

INTELLIGENT TRANSPORATATION APPLICATION

General Instructions:

This Excel form is to be used to request federal Congestion Mitigation and Air Quality (CMAQ) funding available through the Maricopa Association of Governments (MAG) for Bicycle Projects to be included in the FY2014-FY 2018 MAG Transportation Improvement Program. Funding is available for Federal Fiscal Year (FFY) 2015, 2016 and 2017.

This application form includes:

- Part A - Contact and Project Description,
- PART B - ITS TIP Listing and CMAQ Score Data,
- PART C - ITS project Description,
- Part D - Checklist and Signature Page, and Transmittal Instructions and Schedule.

Each part is a separate tab of this excel file. Please complete Parts A - D. Alternative application forms are available upon request.

Deadlines and Transmittal Instructions:

Two copies of a printed, complete and signed application must be received in the MAG offices by **10:00 a.m. Wednesday, September 19, 2012**. The application is to be submitted electronically and should include ArcGIS shape files depicting the project location if they are available.

Detailed transmittal instructions are located in a separate tab in this excel sheet. Late applications **will not be accepted.**

If member agencies need additional information or have questions, they should contact Teri Kennedy or Stephen Tate at (602) 254-6300 or contact them by e-mail at the following addresses:

- <mailto:state@azmag.gov>
- <mailto:tkennedy@azmag.gov>
- <mailto:LLuo@azmag.gov>

All information is required, unless noted by the word - Optional.

PART A - CONTACT AND PROJECT DESCRIPTION

Contact Information	
1. Sponsoring Agency	City of Surprise
2. Contact Name	Nicholas Mascia
3. Phone	623-222-6140
4. E-Mail Address	nicholas.mascia@surpriseaz.gov
5. Mailing Address	16000 North Civic Center Plaza Surprise AZ, 85374

(OPTIONAL)

If the applicant will be providing a GIS coverage (shapefile or geodatabase), please see the tab labeled "GIS Transmittal Instructions)

[GIS Submittal Instructions](#)

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PART B-ITS TIP Listing and CMAQ Score Data

This part of the form identifies data to calculate an CMAQ Score and provide the minimum data needed for a listing of the project in the Transportation Improvement Program

Federal Funding Eligibility

All ITS projects to be funded with Federal CMAQ funds must be in the 8-Hour Ozone Nonattainment Area. Please use the following link to verify that the map is located in the nonattainment area:

[Link to an 8-Hr Ozone Nonattainment Map on the MAG Website](#)

1. Traffic Estimate and Roadway Characteristics

a. Current Average Daily Traffic (ADT) on the Facility or the Nearest Parallel Facility of a Similar Type:

b. Please Describe how the ADT was estimated:

c. When was the ADT estimate developed:

d. Name of the Roadway Section Used for the ADT Estimate:

e. Starting Limit of the Roadway Section:

f. Ending Limit of the Roadway Section:

g. Length (Miles)

h. Total Number of Through Lanes on the Roadway Section:

i. Federal Functional Classification of the Roadway Section:
[Link to Functional Classification Map on the MAG Website](#)

2. Traffic Coordination Improvements. 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"/> 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

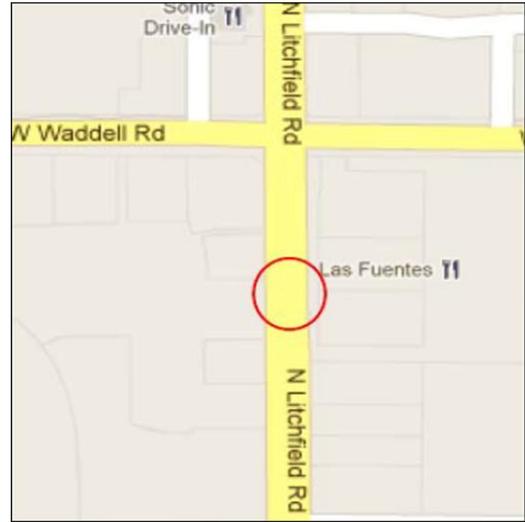
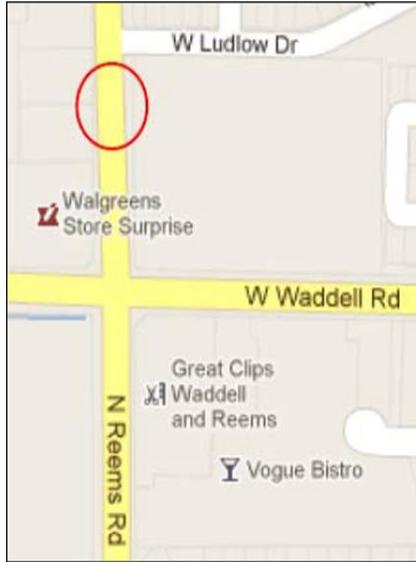
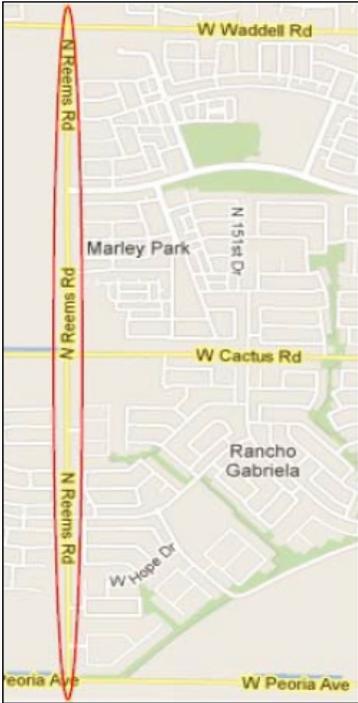
3. Other Improvements. Check all that apply:

