

“TURNPIKE 101 Q&A”

The North Carolina Turnpike Authority wishes to acknowledge its gratitude to the federal and state environmental regulatory and resource agencies for their contribution to the success of “Turnpike 101” on November 21, 2006. There were several questions asked during the course of the workshop. Below is a list of these questions followed by more detailed and specific answers than may have been provided at the workshop. If you have additional questions or comments after reading the Q&A, please email me at gail.grimes@ncturnpike.org and I will forward your questions or comments to the appropriate individual for further responses.

Q: How is the trucking industry involved in planning for toll roads?

A: Nationally, the trucking industry is generally not in favor of tolls. However, the industry is impacted by traffic congestion. Therefore, the trucking industry, in general, has expressed some support for congestion pricing. The NCTA will coordinate with the trucking industry and local businesses regarding truck routing and timing.

Q: Why is the NCTA developing two traffic forecasts for the candidate turnpike projects?

A: The two traffic forecasts are developed for different purposes. Traffic forecasts developed as part of the NEPA study are used to design the proposed roadway. The impacts to the human and natural environments that are discussed in the environmental document in the NEPA study are based on that design. These forecasts are developed using a transportation model adopted by the metropolitan planning organization (MPO), which includes assumptions of future population and employment within the region. The estimates of future population and employment affect the number of vehicles that are predicted to use regional roadways over a next twenty years horizon. Traffic forecast are developed also for the Traffic & Revenue Study which estimates the revenues the toll road is anticipated to generate over the bonding period. Both traffic forecasts begin with the MPO’s adopted transportation model, but the model input assumptions for population and employment may be

different for the Traffic & Revenue Study. The traffic model used to develop the NEPA forecast is calibrated by the MPO according to regional traffic volumes whereas the traffic model used to develop Traffic & Revenue forecast may be calibrated according to observed volumes within the narrow confines of the project study area. As a result, Traffic & Revenue Study forecasts are based on a version of the model that was not approved by the MPO or the Department of Transportation. The adjustments made in the T&R study model are appropriate given the purpose of that study; it is used by the financial community to evaluate the financial return that could be expected from their investment; and not by the NCTA for developing engineering designs or evaluating project impacts. Both sets of traffic forecasts will be disclosed to the public.

Q: Why are the Traffic & Revenue forecasts lower than the forecast developed for the NEPA studies?

A: In general, the Traffic & Revenues (T&R) forecasts tend to be lower than the NEPA traffic forecasts. The difference between the two forecasts is due to the purposes that each forecast serves, and the fact that each forecast utilizes different standards for analysis that were designed for that particular purpose. The T&R forecasts are used by the financial community and potential investors to evaluate project financial risk and the financial return that could be expected from the investment. From the financial standpoint, a conservative assumption is one that is based on the low end of the predicted range for population and employment growth and traffic volumes, which correlate to lower toll revenues. These “low-end” assumptions help reduce the risk of overstating the revenue potential of the proposed toll road. The NEPA traffic forecast, as discussed in the previous answer, is used to design the proposed roadway, to assess the potential impacts, to predict design year traffic demand and to document the environmental impacts associated with the construction of the road. Therefore, population and employment growth and traffic volumes are based generally on the higher end of the range, which reduces the risk of under-design and facility failure in the horizon years. The two sets of traffic forecast are developed independently by two different engineering firms using

traffic models that are calibrated based on different parameters and inputs, therefore, the results are often different. Both sets of traffic forecasts will be disclosed to the public.

Q: Why are the traffic projection methodologies for the Traffic & Revenue forecast proprietary if NEPA requires full disclosure and federal monies are used to fund the study?.

A: The only proprietary component of the T&R model is the market share micro model that is used to determine the sensitivity of traffic volumes to toll rates. It is standard practice in the toll industry for this component of the model to be proprietary. The NCTA Traffic & Revenue consultant, Wilbur Smith Associates (WSA), is one of the three recognized national experts in toll traffic forecasting. WSA developed the proprietary component of its model based on their nearly 50 years of experience in developing traffic and revenue forecasts. This part of the model estimates the percentage of vehicles that will divert from the roadway based on the varying toll rates. The WSA model will not be used to develop the current and future year traffic forecast for the NEPA document. However, the difference between the NEPA and T&R traffic forecast, if any, will be discussed in the draft environmental documents for each of the candidate turnpike projects.

Q: Is the FHWA the lead agency on NCTA projects?

