop Prioritization Process*, and if the Department continues to proceed the following comments are provided:

- A Benefit Factor is **Air Quality Conformity**. However, there are attainment and non-attainment areas in North Carolina. The proposed ranking system would assign a score for air quality conformity. What happens for attainment areas? It appears that urban loops located in attainment areas will be detrimentally impacted. It is suggested that a score for air quality conformity only if the urban loop is located in a non-attainment area.
- A Benefit Factor is Multi-modal and the Department proposes to assign
 additional points for Multi-modal projects. Most urban loops are controlled access
 facilities and bicycle/pedestrian facilities are not permitted on these facilities.
 Therefore, it will be very difficult to receive additional points for
 bicycle/pedestrian accommodations for multi-modal transportation facilities.
- The "Other Considerations" discusses funding and innovative financing options. It is proposed that a score be provided for applying alternative/innovative funding sources to an urban loop project.
- NCDOT is encouraged to consider the local land use regulations and the community's ability/willingness to preserve a future transportation corridor as a scoring factor.
- The final ranking system will provide a Scoring System Priority Ratio that considers benefits and costs vs. project costs. Projects that are located in environmentally sensitive areas typically have higher construction costs? Have these higher construction costs been considered in the analysis?

Thank you for the opportunity to comment on the proposed new Urban Loop Prioritization process. If you have any questions please do not hesitate to contact me either via phone at (910) 342-2781 or via e-mail at mike.kozlosky@wilmingtonnc.gov.

Sincerely,

Mike Kozlosky
Executive Director

cc: TAC Members

Lanny Wilson, NC Board of Transportation

Gene Conti, Secretary, NCDOT

Jim Trogdon, Chief Operating Officer, NCDOT

Susan Coward, Intergovernmental Affairs and Budget Coordination, NCDOT

Allen Pope, Division Engineer, NCDOT

	COMMENTS	RESPONSES
•	Needs based methodology should be deleted because it is too simplistic by not gauging the efficacy of the transportation solution. Urban loops were included in 1989 to increase support	 Needs based factor's identify existing deficiencies. A benefit-cost analysis looks at needs, benefits and costs. We agree needs can be a simplistic view, one of the reasons it was chosen – to be more easily understood. Efficacy of the solution is important. The Department will presume that the transportation solution will address all the transportation needs for a 20-year forecast and thus result in a effective and efficient solution. The law now allows ten urban loops to be funded using urban loop funds. The 1989 law outlined certain goals, i.e. support statewide growth and development, and the Urban Loops were part of that
•	from urban areas. Economic prosperity should not be principal focus. Travel time savings needs	law. There has been no change to the legislative language of the objectives of the program. The Department believes there is a need to adhere to those goals for the Urban Loop Program
	to account for aggregate vehicle hours of reduction. Don't look at just parallel routes. User benefits should be number of benefitees times amount of time saved by each.	•Good comment. The intent is an approach that will provide aggregate vehicle hours of reduction based on travel time savings in metropolitan area with and without loops. This will be done with the help of the MPO and Regional travel demand models. This will be network based. This involves looking beyond just the parallel routes. User benefits are to be determined by the time saved by each.
•	User pay financing should receive greater attention.	•NCDOT agrees. NCDOT desires an approach that moves projects more quickly to construction where non-loop funds will supplant loop funds. A new criteria will be added to address this. See "Non-Loop Funding Factor" in the revised criteria. One caveat is that the G.S. 136-66 and GS. 143B-350 place restrictions on giving an advantage to any project using local government participation. Therefore, local contributions can not be used in the non-loop funding factor unless the legislation is amended. •Thank you.
•	Use of net loop project costs is appropriate.	

COMMENTS	RESPONSES
Agree that economic development is good and use of Dept. of Commerce model is good but need to gauge economic impact long-term and not just on the temporary benefits of roadway construction	NCDOT continues to work with the Department of Commerce to refine the economic development model. Predicting job creation is not an exact science. The model will focus on two factors: employment opportunities created by Construction Impacts and the dynamic measure of economic development impacts on existing business. The Department commits to working with MPO staff to allow them to review the inputs before the model is run
Environmental study status is given too much weight.	 Several comments have been received similar to this. Environmental readiness is probably not a benefit but it certainly is a requirement for a project to advance to construction. The Department agrees to delete it a a factor receiving points. It was a relatively low impact in the scoring anyway
Air Quality conformity given too much weight	This criteria will be deleted. A review of the urban loop projects indicate that every loop project in a non-attainment area is part of an air quality conformity determination. Also, loop projects in attainment areas would not have received points and thus may have been at a disadvantage. Comments on the latter were received and consideration was given to assigning full points to those projects. However, all projects then would receive maximum points so it has been decided to delete this criteria.
Urban Loop projects are high priority in their MPO area	The Department agrees. Several MPO's have made the same observation. This is one of the reasons why there is a separate Urban Loop Prioritization process. The SPOT template for overall Strategic Prioritization Process allowed MPO's to send this same message about loop projects being high priority. Some indicated this, others did not rank Urban loops since they were excluded from receiving points.

	COMMENTS	RESPONSES
•	Supportive of NCDOT efforts to make process both transparent and datadriven.	Thank you.
•	Agree with first four principles but does not agree with allowing Sec. NCDOT to adjust rankings.	 This is surprising that the MPO thinks the NCDOT Secretary should not have this flexibility. NCDOT has evaluated this comment and continues to believe the Secretary should have this flexibility but does not expect it to be routinely used. There are too many variables to say that a purely technical data ranking is the sole answer to prioritization. When this principle is used, NCDOT commits to explaining why projects were moved up or down in the rankings.
•	Mitigation of congestion is not addressed. Reduction of of VMT should be a needs factor. Do not emphasize economic development above congestion.	 Congestion is a needs factor which is based on the volume to capacity ratio of existing parallel routes. Mitigation of congestion would be a "benefit" factor. The travel time savings factor essentially incorporates the "mitigation of congestion" issue. Regarding the weights, The Department agrees that economic development should not be emphasized above congestion.
•	Travel time savings needs to account for aggregate vehicle hours of reduction. Don't look at just parallel routes. User benefits should be number benefitees times amount of time saved by each.	Good comment. The Department is working on an approach that will provide aggregate vehicle hours of reduction based on travel time savings in metropolitan area with and without loops. This approach will look beyond just the parallel routes. The approach will evaluate the user benefits of the amount of time saved by each user based on a network analysis.

COMMENTS	RESPONSES
The only "cost factor" that should be considered are costs utilizing traditional NCDOT funding sources. Toll revenues should not be considered as a cost to NCDOT since it is being borne by the users.	The only "cost factor" to be used will be expected costs to purchase right of way and construction. A new criteria has been developed to help address this comment. See the new factor titled "Non-Loop Funding Factor".
Economic Development Impact criteria is weighted too high because job creation is difficult to predict. Also, jobs retained through facility improvement is not addressed.	NCDOT continues to work with the Department of Commerce to refine the economic development model. Predicting job creation is not an exact science. The model will focus on two factors: employment opportunities created by Construction Impacts and the dynamic measure of economic development impacts on existing business. The Department commits to working with MPO staff to allow them to review the inputs before the model is run.
Give consideration to "other factors" like building usable segments, avoiding lapse of planning documents and permits, paying for cash flow projects and particularly for local areas providing funding for loop projects.	 In an effort to keep the criteria to a manageable number and simple, the Department has not developed criteria for every possible factor that could impact urban loop prioritization. Given the interest in the comments received regarding local areas providing funding for loop projects, a new criteria titled "Non-Loop Funding" factor has been developed. However, certain General Statutes do impact how this factor will be implemented. See details in the revised criteria.
 Agree with DCHC and Regiional Transporation Alliance comments. 	Thank you and so acknowledged. NCDOT responses are given elsewhere to those comments. 4

COMMENTS	RESPONSES
 Agree with a quantitative methodology approach. Since details are not fully developed, TAC desires another review after details of how points will be assigned. Keep methodology flexiible by updating it with TIP cycle and give opportunity to comment Agrees with Safety and Congestion scoring but omit Infrastructure Health. Thus, weight safety at 20 percent in lieu of proposed 10 percent. Clarify how parallel routes will be chosen. For congestion score, use peak hour volume to capacity ratios not daily volume. Safety score should be simplified to be based on standard statewide crash rates for facility types and give more points to diverting traffic from urban streets than other freeways 	 Thank you. The Department will undertake another round of public comments to allow further comment on proposed criteria. Also, the Department will work with MPO staff to review inputs before the model is run. Agree. Agree. Urban loop projects will enhance mobility and enhance safety on parallel routes. The Infrastructure Health factor has been deleted. The Department will work with each MPO staff to come to agreement on which parallel route(s) will be used. Agree Safety score is based on actual critical crash rate, crash severity and crash density rates not statewide rates for different facilities. Data is from parallel routes – which will be agreed upon by MPO and SPOT. Predicting safety reductions in any of these categories by building a loop project would be purely fictional.