- 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
- Adds Traffic Signals that increase pedestrian crossing time for seniors

4. Traffic Speed Impacts of the Project (Not required for Traffic Coordination Improvements)

- a. Enter the pre-improvement (current) traffic speed of the traffic corridor:
- b. Enter the post-improvement (current) traffic speed of the traffic corridor:

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PART C -ITS project Description

Please enter project data ONLY in highlighted cells, save the file with the lead agency name in it - ie. City 0 ITS Projects.xls
 Submit this Excel workbook to MAG via email to: lluo@azmag.gov
 Please use one worksheet per project, with the tab at the bottom indicating agency priority -- Mesa1, Mesa2,.. etc.
 Links to various websites are provided for additional information and help
 The worksheet titled "Example" shows an example on how to enter Data in the highlighted areas

Please enter required information in highlighted cells

A. Project Title & Sponsor

Lead Agency	City of Surprise
Other Partnering Agencies	N/A
ITS Project Title:	Fiber Installation and 2 DMS
Project Category:	Arterial ITS

B. Project Goals & Objectives

Project Goals:
 Install fiber optic backbone in existing conduit and install DMS to enhance the ability to manage traffic during incidents and special events.

Objectives:
 Expand local ITS infrastructure on two (2) local arterial roadways to assist with arterial traffic management.

C. Project Information

Project Location:
 Reems Road between Peoria Avenue and Waddell Road; Reems Road north of Waddell Road; Litchfield Road south of Waddell Road

Scope of the project:
 Procure and install a fiber optic backbone on Reems Road from Peoria Avenue to Waddell Avenue. This fiber optic line would splice on to an existing fiber optic backbone at the intersection of Reems Road and Peoria Avenue. Procure and install necessary equipment to connect the intersections of Reems Road and Cactus Road and Reems Road and Waddell Road to the newly installed Reems Road fiber optic backbone. Install a total of two (2) dynamic message signs at the following locations: Reems Road north of Waddell Road; Litchfield Road south of Waddell Road

D. Identify Components in MAG Regional ITS Architecture

ITS applications	Relevant Applications (ENTER: Yes or No)	Applicable ITS Market Packages http://www.azmag.gov/ITS/	Note: Please attach the Architecture Flow Diagram in the application
1. Traffic Management	Yes	ATMS03,ATMS06	
2. Transit Operations Support	No		
3. Communications	No		
4. Traveler Information	No		
5. Archived Data Management	Yes	ATMS03	
6. ITS for Safety	No		
7. ITS Plans	No		
8. Freeway-Arterial Operations	No		

E. Program Year Preference

First Choice ● FY2015 ● FY2016 ● FY2017
 Second Choice ● FY2015 ● FY2016 ● FY2017
 Third Choice ● FY2015 ● FY2016 ● FY2017

F. Project Budget

	Federal Cost	Local Match (min 5.7%)	Total Cost
Amount	\$875,575.00	\$52,925.00	\$928,500.00
Cost percentage	94.3%	5.7%	

G. Project Schedule

The table below is provided as a tool to assist local agencies develop a project planning schedule. Column A shows standard project milestones and Column B shows the schedule based on a typical project procurement process. To generate a custom Project Schedule:(1) select applicable milestones in Column C;(2) Enter estimated time to complete milestone measured in months from project development start date in Column D; **NOTE: The project obligation date generated in cell E111 MUST occur before Sept 15th of the programmed fiscal year.** Determine the appropriate **Project Activity Start Date** (by trial-and-error) in order to obligate the project on time.

Standard Project Milestones	Default Schedule for Process	Applicable Milestones (ENTER - Yes OR No)	Estimated Time to Milestone (ENTER #Months)	Estimated Date
Apply for ADOT project number				May-2013
Receipt of ADOT project number	Jul-2013	Yes	2	Jul-2013
Initial DCR	Aug-2013	Yes	3	Aug-2013
Final DCR	Sep-2013	Yes	8	Jan-2014
30% Preliminary Plans, Cost Estimate and Report	Nov-2013	Yes	8	Jan-2014
60% Preliminary Plans, Cost Estimate and Report	Jan-2014	Yes	12	May-2014
Final Preliminary Plans, Cost Estimate and Report	Mar-2014	Yes	16	Sep-2014
Environmental Clearance	Jan-2014	Yes	12	May-2014
Utility Clearance	Feb-2014	Yes	12	May-2014
Right-of-Way Clearance	Nov-2013	Yes	12	May-2014
Approval of IGA	May-2014	Yes	20	Jan-2015
Obligation authority of Federal funds	Jun-2014	Yes	25	Jun-2015
Advertised Date	Aug-2014	Yes	2	Aug-2015
Final Deployment	Feb-2015	Yes	8	Apr-2016

