

Transportation Staff Meeting

March 14, 2012

2:30 PM

Uptown Conference Room (8th floor)

AGENDA

1. I-77 & I-485 TIP & LRTP Amendments & Conformity Determination

Description: This discussion will serve as a follow-up to the March 1 TCC meeting. Its primary purpose will be to determine if the TCC wishes to recommend to the MPO that it release documents for public review related to proposed improvements to I-77 and I-485.

At the March 1 meeting, NCDOT requested the TCC to recommend to the MPO that it release for public comment documents associated with planned improvements for I-77 (TIP project I-5405) and I-485 (TIP project R-4902). Specifically, the documents were for:

- amendments to the 2012-2018 Transportation Improvement Program;
- amendments to the 2035 Long Range Transportation Plan; and
- the conformity determination on the 2012-2018 TIP and 2035 LRTP.

Because the aforementioned documents were not available at the meeting, the TCC passed a motion that stated as follows:

- *Recommend to the MPO that it release the documents for public review, conditioned upon an assessment of the documents at a March Transportation Staff meeting that results in the TCC finding them acceptable; and*
- *If the documents are not found to be acceptable, then the TCC will recommend to the MPO that it give the TCC the authority to release the documents at its April 5 meeting.*

Attachment: TCC comments on I-5405

Access number: 704-432-5485



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March 2, 2012

Eric Midkiff, PE
Project Development Section Head, Central Region
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

SUBJECT: Response to Request for Comments, TIP Project I-5405

Dear Mr. Midkiff:

Attached please find comments on TIP project I-5405 from the Technical Coordinating Committee (TCC) of the Mecklenburg-Union Metropolitan Planning Organization (MUMPO). These comments were endorsed by the TCC at a meeting held on Thursday, March 1, 2012.

Sincerely:

William S. Coxe
TCC Chairman



MECKLENBURG-UNION TCC I-5405 Comments

PURPOSE & NEED

1. The purpose and need statement for the project should be:
 - a. developed in partnership with local entities;
 - b. developed in the overall context of a (currently non-existent) strategic national, state, and regional vision for the I-77/NC 115/Norfolk-Southern "O" line corridor between Charlotte and Statesville. This strategic vision should be developed to guide the incremental investment decisions to be made in the corridor; and
 - c. the only existing guidance for a strategic vision of the corridor may be found in the 2001 I-77 Sub-Area Study which can be downloaded from the MUMPO website at <http://www.mumpo.org/PDFs/I-77/I-77Sub-AreaStudyFinalReport.pdf>
 - d. What are the assumptions regarding corridor air quality benefit/dis-benefit of Alternative 1 and Alternative 2? Is it anticipated that this improvement will increase, decrease, or have a negligible impact on the corridor's air quality?

GENERAL

1. The project's study area boundary is insufficient. While it is recognized that the project's intent is to construct any new lanes in the median, a study area that takes in only the construction project limits and existing ROW is still far too narrowly defined.
2. Stopping the northern project limits at Exit 28 (Catawba Ave.) is very likely to create significant congestion on the I-77 between Exit 28 and Exit 30 (Griffith St. / Davidson). Traffic flow, safety, and air quality could worsen north of the described project limits.
3. Please confirm that there will not be any right of way acquisition and all construction will be within the existing median.
4. Substantial local support exists to extend this project north from Exit 28 to the currently widened section just south of the Langtree Rd. interchange (Exit 31) in Iredell County. There appears to be more than sufficient room on the causeways to add at least one lane without impacting the footprint of the causeways. This lane could be a reversible

HOT lane or permanently one direction based on appropriate analysis. Why is the extension not included?

