

ITEM 12 - Information

December 16, 2009

Briefing on I-270/US 15 Multi-Modal Corridor Study

Staff

Recommendation: Receive briefing on the I-270/US 15 Corridor Study, which includes the Corridor Cities Transitway. The corridor extends from I-495 in Montgomery County to the City of Frederick.

Issues: None

Background: The briefing will cover the study background, its purpose and need, measures of effectiveness, an overview of the alternatives studied, a summary of public and agency comments received to date, and next steps.

I-270/US 15 Multi-Modal Corridor Study – Corridor Cities Transitway

Project Summary – November 2009

The I-270/US 15 Multi-Modal Corridor Study is a joint project between the Maryland State Highway Administration (SHA) and Maryland Transit Administration (MTA). The project extends from the Shady Grove Metro Station in Montgomery County north to the US 15/Biggs Ford Road intersection area in Frederick County (approximately 30 miles). The transit component, known as the Corridor Cities Transitway (CCT), extends 14 miles from the Shady Grove Metro Station in Rockville through Gaithersburg and Germantown where it terminates at the COMSAT facility just south of Clarksburg.

The I-270/US 15 Study Team prepared a Draft Environmental Impact Statement (DEIS) for five highway alternatives and three transit alternatives in June 2002 and held Public Hearings to gather public input soon after. The team held Public Informational Open Houses, in both Montgomery and Frederick Counties, in June 2004 to update the public and introduce the concept of Express Toll Lanes (ETLs) on I-270. Two new alternatives that employ the use of ETLs were developed, and the associated impacts of each alternative were assessed. The Study Team completed an Alternatives Analysis / Environmental Assessment (AA/EA) that documents the effects of the two new alternatives and also explains the project changes that have occurred since the public hearings in June 2002. The AA/EA includes detailed environmental technical analyses of resources affected by the proposed ETL. It also provides information about the ETL effects on CCT ridership, I-270 mainline traffic operations, traffic/environmental effects south of the study area (I-270 to the Capital Beltway), and also summarizes the comments received after the DEIS public hearings and ETL workshops as a result of the public input process.

The AA/EA document, with accompanying technical reports, is available on the project website at www.i270multimodalstudy.com. The public comment period closed on July 31, 2009, and it is anticipated that agency comments will be received by mid-November 2009.

Roadway and Transit Alternatives

Several alternatives were presented in the DEIS and during the June 2002 Public Hearing. The alternatives have a highway improvement (which are numbered) and a transit improvement (which are lettered). Ultimately, the selected alternative will include both a highway and transit choice, so they are paired (for example, “3B”). In brief format, these alternatives included:

- Alt. 1** No-Build, which serves as the basis for measuring the effectiveness of the build alternatives.
- Alt. 2** Transportation Systems Management / Travel Demand Management (TSM/TDM), which includes measures such as ramp metering, improved incident management, interactive highway and transit signage, and improved connections to existing transit systems in the corridor. The TSM/TDM option also includes promoting carpooling, flexible work hours, and telecommuting.
- Alt. 3A/B** Adds one High Occupancy Vehicle (HOV) lane in each direction on I-270 north of MD 121, and extends the existing southbound HOV lane northward to meet the new lane. “Local” lanes on I-270 are extended on both the southbound and northbound side up to MD 27. The CCT would use a light rail transit system with transit alternative “A”, and bus rapid transit with alternative “B”. This alternative includes a direct-access ramp from the HOV lane at New Cut Road and MD 118 only.
- Alt. 4A/B** Adds one general purpose lane in each direction on I-270 north of MD 121, and extends the existing southbound HOV lane northward to MD 121. “Local” lanes on I-270 are extended on

both the southbound and northbound side up to MD 27. The CCT would use a light rail transit system with transit alternative “A”, and bus rapid transit with alternative “B”. This alternative does not include direct-access ramps from the median.

Alt. 5A/B/C Adds both an HOV lane and a general purpose lane in each direction on I-270 north of MD 121, and extends the existing southbound HOV lane northward to MD 121. “Local” lanes on I-270 are extended on both the southbound and northbound side up to MD 27. The transit alternatives coupled with this highway alternative include the light rail transit on the CCT alignment, the bus rapid transit on the CCT alignment, and the implementation of a “premium bus” service along the HOV lanes on I-270, which is transit alternative “C”. Alternatives 5A and 5B do not use barrier-separated HOV lanes and include direct-access ramps from the HOV lane at New Cut Road and MD 118 only. Alternative 5C provides a barrier-separated HOV lane south of MD 121 and also provides direct access at I-370 and Metropolitan Grove Road.

In most areas, the CCT is fully separated from vehicular traffic, either in the median, along one side of an existing roadway, or along new alignment. At-grade or overpass/underpass options exist for major roadway crossings. As proposed, the CCT includes 17 stations and provides direct transfers to the MARC Brunswick line at Metropolitan Grove and the Metrorail Red Line at Shady Grove.

Existing interchanges would be upgraded or reconstructed and four new interchanges are proposed along I-270 and US 15 as part of the project. Direct access ramps would also be considered for areas better served by transit pending the alternative selected and the transit mode choice.

The Express Toll Lane alternatives, Alternatives 6A/B and 7A/B, are presented in the AA/EA document. ETLs are new capacity, tolled highway lanes, constructed in the median of I-270 that will provide a congestion-free trip for the roadway user when travel time is critical. The limits of the ETLs extend from I-370 to just north of the MD 80 interchange near Urbana. The impacts for these new alternatives are documented in the AA/EA. The ETL alternatives include:

Alt. 6A/B Includes the construction of two barrier-separated ETLs in each direction on I-270 between south of I-370 and MD 121, which would reduce to a single ETL with a wide inside shoulder between MD 121 and north of MD 80. The ETL then transitions to a general purpose lane through Monocacy National Battlefield and points north. The existing “local” lanes would be removed from the Shady Grove Road interchange northward.