COMMENTS	RESPONSES
Travel time savings needs to be better defined, needs to be based on decrease in vehicle hours traveled from the project for the urban areas network and MPOs should review once again after methodology is further developed.	 Agree The Department will undertake another round of public comments to allow further comment on proposed criteria. Also, the Department will work with MPO staff to review inputs before the model is run.
Economic development needs to go beyond measuring new job created. Needs to include a measurement of existing employment served by the project. Add preservation of existing nearby employment to the economic development measure.	 NCDOT continues to work with the Department of Commerce to refine the economic development model. Predicting job creation is not an exact science. The model will focus on two factors: employment opportunities created by Construction Impacts and the dynamic measure of economic development impacts on existing business. The Department commits to working with MPO staff to allow them to review the inputs before the model is run
Agree that air quality measure is needed but simplify it. Propose it to be simply 20 points for a project needed to meet AQ conformity and 0 points if it is not needed.	• This criteria will be deleted. A review of the urban loop projects indicate that every loop project in a non-attainment area is part of an air quality conformity determination. Also, loop projects in attainment areas would not have received points and thus may have been at a disadvantage. Comments on the latter were received and consideration was given to assigning full points to those projects. However, all projects then would receive maximum points so it has been decided to delete this criteria

COMMENTS	RESPONSES
 Agree with truck traffic factor but consider what type of facility from which the truck traffic is diverted, i.e. urban streets or other grade-separated facilities. 	This comment is a worthy comment but the traffic models are not sufficiently detailed to further refine this factor. The Department is trying to keep these factors simple to understand and therefore this comment will not be implemented.
 Do not use Land use factor as proposed because all areas should have some form of land use plans. Instead, TAC proposes a sliding scale of points from 0 to 5 depending on percent of right-of-way protected and if NCDOT owns the right-of-way, points are doubled. Consider a new factor: measure 	Agree. The Department will refine this criteria to provide points where right of way is protected. However, the Department does not intend to double the points where right of way is already owned. This urban loop process is to address those projects where funds have not already been committed.
 Consider a new factor: measure is miles of existing or authorized urban loop roadways per urbanized area population. Consider a new factor: Use a 	Disagree. This type of factor is considered more of an "allocation" or "apportionment" factor to be used if urban loop funds were to be distributed to the ten areas. It is not a needs or benefit factor or cost factor.
qualitative factor of where MPOs rank loop projects, higher rank, more points.	Disagree. The Department believes that each of the ten urban areas would rank loop projects very high, especially given there is a separate funding category for these projects. Therefore, it would seem that all projects would probably get similar points if the MPO ranked these projects.

	COMMENTS	RESPONSES
•	Ensure consistent and most current cost data is used in determining the priority ratio.	Agree and will do.
•	Objective is a positive step, recognize details yet to be refined, willing to work with NCDOT to finalize.	Thank you and the Department will work with MPOs to further refine these criteria.
•	Multi-modal factor makes no reference to bicycle or pedestrian connectivity. Some Durham projects may include these improvements. Please add this criteria.	 Urban loop projects traditionally are freeway type facilities where bicycle and pedestrian use are not encouraged. The Department agrees that urban loop projects should enhance bicycle and pedestrian connectivity where necessary and will commit to address this connectivity where feasible in constructing loops. However, this is not a factor that materially affects scoring or a priority ranking.
•	Envrionmental readiness factor should be deleted because it does not measure benefits of the project. Instead, an environmental factor should be included which measures impact of project on natural or community resources i.e. acres of watershed impacted, stream crossings, fragmentation of natural habitat, relocation of homes, urban sprawl.	 Partially Agree. Environmental readiness is probably not a benefit but it certainly is a requirement for a project to advance to construction. The Department agrees to delete it as a factor receiving points. It was a relatively low impact in the scoring anyway. The impact to natural or community resources can not be accurately measured for all remaining urban loop projects since the environmental documents have not yet advanced for all projects. Therefore, this comment will not be implemented.

 Rank whole loops AND segments of loops. Ensure consistent "needs" data is used and verified by MPO before model is run. Run model to isolate loop's effects (no other projects) After ranking, MPO's should be able to rank segments to be constructed first. Give special consideration for Ft. Bragg, other strategic military locations, homeland security, national defense and FEMA staging areas. Hazardous freight should be given special consideration. SPOT and MPO need to agree on "parallel" routes used to generate needs data. Urban Loop funds will only be used for remaining Urban Loop TIP projects will be analyzed. Agree. The Department commits to work with MPO staff to review data inputs prior to running the model. Agree that MPOs should be consulted on which segment of an urban loop TIP project will be constructed first. The Department agrees in concept that the importance of an urban loop to homeland security is a benefit. We will include this in the "other considerations" factors. Good concept but data does not differentiate between hazardous and non-hazardous cargo. Agree. The Department commits to work with MPO staff to review data inputs prior to running the model 	COMMENTS	RESPONSES
	 of loops. Ensure consistent "needs" data is used and verified by MPO before model is run. Run model to isolate loop's effects (no other projects) After ranking, MPO's should be able to rank segments to be constructed first. Give special consideration for Ft. Bragg, other strategic military locations, homeland security, national defense and FEMA staging areas. Hazardous freight should be given special consideration. SPOT and MPO need to agree on 	 constructed. Only these TIP projects will be analyzed. Agree. The Department commits to work with MPO staff to review data inputs prior to running the model. Agree. Agree that MPOs should be consulted on which segment of an urban loop TIP project will be constructed first. The Department agrees in concept that the importance of an urban loop to homeland security is a benefit. We will include this in the "other considerations" factors. Good concept but data does not differentiate between hazardous and non-hazardous cargo. Agree. The Department commits to work with MPO staff to review data inputs prior to

COMMENTS	RESPONSES
Propose segmenting U-2519 and map was attached.	Thank you. U-2519 will be evaluated as one project to be consistent with other loop projects. Which segment is built first will be done after consulting local officials.
Land Use points should be based on how long land use plan has recognized loops.	The Department will change this criteria to provide points where "right of way is protected." The more right of way that is protected, the more points.
Use updated cost estimates for entire loop and subtract funds already expended from total.	 Agree to use updated cost estimates using consistent data for all projects. Do not agree to subtract previous funds since we are prioritizing remaining projects to use uncommitted loop funds.
Assign benefit factor and associated point system to projects beyond feasibility.	The Department believes there is a need to assign points regardless of whether the project is in a feasibility status or beyond. The projects which best meet the criteria should be considered for earlier funding.
Assign points if project has completed environmental documentation, completed design plans or completed R/W acquisition, shovel ready, etc.	Comment appears to be saying projects further along in project development should receive points. Concept is good. However, the Department still needs to consider that there may be projects that have advanced that do not rank as high as those that have not advanced. This will be included under "other consideration" factors after the rankings are determined. The environmental readiness factor has been deleted.

