

**REQUEST FOR QUALIFICATIONS
ON-CALL CONSULTING SERVICES
FOR
BOTTLENECK DATA COLLECTION, MODEL VALIDATION AND IMPROVEMENT**



January 18, 2013

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PUBLIC NOTICE
REQUEST FOR QUALIFICATIONS
ON-CALL CONSULTANT SERVICES
FOR

BOTTLENECK DATA COLLECTION, MODEL VALIDATION AND IMPROVEMENT

Maricopa Association of Governments (MAG) is seeking a Statement of Qualifications (SOQ) from qualified consultants capable of providing professional services in the area of Bottleneck Data Collection, Model Validation and Improvement to form an On-Call list of consultants to provide services to MAG.

Detailed SOQ requirements may be obtained by contacting the MAG Office at the address indicated below or may be downloaded from <http://www.azmag.gov>, then "RFPs and RFQs".

SOQs will be accepted until 2:00 PM MST (Mountain Standard Time) on February 26, 2013, at MAG, 302 North First Avenue, Suite 300, Phoenix, AZ 85003.

SCOPE OF SERVICES

Introduction

The purpose of this Request for Qualifications (RFQ) is to solicit Statement of Qualifications (SOQ) from consultants to participate in forming an On-Call list to provide Maricopa Association of Governments (MAG) with specialized services in the area of Bottleneck Data Collection, Model Validation and Improvement. The duration of the On-Call list will be thirty six (36) months from the date of selection of vendors. The budgeted amount available for services under this RFQ is \$400,000. The total amount available under each Task Order (defined on Page 3) issued to qualified, approved consultants under this RFQ will vary depending on the desired services.

Background

Maricopa Association of Governments is the designated Metropolitan Planning Organization (MPO) for transportation planning for the metropolitan Phoenix area. MAG is also the designated Air Quality Planning Agency for the region. MAG membership consists of the twenty-five (25) incorporated cities and towns within Maricopa County and the contiguous urbanized area, the Gila River Indian Community, the Salt River Pima-Maricopa Indian Community, Fort McDowell Yavapai Nation, Maricopa County, the Arizona Department of Transportation (ADOT), and the Citizens Transportation Oversight Committee (CTOC). ADOT and CTOC serve as ex-officio members for transportation-related issues.

As the designated Metropolitan Planning Organization (MPO) MAG is responsible for the development of transportation plans and programs. As the lead air quality planning agency, MAG is responsible for assembling air quality plans. MAG also is involved in land use, water, human services, and other regional planning programs. These programs rely heavily on official socioeconomic projections approved by the MAG Regional Council.

MAG's system analysis program collects and maintains transportation data for the purposes of regional transportation planning and forecasting, transportation system monitoring, and system analysis. MAG maintains and updates extensive traffic counts, travel time, and speed datasets as well as a variety of travel and socio-economic information in accordance with federal requirements and regional planning needs. MAG is charged with developing, maintaining and applying a variety of the regional transportation forecasting models and tools. The MAG regional four-step based travel demand forecasting model currently serves as the main tool for providing regional travel demand, traffic and transit ridership forecasts for the planning decisions in areas such as transportation, air quality, transportation policy, transportation programming, and other planning efforts of regional significance. Timely update of traffic data and the model is important for maintaining currency of the regional forecasts and answering emerging and ongoing regional planning needs.

As part of the Project, the selected CONSULTANT(s) will be requested to collect traffic data in support of bottleneck analysis and transportation modeling activities at MAG. The selected CONSULTANT(s) may be required to collect different types of traffic data or develop a data analysis methodology. Exact spatial and temporal scope of the data collection services will be determined through the relevant Task Orders. The CONSULTANT may be required to develop and implement model improvements based on the new data sets and ongoing planning tasks. All deliverables and related information, including data and software, shall be thoroughly documented and become the property of MAG.

Goals and Objectives

The overall goal of this Project is to provide data collection, analysis and modeling support for the development of bottleneck evaluation, model improvement and update in support of transportation planning activities at MAG. The Project objectives are the following:

- Collect required traffic data for the purposes of bottleneck analysis.
- Analyze and apply collected data sets in relevant transportation planning and modeling activities at MAG.

What is the Purpose of the On-Call Consultant List?

In order to expedite the delivery of consultant services, MAG will preselect an On-Call list of qualified Consultants to participate in the Bottleneck Data Collection, Model Validation and Improvement On-Call services program. The intent of this program is to enable MAG staff to augment existing resources by forming a pool of qualified Consultants to provide specialized services that are required for executing tasks and projects in identified areas ("Task Orders"). It is anticipated that the selected Consultants will utilize state-of-the-art engineering and planning tools in executing the Task Orders. All third party software and programming languages used for the various tasks shall be agreed upon in advance.

The initial budget of \$400,000 for the Bottleneck Data Collection, Model Validation and Improvement On-Call Consultant projects is included as funding in the MAG current FY Unified Planning Work Program and Annual Budget.

REQUIRED CONSULTING SERVICES AND ANTICIPATED PROJECTS

A. Area of Expertise: Traffic Bottleneck Data Collection and Analysis

The CONSULTANT will demonstrate the qualification for at least one or several sub-areas of expertise below:

1. Traffic Bottleneck and Hotspot Analysis:

The CONSULTANT will develop freeway bottleneck and arterial hot-spot identification algorithms based on traffic data available in the MAG region. The CONSULTANT will evaluate recurring bottlenecks and hot-spots and recommend a systematic data collection plan for further investigation. The ability to conduct traffic congestion studies and comprehensive traffic data analyses and visualizations is required. Experience in bottleneck identification, congestion monitoring and traffic operations is preferred. Close ongoing coordination with MAG staff will be required (as per Task Orders).

