

**Charlotte Region *Fast Lanes* Study**  
**Regional Technical Team**  
**Meeting #5**

November 20, 2008      10:00 – 11:30AM

**Metrolina Regional Transportation Management Center**  
**2327 Tipton Drive, Charlotte, NC**

**Meeting Summary**

**Welcome and Introductions**

The meeting started at 10:05AM.

Jack Flaherty (NCDOT) welcomed meeting attendees by providing a brief overview of study activities to date. He asked meeting attendees to introduce themselves.

**Discussion of Study Progress**

**Review of Phase 1 Recommendations**

Lynn Purnell (PB) reviewed the Phase 1 screening approach and results. He noted that about 50 percent (167 miles) of the initial roadway system which was analyzed had advanced into Phase 2.

Lynn also discussed conditional cases carried forward to the second study phase:

- I-85 assuming major design exceptions in Gaston and Mecklenburg Counties
- I-77 south assuming the corridor is re-built between Center City Charlotte and I-485
- NC-16 assuming a reversible lane north of I-85

**Review of Phase 2 Managed Lanes Design Concepts**

Chuck Fuhs (PB) reviewed preliminary design concepts for adding managed lanes to I-85, NC-16, I-77 North, I-485 South and West, and I-77 South. He noted how reducing lane and shoulder widths can be used to add managed lanes to freeways on a case-by-case basis. About 50 percent of the miles of managed lanes in the United States have been implemented using design exceptions.

On May 29, CDOT and PB presented preliminary *Fast Lanes* cross-sections to FHWA and NCDOT staffs. One of the purposes of the presentation was to obtain FHWA and NCDOT input on the design exceptions (reduced lane widths and narrower shoulders) to implement managed lanes on I-85. On August 18, CDOT received a letter from NCDOT recommending that the study analyze the impacts of constructing managed lanes cross-sections which satisfy AASHTO standards before exploring design exceptions. NCDOT provided recommended HOV typical sections for consideration during the *Fast Lanes* study.

Chuck commented on a September 23 meeting with SCDOT senior management and FHWA-SC staff on managed lanes. The meeting included an overview of

HOV and HOT lanes nationally and the potential for coordinating changes to I-77 in York County with managed lanes concepts for the interstate in North Carolina.

### **Discussion of Phase 2 Preliminary Corridor Results**

Chuck reviewed forecasted HOV 2+ demand by corridor segment for two horizon years, 2013 and 2030. He noted that there was as many segments with high HOV demand inside I-485 as there were outside the circumferential freeway. The lowest HOV 2+ demand segments were located along I-485 and the extreme ends of the radial freeways.

PB and ECONorthwest have just completed preliminary estimates of:

- Annual toll revenues for 2013 and 2030 based on various assumptions on who pay tolls to use the *Fast Lane*
- Capital costs by corridor segment assuming 1) design exceptions and 2) NCDOT-recommended design standards
- Operating and maintenance (O&M) costs by corridor segment

Based on an initial review of revenue and cost estimates, three *Fast Lanes* “early action” projects were presented for attendee consideration:

- I-77 North which will be analyzed during the feasibility study approved on November 6 by NCDOT. The upcoming study will include assessing the feasibility of extending the current HOV facility north to Griffith Street (Exit 30) in Davidson and the feasibility of converting the existing and/or extended HOV lanes to HOT lanes. Work should get underway in January 2009. Other elements of the I-77 North “package” include improved access to Center City Charlotte and consideration of planned I-77 improvements to regain standard lane and shoulder widths south of the I-77/I-85 interchange.
- I-85 in Mecklenburg and Cabarrus Counties by adding concurrent managed lanes in Mecklenburg using design exceptions and pricing one of the two new lanes in each direction being constructed between Exits 48 and 55 in Cabarrus County. This “package” would include analysis of direct connections between I-85 at its interchange with I-77 north of Charlotte.
- I-77 South from York County to as far north as possible in Mecklenburg County. The addition of managed lanes along I-77 could be analyzed in conjunction with potential *Fast Lanes* along I-485 between I-77 and Johnston Road.

Norm Steinman (CDOT) suggested that Phase 2 of the study address the following:

- Are truck only toll lanes feasible in any study corridor?
- What are the benefits of *Fast Lanes* for express bus passengers?
- Review and confirmation of cost estimates (both construction and O&M) by NCDOT and SCDOT staff members.
- Recommendation for US-74 which includes consideration of corridor plans by CATS and NCDOT.
- Next steps in *Fast Lanes* implementation, by corridor and overall.

David McDonald (CATS) requested that US-74 *Fast Lanes* concepts address cross-sections for both LRT and BRT operations along the corridor.

In response to a question from Doug Frate (SCDOT), Joe McLelland (CDOT) noted that HOV demand estimates reflect those high capacity transit projects which are in MPO LRTPs. Chuck discussed the different transportation markets and how managed lanes can be implemented in corridors with rail services. Hank Graham (Gaston MPO) asked about the impacts on travel demand along I-85 in Gaston County following implementation of the Garden Parkway. Joe noted that the proposed highway is currently shown in the regional model as a free (non-tolled) facility. Hank noted that Gaston County stakeholders could have questions about interrelationships of the two roadways.

### **Report from TRB HOV/HOT Systems Conference & FHWA HOT Lanes Workshop in Minneapolis**

Lynn briefed meeting attendees on the HOV/HOT Systems Conference held on September 7-9. He reviewed the topics of the break-out sessions and the managed lanes which have been implemented across the nation that were highlighted in the conference.

Lynn also discussed FHWA's new HOT Lanes workshop offered after the conference. He reviewed the workshop's discussion topics.

### **Next Regional Technical Team Meeting**

Lynn reviewed the schedule for completing remaining tasks in Phase 2. The next RTT meeting will likely be held in late January or early February 2009. There also is consideration for a final *Fast Lanes* workshop to be held in February or March 2009.

### **Attendees**

Tim Gibbs (Charlotte DOT)  
Jack Flaherty (NCDOT-Public Transportation Division)  
Bob Cook (Mecklenburg-Union MPO)  
Joe McLelland (Charlotte DOT)  
Anna Gallup (Consultant for Charlotte DOT)  
Michael Harper (Town of Mooresville)  
Doug Frate (SCDOT)  
Sarah Rayfield (York County, SC)  
Hank Graham (Gaston MPO)  
Bjorn Hansen (Lake Norman RPO)  
Norm Steinman (Charlotte DOT)  
David McDonald (Charlotte Area Transit System)  
John Rose (Charlotte Area Transit System)  
Eric Gorman (PB Americas)  
Chuck Fuhs (PB Americas)  
Lynn Purnell (PB Americas)  
Derek Piper (PB Americas)