5. The MUMPO 2035 Long Range Transportation Plan calls for additional bridges across I-77 north and south of the Exit 25 (NC 73) interchange (not including those in the I-77/NC 73 interchange study). Will the ability to construct these bridges at a later date be precluded or made more expensive by the current project?
6. The operational goals of the HOT lane investment are crucial to their cumulative and secondary impacts, as well as the analysis of the project from an air-quality conformity standpoint. They cannot be separated from the discussion of the alternatives or from the project financing method. Profit maximization goals could be a requirement for private participation in the project and could result in a different outcome than goals that maximize person through-put (multi-modality), high level of service, and high quality of maintenance. How can the decision about financing be separated from the project selection decision?

NATURAL ENVIRONMENT

1. How will construction affect our streams and watershed?
2. How will drainage be handled due to increased impervious surfaces?
3. Will all trees within the median be removed? If so, will any vegetation be replaced along remaining median or along edge of right of way?
4. What type and size of vegetation will be planted?
5. What size of vegetation will be planted?
6. Stormwater and mitigation effects of increased lane width/number should be undertaken (with adequate measures identified).
7. What are the assumptions regarding corridor air quality benefit/dis-benefit of Alternative 1 and Alternative 2? Is it anticipated that this improvement will increase, decrease, or have a negligible impact on the corridor's air quality?

HISTORIC PROPERTIES

1. Impact upon the following historic properties should be assessed:
 - Williams Memorial Presbyterian Church – 4700 Beatties Ford Rd.
 - Elmwood/Pinewood Cemetery – 700 W. 6th Street
 - Oaklawn Cemetery – 1600 Oaklawn Ave.

TRAFFIC & TRANSIT OPERATIONS

1. The existing interchanges at exits 16 (Sunset Rd.), 23 (Gilead) and 25 are significant contributors to travel time delays in the corridor due to situations such as outdated designs, or proximity to Y-line intersections with US 21, etc. To not include the interchanges in the corridor's analysis is a major flaw and should be reconsidered.
2. The feasibility of bus-only interchanges should be analyzed.
3. If HOV 3+ is determined to be the most feasible alternative, what, if any, impacts will be felt at existing park and ride lots along the corridor? For example, will extra capacity be needed to accommodate commuters (transit and carpoolers) if the "slugging" phenomenon emerges?
4. Take into consideration the existing and potential future express bus routing and scheduling during both construction and build out of the project.
5. Project should study how Charlotte Area Transit System (CATS) express buses can seamlessly access the HOT/HOV lane(s).
6. Preserve the ability, wherever possible, to design potential median slip ramps to non-exit cross street bridges.
7. Should the 3 lane plus 1 HOV/HOT lane configuration in the prior project still be studied as an option moving forward? At least one option should include an additional general purpose lane.
8. How will proposed improvements interact with existing and proposed diverging diamond?
9. Will the project's design allow for future construction of the Jim Cooke Road Bridge?
10. Several local governments have proposed additional general purpose interchanges on I-77 between Charlotte and Statesville. These could have operational impacts on the project proposed under I-5405 or subsequent projects.
11. How will the corridor traffic operations handle Alternative 2 with two HOT lanes in each direction? How will the engineering design of the facility minimize the impact of weaving vehicles in advance of interchanges?
13. Alternative 2 appears to involve substantive issues including:

- a. Impediments to construct an additional HOT lane in each direction beginning south of the Harris Boulevard interchange where the current median width seems to be approximately 22 feet with a vertical difference between north and south bound lanes.
- b. Apparent inability to add additional lanes south of I-85 and provide proper lane width and breakdown shoulders without substantive human and natural environmental impact
- c. Potential preclusion of additional access to the HOT lanes from current non-interchange bridges due to consumption of the available median width.
- d. Delivery of significantly greater traffic volumes to a constrained cross-section in Cornelius resulting in operational issues and lessened utility of the investment since the volumes cannot be processed in the northbound direction or the southbound direction in Charlotte.

NOISE

- 1. Noise studies should be undertaken; one or two additional lanes in each direction could result in significant increase in noise levels.
- 2. How will noise barrier locations be determined? If a jurisdiction wants an upgraded design for the barriers, how are they paid for?
- 3. Construction noise impacts on surrounding neighborhoods should be should be assessed.