2. Traffic Data Collection and Commercial Traffic Data Purchase:

The CONSULTANT will conduct traffic data collection on freeways and arterial streets as per MAG's planning and modeling data requirements. The ability to conduct data collection of traffic volume, speed, travel time, vehicle classification, and vehicle trajectory on freeways and arterial streets is required. The CONSULTANT will provide an archived historical speed database in the MAG region as per scope of services in relevant Task Orders. The ability to provide archived historical speed and travel time data on freeways and arterial streets is required. Local experience in traffic data collection is preferred. MAG encourages innovative data collection methodologies and technologies in order to improve data quality and efficiency of data collection exercises. Ability to quickly deploy resources for a traffic data collection job is desirable. Close ongoing coordination with other consultants and MAG staff will be required (as per Task Orders). Other data sets might be identified for collection or purchase as will be required for ongoing modeling tasks.

3. Aerial Photography Survey:

The CONSULTANT will conduct aerial photography survey on bottleneck and hotspot areas. Demonstrated experience in large scale aerial photography traffic survey on transportation roadways is required. Experience in analyzing traffic congestion and bottleneck conditions using aerial photography survey results is required. Expertise in image data processing, traffic flow theory, and data visualization is required. Close ongoing coordination with other consultants and MAG staff will be required (as per Task Orders).

B. Area of Expertise: Transportation Model Development and Application

The newly collected data sets from the bottleneck study will be utilized for the purposes of developing the MAG regional traffic forecasting model and MAG dynamic traffic simulation models. Tasks of methodological model re-calibration, model improvements, model maintenance, and model software improvement will be assigned. Expertise is desired in regional four-step trip-based model development and dynamics traffic assignment models for large metropolitan areas. Expertise in TransCAD, GIS-DK, Java and Fortran will be required for the purposes of model software improvement and modification. Quality control, quality assurance, well documented and implemented testing and debugging procedures will be emphasized in the anticipated Task Orders. Demonstrated expertise in four-step based models and special market sub-models sensitivity testing and validation in general is required. Complementary expertise in software testing, software quality control, software documentation and related disciplines is desirable.

Anticipated Projects:

The overall goal is to provide data collection and analysis, and modeling support for the development of bottleneck evaluation, model improvement and update in support of transportation planning activities at MAG. The following section provides a sample of the types of projects for which MAG may require assistance:

1. Bottleneck Identification Algorithm, Methodology and Evaluation.

This project will analyze the latest historical traffic data (speed, volume, and travel time) available to MAG, and develop bottleneck identification algorithms and a methodology for MAG. Investigation of characteristics of bottlenecks and hot-spots are required, such as congestion level, duration of congestion, and their economic impact. The project will define a list of bottlenecks and freight bottlenecks existing in the current MAG transportation network for further evaluation. The results of this project will be necessary in conducting advanced bottleneck analyses as described in the following anticipated projects. The final report will be delivered to MAG in a mutually agreed upon format. The specific scope will be defined in the Task Order scope of services. Multiple Task Orders may be issued.

2. Advanced Bottleneck Data Collection Planning and Bottleneck Analysis.

This project will design a comprehensive data collection plan to be deployed at specific bottleneck vicinity areas as defined by MAG. The project will guide a variety of advanced data collection efforts to gather necessary information for assessing bottleneck characteristics. Expertise in investigating bottleneck causes and bottleneck mitigation solutions may be required. The final report will be delivered to MAG in a mutually agreed upon format. The specific scope will be defined in the Task Order scope of services. Multiple Task Orders may be issued.

3. Development of Archived Historical Speed Database.

An archived historical speed geo-database in the MAG region will be purchased from private sector companies. It is required that the database will cover the majority of freeways and arterial streets in the MAG region and adjacent areas. The data will be delivered to MAG in the mutually agreed upon database format. This data will be necessary in conducting transportation modeling and bottleneck analyses and MAG should obtain full ownership of the data purchased. The specific data purchase requirements will be defined in the Task Order scope of services. Multiple Task Orders may be issued.

4. Bottleneck Aerial Photography Survey.

This project will collect aerial photography and video data in specific bottleneck areas as defined by MAG. This survey will be used in examining queue development and traffic movement characteristics at bottlenecks. The specific aerial photography survey method and plan will be defined in the Task Order scope of services. Close coordination with other consultants and MAG staff will be required.

The final results will be delivered to MAG in a mutually agreed upon format. Multiple Task Orders may be issued.

5. Advanced Traffic Data Collection.

This project will collect a variety of traffic data to assist bottleneck analysis. Innovative data collection methodologies and technologies are encouraged. The data includes, but is not limited to, traffic volume, travel speed, travel time, queue length (or queue population), vehicle trajectory, and lane changing pattern. The ability to quickly deploy resources and local experience in securing relevant permits for data collection is required. The specific data collection method and plan will be defined in the scope of services for individual Task Orders. Close coordination with other consultants and MAG staff will be required. The final results will be delivered to MAG in a mutually agreed upon format. Multiple Task Orders may be issued.