< ENTER mm/yyyy -- Project Activity Start Date

H. System Maintenance and Operations

Current staff resources available for ITS operations at the local	4
Additional staff resources required for fully utilizing features added by	none
Estimated current annual ITS operations & maintenance budget	\$45,000
Estimated additional annual operations & maintenance funds required	\$0
Estimated DATE from when required additional O&M funds will be	Jul-2018

check project schedule

Other comments:

I. Systems Engineering Analysis Requirement

Commitment to address the federal requirement for Systems Engineering Analysis:

Agency's intent to follow the process described in the 'V' diagram during the project development process

<http://www.azdot.gov/Highways/TTG/PDF/SystemsEngineeringChecklist.pdf>

PART D - SIGNATURE AND CHECKLIST

As the jurisdiction's manager/administrator or designated representative, I certify that this application is accurate and complete and that the project will be included in the sponsoring MAG member agency's local CIP/TIP if the project is selected for federal funding.

Signature: 

Name: Chris Hillman

Title: City Manager

Date: 9/18/12

WILL FILL OUT AFTER QUESTIONS APPROVED.

Checklist - OPTIONAL

This check list is optional, but is included to facilitate applicant review and verification that all required fields in the form have been completed.

PART A - Contacts and Project Description Fields	Complete?
Contact Information, fields 1 – 5 are complete	✓
PART B - TIP Listing and CMAQ Score Data	Complete?
1. Traffic Estimate and Roadway Characteristics - Fields a - I are complete	✓
2. Traffic Coordination Improvements - as applicable table is complete	✓
3. Other Improvements - As applicable all fields are completed	✓
PART C - Total Project Schedule and Budget Including All Segment Fields	Complete?
Section A is Complete	✓
Section B is Complete	✓
Section C is Complete	✓
Section D is Complete	✓
Section E is Complete	✓
Section F is Complete	✓

Section G is Complete	
Section H is Complete	
Section I is Complete	
PART D - Signature Page Fields	Complete?
Form is signed	
Name, title and date fields are completed.	

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MAG CMAQ Project

Intelligent Transportation Systems Project

Item Description	Unit	Quant.	Unit Prices	Total	Eligible for CMAQ?
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A. SCOPING (15% Preliminary Engineering Design)
(Non-infrastructure projects: Only #2 applies).

1. SITE TOPOGRAPHIC SURVEY	LS	1	\$10,000.00	\$10,000.00	No
2. PROJECT ASSESSMENT REPORT or DETAILED WORKPLAN	LS	1	\$5,000.00	\$5,000.00	No
3. SYSTEMS ENGINEERING ANALYSIS (must address FHWA requirements)	LS	1	\$20,000.00	\$20,000.00	No
4. ENVIRONMENTAL DETERMINATION (Infrastructure projects, including technical supporting documents)	LS	1	\$20,000.00	\$20,000.00	No
5. HAZMAT ASSESSMENT	LS	1	\$5,000.00	\$5,000.00	No
SUBTOTAL – PROJECT SCOPING COSTS				\$60,000.00	\$0

B. FINAL PRELIMINARY ENGINEERING DESIGN - Stages II, III, IV and PS&E
(Not applicable to non-infrastructure projects)

Item Description	Unit	Quant.	Unit Prices	Total	Eligible for CMAQ?
1. Right-of-Way Acquisition	LS	1		\$0.00	No
2. Plans, Special Provisions or Bid Manual, Cost Estimate & Schedules.	LS	1		\$0.00	No
3. GEOTECHNICAL INVESTIGATION and Materials & Pavement Design Report	LS	1		\$0.00	No
4. DRAINAGE REPORT	LS	1		\$0.00	No
5. Storm Water Pollution Prevention Plan (SWPPP)	LS	1		\$0.00	No
SUBTOTAL – PROJECT DESIGN COSTS				\$0.00	\$0

C. CONSTRUCTION OR IMPLEMENTATION

For non-infrastructure projects (no ground disturbing activities), address only parts 2, 3 and D.

1. CONSTRUCTION ELEMENTS (Insert additional rows if necessary)

Item Description	Unit	Quant.	Unit Prices	Total	Eligible for CMAQ?
TOTAL ADOT Fee COST				\$17,070	\$0
E. TOTAL PROJECT COST (All <u>subtotals</u> + ADOT local projects review fee)				\$930,570	\$853,500
F. SUMMARY OF FEDERAL AND NON-FEDERAL FUNDS					
TOTAL COST FOR PROJECT CONSTRUCTION/IMPLEMENTATION					\$930,570
TOTAL COST FOR PROJECT ELIGIBLE FOR FEDERAL REIMBURSEMENT					\$853,500
TOTAL FEDERAL FUNDS @ 94.3% (.943 x Total Eligible Cost shown highlighted above)					\$804,851
LOCAL AGENCY MATCHING FUNDS (.057 x Total Cost shown highlighted above)					\$48,650