Alt. 7A/B Includes the construction of two barrier-separated ETLs in each direction on I-270 between south of I-370 and north of MD 80. Both ETLs would then transition into general purpose lanes through Monocacy National Battlefield and points north. The existing “local” lanes would be removed from the Shady Grove Road interchange northward.

The two ETL alternatives have exactly the same roadway footprint. North of MD 121, only a three-lane section is delineated in each direction for Alternative 6 with a 16-foot inside shoulder. The 16-foot shoulder could ultimately be re-striped as a fourth 12-foot travel lane and a 4-foot inside shoulder. The reason for incorporating the same roadway footprint is to provide flexibility to eventually extend a fourth lane northward without needing to do new construction as traffic volumes increase.

Access to the ETL system occurs through “open access areas” north of MD 121, similar to the way that traffic enters and leaves the “local” lanes today. South of MD 121, access will be gained via direct-access ramps. The direct access ramps will be located at the proposed New Cut Road (Little Seneca Parkway) near COMSAT, at MD 118 near the Germantown Transit Center, at Metropolitan Grove Road Extended,

and at I-370. The I-370 ramp will be a directional ramp from southbound I-270 to eastbound I-370 and westbound I-370 to northbound I-370 only. The study is also looking at a potential south-oriented ramp at MD 117, in the event that the West Side Mobility Study ultimately uses a managed lane strategy south of I-370 as the preferred alternative.

The alignment presented in the AA/EA document for the CCT is the Master Plan Alignment. The MTA is investigating alternative alignments that deviate slightly from the Master Plan Alignment at Crown Farm, Life Sciences Center, and Kentlands. The alternative alignments are being considered based on future land use considerations in these areas. The Crown Farm is being redeveloped, and the master plan alignment conflicts with a proposed school site. The Gaithersburg West Master Plan is currently being updated, and the realignment of the CCT could potentially better serve the proposed development and attract more riders. The Kentlands alignment shift to the opposite side of Great Seneca Highway would support the redevelopment near the Kentlands.

NEPA Approval Process

The Federal Highway Administration (FHWA) has recommended that the team use a Tier 1 FEIS for the highway portion of the project, and to split the transit and highway pieces after a preferred alternative is selected. The Federal Transit Administration (FTA) concurred with FHWA's recommendation. The purpose of the Tier 1 FEIS is to perform the required level of environmental analysis, minimization, and mitigation to establish a limit of disturbance that could be used as a basis for Tier 2 studies of smaller, "staged" projects. As part of the Tier 1 study, the team will identify "sections of independent utility", which are roadway sections or work items that will improve the roadway system without contributing to congestion or decreasing safety within the corridor. The FHWA will provide a Record of Decision on the Tier 1 document for the corridor, and then issue subsequent NEPA approvals on the Tier 2 documents for each "breakout" project.

The MTA will prepare and submit their New Starts application for a grant agreement for preliminary engineering to the FTA after the preferred alternative is selected and the highway and transit projects split. Even though the projects will be proceeding on separate schedules for the remainder of the planning, design, and construction stages, they will still be intertwined from a travel forecasting standpoint.

Funding

- Highway alternatives range from \$50-200 million for a TSM/TDM option to \$4.7 billion for Alternative 5C. The ETL alternatives proposed in the AA/EA document are estimated at \$4.6 billion (2009 estimate). Programmed funding for the highway portion of the project in MDOT's Consolidated Transportation Program is for Planning only, through FY '10.
- An examination and decision of project phasing options for implementation of the recommended improvement is needed as the team prepares the Tier 1 FEIS. This will break the I-270/US 15 improvements into segments that can be developed and funded over time, and thereby allowing lower initial costs.
- The Corridor Cities Transitway is funded for project planning, and the costs in the AA/EA were \$450 million for a bus rapid transit system and \$777 million for light rail (2007 estimate).

Current Action Items and Activities

- CCT Team recently finalized a report that assesses the effects on ridership and travel time for various alternative alignments through the Crown Farm, Kentlands, and the Life Sciences Center. Results indicate that the Crown Farm and Life Sciences Center alignments would benefit the CCT. When including the Kentlands shift to the other alignment changes, ridership on the CCT is slightly negatively impacted. However, other considerations will be included when making the final decision on this alignment.

- The CCT team is preparing the necessary land use and financial documentation for the FTA New Starts submittal.
- Reviewing, cataloging, and replying to comments received on the AA/EA document and the study as a whole.
- Extensive developer coordination in both counties.
- Evaluating a potential location for a CCT Operations and Maintenance facility.
- Investigating project needs for stormwater management, station development, and hiker/biker trail.
- SHA and MTA team are investigating minimization and mitigation methods for impacts within the corridor.

Project Schedule

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| Preferred Alternative Recommendations from Local Governments | November 2009 |
| Team Recommendation of Preferred Alternative | Winter 2009/2010 |
| Transit and Highway Projects Split | Spring 2010 |

Following the split, the MTA will submit their New Starts Application and begin the preliminary engineering of the preferred alternative. SHA will begin assessing the recommendations received from the local governments for modifications to the alternatives (such as the use of HOT lanes instead of ETL lanes, the use of a reversible lane system, and enhanced connections between the managed lanes and park and ride facilities). Both the MTA and SHA would prepare Final Environmental Impact Statements for their respective projects.