6. Transportation Data Management Service.

This project will address MAG's transportation data management needs in a variety of fields. It is required for consultants to work closely with MAG staff to develop programs and tools which would automate data processing, analytical and visualization tasks. Demonstrated experience in development of transportation data management software and systems is required. Final deliverables will be included on MAG's transportation web portal or integrated with internal data analysis routines. Close coordination with performance management tasks might be required. The specific work will be defined in the Task Order scope of services. Multiple Task Orders may be issued.

7. Model Update Based on New Data Sets.

This project will update and validate the MAG transportation models based on the recently collected data. Task orders will include modifications and development of special purpose sub-models based on the new data sets collected in this on-call. Changes to the regional travel demand model based on the recently collected data will be required. Consultants will work with MAG staff in developing and improving routines, procedures and standards in the model. Multiple Task Orders may be issued relating to this project. The specific work will be defined in the scope of services for individual Task Orders.

8. Model Software Development, Testing and Application.

As per changes required by model re-calibration updates, new development, testing and implementation of the MAG transportation model software will be required in order to reduce model run times, improve model integrity, transparency, and address software legacy issues. The specific areas of software development will be defined in the Task Order scope of services. Multiple Task Orders may be issued.

MAG reserves the right to amend the above list of projects at its sole discretion based on the emerging planning needs and issues that might be identified during the data collection and model improvement and update. Actual Task Orders might differ in name, scope or sequence from the list of projects provided above. Other Task Orders in the area of expertise might be issued as well to address needs of the On-Call support.

STATEMENT OF QUALIFICATIONS (SOQ) REQUIREMENTS AND CONTENT

It is required that the SOQ include the following items in the same order as they are listed below. Failure to provide the requested information may result in rejection of the SOQ. Brief and concise submittals are encouraged. The total number of pages must not exceed forty (40) pages total, entirely on letter size (8.5 x 11 inches), excluding the resumes, the cover letter, tabs, and appendices. Blank pages are not included in the total page count.

1. **Identification.** A title sheet or equivalent which includes:
 - a. The title of this solicitation.
 - b. Proposer's name and business address.
 - c. The name, title, mailing address, and telephone and fax numbers of the principal contact.
2. **Table of Contents.**
3. **Organization and Approach.** A brief statement describing the CONSULTANT's organization and outlining its approach to completing the work required for the range of projects included in this solicitation. This statement should briefly illustrate the CONSULTANT's overall understanding of specific areas of expertise as well as the anticipated projects listed.
4. **Background of Firm.** Background information regarding CONSULTANT, including:
 - a. Number of employees (by type of professional expertise and managerial role in the company).
 - b. Length of time the CONSULTANT has been in business.
 - c. Number of affiliated offices (if applicable).
5. **Range of Services Offered.** Identification of the specific services that the CONSULTANT is qualified in and plans to provide to MAG. Related services may be offered in addition to those referenced above in the Section titled "REQUIRED CONSULTING SERVICES AND ANTICIPATED PROJECTS." The CONSULTANT does not have to submit a response to all the required areas of expertise and anticipated projects listed to be favorably considered. This information must be provided in a spreadsheet format, clearly identifying the firm's role and the role of Subconsultants. Therefore, all SOQs should include sufficient personnel resources for carrying out all types of anticipated work in each area of expertise offered.
6. **Recent Examples.** Examples of successful, recent experience in providing consultant services in each of the areas of expertise identified above. Preference will be given to Consultants with demonstrated experience and expertise in successfully performing work of a similar nature or related nature.
7. **References.** One reference for each example submitted under item six (6), above. Include the following:
 - a. Date of the project.
 - b. Name and address of client.
 - c. Name and telephone number of the individual in the client organization that had management responsibility for the project.
 - d. Relevance to this SOQ.

- e. Brief description of the project.
8. **Individuals and Expertise.** A complete listing of all individuals to be included under each area of expertise, specifying their level of participation in each of the examples for the areas of expertise identified in item six (6). This information must be provided in a spreadsheet or tabular format with Subconsultants listed separately. Project managers on assignments that involve traffic engineering elements must be a currently registered engineer in Arizona.
9. **Resumes.** Resumes of each person listed in item eight (8) above, indicating education and experience relevant to the areas of expertise. Include abstracts of previously completed similar projects.
10. **Subconsultants.** The name, address, telephone number, and primary contact for Subconsultants included in the project (if any). For each Subconsultant, include resumes of the individuals to be assigned to the project and at least two (2) references which include:
- a. Date of the project.
 - b. Name and address of client.
 - c. Name and telephone number of the individual in the client organization that had management responsibility for the project.
 - d. Relevance to this SOQ.
 - e. Brief description of the project.
11. **Additional Information.** Any additional information that the CONSULTANT believes would be useful to MAG in evaluating the CONSULTANT's SOQ.
12. **Rules of Professional Conduct Certification Statement.** A signed statement, located on the last page of Appendix A, certifying that CONSULTANT will comply with, in all respects, the rules of professional conduct set forth in A.A.C. R4-30-301 (Appendix A), which is the official compilation of Administrative Rules and Regulations for the State of Arizona.
13. **Information Form.** A completed Proposer's Information Form (Appendix B). If applicable, completed Proposer's Information Form for each Subconsultant proposed for this project.
- By signature on the Proposers Information Form, the CONSULTANT certifies that:
- a. The submission of the offer did not involve collusion or other anti-competitive practices.
 - b. The CONSULTANT will not discriminate against any employee or applicant for employment in violation of Federal Executive Order 11246.
 - c. The CONSULTANT has not given or offered to give and does not intend to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip favor, or service to a public servant in connection with the submitted offer.
 - d. Failure to sign the offer, or the falsity of a statement in a signed offer, shall void the submitted offer or any resulting contracts, and the CONSULTANT may be debarred.
14. **Debarment and Suspension Certification.** As required by 49 CFR 29 (Debarment and Suspension), certification of Consultant's eligibility to receive Federal funds and a copy of such certification for which may be furnished to ADOT or other government entities. A certification to this effect is included in this RFQ as Appendix C and must be submitted by Consultant in order for CONSULTANT to be considered responsible and their SOQ to be considered responsive.