COMMENTS	RESPONSES
 Concurs with the proposed methodology Comments on Travel Time Savings: 1. Consider using reduction in Vehicle hours of delay (VHD) as 	Thank you Agree
 the measure 2. Use 2035 E+C as basis as nobuild. With improvement is the build scenario. Compare build and no-build reduction in VHD. 3. Highest performing projects gets 100% and other projects decrease as VHD gets smaller. 	 Agree This could be done if all travel demand models were identical and data inputs completely consistent. There are some differences It is preferred to develop the travel time savings and then compare one project's savings vs. another projects's savings. The
4. Some segments carry higher traffic volumes than other segments when connected with other segments.	 scoring for this factor has been revised to assign points based on which project provides the highest travel time savings in relation to other projects. This is why it is proposed to evaluate TIP projects rather than segments of loops. Data will be used on each TIP project segment that gives that overall TIP project the highest potential points.

C	OMMENTS	RESPONSES
measure economy transpor Economi industry of worke "Transpo	ra supplemental of the primary county's y involved in tation industries. Use c Census data on that measures percent rs employed in the ortation and sing" sector in each	The Department will consider this comment in further discussions with the Dept. of Commerce and how their economic model calculates direct, indirect and induced employment effects.
Give more the where the second control of the second control	re multi-modal points nere is more than one odal connection.	Agree. The Department has revised the scoring sytems and will give additional points if there is more than one multi-modal connection.

COMMENTS	RESPONSES
 Change Environmental Readiness Factor to NEPA Process Factor Give points to projects that if constructed will prevent an areas from becoming non-attainment. 	 This factor has been deleted. The Air Quality conformity criteria will be deleted. A review of the urban loop projects indicate that every loop project in a non-attainment area is part of an air quality conformity determination. Also, loop projects in attainment areas would not have received points and thus may have been at a disadvantage. Comments on the latter were received and consideration was given to assigning full points to those projects. However, all projects then would receive maximum points so it has been decided to delete this criteria
 More details on "needs" data is desired. How are these scored? Regarding multi-modal, is there a way to support Park-N-Ride concept where mass transit uses loop from a Park-N-Ride lot? Under "Needs Factors", replace "likely be high score" with "be a typical high score". 	 Scoring is similar to overall strategic prioritization process. Data is from same databases. All loops probably will have mass transit use from PARK-N-RIDE lots. This would then be a "wash" for all the loops. There is no change to this criteria. Agree. The scoring system has been revised to a more simple system.

COMMENTS	RESPONSES
The Wilmington By-Pass project already has a Record of Decision. Please don't allow the document to lapse.	The Department agrees that environmental documents and permits should not be allowed to lapse and will make a concerted effort to ensure this does not happen.
Projects should be approved by the BOT and where ROW has already been acquired, this should be a consideration. ROW has already been acquired for sections A and B.	The Department has revised the land use factor to now address right of way being protected. Where ROW has been fully authorized and/or acquired, additional points will be given to those projects since all that is needed is construction.
Another consideration should be when non-loop dollars are being used on loops. Wilmington used Garvee, traditional let and stimulus dollars on Section A. Because of this, Wilmington By-Pass should not be in the Urban Loop Prioritization Process.	 Partially agree. NCDOT desires an approach that moves projects more quickly to construction where non-loop funds will supplant loop funds. A new criteria will be added to address this. See "Non-Loop Funding Factor". One caveat is that a local government contribution will not be counted in this factor since G.S. 136-66 and GS. 143B-350 place restrictions on giving an advantage to any project using local government participation. Also, all remaining loop projects (those not yet authorized for construction) will be evaluated under the Urban Loop Prioritization Process. The Department will, however, include the Wilmington By-Pass as part of the Urban Loop Prioritization process.

COMMENTS	RESPONSES
Wilmington By-Pass has been the No. 1 project for years and has been right behind the Fayetteville Outer Loop in the loop schedule. Do not shuffle existing and fully funded ROW projects now.	This comment is so noted
Air quality Factor- It appears that no consideration/points are given for loop projects in attainment areas	 This criteria will be deleted. A review of the urban loop projects indicate that every loop project in a non-attainment area is part of an air quality conformity determination. Also, loop projects in attainment areas would not have received points and thus may have been at a disadvantage. Comments on the latter were received and consideration was given to assigning full points to those projects. However, all projects then would receive maximum points so it has been decided to delete this criteria
Multi-modal factor: since bike/ped facilities are not allowed, there should not be any additional points for bike/ped accommodation.	• Agree

COMMENTS	RESPONSES
Provide a score/points for innovative funding options rather than this being considered as "other considerations". Encourages NCDOT to consider	 A new criteria has been developed titled "Non-Loop Funding Factor". NCDOT desires an approach that moves projects more quickly to construction where non-loop funds will supplant loop funds. One caveat is that a local government contribution will not be counted in this factor since G.S. 136-66 and GS. 143B-350 place restrictions on giving an advantage to any project.
Encourages NCDOT to consider the local land use regulations and ability of community to preserve a future transportation corridor.	 The Department has revised the land use factor to now address right of way being protected. Where ROW has been fully authorized and/or acquired, additional points will be given to those projects since all that is needed is construction.
Ensure that construction costs reflect that some projects are in environmentally sensitive areas.	The Department will use cost estimating procedures that are consistent with normal Department practices. These procedures indirectly do account for these types of factors.

	COMMENTS	RESPONSES
.	Process looks really good.	Thank you
•	Make sure crash data and congestion data for US 52 is fully communicated.	 Agree. The Department will consider using US 52 crash and congestion data in evaluating W-S Outer Loop.
•	Should be consideration for historic preservation benefits which would include the damage done to towns by the existing heavy truck traffic.	 Agree. This is why there is a freight factor. The sooner truck traffic can be taken out of existing towns, central business districts, etc., the more benefits to the town and CBD regarding safety, pavement preservation and congestion. This is built into the freight factor.
•	The "Benefits" factors, do not express enough credit for loop completion for regional through service, particularly trucks.	The Department has revised the scoring system. See revised criteria.
•	Commend NCDOT for working towards transparency, accountability and objective criteria.	• Thank you.

	COMMENTS	RESPONSES
•	Ensure the original commitments, priorities and loop projects from the 1989 law will be completed first before additional projects are advanced.	NCDOT will follow the law as it exists today. Existing law does not specify which loop projects should be completed first. The needs are greater than the revenues so this is a prime reason for prioritization.
•	Environmental factor is more a "how" factor rather than a "needs" factor. This factor should reflect need for permitting agencies to establish the permitting priorities.	The Environmental Readiness Factor has been deleted.
•	If a county is a proactive partner in funding for congestion relief, this should be included in multimodal factor.	 Good comment but there is also a state law which essentially says that when local governments contribute to a project, the implementation of that project can not affect the implementation of any other project in the STIP. A new criteria is being proposed titled "Non- Loop Funding Factor" and is described elsewhere in these comments.
•	Travel time may be too heavily weighted and economic development benefits should receive equal or greater scoring	Good comment. After review, the Department has decided that congestion should receive more weight than economic dvelopment in the overall scoring and the revised scoring system reflects this concept.

	COMMENTS	RESPONSES
•	Step in the right direction. Objectives are good but include improved safety. Also, safety factor should be higher than 10%.	 Thank you. Thank you. A revised scoring system is being proposed which we believe accurately reflects how Congestion, Safety and Infrastructure Health needs are addressed.
•	Apply Needs factors to network and not just parallel routes.	 Agree. NCDOT will use travel models on a network basis and not look at benefits based solely on parallel routes.
•	Add more on crash reduction to Benefit factors.	Thank you and see revised scoring system.
•	Will un-constructed projects of existing loops have to compete with smaller segment of partially constructed loops and can they realistically do so?	Yes. All remaining un-constructed TIP projects will have to compete against each other. This is part of the challenge of initiating a prioritization process in an on-going program.

