

## ITS PROJECT APPLICATION FORM – FY 2007-2011 TIP Cover Sheet

**General Instructions:** This form is to be used to request federal Congestion Mitigation and Air Quality (CMAQ) funding available through the Maricopa Association of Governments for Intelligent Transportation System (ITS) projects to be included in the FY 2007-2011 MAG Transportation Improvement Program. Currently funding is available only for **FY 2011**.

Separate application forms are available for bicycle, pedestrian and transit projects. Also, a general application form is provided for projects that do not fit the categories listed. Freeway, street and rail transit projects will be programmed in a separate process, so please **DO NOT** use the general form to apply for funding for freeway, street and rail transit projects.

This application form includes:

- Part A: Project Description and TIP Listing Information. In Part A, the applicant provides the minimum information necessary to list a project in the TIP as required by applicable federal regulations and general descriptive information necessary for MAG staff and technical committees to evaluate the project.
- Part B: Project Congestion Management System (CMS) and Congestion Mitigation Air Quality (CMAQ) Data: In Part B, the applicant provides data necessary for MAG staff to calculate CMS and CMAQ scores for projects.
- Part C: MAG Technical Committee Additional Information. This section is used to collect information requested by the MAG ITS Committee. The MAG ITS Committee is charged with evaluating and recommending ITS projects for federal funding.

**Deadlines and Transmittal Instructions:** This form should be completed and returned to MAG Offices by **5:00 p.m. September 2, 2005**. The mailing address and FAX number for the MAG offices is:

Maricopa Association of Governments  
302 North 1 st Avenue, Suite 300  
Phoenix, Arizona 85003  
FAX Number: (602) 254-6490

If you wish to e-mail this information, please send it to [state@mag.maricopa.gov](mailto:state@mag.maricopa.gov).

**Electronic Download Information:** A downloadable version of these forms in Microsoft Word is available on the MAG website at [www.mag.maricopa.gov](http://www.mag.maricopa.gov). If requested, MAG staff will also provide these forms via e-mail or FAX.

**MAG Contact Information:** If you have any questions, please contact Stephen Tate or Paul Ward at (602) 254-6300 or at [state@mag.maricopa.gov](mailto:state@mag.maricopa.gov).

**Agency Contact Information:** Please complete the following contact information for each project, so that we may contact you should we need additional information.

1. Name of the Agency Contact for the Project Request:	2. Telephone:
3. E-mail	4. Date:

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## ITS PROJECT APPLICATION FORM – FY 2007-2011 TIP

### Part A: Project TIP Listing Information and Description

#### Section Two: Project Description

Please complete the following information for all projects. The information provided is necessary for MAG staff and modal technical advisory committees (TACs) to understand and evaluate the federal funding request. Information supplied under items 1, 2 and 3 will be provided to the TACs as part of the evaluation process.

1. Please attach a map, drawing, photograph, plans or other graphic showing the location of the project. If no graphic is available or it is not feasible to provide one, please indicate this fact in the space below.

2. Please attach a description of the project. This description should be no longer than 150 words and should include a description of the work to be performed, whether the project includes design, right-of-way acquisition and construction phases, identification of any major structures (e.g. bridges) to be constructed and the relationship of the project to other programmed and planned projects in the TIP, regional plan, local capital improvement programs or local plans.

3. Please attach an explanation of why the project should receive MAG federal funding. This explanation should be no longer than 150 words and should describe the problem or goal the project is intended to address. If CMAQ funding is requested the explanation should indicate what air quality benefits are to be achieved by the project. The explanation could also describe the project's expected congestion mitigation or reduction impacts, service to underserved communities, safety benefits, usage levels, advancement of regional or multi-jurisdictional goals, improvement in network continuity and accessibility and other benefits.

4. Explain how the project addresses multi-modal issues. For example, show how the project accommodates the needs of bicyclists and pedestrians by including facilities designed in accordance with: (a) MAG Pedestrian Plan 2000; (b) MAG Pedestrian Area Policies and Design Guidelines; (c) MAG Regional Bicycle Plan; (d) MAG Regional Off-Street System Plan. Describe the pedestrian and/or bicycle facility included in the project and how that facility meets the guidance of the above documents.

5. Explain how this facility meets the needs of older adults. For example, which design elements from FHWA's Highway Design Handbook For Older Drivers and Pedestrians will be incorporated into this project: (a) Larger, better-illuminated signs and higher contrast signage; (b) Advanced distance notification of required tasks (e.g. merge, four-way stops); (c) Consistent overhead placement of lane-use control signs; (d) Increase pedestrian control-signal timing based on an assumed walking speed of .85 meters per second; The use of protected-only operations in turning lanes; Any other older adult considerations.

6. Please provide a cost breakdown for the project including quantities and unit costs used. This information is requested only for the purpose of aiding MAG staff in determining the eligibility of the project for the federal funding requested and for identifying potential problems with the cost estimate.

7. Please provide a schedule for obligating the project. Generally a construction project will require 18 months to design and obtain environmental, right-of-way and utilities clearance necessary to obligate the project. A design project will generally require 3 to 6 months to obligate.

## ITS PROJECT APPLICATION FORM – FY 2007-2011 TIP

### Part B: CMS and CMAQ Data

**General Instructions:** In Part B, the applicant provides data necessary for MAG staff to calculate Congestion Management System (CMS) and CMAQ scores for projects.

**Section One:** Congestion Management System and CMAQ Data

Please complete the following information for all street projects. The information used in this section is used to calculate CMS scores.

