# **Town of Arlington Transportation Advisory Committee (TAC) Symmes Transportation Subcommittee (STS)** Thursday, January 6, 2005

Town Hall Annex First floor Conference Room, 5:15 PM

STS members present: Ed Starr (Chair), Elisabeth Carr-Jones, Jeff Maxtutis, , Kevin O'Brien & Scott Smith

Others present: Patrick McMahon & Jake Upton (Symmes Redevelopment Associates), Sandi Bourgeois, Terry Dash, Deborah Dill & Elaine Duffy (Symmes Neighbors)

#### Administration

The minutes of December 16, 2004 and December 21, 2004 were approved. The next STS meeting was set for Thursday, January 13, 2005 at 6 PM.

#### Analysis of Hospital Road Delays and Summer Street Westbound Queues

Ed Starr distributed an analysis of the delays from Hospital Road onto Summer Street for the ten options for which data had been compiled. The analysis compares southbound left and right turn delays for the AM and PM peak hour, showing delays ranging from 35 to 72 seconds for the options including a traffic signal at Hospital Road. The analysis also includes volumes of anticipated traffic entering Hospital Road from Summer Street for each of the ten options.

The analysis of the westbound queues on Summer Street at the Hospital Road intersection showed a range from 234 to 577 feet for the 50% (average) queue during the AM peak and a range from 398 to 630 feet for the 50% queue during the PM peak. The distance from Hospital Road to Grove Street has been measured at 440 feet.

# **Analysis of Hospital Road Right-Turn Pocket**

Patrick McMahon distributed a memo from Howard/Stein-Hudson (HSH) analyzing the effect of a right-turn pocket on Summer Street at Hospital Road. The memo showed differences in queue lengths of 16 to 268 feet on Summer Street for the 50th percentile traffic and 78 to 188 feet for the 95th percentile traffic during the AM and PM peaks. Estimated block times for the pocket ranged from 9% to 25% for the 50th percentile and from 49% to 63% for the 95th percentile. The analysis was performed for two options.

### **One-Way Concept for Woodside Lane Access**

Patrick McMahon distributed a concept design drawing for a one-way (southbound) access to the Symmes site at Woodside Lane. The concept plan features a narrow access roadway and proposed signage. Two questions were raised: 1) can the width of the roadway be narrowed further from 18' to 15', 2) can the angle of the access roadway entrance be further differentiated from the angle of Hospital Road.

#### **Summer Street Corridor Intersection Coordination Data**

Patrick McMahon distributed Synchro data sheets from HSH for coordinated signals at the intersections of Summer & Mill, Summer & Oak Hill and Summer & Grove. Three issues were raised: 1) the Oak Hill & Grove phasing diagrams indicate no pedestrian phase, 2) simultaneous phasing is indicated for Oak Hill & Grove when it may be beneficial to phase them independently, 3) it may be beneficial to shorten the Oak Hill phase to discourage cutthrough traffic.

#### **Analysis of Summer Street Corridor**

Ed Starr distributed an analysis of the Summer Street corridor including the intersections at: Brattle & Hemlock, Hospital, Grove, Oak Hill and MIll. The analysis compares the level of service and queue lengths for three options during the westbound PM peak, and for two options during the eastbound AM peak.

### **Alternative Route Analysis**

Scott Smith explained a method of trip distribution analysis utilizing 4 traffic groups (site residents, site visitors, area residents and Summer Street through traffic), 4 directions of travel (north, south, east and west) and 3 options for the Woodside Lane access (open, closed and one-way southbound). When travel times have been determined, the percentage of traffic using the Woodside Lane access is predicted based on an equation which plots as an elongated scurve (or logit curve) on a graph of percentage of traffic over the relative time savings. Scott stated that the method had resulted in reasonably accurate predictions of traffic using cutthroughs around Lake Street.

Scott stated that the travel times would need to be modified from what was provided in the HSH traffic study and asked that HSH provide information on how their data was derived. A question was raised about the Stratton School being factored in as a destination for traffic from the site. Jake Upton stated that the projected number of students from K-12 for the Symmes site was approximately 35.

In response to a question at a previous STS meeting, Elisabeth Carr-Jones presented an engineering drawing from the Summer Street Reconstruction Project indicating that a stop sign would be placed at the reconfigured south end of upper Brattle Street.

# **Next Steps**

Suggestions for possible decision-making criteria for Task 2 of the Plan for Symmes Transportation Tasks were: 1) to avoid LOS F on Summer Street, 2) to avoid blocking of intersections with signal queues, 3) to provide adequate pedestrian infrastructure and 4) to increase safety.

Ed Starr stated that he planned to meet with representatives of Arlington's Fire and Police Departments. Kevin O'Brien asked if the Subcommittee would need the assistance of Peer Reviewer Gary Hebert. It was agreed that Gary would be useful to answer questions when the Subcommittee had narrowed the options.

### The meeting adjourned at 6:45 PM.

#### **Handouts:**

Agenda - from Ed Starr

Analysis of Hospital Road Delays and Summer Street Queues - from Ed Starr Memo re. Westbound Summer St. at Hospital Rd. Right-Turn Pocket - from Patrick McMahon Concept Design drawing for One-Way Access at Woodside Lane - from Patrick McMahon Synchro data for Coordinated Summer Street intersections - from Patrick McMahon Analysis of Summer Street Corridor - from Ed Starr Minutes of December 16, 2004 STS meeting - from Elisabeth Carr-Jones