SCI-139 @ Rosemont Road (CR 377)

The intersection of Sci 139 and CR 377 is a T-configuration with a traffic signal controlling the vehicular movements. CR 377 runs parallel to a stream that passes underneath SR 139 at the intersection. The existing structure is a type 111, concrete slab simple span bridge with a Sufficiency Rating of 67.5. Constructed in 1930 with major work performed on it in 1975 by District forces, this structure ranks number 58 on the District Bridge Priority Program. The question has been posed if it would be economically feasible to add a dedicated left turn lane on SR 139 for northbound traffic. To be able to do a project of this nature, the existing structure would have to be replaced and the proposed structure designed much wider to accommodate the intersection geometry.

New traffic counts were taken at the intersection and the accident history for CYs 2003-2005 was retrieved. The accident history for CYs 1993-1995, when the signal was constructed and activated, was queried for comparison to the existing history. Accident diagrams for total accidents were plotted for both groups and a diagram for the accidents that might be eliminated with a left-turn lane also was plotted. Signal warrants were run and the overall operation of the intersection was investigated.

Using the District's Safety Project Rating Process, the addition of a turn lane was analyzed. The proposed project scores a 19 for Safety Upgrades and has a negative 24% rate of return. An estimated project cost of \$620,000 was used for the proposed project. The logical conclusion is not to proceed with this proposed project at this time. A decision on maintaining the operation of the traffic signal will have to be made. If Right Turn Reduction Factors are applied, this signal will not meet warrants.