COMMENTS	RESPONSES
Loops in original legislation should be given special consideration.	 Thank you for the comment. The Department must adhere to the current law and will treat all remaining loop projects without special consideration to when the loop project was added to the legistlation.
 Multi-modal points should only be awarded if multi- modal facilities are within right-of-way. Also there is an inconsistency in document about ½ or 1-mle for an mulit-modal connection. 	Agree with both comments. The Department will clarify that the distance is to be one mile.
Before final adoption, a trial run is needed, results shared and analyzed so all can agree it reflects reality.	The Department agrees that the final criteria needs to be shared, the data inputs need to be shared and intends to do this before running the data through the model.
	20

COMMENTS	RESPONSES
 Congestion needs factor should be based solely on V/C ratio and not use AADT Safety needs factor should be 25% and not 10% Benefits factors should include a factor for how long a project has been in the law but not completed. Environmental readiness factor weight is too low to recognize this. Air Quality conformity factor is too confusing and asks why projects in non-attainment areas get points over projects not in non-attainment Benefits factor for Freight should only count through trucks not just measured truck volumes. 	 Thank you. The AADT is only 40% of this factor. Thank you. The scoring system has been revised to more accurately reflect comments received and the Department's position on the scoring of the criteria. The Department will prioritize all remaining loop projects, regardless of the length of time they have been in the law. Also, the Environmental Readiness Factor has been deleted. This criteria will be deleted. A review of the urban loop projects indicate that every loop project in a non-attainment area is part of an air quality conformity determination. Also, loop projects in attainment areas would not have received points and thus may have been at a disadvantage. Comments on the latter were received and consideration was given to assigning full points to those projects. However, all projects then would receive maximum points so it has been decided to delete this criteria. Existing counting methods and data do not now separately list through truck traffic so this factor will remiain unchanged.

COMMENTS	RESPONSES
 No mention of scoring for human and natural environment Allowing Secretary to adjust final rankings reduces objectivity and re-introduces political influence 	 Human and environmental effects are not known today for all remaining loop projects, therefore we do not have the data to analyze all remaining projects. No data-driven methodology will result in the perfect ranking system. The Secretary must have the ability and discretion to move projects in the ranking. This is expected to be done on an exception basis not a routine basis and when it is done, the Department will provide reasons for the change in the rankings.
 Does process consider that many of the projects are only partial loops and not complete loops? How does infrastructure health score of parallel routes impact priority of loop projects? 	 Remaining TIP projects will be analyzed. This means any TIP urban loop project that has not gone to construction. The Infrastructure Health factor has been deleted.
What is quantitative approach and data used for "Congestion score"?	Congestion is a combination of volume to capacity ratio and AADT.
Air quality factor should be reworded and points awarded to projects that benefit air quality rather than whether a region must meet conformity determination.	 This criteria will be deleted. A review of the urban loop projects indicate that every loop project in a non-attainment area is part of an air quality conformity determination. Also, loop projects in attainment areas would not have received points and thus may have been at a disadvantage. Comments on the latter were received and consideration was given to assigning full points to those projects. However, all projects then would receive maximum points so it has been decided to delete this criteria

COMMENTS	RESPONSES
 For freight factor, where is the data coming from. HPMS does not seem relevant. Will additional funding sources be considered (tolls, GARVEE, GAP, TIFIA, etc.)? In travel time savings, has induced travel been considered Has the transportation/land use point been considered? Has adequate time been provided to MPO TACs to allow adequate consideration of the proposed process? A similar prioritization process for Interstate highways would be beneficial and would help with rural political support for loop process and funding. 	 The data will be derived from the travel demand models used in each urban area. Yes. A new criteria will be added to address this. See "Non-Loop Funding Factor". One caveat is that a local government contribution will not be counted in this factor since G.S. 136-66 and GS. 143B-350 place restrictions on giving an advantage to any project using local government participation. Yes This criteria has been revised to give points based on percent of right of way protected in the corridor. See revised criteria for additional narrative. Yes. However, the Department will provide another round of public comments and commit to work with MPO staff to review and agree on data inputs prior to running the model. The Department is in the midst of a highway prioritization process for all highway projects across the State. That process is separate from the Urban Loop Prioritization Process.

COMMENTS	RESPONSES
 Applaud the Department's efforts at creatign a quantitative process Confirm whether the total benefits factor points are 100 or 150. Clarify the method of selecting alternative routes to calculate safety and congestion benefits Eliminate infrastructure health on parallel routes to avoid creating a disincentive to maintain those routes. In lieu of infrastructure health score, create a factor of completed mileage per urbanized area population Clarify how travel time savings will be calculated. 	 Thank you. The scoring system has been revised to hopefully make an easier understanding of the factors and weights of each factor. The Department and the MPOs will work together to determine the parallel routes that currently carry the traffic that will use the urban loop project once the urban loop is open to traffic. Agree. The Infrastructure Health Score has been deleted This is more of an "allocation" or "apportionment" factor if it were to be used and is not considered a needs or benefits factor. Also, the Infrastructure Health score has been deleted. The urban areas traffic demand models will be used to assess travel time with and without the loop projects. Travel time savings will be based on the network savings not on just the parallel routes.

COMMENTS	RESPONSES
Clarify economic development criteria and give consideration to job preservation or retention not just job attraction.	The Department continues to work with the Department of Commerce to refine the economic development model. Predicting job creation or retention is not an exact science. The model will focus on two factors: employment opportunities created by Construction Impacts and the dynamic measure of economic development impacts on existing business. The Department commits to working with MPO staff to allow them to review the inputs before the model is run.
 For land use factor, give consideration to whether right of way has been acquired or reserved instead of whether the loop is included in existing plans. 	 Agree. The Department will change this criteria to provide points where "right of way is protected." The more right of way that is protected, the more points.
 For freight factor, consider types of routes (freeway, arterial or urban) being relieved not just amount of truck traffic. 	The traffic demand models may not provide sufficiently detailed data to make this analysis. One of the principles of the process is that the criteria is to be transparent so the Department is trying to make this simple and understandable.
 Consider amount of time saved to get to transportation terminal and not just distance. 	The distance was chosen to be a more simple criteria to measure.
Simplify air quality factor to be a simple yes/no .	 This criteria will be deleted. A review of the urban loop projects indicate that every loop project in a non-attainment area is part of an air quality conformity determination. Also, loop projects in attainment areas would not have received points and thus may have been at a disadvantage. Comments on the latter were received and consideration was given to assigning full points to those projects. However, all projects then would receive maximum points so it has been decided to delete this criteria.

COMMENTS	RESPONSES
Use updated and congruent cost information	Agree. The Department will use consistent cost information for all projects.
Desire second opportunity to comment once final draft is created.	Agree. The Department is publishing the final criteria for additional comments. The Department agrees to work with MPO staff on the data inputs before the model is run
Change environmental status factor to environmental factor and impacts to wetlands, stream crossings, etc	The environmental readiness factor has been eliminated.

	COMMENTS	RESPONSES
•	Loop program is significantly under-funded and prioritization method is is window dressing. Unless revenue stream is increased or project list is cut the proposed urban loops can not be completed.	 Agree that the loop program is significantly under-funded. Revenue deficit makes a prioritization process all the more important for wise decision-making for loops and all other transportation needs. Not only are loops under-funded but so is overall transportation program. Wise decisions must be made to expend limited resources. A data-driven prioritization process will help ensure limited resources will be used in an efficient manner and help alleviate concern whether subjective judgments are being made on where to construct projects.