A: Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU); the FHWA, NCTA and NCDOT will be joint lead agencies on all turnpike projects. The FHWA will serve as the lead federal agency.

Q: Will non-tolled alternatives be studied if the purpose and need specifically calls for a toll road?

A: The FHWA guidance to Colorado DOT (October 2004) explains that it is not necessary to look at non-toll alternatives if the purpose and need specifies a toll

road. The FHWA guidance describes circumstance under which tolling can be included in a purpose and need statement.

Q: The NCTA candidate toll projects are projects that were not designated as toll roads in the initial long range transportation plan; the plans are being modified after the studies have begun. How is the being done?

A: A project that is located within an area that is subject to air quality conformity requirements may be approved for construction only if the project conforms to the applicable plan for achieving air quality standards. In metropolitan areas, this conformity determination for a project is typically made by relying upon the conformity determination that was made for the metropolitan area's long range transportation plan. In order for the project-level finding to rely on the MPO's finding, the project approved during the NEPA process must be "consistent in design concept and scope" with the project that was included in the MPO's long range plan. This means that the project must be included in the MPO's plan as a toll road before the NEPA process is completed. The NCTA, FHWA and NCDOT will work with the MPO's to ensure that any amendments are made to the MPO's long range plan prior to approval of the final NEPA document.

Q: Will the USACE be invited to be a cooperating agency on NCTA projects?

A: Yes.

Q: Will the agencies have input into the development of schedules for the NCTA candidate toll road projects?

A: Project-specific coordination plans will be developed for each project. These plans will include project schedules. Agencies will be asked to provide input into the development of the plan and the schedules.

Q: Is the NCTA developing a single “programmatic” coordination plan for its projects, or will a coordination plan be developed for each project?

A: The NCTA will not develop a single “programmatic” coordination plan for the candidate turnpike projects. A single “skeleton” plan was developed that incorporates all the elements of the plan that would apply to all projects, but this skeleton will be expanded into a project specific plan for each individual project.

Q: What is the definition of “reasonable” in terms of screening alternatives?

A: The term “reasonable” is defined by the Council on Environmental Quality as those alternatives that “are practical or feasible from the technical and economic standpoint using common sense” (CEQ “NEPA’s 40 Most Frequently Asked Questions,” Guidance, Question 2A). Professional judgment must be exercised in determining the “reasonableness” of an alternative. This judgment is informed by experience and case law. On many projects, it is necessary to determine which alternatives are “practicable” for purposes of Section 404 permitting under the Clean Water Act; this judgment is made by the USACE. Additionally, it may be necessary to determine which alternatives are “prudent” for purposes of Section 4(f); this judgment is made by FHWA. These judgments are all taken into account as part of the environmental review process.

Q: What implications does Section 6002 have on the Gaston East-West Connector which the NCDOT initiated in 2003 as a free road which is now one of the NCTA candidate projects?

A: The Gaston study was initiated in 2003, but the notice of intent for the Gaston project was issued in 2006, after SAFETEA-LU was passed in April 2006; therefore the NCTA proposes to follow the Section 6002 process for this project. The NCDOT followed the Merger '01 process from project initiation through the identification of detailed study alternatives. Therefore, the NCTA currently plans to incorporate Concurrence Points 3, and 4a – 4c into the Section 6002 Coordination Plan for the project. However, this and other relevant issues, such as revising the project scope

and technical documents to include tolling as an option, will be discussed with the federal and state participating agencies before a final decision is made.

Q: How will the NCTA handle mitigation?

A: The NCTA is working with North Carolina Ecosystem Enhancement Program (EEP) to determine if EEP can fulfill the mitigation needs of the candidate toll projects.

Q: Item 12 in the draft coordination plan, which references Section 404 permits and Section 401 certification calls for permits to be issued within 180 days of the ROD. Is this accurate?

A: Section 6002 does not require permits to be issued within 180 days after the ROD is published in the Federal Register, nor will the NCTA incorporate this requirement into the project coordination plan. Section 6002 says that *if* a permit is not issued within 180 day after the ROD is published *or* within 180 days after receipt of a complete permit application, *whichever is later*, the FHWA will notify certain committees in Congress. The Coordination Plan reflects this requirement.

Q: What is the timeframe for the agencies to review a project's purpose and need and alternatives development.

A: The timing of specific steps is not detailed in the draft coordination plan and will be determined in project-specific coordination plans developed with the agencies.

