Follow-up to Programming From Competitive Set-Asides For August 6, 2008 CDTC Planning Committee Meeting

At its July 2, 2008 meeting, the CDTC Planning Committee deferred action on its ITS for Local Signals Set-Aside pending clarification of the scope of work of the Albany candidate (New Scotland ITS). Clarification was specifically needed on the transit signal priority component and the maintenance commitment to the project by the City. In addition, the Planning Committee deferred action on the Schenectady County candidate (Providence at Hillside traffic signal) as a safety project pending clarification of the scope of work, specifically the justification for the proposed right turn lane, and confirmation of the cost estimate for the project as a safety project.

Since the July meeting, CDTC staff has been in contact with project sponsors to obtain the needed information on the deferred projects and to make any necessary adjustments to the July evaluations. The following provides an update on the deferred project candidates and also provides additional information on candidates that was received since the July meeting.

Albany ITS Candidate

Since the July meeting, CDTC staff has been able to confirm that the scope of work is close to the low-end scope assumed in the evaluations, which was reflected in the material distributed to the Planning Committee in July. CDTC is unable to provide any better cost estimate than the sponsor. Therefore, standard amounts for engineering, contingencies and inflation to latter years was added to bring the cost to \$0.704M as reflected in the July 2 material. Also, since the cost provided by the City is based on projects completed nearly two years ago, CDTC suggests adding a 20% inflation factor to bring the cost estimates up to date. This would result in a total cost of \$0.845M and a revised benefit/cost ratio of 8.3 (from the July B/C of 10.0).

Troy ITS Candidate

In a letter to CDTC since the July Planning Committee meeting, the City of Troy has clarified that the scope of its Pawling Avenue ITS candidate is more similar to the City of Albany's proposal than what was evaluated at the July Planning Committee meeting. The scope will not include such things as poles, drop curves, and stamped crosswalks. Instead, it will include new controllers and cabinets, pedestrian signal equipment, and other associated hardware. The proposed project scope and budget does not include addressing ADA deficiencies, transit prioritization or other treatments. The cost estimate provided by the City (\$0.497M) appears to be for construction only. Applying the standard CDTC adjustments for engineering, contingencies and inflation to latter years results in a total cost of \$0.686M and the benefit/cost ratio would remain near the 2.4 calculated for the July 2 meeting.

Providence/Hillside Intersection Safety Improvements

The Providence/Hillside Project, proposed by Schenectady County, was originally submitted to CDTC under the ITS for Local Signals set-aside. The proposed project calls for installing a fully-actuated traffic signal, improving intersection geometry, and constructing a right-turn lane on the westbound approach to the intersection. The project would include a controlled pedestrian crossing, crosswalks, and other pedestrian and bicycle treatments. The geometric changes to the intersection will require strip-takings, relocations of utility poles, and some drainage work.

After screening all project candidates prior to the July 2nd Planning Committee meeting, it was determined by CDTC staff that the Providence/Hillside project was not eligible for the ITS set-aside. However, the project would be eligible for either the Intersections/Roundabouts/Queue Jumpers set-aside or the Safety for Non-State Roads set-aside. A roundabout project at the intersection was considered and evaluated but was not funded through the Intersections/Roundabouts/Queue Jumpers set-aside at the July 2 meeting. A safety project using the submitted project scope was also considered. However the Planning Committee raised a question about the safety benefits related to the proposed right-turn lane.

The crash history at the intersection indicates that there are a relatively high number of severe, right angle type crashes at the intersection. This crash type can be reduced with the installation of the traffic signal as noted by the County's engineering consultant. However, the crash history does not directly support the need for the right turn lane under current traffic conditions. The capacity and level-of-service analysis of the intersection using Highway Capacity Manual procedures indicates that all approaches to this intersection, with a signal, would operate at a very high level-of-service during the afternoon peak hour under current traffic and geometric conditions. Adding a right-turn lane would have a marginal effect on traffic operations and vehicle safety.

Constructing a right turn lane may benefit bicycles and pedestrians using the shoulder along the east leg of Providence Avenue. A right turn lane would separate aggressive drivers who might use the existing shoulder as a right-turn lane from cyclists and walkers. However, because this intersection would function very well as a signalized intersection, the volume of traffic that would use the shoulder as a right turn lane is likely to be small at this time. Because of recent construction cost inflation and design requirements of the project development process, the cost of constructing a right turn lane is likely to exceed the budget established for the project. If vehicle/pedestrian conflict becomes an issue, imposing a 'No Turn on Red' restriction is a treatment that could mitigate the problem.

CDTC staff estimates that the cost of installing a fully-actuated traffic signal, pedestrian treatments, and minor geometric improvements would total about \$210,000.