Proposed Urban Loop Prioritization Process

The North Carolina Department of Transportation (Department) proposed an urban loop prioritization process and posted it on its website for public comment until Nov. 30, 2009. Comments have been received and reviewed. An accompanying 27-page power-point presentation contains a summary of the comments received and the Department's response to those comments. As a result, the Department is proposing changes to the proposed criteria. The most significant changes are these:

- **1.** The Infrastructure Health factor was deleted. Several comments indicated that the "needs" of a new loop are not dependent on the pavement condition of parallel routes. Probably true. Since the factor was only 4% of the overall scoring, it was deleted.
- **2.** The Environmental Readiness Factor was deleted. Several comments indicated this factor did not really provide any "benefit" to the project. The Department has decided to not use this factor in the scoring but consider it under the "Other considerations".
- **3.** The Air Quality Conformity factor was deleted. Several comments indicated there was some confusion over the scoring. Also, projects in attainment areas were not addressed. The Department has decided not to use this factor in the scoring but consider it under the "Other considerations".
- **4.** The Land Use factor was deleted and replaced with a factor titled "Protected right of way". There seemed to be a consensus that every urban area has likely done some form of land use to address the urban loops in their area. Several comments were received that protecting the right of way was a better measure. Thus, a new factor titled "Protected right of way" has been added. See below and the Appendix for details of the scoring for this factor.
- **5.** A new factor titled "Non-Loop Funding" was added. Several comments were received that the process needs to reward urban loop projects that are supported financially by local governments or users. The Department fully agrees. There is a constraint however in the General Statues. G.S. 136-66 and GS. 143B-350 place restrictions on giving an advantage to any project using local government participation. Thus, the Department is proposing a criteria that should help meet the desires of the comments and the Department yet stays within the context of the General Statues. See below and the Appendix for details of the scoring for this factor.
- **6.** A simpler scoring system has been developed. To simplify an understanding of the scoring system, the Department has revised the scoring to allow each "needs" factor and "benefits" factor to have a potential point total of 0 to 100. Each factor will then be weighted by some percentage of the overall scoring. In other words, the maximum number of points that can be assigned for congestion, safety or infrastructure health or the six benefit factors (travel time savings, economic development, freight mobility, multimodal, protected right-of-way, and non-loop funding) is 100 points each but the

weighting factor for each can be changed to reflect how important that factor is in relationship to all other factors and obviously the sum total of the percentages of all the factors must equal 100%.

To help ensure these criteria receive full disclosure before the process is finalized. the Department is going to solicit comments again. These criteria have been revised, reworked and new criteria proposed based on the attached comments we received. We will appreciate receiving comments on whether these are the appropriate criteria and weighting factors by February 28, 2010.

The expected timeframe of remaining work after the comment period closes is to review, revise and finalize urban loop criteria in March. Work with MPO staff to review data inputs to the model and have model runs completed in April.

One other note, several comments were received requesting that the MPOs be given the opportunity to review the data inputs prior to scoring the projects. The Department agrees to do this but the first step is to ensure everyone has had the opportunity to comment on the criteria to be used. Once the ranking criteria and scoring system is finalized, the data inputs will be more fully developed and shared with MPO staff for their review and comment before the final results are tabulated.

Objective

Create an Urban Loop prioritization process that supports statewide growth, economic development and enhances mobility.

Background

The Urban Loops program designation and funding was established by the 1989 Highway Trust Fund as part of the Intrastate Highway System. The Trust Fund legislation stated the Intrastate System was "designed to support statewide growth and development objectives and to connect to major highways of adjoining states." There were 7 loops established at that time (Asheville, Charlotte, Winston-Salem, Greensboro, Durham, Raleigh and Wilmington). Three additional loops were later added: Fayetteville and Greenville in 2003 and Gastonia in 2004.

Furthermore, G.S. 136-180 states that a new Interstate or freeway as the revised termini of an urban loop may be accepted if "The Board of Transportation finds that the purposes of the urban loop facility, specifically including reduced congestion and high-speed, safe, regional through-travel service, would be enhanced by the action."

The Urban Loop Program currently totals 353 miles, 140 of which are open to traffic. The estimated cost to complete the program is now around \$5.5 Billion. At the current funding rate and the expected increases in construction costs, it will take more than 50 years to complete the program. The challenges in constructing these projects have been many and can be expected to grow in difficulty. Urban loop projects are new location projects that are large, complex and costly and can be very time-consuming to move through the project development process. Ever rising costs of engineering, right-of-way,

construction and environmental impacts ensure that further delays in completing the Urban Loop program translate to additional funding needs. Economic development opportunities are lost when the urban loops are not completed. At the same time, revenues to the Department have declined. A prioritization process to help ensure the most cost-effective use of resources to complete the urban loop program is needed.

The 21st Century Transportation Committee report dated December 2008 included the following "policy objective": "Enhance mobility and reduce congestion by accelerated investment and completion of all planned urban loops with priorities established based on measurable transparent criteria."

Purpose

The purpose of the loop prioritization process is to prioritize the remaining TIP projects that comprise the uncompleted sections of the 10 Loops.

Proposed Principles of an Urban Loop Prioritization Process

The following principles outline what an urban loop process should achieve. When the priorities are established, one should be able to say the priorities meet the test of following principles:

- Projects will support statewide growth and foster economic development
- Selection criteria will be data driven and transparent
- Selection criteria will be consistent with overall Strategic Prioritization Process
- Pilot effort will include a Benefit-Cost Type Methodology
- Pilot effort will be subject to public review and comment
- Secretary of NCDOT will have ability to move projects in final rankings

Proposed Methodology

A urban loop prioritization process would include both "needs" and "benefits" factors. This is based on research of various State's highway prioritization processes. The most mature State prioritization processes have some form of a "benefit-cost" methodology that provides project rankings based on identifying not just the needs for projects but also incorporating the benefits and costs of the projects to meet those needs. Proposed "needs" factors and "benefits" factors are outlined below:

The Strategic Planning Office of Transportation (SPOT) highway prioritization model is currently a needs-based only approach to prioritizing TIP projects but is limited to analyzing current conditions not future conditions. Therefore, the SPOT highway prioritization model is a starting point for establishing priorities for planned urban loops. Since urban loops are Mobility projects on the Statewide Tier, it is appropriate to use the highway prioritization matrix for scoring needs. This also shows consistency with one of the guiding principles. These "needs factors" are briefly described below but the details of the scoring for each factor are more fully explained in the Appendix. Also attached is a scoring sheet which provides the weighting factors in a table format.

"Needs" factors

The data for the "needs" factor will be taken from the parallel routes to the proposed urban loop project. Parallel routes are defined as those routes currently carrying the traffic that is expected to use the new urban loop. The Department agrees to work with MPO staff to ensure agreement on which routes are considered "parallel routes". The data will be the most current data available in NCDOT databases and the Department will ensure the same year's data be used for all 10 urban areas. More details on these factors are included in the Appendix.

- **1.** Congestion Score (10%): A measure of recurring congestion on the parallel routes. The higher the congestion score, the more points to the project.
- **2. Safety Score** (5%): A measure of the past crash history indicating whether the crashes on the parallel routes are greater than comparable routes elsewhere in the State. The higher the crash rates, the more points.

"Benefits" Factors

The current highway prioritization model does not account for the "benefits" factors of how projects meet identified deficiencies because the data is not readily available for all TIP projects. A review of various other State's highway prioritization models generated a list of factors that are believed to be applicable to North Carolina for prioritization. Based on the comments received, the below "benefit" factors should more accurately reflect the benefits of the urban loop projects. Again, once these criteria are finalized, the Department will provide MPO staff with the data inputs prior to finalizing the scoring. Also, these "benefits" factors below are more fully explained in the Appendix.