15. **Authorized Signer Signature.** The SOQ shall be signed by a representative or officer authorized to bind the CONSULTANT. Individuals of the CONSULTANT qualified to negotiate a contract with MAG regarding the SOQ shall be identified by name, title, address, and telephone number.
16. **Confidential Portions Identification.** In accordance with Arizona Administrative Code R2-7-103, CONSULTANT may designate as confidential portions of a SOQ. A summary index of any such designation must be included in the Table of Contents or cover letter in the SOQ documents. If MAG determines to disclose the information provided, MAG shall inform the CONSULTANT in writing of such determination.
17. *Disclaimer: **Anti-Lobbying:** MAG complies with the provisions of Section 1352 of Title 31, U.S. Code (Public law 101.121) as codified in Title 48, Federal Acquisition Regulations Subpart 3.8 and Subpart 52.203-11 and 23 CFR 630.112(c)(5). That legislation prohibits Federal funds from being expended by a recipient or any lower tier sub-recipients of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence a Federal agency or Congress in connection with the award of any Federal contract, the making of any Federal grant or loan, or entering into any cooperative agreement, including the extension, continuation, renewal, amendments or modification of any Federal contract, grant, loan or cooperative agreement.*

STATEMENT OF QUALIFICATIONS (SOQ) DELIVERY AND OPENING

Ten (10) copies of the SOQ, entirely on letter size (8.5 x 11 inches) paper, should be submitted by 2:00 PM Mountain Standard Time (MST), February 26, 2013, to the following address:

Maricopa Association of Governments
Attention: Vladimir Livshits
302 North First Avenue, Suite 300
Phoenix, AZ 85003

Timely receipt of SOQs shall be determined by the date and time the SOQ is received at the above address. No late submissions, facsimile, or electronic submissions shall be accepted after the time indicated. Hand delivery is therefore encouraged to assure timely receipt. SOQs received after the deadline shall be stamped for time and date and returned unopened to the CONSULTANT.

All material submitted in response to this solicitation becomes the property of MAG and shall not be returned. After contract award, the SOQ shall be open for public inspection except to the extent that the withholding of information is permitted or required by law. If the CONSULTANT designates a portion of its SOQ as confidential, it shall isolate and identify in writing the confidential portions in accordance with Arizona Administrative Code R2-7-103 and shall be included in the SOQ. Upon receipt of written notification, MAG will review any portions of the SOQ that the CONSULTANT considers to be confidential and will then make a determination on what should be released. MAG will also notify the CONSULTANT in writing of the determination and provide an opportunity for the CONSULTANT to respond to the decision prior to releasing the SOQ.

Any questions regarding this Request for Qualifications should be submitted in writing to Vladimir Livshits, System Analysis Program Manager by fax at 602-254-6490; or by email at vlivshits@azmag.gov not later than eight (8) working days prior to the closing date of February 26, 2013. Responses to questions submitted will be posted on the MAG Web site at <http://www.azmag.gov> under "RFPs and RFQs" not later than five (5) working days prior to the closing date of February 26, 2013. Additional information regarding MAG activities, including Committee meeting schedules, may be found on the MAG Web site <http://www.azmag.gov>.

PHASE 1 - STATEMENT OF QUALIFICATIONS EVALUATION AND SELECTION PROCESS

1. **Evaluation Criteria.** All SOQs submitted will be evaluated by a group consisting of MAG staff and member agencies. Evaluation criteria include, but are not limited to, the following:
 - a. Demonstration of the overall understanding of goals and objectives of this solicitation.
 - b. Clarity of SOQ, realistic approach, technical soundness, and enhancements to elements outlined in this RFQ.
 - c. Education and relevant experience of personnel in providing similar services. Only those personnel that will be assigned to work directly on each area should be cited.
 - d. Proven track record in the areas of expertise sought. Consultant should clearly identify the principal people who worked on past projects and the amount of time they devoted to the work effort.
 - e. Availability of key personnel throughout the project effort.
 - f. Ability and commitment to deliver required products and services, meet all deadlines for submitting associated work products, and ensure quality control.
 - g. Recognition of work priorities and flexibility to deal with change and contingencies.
2. **References.** As part of its final selection, MAG reserves the right to contact a reasonable number of references from among those provided by the CONSULTANT.
3. As provided by Arizona Administrative Code R2-7-101, discussions may be conducted with Proposers who submit SOQs determined likely to be selected for inclusion in the Bottleneck Data Collection, Model Validation and Improvement On-Call Consultant list. If discussions are conducted during Phase 2 pursuant to Arizona Administrative Code R2-7-101, MAG shall issue a written request for best and final offers. Award may be made without discussions; therefore, SOQs shall be submitted on complete and on most favorable terms. The selection of a CONSULTANT will be based solely on qualifications and exclude consideration of price or fee. MAG will negotiate compensation with the CONSULTANT determined to be the most qualified; and, if a fair and reasonable compensation cannot be negotiated with CONSULTANT, MAG may initiate negotiations with the next most qualified CONSULTANT.
4. **MAG Approval.** A recommendation for inclusion of the selected CONSULTANT(s) in the Bottleneck Data Collection, Model Validation and Improvement On-Call Consultant list shall be made by the MAG Executive Director to the MAG Regional Council. The decision of the Regional Council is final.
5. MAG reserves the right to:
 - a. Cancel this solicitation.
 - b. Reject any and all proposals and re-advertise.
 - c. Select the SOQ that will, in its judgment, best meet MAG's needs, despite any differences in estimated project costs between the CONSULTANT and all others.
 - d. Negotiate a contract that covers selected parts of a proposal, or a contract that will be interrupted for a period, or canceled, for lack of funds.
 - e. Conform with the State of Arizona Public Records law(s).

