

**A RESOLUTION ON THE FUTURE OF
SMITH LEVEL ROAD TIP PROJECT U-2803
Resolution No. 121/2008-09**

WHEREAS, the North Carolina Board of Transportation included Smith Level Road in the 1993-1999 TIP and designated it Project U-2803; and

WHEREAS, in March 2009, the North Carolina Department of Transportation presented a design for Project U-2803; and

WHEREAS, in April 2009, the Carrboro Board of Aldermen received public comment on the design as prepared by the North Carolina Department of Transportation, and

WHEREAS, the Carrboro Board of Alderman urged the North Carolina Department of Transportation to consider a two-lane design, and

WHEREAS, the North Carolina Department of Transportation has provided as an option for moving forward to accept the current design: 3-lane, 4-lane, 4-lane divided sections with sidewalks and bike lanes and a roundabout at Rock Haven Road.

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that the Board directs staff to:

1. Inform the North Carolina Department of Transportation to move forward with the design presented at the March 9, 2009 NCDOT public hearing.

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WHEREAS, the Carrboro Board of Alderman urged the North Carolina Department of Transportation to consider a two-lane design, and

WHEREAS, the North Carolina Department of Transportation has provided as an option for moving forward to abandon TIP U-2803 (a highway project) and seek a new Bike/Ped TIP project.

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that the Town will seek a new Transportation Improvement Program bicycle and pedestrian project to include (a) sidewalks, (b) bike lanes, (c) roundabout at Rock Haven Road, and (d) any other safety improvements deemed necessary to create a bicycle and pedestrian friendly corridor.

NOW, THEREFORE BE IT FURTHER RESOLVED by the Carrboro Board of Aldermen that the Board directs staff to:

1. Inform the North Carolina Department of Transportation that the Town wishes to delete U-2803 from the STIP.
2. Begin the process of requesting a new STIP bike/ped project, starting with a formal request to the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Technical Coordinating Committee.

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WHEREAS, the Carrboro Board of Alderman urged the North Carolina Department of Transportation to consider a two-lane design, and

WHEREAS, the North Carolina Department of Transportation has provided as an option for moving forward to ask NCDOT to design and construct a 3-lane road with sidewalk, bike lanes, and roundabout; and for the Town to agree to take over maintenance and ownership of Smith Level Road within the project limits.

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that:

1. The Town requests that the North Carolina Department of Transportation design and constructs a three-lane cross-section for Smith Level Road between bridge 88 and Rock Haven road, to include sidewalks, bike lanes throughout and a roundabout at Rock Haven Road.
2. The Town will assume maintenance and ownership of Smith Level Road, between the project limits, after construction of the improvements detailed in item 1 above.

MEMORANDUM

To: Mayor Chilton and Board of Aldermen
Cc: Steve Stewart, Town Manager
Roy Williford, Planning Director
George Seiz, Public Works Director
From: Adena Messinger, Transportation Planner
Re: NCDOT Post-hearing Meeting for TIP Project U-2803, Smith Level Road
Date: April 28, 2009

This memo serves to provide to the Mayor and Board of Aldermen a summary of the Post Public Hearing Meeting held by NCDOT on April 28, 2009. NCDOT will also be providing a written summary of the meeting and staff will share this with the Board as soon as it is made available. A copy of the "Post Public Meeting summary" that was handed out is attached for your information.

Brenda Moore, P.E., NCDOT Roadway Design Engineer, presented 10 topics for discussion in response to comments provided at the March 9, 2009 public meeting as well as those comments received via email and mail.

1. Accuracy of traffic data used for design.

Scott Walston from NCDOT shared a memo dated September 5, 2006, which outlined the methodology used by NCDOT to forecast future traffic on Smith Level Road. Mr. Walston explained that the forecast was based on the Triangle Regional Model and that data obtained from Carrboro was used as well. He also explained that the forecasts did account for pedestrian and bicycle trips as well as transit trips.

2. Safety of pedestrians at roundabouts.

Jim Dunlop from NCDOT indicated that one-lane roundabouts are safer than signalized intersections for pedestrians, noting that a roundabout forces a vehicle to slow down, while a signal does not. He also mentioned that there are many examples of roundabouts at schools and that there is no evidence of a problem. Mr. Dunlop shared that one-lane roundabouts are considered accessible for all pedestrians, including those who have a visual impairment.

3. Roundabout locations at Damascus Church Road, Willow Oak Lane and Culbreth Road.

Mr. Dunlop commented that Damascus Church Road would be a good location for a roundabout, outside of this project. While he has not looked at the other locations specifically, he offered that Willow Oak did not appear to be a good location due to the low traffic volume on the minor leg (Willow Oak Lane); Culbreth could be another potential location but in both cases the footprint of the roundabout and associated right-of-way might be a limiting factor (i.e., not enough room for the roundabout).

