

FY2016 MAG TRAFFIC SIGNAL OPTIMIZATION PROGRAM

REQUEST FOR PROJECTS

The Maricopa Association of Governments (MAG) serves as the forum for planning regional transportation improvements that involve strategic investments in advanced traffic management infrastructure and operations. The Traffic Signal Optimization Program (TSOP) program provides technical assistance to MAG member agencies that own and operate traffic signal systems to ensure that these systems are well adjusted to match prevailing traffic patterns.

TSOP projects are launched through MAG on-call consultant services contracts with a number of qualified engineering consultants. Projects provide technical assistance to MAG member agencies for improving traffic signal coordination and optimization. Projects could also assist member agencies in developing computer-based traffic signal coordination networks that are utilized by local agency staff to refine signal timing. A total of \$300,000 is available in FY2016 for TSOP projects. This call for projects will identify projects for the available funding.

The deadline for TSOP application submittals is Friday **November 13, 2015**. Please complete and submit the attached application to:

Traffic Signal Optimization Program
Maricopa Association of Governments
302 N. 1st Avenue, Suite 300
Phoenix, Arizona 85003

Project applications may also be submitted via email to: tsop@azmag.gov. The application form may be downloaded from the MAG website at:
<http://www.azmag.gov/Projects/Project.asp?CMSID=1050&CMSID2=1138>

If you have any questions please contact Micah Henry at (602) 452-5097 or via Email: mhenry@azmag.gov

The anticipated schedule for MAG approvals and launching projects is:

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| Receive all project applications | Nov 13, 2015 |
| Review at ITS Committee Special Meeting | Dec 2, 2015 |
| Transportation Review Committee | Dec 17, 2015 |
| Management Committee | Jan 6, 2016 |
| Regional Council Approval | Jan 27, 2016 |
| Task Order Development | Jan/Feb 2016 |
| Project Kickoff Meetings | Feb/Mar 2016 |
| Project Completion Deadline | June 30, 2016 |

Information on Project Review Process, Agency Responsibilities etc,

MAG ITS Committee members and MAG staff will review TSOP project applications. All TSOP projects proposed must lead to improvements to traffic signal operations.

Application guidelines and project requirements:

A. Regional Integrated Corridor Management (ICM) Projects involving Signal

Optimization: Requests for regional TSOP projects are being accepted up to a maximum estimated cost of \$60,000 per project. Regional projects shall have at least two agencies involved. The outcome of these projects may be evaluated through a before-and-after study by an independent consultant if it involves regular timing improvements. The scopes of these projects could include:

- Develop the Concept of Operations and Associated Signal Timing Strategies for Integrated Corridor Management: CONSULTANT will provide technical assistance for developing signal timing strategies for freeway-arterial corridors. These projects would typically involve: ADOT, DPS, Maricopa County, Traffic and Law Enforcement staff at affected local agencies.

B. Single/Multi-jurisdictional TSOP Projects: Requests for single agency projects are being accepted up to a maximum estimated cost of \$30,000 per project, and each agency may request ONE single-jurisdiction project. Requests for Multi-jurisdictional projects are accepted up to \$60,000. Agencies can request for any number of multi-jurisdictional projects. The scopes of the Single/Multi-jurisdictional projects could include:

- Signal Timing Refinement Project: CONSULTANT1 will gather traffic data, develop and recommend new signal timing plans. LOCAL AGENCY will implement signal timing. If recommended by the ITS Committee, the project will be subjected to a before-and-after evaluation by CONSULTANT2 (using the MAG methodology). The evaluation report will be provided to the LOCAL AGENCY and MAG.
- Collect Traffic Data Required for Signal Timing Refinement: CONSULTANT1 will gather traffic data and provide them to the LOCAL AGENCY. LOCAL AGENCY staff uses the data to determine new signal timing. New signal timing is implemented in field devices within 4 months of delivery of data. LOCAL AGENCY will also perform a before-and-after study (using the MAG methodology) and deliver the study report to MAG within 6 months and present study findings to the ITS Committee during TSOP program updates.
- Collect Traffic Data Required for Signal Timing Refinement: CONSULTANT1 will gather traffic data and provide them to the LOCAL AGENCY. LOCAL AGENCY staff uses the data to determine new signal timing, and implement new timing in the field within 4 months of delivery of data. CONSULTANT1 will also perform a before-and-after study (using the MAG methodology) and deliver the study report to MAG and the LOCAL AGENCY.

C. SYNCHRO Network Development Projects: These projects must include a task to implement new signal timing on selected portions of the network. These projects may be evaluated through a before-and-after study by an independent consultant.

Regional ITS Priorities Established in the 2012 MAG ITS Strategic Plan:

- ICM Projects with regional significance
- Multi-jurisdictional projects

Local Agency Responsibilities:

Agencies that receive TSOP assistance will be expected to undertake the following:

- Appoint a project manager to be the single source of contact for the agency
- Provide the necessary background information to the CONSULTANTS assigned by MAG to the project, including:
 - Scaled aerial photos or maps of the local agency to create the background SYNCHRO network.
 - A map identifying project boundaries and ALL signalized intersections that are included in the project
 - Existing signal phasing, clearance intervals, lane geometry, speed limits and other timing parameters
- Implement the new signal timing, recommended by the CONSULTANT or developed by LOCAL AGENCY staff using project data, in signal controllers within 4 months to allow for timely before-and after evaluation.
- Provide the final traffic signal timing information to MAG, to be shared with other adjacent jurisdictions via the Regional Archived Data Server (RADS).
- If a before-and-after study was performed by the agency, provide the report to MAG