PHASE 2 - QUALIFICATIONS MATRIX AND CONTRACT

1. **Format.** The format for Phase 2 response shall be provided to the selected On-Call CONSULTANT(s).
2. **Qualifications Matrix.** A qualification matrix listing all personal that will be made available for work performed under the On-Call Contract shall be provided by the CONSULTANT(s). Information to be listed on the matrix includes the name of all personnel, staff classification or job title, years of experience, and any relevant qualifications or certifications.
3. **MAG Contract.** Selected On-Call CONSULTANT(s) shall enter into a MAG On-Call Contract to provide services in areas for which they have been qualified.
4. **Contract Term.** The terms of any resultant On-Call Contract(s) for MAG shall commence on the contract enter date and may continue up to three (3) years, unless terminated, cancelled, or extended as otherwise provided herein.
5. **Contract Extension.** MAG reserves the right to unilaterally extend the period of any resultant contract for thirty-one (31) days beyond the stated expiration date. In addition, by mutual written agreement, any resultant contract may be extended for supplemental periods as approved by MAG.
6. **Insurance.** MAG requires that the CONSULTANT and, if applicable, Subconsultants, to maintain insurance coverages appropriate to any executed contracts. Insurance required by MAG must be met following award of a contract, and prior to CONSULTANT and, if applicable, Subconsultants, beginning work on a Task Order.

PHASE 3 - PROJECT INITIATION

1. **Request for Technical and Pricing Proposal.** To initiate a project under this contract, MAG will provide a brief scope of services for the Task Order and request a technical and pricing proposal, based on the rate and personnel schedules described above, to be submitted to MAG within two (2) weeks of receipt by selected On-Call CONSULTANT. The CONSULTANT's proposal shall include the project scope of services, required schedule, a list of deliverables, and pricing. MAG reserves the right to select and request proposals from more than one Consultant on the qualified On-Call list to respond to any specific Task Order. For all projects that are estimated to exceed \$100,000 in total cost, a minimum of three (3) qualified Consultants shall be invited to submit proposals. (See CONSULTANT SELECTION FROM MULTIPLE CONTRACTS section below.)
2. **Response.** Responses to a Task Order shall be in writing and submitted to MAG Project Manager. Pricing submitted shall include listing of proposed staff, staff position description (i.e., Project Manager, Systems Integrator), hourly rate according to the rate schedule for the period to be covered by the project in question, estimated number of hours, and anticipated travel expenses. Items shall be totaled and the total shall be a NOT TO EXCEED amount. MAG will finalize the scope of services and project pricing in consultation with the CONSULTANT and other stakeholder agencies with direct involvement in the project.
3. **Task Order Agreement.** Upon finalization of the scope of services, cost, and project schedule, a Task Order agreement shall be executed. The CONSULTANT will commence work upon an approval notice from the Project Manager.
4. **Task Order Duration.** Duration of services for projects to be completed under this contract may vary from a few weeks to several months and will be dependent on the scope of services of each project. The schedule and duration will be as specified in the executed Task Order for each project. The CONSULTANT will submit any changes to the project schedule in a format specified by MAG.

VENDOR INFORMATION

Prior to issuance of a Task Order and subsequent payment, the selected On-Call CONSULTANT will have a completed Federal Form W-9 and Proof of Insurance on file with MAG. No payments shall be made until the forms are on file.

PERFORMANCE STANDARDS

MAG relies upon the provision of services in accordance with the contract; therefore, the CONSULTANT will agree that time is of the essence, and that contractual commitments shall be met.

The CONSULTANT agrees that CONSULTANT's employees shall not divulge or release data or information developed obtained in connection with the performance of the resulting contract, unless made public by MAG.

CONSULTANT SELECTION FROM MULTIPLE CONTRACTS

MAG makes no guarantee as to the amount of work to be assigned to any Consultant and may exercise its option not to utilize the services requested herein. MAG is under no financial obligation to any selected Consultant unless MAG issues a Task Order for a specific requirement.

Experience of the CONSULTANT, qualifications, education, and experience of the staff will be the criteria used to make a determination as to which Consultants will be contacted for consideration to perform required services. Each Consultant contacted will have the opportunity to indicate their availability and prepare a staffing plan and detailed approach for the desired work assignment. If substitution of staff is required after commencement of assignment, replacement must possess comparable qualifications and must receive prior written approval from MAG.

MAG will select the CONSULTANT(s) which best addresses MAG requirements. MAG will attempt to reach an agreement with the most qualified Consultant in MAG's opinion. If MAG cannot reach an agreement with the selected CONSULTANT, MAG may choose to select another Consultant from the On-Call pool or rebid the required services.