ENVIRONMENTAL JUSTICE

- 1. There are significant environmental justice populations along the corridor, particularly south of exit 16. MUMPO's Degree of Impact (DOI) analysis of EJ populations indicates that the corridor passes through areas with a "moderate" DOI impact, which translates into 3-4 of the six EJ populations being represented at levels exceeding regional thresholds for those populations.
- 2. Due to the increased capacity what are the proposed noise barriers? None are noted.
- 3. What will be the material of the proposed noise barriers?

BIKE, PED & GREENWAYS

- 1. Is there an opportunity for a culvert crossing for greenway at Westmoreland Road?
- 2. Is there an opportunity for a greenway crossing under Exit 28?

3. Is there an opportunity for a greenway trail at Caldwell Station Creek just north of Exit 25?
4. Is there a proposed crossing opportunity at Willow Pond/Blakely property (along both sides of I-77 between Westmoreland Rd. and Catawba Ave.)?
5. Is there an opportunity for a pedestrian overpass within Cornelius?
6. Impacts (both design and construction) upon adjoining parks and greenways – notably the Irwin Creek (existing and proposed) greenway need to be evaluated.
7. Bicycle and pedestrian accommodations using Complete Street standards should be considered on local street networks and adhered to on all grade separations that are proposed to be removed and replaced.

INTERCHANGES

1. In the discussion of any alternate, the operations of the current interchanges should be addressed. We are personally aware of substantial congestion at the Sunset Road interchange and the Gilead Road interchange spilling back onto the mainline at times during the peak periods. It is likely that similar congestion exists at other interchanges. Any discussion of the alternatives should clearly forecast the ability to move across the general purpose lanes from the HOT lanes to the on and off ramps and factor the use of the managed lanes accordingly.
2. The ability to upgrade existing interchanges should not be precluded or made less likely in either the project design or the financial construct being created for project delivery.
3. The Town of Huntersville, in conjunction with federal, state, and regional partners, has produced an interchange modification report for the I-77/NC 73 interchange. Suggestions for additional bridges across the interstate included in this study should be incorporated in the design of the widening under I-5405.
4. Both the 2025 Transit/Land Use Plan (1998) and the I-77 Sub-Area Study (2001) discuss the potential for specialty interchanges on I-77 (in addition to the general purpose interchanges) to handle bus access into and out of the HOV lanes. HOT lanes were not in general discussion when these studies were produced. The build analyses explored in the environmental document should include analysis of the functionality of this concept in the long-term vision for the corridor. The build analyses SHOULD NOT PRECLUDE nor should it significantly impact the cost of the latter implementation of this concept if the concept has value in the long term future of the corridor.

5. What is the role and potential for ramp metering or other management techniques to preserve the long-term capacity of the investment?

The following comments were submitted by local entities, and should be considered as the project moves beyond planning and into design and pre-construction.

OTHER

- How will notification be handled for all phases of construction?
- How will jurisdictions be notified of construction schedule/delays?
- When will the public hearings occur? How many?
- What public outreach efforts will be conducted during this process?
- Will the public have a comment period after final design?
- Who will be responsible for policing during construction?
- What will be the time period of construction for Cornelius' portion of improvements?
- Will there be potential interstate delays? If so, is there a detour plan?
- How will the northbound lanes taper to the existing cross-section approaching Exit 28?
- Will proposed design for Westmoreland Road include setup for future interchange?
- Will the I-77 Service Road (one the west side of I-77 between Westmoreland Rd. and Catawba Ave.) be impacted?
- How will US 21 be impacted?
- How will businesses and churches be impacted?
- What type of physical barrier will be used to divide northbound and southbound lanes?
- Will underground utilities be installed?
- Will mainline interstate lighting be included? If so what wattage/style?
- Where will overhead signage be located?
- Will there be opportunities for local community to be incorporated into the project design?
- How will cross-slope drainage be addressed given the number of lanes proposed for either direction?