- 1. Travel time savings (30%). This is the key measure of whether the urban loop will reduce congestion and provide greater mobility. The benefits are based on travel time savings the loop project would provide to the region. The travel time savings will be calculated using the travel demand model for the area. The measure will be the reduction in vehicle hours of delay for the network. This will be determined by running the travel demand models with and without the loop projects. The higher the travel time savings using vehicle hours of delay by the users, the more points.
- 2. Economic Development (20%). A measure of the economic impact the project brings to the region. The NC Department of Commerce would provide this information. Department of Commerce has developed a dynamic economic analysis model which provides the economic impacts to the surrounding region. The model focuses on employment impacts created by the construction and the dynamic measure of economic development impacts on existing business. See the Appendix for further details on this model. This model and its inputs and outputs are not yet fully developed. However, it is clear that the model has the ability to forecast the employment and economic impacts as outlined and the greater the impacts, the more points will be assigned to the project.
- **3. Freight (5%)**. Domestic movement of freight will increase dramatically and the urban loops can assist in diverting truck traffic from central business districts, thus increasing mobility and safety and delaying pavement deterioration. The higher the truck volumes in the design year, the higher the points. Several comments were received on whether the type of truck traffic or the type of routes from which the truck traffic will be pulled to the

urban loop are part of this factor. Current data is not sophisticated enough to determine the type of truck traffic that will use the new urban loop. For the sake of simplicity, the Department will continue to use the truck volumes in the design year.

- **4. Multi-Modal (5%)**. A measure of the Department's commitment to promoting multimodal options which boosts the ability to move people and goods more efficiently on the transportation network. Multi-modal is limited to whether the project provides for HOV/HOT/Light rail, etc. in the right of way or the project provides a direct connection to one or more other modal terminals. Multi-modal projects receive additional points. **5.Protected Right of Way (5%)**. This is a new criterion which essentially replaces the previous "land use" criteria. The reason for revising this criterion is that protection of right of way is a more accurate measure of a benefit to constructing the project. If right of way is protected or already partially or fully purchased, the project should receive more points. Keeping in mind that the urban loop program has been underway since 1989, this is a factor that may not be a perfect "benefit" factor but it is a significant enough factor to use it to rank projects.
- **6. Non-Loop Funding(20%)**. This is a new criterion and is being proposed based on comments received and a desire by the Department to move projects to construction where the use of loop funds can be eliminated or reduced. Briefly, this criterion will give points to projects where non-loop funds will supplant loop funds to cover right of way and construction costs. Examples would be tolling, innovative financing, TIFIA, GARVEE or a commitment by the MPO to use non-loop equity funds. The number of points awarded would be the percent of non-loop funds used to fully fund remaining right of way and construction. The greater that percentage of total costs, the more points. A caveat or restriction to this criterion is that the Department must be vigilant of the General Statute limitations as outlined elsewhere in this report.

Scoring System For Loop Projects: Each project would have a Priority Ratio. The highest Priority Ratio project would be the highest ranked project, the next highest priority ratio project would be the next highest rank project, etc. The Priority Ratio would consist of the numerator being the sum of the points from each "needs" factor multiplied by the weighted percentages plus the points from the "benefits" factors multiplied by the weighted percentages. The denominator of the Priority Ratio would be the project costs to complete the project using loop funds. This amount includes the preliminary engineering, right-of-way and construction phases of work. It does not include operational or maintenance costs since loop funds are not used for those purposes. The higher the priority ratio, the higher the rank. The details of this scoring system are shown in the Appendix.

Other Considerations:

It is important to remember the remaining TIP Loop projects are already in various stages of planning or project development. Once the rankings are determined, there will still need to be a check on the status of each loop project to help determine the most cost-effective method of scheduling these ranked loop projects. For example, there are other factors that could be considered such as: avoiding lapse of planning documents or permits; status of environmental document; whether the project must be constructed to meet an air quality conformity determination and if so, what year must it be completed;

building usable segments; whether the project has an added benefit of serving strategic military locations, homeland security, national defense and FEMA staging areas; applying funds to areas based on construction costs, inflation, volumes of work and capacity of the industry. No additional scoring is contemplated for these factors but they should be a part of the decision on when to schedule projects for funding.

DETAILED SCORING MATRIX

APPPENDIX

As stated previously, each of the following needs factors and benefit factors may receive a possible 100 points. Then, each factor will be given a percentage weight in relation to the other factors and the total weights must equal 100%. The number in parenthesis below is the weighted percentage of the total score. For example, the points for congestion will range from 0 to 100. That point total will be multiplied by 20% to determine the number of points to be added to the other factors to determine the total points awarded to the project.

"Needs" Factors:

General Theme on "Needs": The higher the deficiencies, the more points.

This data resides in the Department's databases. The data is the most current Volume to capacity and AADT data available – currently this data is 2008 data or newer. The "needs" factor data is derived from the existing parallel routes that carry traffic now that would be expected to travel the new urban loop project. The Department will work with MPO staff to reach agreement on these parallel routes. It is recognized that different segments of routes will have different individual scores. The plan will be to determine one score based on a weighted average according to segment length of the parallel routes.

- **1.** Congestion score (10% of total score): The congestion score is a combination of Volume/Capacity (V/C) ratio and Average Daily Traffic (ADT). Sixty percent of this score is the volume/capacity ratio and 40% is AADT. Current NCDOT data will be used. The total number of possible points for this score is 100. The calculated congestion score will be between 0-100 and this number will be the points assigned to this criterion. For example, a congestion score of 65 will result in 65 points to this criterion.
- **2. Safety score** (5% of total score): This is a combination of three equally weighted safety-related factors: Crash Density (The crash density of the study area versus the average crash density of similar facilities) plus Severity Index (measure of the mix of accident severity in a group of accidents at a location) plus Critical Crash Rate (the actual crash rate versus the critical crash rate for the study area). Each of these factors is decimal so the combined score will be a decimal. This decimal score will range from 0 to 1. Use the current "3-year moving average" data from parallel routes. Multiply the decimal score by 100 to determine the total number of possible points.

"Benefits" Factors

General Theme on" Benefit-Cost": The greater the benefits, the more points.

Similar to the "Needs" factore, each of the following "benefits" factors may receive a possible 100 points. Then, each factor will be given a percentage weight in relation to the other factors and the total weights must equal 100%. The below criteria are now proposed based on comments received.

- 1. Travel Time savings (30% of total score). This is a key measure of whether an urban loop is reducing congestion and thus improving mobility. The greater the travel time savings, the better for mobility, the greater the points. The Department's Transportation Planning Branch (TPB) and various Metropolitan Planning Organizations (MPOs) travel demand models have data which can provide travel time savings for urban loop projects, i.e. time savings in the area with and without the loop project. The greater the travel time savings, the more points. These travel time savings will be expressed in vehicle hours of delay by the users of the network. To date, these models have not yet been run to determine vehicle hours of delay, thus it is not known exactly the magnitude of these vehicle hours of delay. What is proposed for scoring is a system of giving points to projects based on comparative ranking of one loop project versus other loop projects. In other words, if Project A has the greatest number of hours of reduction in vehicle hours of delay in comparison to other projects, that project receives the most number of points. The projects will be listed using the number of vehicle hours of delay being reduced as the criteria from greatest to least number of hours of delay. If there are 25 projects, then the project with the greatest hours of reduction in vehicle hours of delay will get 100 points. The second project gets 96 points, etc.
- **2, Economic Development (20% of total score).** This is a measure of the economic impact the project brings to the region. The Department of Commerce has developed a dynamic economic analysis model which provides the economic impacts to the surrounding region. The model focuses on employment impacts created by the construction and the dynamic measure of economic development impacts on existing business. The construction impacts include direct, indirect and induced employment create by the investment of the project. Direct effects used here would be the employment opportunities that an initial investment would have upon the region. Indirect effects are employment opportunities that regional suppliers and others will experience due to the initial project investment. Induced effects are employment opportunities due to the change in household purchasing due to change in compensation in the region.

The dynamic measure of impacts on existing businesses examines the high growth/targeted industries and manufacturing industries within a 1 mile buffer of the proposed loop. In addition the number of jobs in the buffer, the population in the county(s) within the project and the effect of tourism brought by the loop are analyzed to determine the additional expected employment impacts of constructing the loop.