4. Berryhill subdivision access and concerns about Willow Oak Lane.

The overall comment was that a median break to allow for left turns out of Willow Oak was not a good design for this situation. Regarding traffic through the Berryhill neighborhood, this would be an issue that requires additional information and NCDOT requested that the Town take traffic counts to get a sense of current traffic volumes.

5. Sidewalks leading up to Rock Haven Road. (NCDOT received public comment requesting pedestrian facilities prior to the construction year of this project - 2012).

NCDOT staff clarified that the existing TIP project (U-2803) would fill in the gaps in the pedestrian network leading up to the high school.

6. Pedestrian access to Frank Porter Graham Elementary School.

NCDOT will continue to work with both Carrboro and Chapel Hill to tie the sidewalk into the Morgan Creek greenway planning that both Towns are undertaking. NCDOT will coordinate with Chapel Hill and Carrboro to provide appropriate warning signage if the sidewalk is constructed before the greenway trail tie can be made.

7. Existing bus stops along Smith Level Road.

The TIP project will not result in the loss of any existing bus stops along Smith Level Road.

8. Use of smart signals for visually impaired.

If the Town would like to request audible pedestrian signals for this project, NCDOT would like a written request at least 6 months prior to the project letting. Including this with the signals should not be a problem.

9. Town of Carrboro resolution.

Adena Messinger distributed a copy of the Board of Aldermen's resolution from April 28, 2009 and she read aloud the resolution statement. NCDOT staff clarified that the resolution suggests that what the Town wants is a bicycle/pedestrian project.

NCDOT staff offered three options for the Town to consider:

a. Accept the current design, which is the minimum that NCDOT can design, based on the requirement for a STIP highway project to meet a certain purpose and need. [The purpose and need, as stated in the Environmental Assessment document is "to improve traffic capacity, bicycle and pedestrian access and improve vehicle, pedestrian and bicycle safety."]

b. Request that the current project (U-2803) be removed from the STIP and seek funding for the sidewalks and bicycle lanes through the Bicycle and Pedestrian Division. This will require working with the MPO to add a new bike/ped project to the draft 2011-2017 MTIP/STIP. The MPO will use its ranking methodology to prioritize where this project would fall in the list of bike/ped projects. Once the project is submitted for consideration in the 2011-2017 STIP, the Bicycle and Pedestrian Division will determine if/when it can be funded. It is unclear how soon this funding would be available.

c. Ask NCDOT to design and construct a three-lane section (three lanes due to the turn lanes in addition to the two through lanes) with sidewalk and bike lanes. To exercise this option, the Town will agree to take over that section of Smith Level Road (i.e., own and maintain it as a Town street). This would delay the current schedule by about one year (construction would probably begin in 2012). Regarding this option, Jim Dunlop noted that NCDOT should further evaluate this option in terms of its impact on the operation of the state system, particularly with regard to continuity of road maintenance and future improvements.

10. Project Status.

At the conclusion of the meeting, NCDOT agreed to delay the schedule to allow for the Board of Aldermen to consider the three options listed above, at an early June Board meeting. Following the Board's decision in June, NCDOT will proceed with the Town's preferred option (continue as planned, stop the project, or proceed with the 3-lane design).

Overview of Smith Level Road Options

Option 1

Description	Accept the current design: 3-lane, 4-lane, 4-lane divided sections with sidewalks and bike lanes and a roundabout at Rock Haven Road
Financial cost to town	30% of sidewalk construction = \$108,000 (Note, for the April 21st meeting the estimate of 360,000- was in error. \$360,000 was the TOTAL estimate, 30% of which is \$108,000.)
Timeline	construction year: FY2011
Next steps	Inform NCDOT of the Town's decision. NCDOT will proceed with right-of-way acquisition in late summer 2009.

Option 2

Description	Abandon TIP U-2803 (a highway project) and seek a new Bike/Ped TIP project. The funds for a bike/ped TIP project are allocated via the Bicycle and Pedestrian Division of NCDOT.
Financial cost to town	Unknown, possibly 30% cost of sidewalk construction.
Timeline	Unknown. It will depend on when it gets put in the TIP and when funding is available.
Next steps	Inform NCDOT of the Town's decision. As part of the resolution, clarify the major elements of the project (Sidewalk? Bike lanes? Roundabout? Other?) and instruct staff to make a request to the MPO to include the new project in the 2011-2017 MTIP. This will typically first go to the Technical Coordinating Committee (TCC), who will then make a recommendation to the Transportation Advisory Committee (TAC). The next TCC meeting is scheduled for June 24, at which the TCC would recommend action for the August TAC meeting. The draft 2011-2017 STIP is in process and there is time to make adjustments to the draft.
Other considerations	The Division of Bicycle & Pedestrian Transportation receives a list of candidate independent bike/ped projects from the TIP Unit every other year. Their ability to recommend inclusion of new independent projects in the updated TIP depends on a variety of factors, which are described on the webpage: http://www.ncdot.org/transit/bicycle/funding/funding_TIP.html . New projects often are placed in the later years of the TIP schedule. Due to their current limited funding allocation, larger scale projects can be difficult to fund, so cost is a major consideration.

