Agenda Item #3H

MARICOPA ASSOCIATION OF GOVERNMENTS INFORMATION SUMMARY... for your review

DATE:
September 7, 2011

SUBJECT:
Amendment of the FY 2012 Unified Planning Work Program and Annual Budget to Increase the Mesoscopic to Microscopic Conversion Tool On-Call Project by $10,000

SUMMARY:
The FY 2012 Unified Planning Work Program and Annual Budget (UPWP), approved by the Regional Council in May 2011, includes $30,000 for an on-call consultant project for developing the Mesoscopic to Microscopic Conversion Tool. This project will develop a software tool for data conversion that will be utilized by MAG during the development of simulation models that could be used to examine traffic operations. This software tool will be specifically utilized for converting the output from a mesoscopic simulation model, named Dynus-T Regional Intelligent Transportation Systems (ITS) Operations Planning Model, that is linked to the region's travel demand model. The converted output will be used as input for the VISSIM microscopic traffic simulation model. The VISSIM simulation model helps produce a realistic visual presentation of the transportation system being examined and shows vehicle movements, bottlenecks and queues, and the traffic management strategies utilized by the Arizona Department of Transportation and local agencies at various points in time on the freeways and arterials examined.

It is now estimated that the budget required for the level of effort by an on-call consultant to develop this tool is $40,000. An increase of the on-call project budget by $10,000, through an amendment of the FY 2012 UPWP, is required to carry out this project.

PUBLIC INPUT:
None has been received.

PROS & CONS:
PROS: The development of this conversion tool will enable MAG to transform the Dynus-T Regional ITS Operations Planning Model into a very efficient tool for analyzing complex traffic management problems in the region.

CONS: None.

TECHNICAL & POLICY IMPLICATIONS:
TECHNICAL: The need for developing a realistic large scale traffic simulation model has long been identified by professionals in traffic operations and management. This particular software tool will help MAG achieve that goal and develop a very useful analytical tool for the region.

POLICY: The final model will be capable of examining a range of traffic operations and will be capable of generating information that may also be useful in resource allocation decisions, such as comparing the effect of the construction of a new lane of freeway to reduce congestion, to possible improvements

through effective traffic management strategies using ITS that might incur a much reduced but recurring cost.

ACTION NEEDED:
Approval to amend the FY 2012 MAG Unified Planning Work Program and Annual Budget to increase the budgeted amount by $10,000 for the Mesoscopic to Microscopic Conversion Tool on-call project.

PRIOR COMMITTEE ACTIONS:
This item is on the September 7, 2011 MAG Management Committee agenda for recommended approval.

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