The outputs of the model are expressed in terms of employment created. Since the model has not yet been fully developed, it is not yet possible to develop some table of what may be the expected range of the output measure. Therefore, it is proposed that the scoring system consist of giving points to projects based on comparative ranking of one loop project versus other loop projects. In other words, if Project A has the greatest number

of employment opportunities in comparison to other projects, that project receives the most number of points. The maximum number of points, like all the other factors, is 100. The projects will be listed using the number of employment opportunities created as the criteria from greatest to least. If there are 25 projects, then the project with the greatest employment opportunities will get 100 points. The second project gets 96 points, etc. If there are only 20 projects being evaluated, then the project with the greatest employment opportunities would still get 100 points but the second project would get 95 points, etc.

The Department staff will work with MPO staff to allow MPO review of input data to the dynamic model prior to running the model..

3. Freight (5% of total score). The State is expected to experience a 67% increase in domestic freight tonnage over the next 20 years (21st Century Report, 2008)- an explosive growth rate. The Department needs to accommodate the increase. Urban loop projects provide the opportunity to divert through truck traffic from central business district areas, thus increasing safety, reducing congestion and helping extend the pavement life. Projects that carry high truck volumes receive more points. Use projected 20-year forecasted traffic. If 20-year AADT truck volumes >1000 = 10 points. If truck volumes >10,000 = 100 points and similarly in-between. See Table:

Truck volume > 1,000 = 10 point

Truck volume>2,000 = 20points

Continue volume to number ratio up to 10,000 and points assigned

Truck volume >10,000 = 100 points (max)

4. Multi-Modal (5% of total score).

This factor is used in the Department's overall strategic prioritization process. The Department is committed to multi-modal projects. This is also a measure of the Department's commitment to promoting multi-modal options which boosts the ability to move people and goods more efficiently on the transportation network. The definition of "multi-modal" is a project which encourages the use of 2 or more modes (highway, bicycling, walking, rail, ferry, aviation, transit) to achieve enhanced mobility in a travel corridor." Loop Projects must meet the definition of "multi-modal" and then will receive points based on the following scoring:

- 1. HOV/HOT or Light Rail or Bus Rapid Transit within the highway right-of-way = 60 points.
- 2. Connection to one other transportation terminals (airport, seaport, rail depot, ferry terminal, inter-modal terminal, transit terminal) = 30 points. A connection to two or more transportation terminals receives an additional 10 points. Connections to other transportation terminals are defined as a Loop Project providing access within one mile of the terminal right-of-way. One mile is chosen as a reasonable distance to whether the new loop truly would provide ready access to the terminal.
- **5.Protected Right of Way (5% of total score).** This is a new criterion which essentially replaces the previous "land use" criteria. The reason for revising this criterion is that protection of right of way is a more accurate measure of a benefit to constructing the project. If right of way is protected or already partially or fully purchased, the project should receive more points. Keeping in mind that the urban loop program has been

underway since 1989, this is a factor that may not be a perfect "benefit" factor but it is a significant enough factor to use it to rank projects.

Again, the maximum number of points for this factor is 100. Where the corridor has been protected but no right of way purchased, the project is assigned 50 points. Where right of way has been partially acquired, the project is assigned 75 points. Where the right of way has been fully purchased or funds already authorized to fully fund right of way, then 100 points would be assigned to the project. Where there has been no corridor protected and no right of way purchased, no points would be assigned.

6. Non-Loop Funding (20% or total score). This is a new criterion and is being proposed based on comments received as well as a desire by the Department to move projects to construction where the use of loop funds can be eliminated or reduced. Briefly, this criterion will give points to projects where non-loop funds will supplant loop funds to cover right of way and construction costs. Examples would be tolling, innovative financing, TIFIA, GARVEE or a commitment by the MPO to use non-loop equity funds. The number of points awarded would be the percent of non-loop funds used to fully fund remaining right of way and construction costs. The greater that percentage of total costs being borne by non-loop funds, the more points. A caveat or restriction to this criterion is that the Department must be vigilant of the General Statute limitations. G.S.136-66 and G.S.143B-350 place restrictions on giving an advantage to any project using local government participation. See below for statute language.

G.S.136-66.3 c(1) states: No TIP Disadvantage for Participation. – If a county or municipality participates in a State highway system improvement project, as authorized by this section, or by G.S. 136-51 and G.S. 136-98, the Department shall ensure that the local government's participation does not cause any disadvantage to any other project in the Transportation Improvement Program under G.S. 143B-350(f)(4).

GS.143B-350 states: Local Government Participation. – The ability of a local government to pay in part or whole for any transportation improvement project shall not be a factor considered by the Board of Transportation in its development and approval of a schedule of major State highway system improvement projects to be undertaken by the Department under G.S. 143B-350(f)(4).

Thus, the Department is proposing a criterion that should help meet the desires of the comments and Department stays within the context of the General Statues. Points will be assigned based on the percentage of non-loop funds committed to fund the combined expected right of way and construction costs. In other words, if non-loop funding will cover 100 percent of the expected right-of-way and construction costs, then the project will be assigned 100 points for this factor. If non-loop funding will cover only 50 percent of the total right of way and construction costs, then only 50 points will be assigned. Again, any funding contributions by local governments/municipalities can not be used to determine the points given the limitations of the existing statutes.

SUMMARY TABLE OF POINTS

"Needs" Factors	Percentage of Total Score
1.Congestion	10
2.Safety	5
"Benefits" Factors:	
1. Travel Time savings	30
2. Economic Development	20
3,.Freight	5
4. Multi-Modal	5
5. Protected Right of Way	5
6. Non-Loop Funding	20

Priority Ratio = Needs factor points plus Benefits factor points Project Costs (Capital Expenditures)

Priority Ratio: "Needs" factor points plus "Benefits" factor points in the numerator. Project Costs (representing remaining preliminary engineering, right-of-way and construction) in the denominator.

A Priority Ratio which is a benefit-cost type ratio can be computed. The numerator in the ratio would be the simple addition of "needs" plus "benefits" factors. The denominator would be the sum of the expected project costs for remaining preliminary engineering, right-of-way and construction. These costs would not include operations and maintenance costs that one could expect to see in a traditional benefit-cost methodology because loop funds are only used for the capital expenditure. These project costs would typically be in the millions of dollars which would result in a ratio having multiple decimal places. The total project costs, therefore, should be shown in "millions" of dollars in order to make the final "priority ratio" a more easily understood number. The higher the priority ratio, the higher the rank.



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR. SECRETARY

January 8, 2010

TIP Projects:

B-4223: replace Bridge # 21 (Lane's Ferry), over the Northeast Cape Fear River. Under construction, traffic has been shifted to the new alignment and bridge. **Majority of Work Complete awaiting short punch list of items**

R-2245: Second bridge to Oak Island over the intercoastal waterway.

Under construction

Estimated Contract Completion Date of August 2010

B-0682: Bridge to Sunset Beach over the intercoastal waterway.

Under construction

Estimated Contract Completion Date December of 2010

U-4733: intersection improvements SR 1411 (Wrightsville Avenue), from Forest Hills Drive to SR 2313 (Wilshire Boulevard).

Estimated Contract Completion Date Spring/Summer 2010 (delays)

U-5017A: Letting Date 10/21/2008 Wilmington Computerized Signal System

Estimated Contract Completion Date Nov. 2010

U-5017B: Letting Date 11/18/2008 Wilmington Computerized Signal System

Estimated Contract Completion Date June 2011

U-5017C: Letting Date 12/16/2008 Wilmington Computerized Signal System

Estimated Contract Completion Date Jan. 2011

U-3462: Town of Shallotte, SR 1357 (Smith Avenue) extension from West of US 17 Business to NC 130. Under construction and funded by stimulus.