Option 3

Description	Ask NCDOT to design and construct a 3-lane road with sidewalk, bike lanes, and roundabout; agree to take over maintenance and ownership of Smith Level Road within the project limits.
Financial cost to town	Maintenance costs projected as: A rough estimate for the annual maintenance cost would be \$17,920. Please see attachment D (question 2) for more details.
Timeline	This will put the project about 1-year behind the current schedule; construction year ~2012 (this assumes that NCDOT is notified in June that this is the direction that the Town has selected).
Next steps	Make a formal request to NCDOT for this option.
Other considerations	Selecting this option would be a significant deviation from the norm. As addressed in attachment D (question 2), taking over ownership and maintenance has significant long term implications for the Town's fiscal and administrative relationship to state-owned roads. It also begins to change the relationship between NCDOT and the Town with respect to the stewardship of the street network. For these reasons, the staff does not recommend that the Board pursues this option.

BOARD OF ALDERMEN QUESTIONS REGARDING THE THREE OPTIONS FOR MOVING FORWARD WITH IMPROVEMENTS TO SMITH LEVEL ROAD

1. What is the existing land use in Orange County, including Chapel Hill, and immediately adjacent to Orange County in Chatham County? I am interested in the basis for DOT's projections.

Within Chapel Hill's planning jurisdiction, the existing land use adjacent to Smith Level Road is primarily agrarian and low residential, with a few parcels of undeveloped land and commercial at the border with Chatham County.

Within Carrboro's planning jurisdiction, the existing land use adjacent to Smith Level Road is primarily single family residential and multifamily residential, with some parcels of agrarian, public, and business uses.

The existing land use near Smith Level Road in Orange County (outside of Carrboro or Chapel Hill's planning jurisdictions) is mostly residential, agrarian or undeveloped.

The existing zoning in Chatham County, at the county border, (Chatham doesn't have a land use map) is residential and a little commercial. Along 15-501 the zoning is also a mix of residential and commercial.

In addition, the following projections for Chatham County, from the DCHC 2035 Long Range Transportation Plan, may be of relevance to the question:

[numbers are for the part of Chatham County that is in the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization]

2005 pop = 56,023 2035 pop = 145,552

2005 emp = 16,216 2035 emp = 36,739

2. What is the legal basis for DOT's proposal for us to maintain a state road? That is what were the policy standards or guidelines they followed to propose this particular arrangement.

[Per Scott T. Slusser, Assistant Attorney General] The answer to that question is found in the General Statutes section N.C.G.S. 136-41.3 and N.C.G.S. 136-66.1. The pertinent sections of N.C.G.S. 136-41.3 says:

"The Department of Transportation within its discretion is hereby authorized to enter into contracts with municipalities for the purpose of maintenance, repair, construction, reconstruction, widening or improving streets of municipalities.

And the Department of Transportation in its discretion may contract with any city or town which it deems qualified and equipped so to do that the city or town shall do the work of maintaining, repairing, improving, constructing, reconstructing, or widening such of its streets as form a part of the State highway system."

Also N.C.G.S. 136.66.1(3) states:

"Maintenance of State Highway System by Municipalities. -- Any city or town, by written contract with the Department of Transportation, may undertake to maintain, repair, improve, construct, reconstruct or widen those streets within municipal limits which form a part of the State highway system, and may also, by written contract with the Department of Transportation, undertake to install, repair and maintain highway signs and markings, electric traffic signals and other traffic-control devices on such streets. All work to be performed by the city or town under such contract or contracts shall be in accordance with Department of Transportation standards, and the consideration to be paid by the Department of Transportation to the city or town for such work, whether in money or in services, shall be adequate to reimburse the city or town for all costs and expenses, direct or indirect, incurred by it in the performance of such work. The city or town under contract with the Department shall develop an annual work plan for maintenance of the State highway system consistent with the needs, inasmuch as possible, as identified in the report developed in accordance with G.S. 136-44.3. The annual work plan shall be submitted to the respective division engineers and shall be mutually agreeable to both parties."