Q: What is the status of the purpose and need for Mid-Currituck Bridge project?

A: The purpose and need is being revised to include hurricane evacuation. No other changes are planned at this time. However, the NCTA expects to have discussions regarding purpose and need and alternatives with environmental agencies in early 2007. These discussions could result in a reevaluation of the purpose and need statement.

Q: How will the maintenance costs be covered while bonds are being repaid?

A: The tolls will be set to fund operating and maintenance costs in addition to the bond payment.

Q: When will the regular monthly project meetings begin?

A: The first agency meeting is scheduled for December 15, 2006.

Q: Article 6H (page 8) of the NCTA enabling legislation appears to give the NCTA the authority to toll existing interstate highways. The NCTA has indicated that it does not have authority to toll existing roads. Which is it?

A: The NCTA can not toll existing facilities, with the exception of I-540P, the section of I-540 between NC 54 and NC 55 near Morrisville. Any additional allowances to toll existing facilities would require action by the North Carolina General Assembly. Regarding conversion of High Occupancy Vehicle (HOV) and High Occupancy Toll (HOT) lanes, tolls can be imposed only if new lanes are added; existing lanes could not be tolled.

Q: Can environmental justice impacts be addressed by incorporating mass transit on a tolled facility?

A: The NCTA will coordinate with the applicable transit provider to determine what accommodations should be made for buses on its toll roadways. It is possible that buses could use the facility at a discount or for free, as is done on other toll facilities across the country. However, it is important to note that the bond rating agencies evaluate a variety of project risks when assessing a project's financial feasibility. It may not be possible for the NCTA, which does not have a record of proven traffic and revenue, to allow financial concessions for public transportation, or to make any other concessions, that could decrease potential toll revenue. The NCTA will

carefully balance all such factors in order to achieve a financial package which will allow the NCTA to construct, operate and maintain our toll facilities.

Q: How do various toll technologies work when buses, transit vehicles, or HOV are free or discounted?

A: Transit vehicles may be allowed to use a toll facility for a reduced rate or for free. In such cases, transponders are typically used. The transponder is read as it passes through the toll infrastructure on the toll lane. The toll transaction is sent to a customer service center for processing where it is identified as part of a billing class, which in such cases is "a transponder located in a transit vehicle". Current technology allows Turnpike Authorities great versatility in tolling vehicle type, account type and time-of-day pricing. Reduced tolls or no tolls for transit vehicles using NCTA toll roads will be decided at a later date on a project-by-project basis.

Q: The presentations indicate that toll roads will be transferred to NCDOT after the bonds are paid. However, the Triangle Parkway example showed the project being transferred after a \$130 million profit. Please explain how and when the decision is made to transfer a project to NCDOT.

A: In accordance with North Carolina Statute, the NCTA will transfer ownership of all toll road projects to NCDOT after all debt obligations are fulfilled. At that time, the toll equipment will be removed and the roadway will operate as a free facility. However, the initial bonding period for a major project may be as long as 40 years. During the later years of the bonding period, the net revenues from the roadway may exceed the debt obligations. The graphic showing the \$130 million "profit" illustrated this potential surplus. The actual amount of the surplus would depend on toll revenues and project costs; and there is no guarantee that any such surplus would occur. In any case, no uncommitted "profit" from any of the turnpike candidate projects is anticipated at this time.

Q: Where does the \$50 million per mile cost rule of thumb come from? Today, NCDOT finds that new location interstate-standard freeways in urban areas are running about \$30 million per mile.

A: The \$50 million figure is a general estimate which includes all project development costs, such as mitigation, right of way acquisition, toll technology, construction etc.

Q: Will federal officials emphasize how MPOs address Section 6002 during their MPO certification process (for those MPOs that have toll projects)?

A: The MPO's are not required to follow the Section 6002 process, so compliance with Section 6002 will not be an issue in the MPO certification process. The MPO certification will follow Section 6001, which integrates planning and NEPA.

Q: How many projects will be evaluated and constructed before committing to more projects.

A: The NCTA is authorized to develop up to 9 turnpike projects. Currently, the NCTA Board of Directors has approved the evaluation of six candidate turnpike projects. The NCTA currently is proceeding with the project development studies for all candidate projects.

Q: After a toll project is built, what happens if the local governments want to add lanes? What is the process?

A: A project which includes the addition of toll lanes to an existing roadway would go through the same process as any other toll candidate project.