Estimated Contract Completion Date Dec. 2010

R-4002: widen SR 1472 (Village Road) from SR 1437 (Old Fayetteville Road)/SR 1435 (South Navassa Road) to east of US 17 Interchange ramps, to a 4-lane divided facility. **Estimated Contract Completion Date June 2011**

B-4030: replace Bridge #9 over Bear Branch, on NC 130. **Estimated Contract Completion Date 12/31/2010**

W-5103 – US 421 (Carolina Beach Road) from George Anderson Road to SR 1100 (River Road) construct various safety improvements at 20+ intersections.

Letting Date January 19, 2010

W-5104 – NC 132 (College Road) from US 421 (Carolina Beach Road) to US 117 (Shipyard Blvd.) construct various safety improvements at 10+ intersections.

<u>Letting Date September 14, 2010</u>

R-2633 AA & AB: Construction of I-140 (Wilmington Bypass) from US 17 to US 74/76. Right of Way 2008 (Has begun) and Construction Fall 2010 Design/Build – January 2010 Selection of Design/Build Team

U-3338 B: Widening of Kerr Ave. from Randell Parkway to Martin Luther King, Jr. Parkway. Start Date May 2013

R-3601 US 17/74/76: Widening across the "causeway", between Leland and Wilmington. AT the beginning the planning process. We will move into the merger process afterwards and then to design. A scoping meeting will be held in the next couple of months. Start Date July 2013

R-3432 – SR 1163 (Georgetown Road) extend from SR 1184 (Ocean Isle Beach Road) to NC 179. Start Date June 2013

U-4902 B: construct a concrete median island from SR 1402 (Porter's Neck Road) to Colonial Drive (non-system road). Project is in the planning process and awaiting the completion of the Market Street Corridor Study.

R-2633 B: Construction of I-140 (Wilmington Bypass) from US 74/76 to US 421.

R-5021: NC 211 widening, from NC 87 to SR 1500 (Midway Road).

R-4063: widen SR 1472 (Village Road) from SR 1435 (South Navassa Road) to SR 1438 (Lanvale Road).

Military Cutoff Road Extension (U-4751) and Hampstead Bypass (R-3300): extending Military Cutoff Road from Market Street to the Wilmington Bypass, with an interchange at the Bypass. NCDOT and the merger team are scheduled to have selected a preferred alternative by Winter 2009/2010 and complete the final environmental impact statement by Summer 2010.

Feasibility Studies for NC 211 & NC 904: Completion Date Winter 2009/2010

NC 211 – from SR 1500 (Midway Road) to US 17

NC 904 – from NC 179/904 (Beach Drive) to US 17

FS-0203C Feasibility Study for College Road: from SR 1327 (Gordon Road) to US 17 (Market Street).

Division Projects:

NC 87 - Boiling Spring Lakes: install two right turn lanes and extend existing left turn lane at the intersection of SR 1539 (East Boiling Spring Lakes Road) and NC 87.

Estimated Contract Completion Date December 2009

SR 1448 (**Middle River Road**): full depth patching from NC 211 to the paved end of system. Schedule to be under contract in the Summer 2009

US 117 (College Road): extend left turn lane along US 117 (College Road) at Randall Parkway to provide additional storage. Schedule to be under construction in the Summer 2009

SR 1345 (**Royal Oak Road**): mill patch the rutted section of SR 1345 (Royal Oak Road), due to increased truck traffic. Schedule to be under contract in the Summer 2009

SR 1455 (Porter's Neck Road): construct a roundabout at the intersection of SR 1455 (Porter's Neck Road) and SR 1402 (Edgewater Club Road). Currently the right of way is being obtained.

SR 1403 (**Middle Sound Loop Road**): redesign the intersection of SR 1403 (Middle Sound Loop Road) and SR 1407 (Darden Road), into a roundabout design. Design is complete and our schedule is to construct the roundabout in the summer of 2010, when school is complete.

SR 1492 (Pine Grove Road): redesign intersection at SR 1492 (Pine Grove Rd) and Masonboro Loop Road. Schedule to have permitting complete by August 2009, bid project in September 2009, award in October 2009, construction to begin in December and complete by end of March 2010.

US 421 Carolina Beach: widen Carl Winner Street to allow dual right turn lanes onto US 421 northbound.

NC 132 (College Road): extend the left turn lane southbound on NC 132 and New Center Drive intersection. Schedule to be under construction in the Summer 2009

NC 132 (College Road): extend the left turn lane northbound on NC 132 and Martin Luther King Parkway. Schedule to be under construction in the Summer 2009

Resurfacing Projects:

These roads are in this Brunswick County contract:

NC 211 mill patching and resurfacing from SR 1500 (Midway Road) to SR 1114 (Zion Hill Road).

SR 1539 (East Boiling Springs Lake Road) resurfacing from NC 87 to RR tracks.

SR 1115 (Stone Chimney Road) mill patching and resurfacing from NC 211 to US 17.

SR 1119 (Stanley Road) mill patching and resurfacing from end of maintenance to SR 1120 (Sabbath Home Road).

SR 1527 (Wescott Road) resurfacing from NC 211 to SR 1526 (Jabbertown Road).

SR 1527 (Wescott Road) patching and resurfacing from SR 1526 to SR 1528 (East Moore Street).

Estimated Contract Completion Date May 2010

This is the Pender County contract:

NC 50 resurface from North Topsail Drive/Roland Drive to 0.09 miles north of NC 210, no work on swing bridge over the intercoastal waterway.

Estimated Contract Completion Date May 2010

These are in this New Hanover County contract:

US 421 milling and resurfacing from Snows Cut Bridge to Carolina Sands Drive.

US 117/NC 132 resurfacing from SR 1322 (Murrayville Road) to bridge over I-40.

SR 1574 (Service Road) milling and resurfacing from SR 1573 to SR 1573.

SR 1592 (Landsdowne Road) mill patching and resurfacing from NC 132 to

SR 1516 (Navaho Trail).

SR 1516 (Navaho Trail) mill patching and resurfacing from SR 1592 to

SR 1492 (Masonboro Loop Road).

SR 1492 (Masonboro Loop Road) patching and resurfacing from SR 1517 (Trails End Road) to SR 1505 (Beasley Road).

SR 1411 (Dawson Street Extension) resurfacing from US 76 (Oleander Drive) to SR 1411 (Wrightsville Avenue).

SR 1411 (**Wrightsville Avenue**) patching from SR 1411 to Independence Boulevard.

SR 1411 (Wrightsville Avenue) patching from Huntington Road to US 76.

SR 1411 (Wrightsville Avenue) milling and resurfacing from US 76 to US 74.

SR 2313 (Wilshire Boulevard) patching from SR 1411 to SR 1175 (Kerr Avenue)

SR 1302 (North 23rd Street) milling and resurfacing from US 17 Bus. To north of RR Tracks.

Estimated Contract Completion Date June 2010

This contract was let on November 16, 2009:

Brunswick County:

Resurface NC 87 from NCL of Boiling Springs to US 17, including spiral widening at various locations.

Resurface **NC 211** from 0.24 mile west of the Town of St. James to 0.18 mile east of SR 1500 (Midway Road).

Resurface **SR 1300** (**Calabash Road NW**) from SR 1308 (Etheridge Road NW) to NC 904,

Resurface SR 1132 (Shell Point Road) from NC 130 to SR 1130 (Mt. Pisgah Road),

Resurface SR 1417 (Malmo Loop Road) from NC 87 to US 74/76,

Resurface SR 1426 (Mt. Misery Road) from US 74/76 to SR 1426

New Hanover County:

Resurface **US 421 Truck** from 0.02 mile north of US 421 to 0.01 mile north of Queen Street (non-system).

Resurface SR 1301 (Princess Place Road) from US 17 Business to 17th Street.

Estimated Contract Completion Date November 12, 2010