3. What are the projected maintenance costs if the Town takes over this part of Smith Level Road?

A cautious approach should be used while reviewing the option to take over maintenance responsibilities for this section of Smith Level Road. The following information should be considered:

1. Short term and long term.

The fact that the pavement condition would be improved as part of the project would mean that the initial costs for maintaining the road section itself for roughly the first 10 to 12 years will be relatively low. However, as the roadway ages, maintenance costs will subsequently increase. Routine maintenance costs such as snow removal, litter, mowing, weed eating will match those of similar roadways from the outset.

2. Powell Bill Funding and current street maintenance levels

The Town of Carrboro has received on average about \$483,000 per year of Powell Bill funding over the last five years. During that period of time (and before) the funding has been consistently, and significantly, below eligible expenses. Carrboro strives to keep its' roads, street signs, right-of-ways, and sidewalks in good condition and subsequently needs to use funding sources other than Powell Bill funds to maintain an adequate level of service. There are about 39 miles of city maintained roads.

The annual maintenance cost for maintaining Town streets, right-of-ways, parking lots and bike paths is on the order of \$1,000,000 (including resurfacing, 15 year cycle) or roughly \$25,600 per mile. The vast majority of this amount is for street and right-of way maintenance which includes such items as: street sweeping, sign installation/maintenance, paint striping, litter patrol, right-of-way mowing, tree trimming on right of way, snow/ice control, grading of gravel roads, storm sewer maintenance, sidewalk maintenance ditch cleaning, crack sealing, and pavement repair. It does not include any major capital costs such as vehicle/equipment replacement or street lighting.

Adding streets to the system will obviously increase the overall maintenance costs. The \$1,000,000 figure is already roughly double of what is currently received in Powell Bill funding.

3. Overall pavement system condition

A street condition survey of the entire town maintained system is conducted every three years. This survey pinpoints needed repairs/resurfacing and helps to gage the effectiveness of the street maintenance program. The following table shows the overall weighted rating of the entire road system over the last three surveys:

Year	Overall Rating
2002 -	97
2005 -	88
2008 -	85.7

The rating system is broken down as follows: 91-100 Very Good, 81-90 Good, 66-80 Fair, 51-65 Poor, 0-50 Very Poor. With a rating of 85.7 the overall system is still in relative good condition. However, we need to remain vigilant of the downward trend and strive to reverse it. Many of the Town roads constructed in the 80's & 90's are entering the later years of their design life (typically 20 years) and the need for resurfacing will increase. The Town is already challenged to maintain the existing system, increasing the number of roads makes it even more challenging especially if the available funding (Powell Bill) is inadequate.

4. Maintenance responsibilities

The current model whereby NCDOT maintains most major arterials and the Town the secondary roads adjacent to them, works relatively well in the understanding of maintenance responsibilities for each agency. Should the Town take over this roughly 0.70 mile stretch of road there will be a short length of town maintained street in between two state maintained roadways. The delineation of maintenance responsibilities becomes less clear with this type of configuration having a short piece here or there that is out of the norm. There is minor potential for overlapping of services or inconsistent service (such as during a snow storm) as NCDOT trucks and town Trucks would be quickly driving in and out of this section.

Although what is mentioned in the paragraph above seems to be a relatively minor issue (NCDOT indicate they would be OK with this set-up) from a longer term perspective there may be more concern. And that could arise should there be design changes in the future proposed for the NCDOT portions on either side of a Town maintained section. The Town would want to avoid being "caught in the middle" of being pressured to modify its' own maintained section to conform with the NCDOT portions. The reverse of this situation could also happen.

The above considerations are best summarized by an earlier e-mail from the Town Manager to the BOA on this subject matter. A portion of that e-mail reads as follows: "... The most troubling aspect of this

option is the requirement for the Town to take over the improved section of Smith Level Road and be responsible for all future maintenance costs and any necessary improvements. Voluntarily agreeing to take over maintenance of an NCDOT street such as Smith Level Road establishes a bad precedent in that any time the Town wants something in the future that is different than what NCDOT desires, the obvious solution to NCDOT will be to try to get the Town to take over maintenance. There are already bills in the General Assembly that, if enacted, would force municipalities to take over maintenance of a number of state roads. The Town is already challenged to maintain its current lane miles with the current revenue stream and staffing. Powell Bill funds used for street maintenance declined in the current year, are projected to decline next year and may decline in the years beyond FY 09-10. At a time when we are trying to reduce expenditures and are experiencing declining revenues, I suggest that the Town be very wary of voluntarily taking over a portion of a state-maintained road such as Smith Level Road.”