Projects that exceed \$100,000 in estimated total cost:

The consultant selection process for all projects that are estimated to exceed \$100,000 in total cost will include detailed technical proposals from at least three (3) qualified Consultants listed on the Bottleneck Data Collection, Model Validation and Improvement On-Call Consultant list. MAG reserves the right to interview one (1) or more of the responding Consultants prior to a final decision on the award of a Task Order. For such projects, Consultants invited to respond will be provided a reasonable period of time, to be determined by MAG, to prepare and submit proposals. If interviews are held, at least two (2) weeks' notice will be provided.

CHANGES IN SERVICES

Significant changes in the scope, character, or complexity of the services shall not be negotiated under this contract. Changes in services may result in the contract being canceled and rebid. Should this be required, all Consultants will be notified in writing within 30 (thirty) days prior to cancellation.

PROJECT ADMINISTRATION AND PROJECT MANAGEMENT

The MAG Project Manager is Vladimir Livshits, System Analysis Program Manager, for the On-Call Consultant Services for Bottleneck Data Collection, Model Validation and Improvement On-Call, who will provide general direction as necessary and who will be responsible for decisions pertaining to work under the contract.

PAYMENT

The CONSULTANT will be paid based on the negotiated scope of services, budget, schedule, and fee.

Progress reports and invoices shall be submitted according to intervals specified in the final Consultant contract or Task Order for reimbursement of costs incurred in conformance with the project budget. The progress reports shall document services by each work task, the hours worked, and the hourly rate of each person, and other direct expenses. All costs incurred in preparing invoices shall be included in the general and administrative expenses or the overhead. MAG will provide to the CONSULTANT the format to be used for invoices and progress reports.

MAG shall retain ten percent (10%) of the amount billed until satisfactory completion of the project. Final payment shall be made as soon as possible after the date of acceptance.

INVOICING REQUIREMENTS

All invoices for this contract shall be delivered in person or sent by mail addressed as follows:

Maricopa Association of Governments
Attention: Accounts Payable
302 North First Avenue, Suite 300
Phoenix, AZ 85003

ADMINISTRATIVE REQUIREMENTS

1. The CONSULTANT agrees and understands that the Bottleneck Data Collection, Model Validation and Improvement On-Call Contract shall not be construed as an exclusive arrangement and further agrees that MAG may secure similar services with other contracted sources at any time in conjunction with, or in replacement of, the proposed services.
2. The basis for payment to the CONSULTANT for services rendered shall be based on the negotiated scope of services, budget, approved rate schedule for the prime Consultant and/or any Subconsultants, and fee.
3. An audit examination of the CONSULTANT's records may be required.
4. During project execution, a progress report shall be submitted along with the invoice within ten (10) working days after the end of each month until the final report is submitted. Each report should include a comprehensive narrative of the activities performed during the month, an estimated percent completed for each project task, monthly and cumulative costs by task, activities of any Subconsultants, payments to any Subconsultants, and a discussion of any notable issues or problems being addressed.
5. Each Consultant selected must document any potential conflicts of interest during the contract period. A conflict of interest shall be cause for terminating a contract. A potential conflict of interest includes, but is not limited to, the following:
 - a. Accepting an assignment where duty to the client would conflict with the CONSULTANT's personal interest or the interest of another client.
 - b. Performing work for a client or having an interest which conflicts with this contract.
 - c. Employing personnel who worked for MAG or one of its member agencies within the past three (3) years.

MAG shall be the final determining body as to whether a conflict of interest exists.

6. MAG, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C 2000d to 2000d-4 and Title 49, the Civil Rights Restoration Act of 1987 (Public Law 100.259). Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all Consultants that it will affirmatively insure that in any contract entered into pursuant to this solicitation, minority business enterprises will be afforded full opportunity to submit SFQs in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award. Any contract resulting from this RFQ shall contain Title VI compliance language as specified in Appendix D of this RFQ.
7. The CONSULTANTS selected shall be required to comply with MAG insurance requirements, which may include Workmen's Compensation, Architects and Engineers Professional Liability insurance, Commercial General Liability insurance, Business Automobile Liability insurance, and Valuable Papers insurance.
8. Small and Minority Business and Women's Business Enterprises.
 - a. It is MAG's policy, as a federally assisted agency, to encourage small and minority businesses and women's business enterprises to submit proposals.
 - b. State whether the primary Consultant firm or any Subconsultants are a small or minority business or a woman's business enterprise.

APPENDIX A - ARIZONA ADMINISTRATIVE CODE R4-30-301

CH. 30

BOARD OF TECHNICAL REGISTRATION

R4-30-301

ARTICLE 3. REGULATORY PROVISION R4-30-301. Rules of Professional Conduct

All registrants shall comply with the following rules of professional conduct:

