Thursday, December 17, 2009

Transportation
RECOMMENDATION FOR COUNCIL ACTION

Item No. 83

Subject: Authorize the City Manager to negotiate and execute an Interlocal Agreement with the University of Texas at Austin for dynamic traffic modeling to be used for development of the Strategic Mobility Plan, urban rail studies, and other transportation planning needs.

Amount and Source of Funding: Funding in the amount of \$310,000 is included in the Fiscal Year 2009-2010 Austin Transportation Department Budget for the Strategic Mobility Plan.

Fiscal Note: A fiscal note is attached.

For More Information: Rob Spillar, 974-2488, Gordon Derr, 974-7228, Leanne Vaughn, 974-5657, Gilda

Powers, 974-7092

Prior Council Action: June 18, 2009 - Resolution 20090618-050 approved.

Resolution 20090618-50 identifies the citizens' major mobility concerns and recognizes the need to address shortcomings in the pedestrian, bicycle, transit and automobile systems. The resolution directs the City Manager to procure a consultant team with experience in development of multi-modal strategic mobility plans. The strategic mobility plan is coordinated with multiple area jurisdictions and includes the development of a cohesive set of options for near term low-cost mobility improvements. The Dynamic Traffic Assignment will help the City obtain the goals of the resolution by identifying essential travel demand forecast data to develop transportation project alternatives.

The total estimated project cost is \$310,000 which includes \$70,000 for initial project start-up costs. The remaining \$240,000 will be expended on network analysis and technical support: faculty and graduate student assistance, hardware and software licensing, supplies, and support from the UT Center for Transportation Research. One-half of the total agreement amount (\$155,000) is to be paid to UT within thirty days after the approval and execution of the interlocal agreement. The remaining costs are to be paid within 30 days after delivery by UT and acceptance by the City of the anticipated deliverables.

Dynamic Traffic Assignment provides an advantage over standard techniques because it recognizes real-time traffic flow varies by temporal distribution, levels of congestion and person-travel flow. It allows origin-destination input trip departures by time period of day, such as AM or PM peak periods, and outputs dynamic transit and roadway link flows, costs, and other variables of interest. The flow and congestion results are often more realistic than standard models due to the technique's consideration of time-of-day congestion across the network, and the cascading effects of origin-destination choices travelers make in response to varying congestion throughout the day. The innovative Dynamic Traffic Assignment would provide planners and engineers a mechanism for expressing current and projected transportation needs to citizens and help Boards, Commissions, and Council make transportation policy decisions.

The University of Texas at Austin will commence work on the Dynamic Traffic Assignment upon execution of the interlocal agreement. Base model deployment and calibration will begin within 90 days after the initial study. Scenario Evaluation is scheduled to begin in April, 2010 and ongoing coordination with the City of Austin will transpire through September, 2010.