1. Current Average Daily Traffic (ADT) on the Facility or the Nearest Parallel Facility of a Similar Type:	2. Name of the Roadway Section Used for the ADT Estimate:	3. Type of Facility to be Improved (Check only <u>one</u> box):  <input type="checkbox"/> Arterial > 4 legs (e.g. Grand) <input type="checkbox"/> Arterial Street <input type="checkbox"/> Collector Street <input type="checkbox"/> Other	
4. Number of <b>Through</b> Lanes Currently on the Facility Prior to Project Completion (Do <u>not</u> include right, left or center turn lanes):	5. Number of <b>Through</b> Lanes on the Facility After the Project is Completed (Do <u>not</u> include auxiliary lanes):	6. Length of the Facility (in miles):	
7. Township Coordinate of the Midpoint of the Facility:	8. Range Coordinate of the Midpoint of the Facility:	9. Section Coordinate of the Midpoint of the Facility:	

10. If the project improves traffic signal coordination, please do the following:
- a. Enter the pre-improvement (current) traffic speed of the traffic corridor:
  - b. In the Table Check the Box in The Row That Best Describes the Project (Check Only One Box):

	Before (Pre-Improvement) Condition	After (Post Improvement) Condition	Expected Increase In Speed
<input type="checkbox"/>	Non-interconnected, pre-timed signals with old timing plan	Advanced computer-based control	25.0 percent
<input type="checkbox"/>	Interconnected, pre-timed signals with old timing plan	Advanced computer-based control	17.5 percent
<input type="checkbox"/>	Non-interconnected signals with traffic-actuated controllers	Advanced computer-based control	16.0 percent
<input type="checkbox"/>	Interconnected, pre-timed signals with actively managed timing	Advanced computer-based control	8.0 percent
<input type="checkbox"/>	Interconnected, pre-timed signals with various forms of master control and various qualities of timing plans	Optimization of signal timing plans. No change in hardware	12.0 percent
<input type="checkbox"/>	Non-interconnected, pre-timed signals with old timing plan	Optimization of Signal Timing Plans	7.5 percent

**ITS PROJECT APPLICATION FORM – FY 2007-2011 TIP**  
**Part B: CMS and CMAQ Data**

11. Other Project Information: (Check as many as are applicable):

- Includes Traffic Signal Improvements for a Single Agency
- Includes Traffic Signal Improvements that Apply to More than One Agency
- Includes FMS Improvements
- The Project Conforms to Local Land Use Plans
- The facility is on the adopted MAG Roads of Regional Significance Network
- Adds Traffic Signals that increase pedestrian crossing time for seniors

12. Management System (Please check only one box)

- |   |   |
|---|---|
| <input type="checkbox"/> Congestion Management System (CMS)             | <input type="checkbox"/> Safety Management System (SMS)     |
| <input type="checkbox"/> Bridge Management System (BMS)                 | <input type="checkbox"/> Intermodal Management System (IMS) |
| <input type="checkbox"/> Pavement Management System (PMS)               | <input type="checkbox"/> Other                              |
| <input type="checkbox"/> Public Transportation Management System (PTMS) |   |

13. Please identify the priority the agency places on this project. If for example, the agency is submitting three requests for ITS projects and this is the agency's highest priority, then a "1" should be entered. Each priority entered should be unique – e.g. no two requests for ITS projects should have the same priority.

## **ITS PROJECT APPLICATION FORM – FY 2007-2011 TIP Part C: MAG Technical Committee Additional Information**

**General Instructions:** This part is required for all ITS projects.

All ITS project requests should also include the coversheet, Part A and Part B of the Transportation Improvement (TIP) ITS Project Application Form.

### **Overview of the ITS Committee Rating System**

The Rating System Subcommittee of the MAG ITS Committee is responsible for developing and refining the MAG ITS Project Rating System. The initial effort on developing a project rating system was launched in 1998 and was used to compare projects in 1998 and 1999. It was by no means a perfect system, but provided a systematic and an objective method to compare projects, taking into account key factors considered important by the committee. The subcommittee further revised this system in June 2000 and in August 2001. The current system was adopted by the MAG ITS Committee on September 6, 2001.

The primary purpose of the ITS Project Rating System is to help the MAG ITS Committee prioritize ITS projects submitted by member agencies for inclusion in the annual update of the Transportation Improvement Program (TIP). Only projects that qualify as ITS projects are rated using this system. How projects are deemed qualified as ITS projects eligible for federal funds, is based on the National ITS Architecture developed by the USDOT. A regional architecture that is compatible with the National ITS Architecture is a requirement for all major metropolitan regions. Such an architecture has been defined for the MAG region and is included in the MAG ITS Strategic Plan Update of April 2001. The National ITS Architecture refers to Market Packages as ITS applications that are tailored to fit real-world transportation problems. Market Package definitions contained within National ITS Architecture documents are used as the sole criteria to determine whether a candidate project submitted by a MAG member agency for inclusion in the TIP qualifies as an ITS project. Projects that may not meet federal requirements to qualify as an ITS project may qualify for federal funding as a street improvement project.

A number of factors are considered in the ITS Project Rating System. They ensure that projects that foster regional integration, consistency with regional architecture, cost-benefit ratio, and equity are given due credit in the project prioritization process. The rating system accomplishes the following:

- Provides the ability to rate projects submitted by all member agencies on an objective basis
- Encourages integrated rather than fragmented systems
- Encourages regional cooperation
- Encourages projects that extend seamlessly across boundaries
- Encourages projects that are likely to yield higher cost-benefits ratio
- Encourages higher matching funds by cities - stretches the federal funds for more projects

### **Website for ITS data entry**

To provide information for the ITS project rating System and obtain the needed reports and other information on ITS see the MAG website at:

<http://www.mag.maricopa.gov/detail.cms?item=3948>

### **Contact Information**

Please contact Sarath Joshua at (602) 254-6300 or [sjoshua@mag.maricopa.gov](mailto:sjoshua@mag.maricopa.gov) for additional information or questions.

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