1. A registrant shall not submit any materially false statements or fail to disclose any material facts requested in connection with an application for registration or certification, or in response to a subpoena.
2. A registrant shall not engage in fraud, deceit, misrepresentation or concealment of material facts in advertising, soliciting, or providing professional services to members of the public.
3. A registrant shall not commit bribery of a public servant as proscribed in A.R.S. § 13-2602, commit commercial bribery as proscribed in A.R.S. § 13-2605, or violate any Federal statute concerning bribery.
4. A registrant shall comply with State, municipal, and county laws, codes, ordinances, and regulations pertaining to the registrant's area of practice.
5. A registrant shall not violate any State or Federal criminal statute involving dishonesty, fraud, misrepresentation, embezzlement, theft, forgery, perjury, bribery, or breach of fiduciary duty, if the violation is reasonably related to the registrant's area of practice.
6. A registrant shall apply the technical knowledge and skill that would be applied by other qualified registrants who practice the same profession in the same area and at the same time.
7. A registrant shall not accept an engagement if the duty to a client or the public would conflict with the registrant's personal interest or the interest of another client without making a full written disclosure of all material facts of the conflict to each person who might be related to or affected by the engagement.
8. A registrant shall not accept compensation for services related to the same engagement from more than one party without making a full written disclosure of all material facts to all parties and obtaining the express written consent of all parties involved.
9. A registrant shall make full disclosure to all parties concerning:
 - a. Any transaction involving payments to any person for the purpose of securing a contract, assignment, or engagement, except payments for actual and substantial technical assistance in preparing the proposal; or
 - b. Any monetary, financial, or beneficial interest the registrant holds in a contracting firm or other entity providing goods or services, other than the registrant's professional services, to a project or engagement.
10. A registrant shall not solicit, receive, or accept compensation from material, equipment, or other product or services suppliers for specifying or endorsing their products, goods or services to any client or other person without full written disclosure to all parties.
11. If a registrant's professional judgment is overruled or not adhered to under circumstances where a serious threat to the public health, safety, or welfare may result, the registrant shall immediately notify the responsible party, appropriate building official, or agency, and the Board of the specific nature of the public threat.

12. If called upon or employed as an arbitrator to interpret contracts, to judge contract performance, or to perform any other arbitration duties, the registrant shall render decisions impartially and without bias to any party.
13. To the extent applicable to the professional engagement, a registrant shall conduct a land survey engagement in accordance with the April 12, 2001 Arizona Professional Lands Surveyors Association (APLS) Arizona Boundary Survey Minimum Standards, as adopted by the Board on June 15, 2001, the provisions of which are incorporated in this subsection by reference and on file with the Office of the Secretary of State. This incorporation by reference does not include any later amendments or editions and is available at the Board's office and APLS at <http://www.aia.org>.
14. A registrant shall comply with any subpoena issued by the Board or its designated administrative law judge.
15. A registrant shall update the registrant's address and telephone number of record with the Board within 30 days of the date of any change.
16. A registrant shall not sign, stamp, or seal any professional documents not prepared by the registrant or a bona fide employee of the registrant.
17. Except as provided in subsections (18) and (19), a registrant shall not accept any professional engagement or assignment outside the registrant's professional registration category unless:
 - a. The registrant is qualified by education, technical knowledge, or experience to perform the work; and
 - b. The work is exempt under A.R.S. § 32-143.
18. A registered professional engineer may accept professional engagements or assignments in branches of engineering other than that branch in which the registrant has demonstrated proficiency by registration but only if the registrant has the education, technical knowledge, or experience to perform such engagements or assignments.
19. Except as otherwise provided by law, a registrant may act as the prime professional for a given project and select collaborating professionals; however, the registrant shall perform only those professional services for which the registrant is qualified by registration to perform and shall seal and sign only the work prepared by the registrant or by the registrant's bona fide employee.
20. A registrant who is designated as a responsible registrant shall be responsible for the firm or corporation. The Board may impose disciplinary action on the responsible registrant for any violation of Board statutes or rules that is committed by a non-registrant employee, firm, or corporation.
21. A registrant shall not enter into a contract for expert witness services on a contingency fee basis or any other arrangement in a disputed matter where the registrant's fee is directly related to the outcome of the dispute.

Amended by final rulemaking at 12 A.A.R. 1609, effective July 1, 2006 (Supp. 06-2).

COMPLIANCE WITH RULES OF PROFESSIONAL CONDUCT CERTIFICATION

I hereby certify to the best of my knowledge and belief that _____
(Name of Consulting Firm)

and I _____ as the _____ shall comply with, in all
(Name) (Title)

respects, the rules of professional conduct set forth in A.A.C. R4-30-301.

(Signature)

(Print Name)

(Date)

APPENDIX B - PROPOSER'S INFORMATION FORM

Consultants proposing as prime Consultants or Subconsultants on Maricopa Association of Governments' (MAG) projects are required complete this form and return it with your proposal.

If you have any questions about this registration form, please call the MAG Fiscal Services Manager, (602) 254-6300.

1. GENERAL INFORMATION:

Name of Firm: _____

Street Address: _____

City, State, ZIP: _____

Mailing Address: _____

City, State, ZIP: _____

Telephone Number: _____ Fax Number: _____

E-mail address: _____

Web address: _____ Year firm was established _____

Is this firm a prime Consultant? _____ Yes _____ No

Is this firm a Subconsultant? _____ Yes _____ No

If so, Identify specialty: _____

Is this firm a certified DBE? _____ Yes _____ No

If so, by whom? _____

Is this firm currently debarred? _____ Yes _____ No

Is this firm currently the subject of debarment proceeding? _____ Yes _____ No

2. FINANCIAL INFORMATION

Firm's annual gross receipts (average of last three years)

- _____ <\$300,000
- _____ \$300,000 - \$599,999
- _____ \$600,000 - \$999,999
- _____ \$1,000,000 - \$4,999,999
- _____ >\$5,000,000

Information will be maintained as confidential to the extent allowed by Federal and State law. The undersigned swears that the above information is correct. Any material misrepresentation may be grounds for terminating any contract which may be awarded and initiating action under Federal and State laws concerning false statements.

Name, Title

Date

APPENDIX C - DEBARMENT/SUSPENSION CERTIFICATION

STATE OF)

SS.)

COUNTY OF)

I, _____ of the City of _____, in the County of

_____ and the State of _____, of full age, being duly sworn according

to the law of my oath depose and say that:

In accordance with the terms of U.S. DOT regulations, "Nonprocurement Suspension and Debarment," 2 CFR Part 1200, which adopts and supplements the provisions of U.S. Office of Management and Budget (U.S. OMB) "Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement)," 2 CFR Part 180:

1. Proposer certifies to the best of its knowledge and belief, that it and its principals, including its first tier subcontractors: (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded or disqualified from covered transactions by any Federal department or agency; (b) Have not within a three-year period preceding its latest application or proposal been convicted of or had a civil judgment rendered against any of them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction, or contract under a public transaction; violation of any Federal or State antitrust statute; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making any false statement, or receiving stolen property; © Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses listed in subparagraph (1)(b) of this certification; (d) Have not within a three-year period preceding this certification had one or more public transactions (Federal, State, or local) terminated for cause or default.
2. Proposer certifies that it and its principals, including its first tier subcontractors will treat each lower tier contract or lower tier subcontract under the Project that (a) equals or exceeds \$25,000, (b) is for audit services, or © requires the consent of a Federal official, as a covered contract for purposes of 2 CFR Part 1200 and 2 CFR Part 180, and will otherwise comply with the Federal requirements of 2 CFR Part 1200 and 2 CFR Part 180, and will assure that each lower tier participant involved in the Project is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded or disqualified from participation in this transaction by any Federal department or agency;
3. Proposer certifies that if, later, it or its principals, including any of its first tier subcontractors, become aware of any information contradicting the statements of subparagraphs (1)(a) through (d) above, it will promptly provide any necessary information to MAG;
4. If Proposer or any of its principals, including any of its first tier subconsultants or lower tier participants, is unable to certify to the statements within paragraphs 1, 2, and 3 above, the Proposer shall indicate so on its Signature Page.
5. The Proposer further certifies that their firm is not currently debarred, suspended, or proposed for debarment or suspension by the State of Arizona, or any subdivision thereof.

6. Proposer agrees to notify MAG of any change in the status or facts certified above, should one occur, until such time as the Contract is actually executed by MAG, and thereafter during performance of the Contract.

Dated: _____

Signature of Proposer

Printed/Typed Name of Proposer

Corporate seal (if applicable)

Sworn to before me this ____ day of _____, 2012, in the County of _____,

State of _____

Notary Public

APPENDIX D - TITLE VI AGREEMENT/CONTRACT REQUIREMENTS

During the performance of this contract, the CONSULTANT, for itself, its assignees and successors in interest (hereinafter referred to as the CONSULTANT) agrees as follows:

1. **Compliance with Regulations:** The CONSULTANT shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The CONSULTANT, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, national origin, or sex in the selection and retention of Subconsultants, including procurement of materials and leases of equipment. The CONSULTANT shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
3. **Solicitations for Subconsultants, Including Procurement of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by the CONSULTANT for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential Subconsultant or supplier shall be notified by the CONSULTANT of the CONSULTANT's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, or sex.
4. **Information and Reports:** The CONSULTANT shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Arizona Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a CONSULTANT is in the exclusive possession of another who fails or refuses to furnish this information the CONSULTANT shall so certify to the Arizona Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of the CONSULTANT's noncompliance with the nondiscrimination provisions of this contract, the Arizona Department of Transportation shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. withholding of payments to the CONSULTANT under the contract until the CONSULTANT complies, and/or;
 - b. cancellation, termination or suspension of the contract, in whole or in part.
6. **Certification of Non-segregated facilities:** The Federally-assisted consultant hereby certifies that the CONSULTANT does not maintain or provide for the CONSULTANT's employees any segregated facilities at any of the CONSULTANT's establishments, and that the CONSULTANT does not permit the CONSULTANT's employees to perform their services at any location, under the CONSULTANT's control, where segregated facilities are maintained. The Federally-assisted CONSULTANT certifies further that the CONSULTANT will not maintain or provide for the CONSULTANT's employees any segregated facilities at any of the CONSULTANT's establishments, and that the CONSULTANT will not permit employees of the CONSULTANT to perform their services at any location, under the CONSULTANT's control, where segregated facilities are maintained. The Federally-assisted CONSULTANT agrees that a breach of this Certification is a violation of the Equal Opportunity clause in this Agreement. As used in this Certification, the term "segregated facilities" means any waiting rooms and other storage or dressing rooms which are segregated by explicit directive or are in fact segregated on the basis or race, color, or national origin, because of habit, local custom, or otherwise.

7. The CONSULTANT shall include the provisions of paragraphs 1 through 5 above in every subcontract, including procurement of materials and leases of equipment, unless exempt by the regulations, or directives issued pursuant thereto. The CONSULTANT shall take such action with respect to any subcontract. or procurement as MAG, ADOT, FHA, and FTA may direct as a means of enforcing such provisions including sanctions for non-compliance; provided, however, that, in the event the CONSULTANT becomes involved in, or is threatened with, litigation with a Subconsultant or supplier as a result of such direction, the CONSULTANT may request the State to enter into such litigation to protect the interests of the State, and, in addition, the CONSULTANT may request the United States to enter into such litigation to protect the interests of the United States.