ATTACHMENT TWO

Transportation Division Proposed Projects for FY 2012

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: Regional Pavement Management System On-Call

Brief Description: This project will build on the MAG Roadway Operations and Maintenance Costs Study. It will provide more detailed information on Agency Pavement Management Systems and agency assessments of their unfulfilled Pavement Management Systems needs, review national practices and standards in the implementation of pavement management systems, compare these against those used by member agencies in the Region, and review and assess strategies to meet member agency pavement management needs.

A key objective of this study will be to determine if there is a need and interest in developing and implementing regional strategies to address pavement management. These could include: technical assistance to member agencies in initiating and implementing a Pavement Management Systems, the sharing of equipment for Pavement Management Systems activities, and possibly the identification of a funding mechanism for improving member agency pavement management systems.

Recommended: This project is recommended by MAG staff.

Mission/Goal Statement: To determine the need and interest in developing and implementing regional strategies to address pavement management and identification of possible regional strategies to implement.

Resources Required: $50,000

Approximate time frame for project completion: November 2011-June 2012

Expected Outcome: A determination of the need and interest in developing and implementing regional strategies to address pavement management and identification of possible regional strategies to implement.

Benefit to MAG Member Agencies: This project will aid member agencies in improving their pavement management practices and reduce pavement maintenance costs.

Benefit to the Public: This project would help improve pavement conditions in the Region.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: 2012 Traffic Signal Optimization Program On-Call

Brief Description: Projects launched through this program provide technical assistance to member agencies for improving traffic signal coordination, optimization, and review of operations through simulation modeling. Assistance is provided by local consultants hired by MAG through an on-call services contract. The MAG Traffic Signal Optimization Program (TSOP) has completed nearly 50 projects and has provided services to many MAG jurisdictions.

Most of these projects result in immediate system improvements in efficiency and safety and are recognized nationally as having the highest benefit to cost ratios for any transportation project. This program has been championed by the MAG Intelligent Transportation Systems Program to provide traffic engineering assistance for refining signal operations across the MAG region. It is also one of the strategies identified in the MAG Regional Concept of Transportation Operations. Projects generally cost up to $30,000, and do not require a local match. The program also provides an annual training workshop for member agency staff on the use of the computer software SYNCHRO for optimizing traffic signal timing.

The MAG FY 2011 to FY 2015 Transportation Improvement Program (TIP) includes $298,865 in CMAQ funds for TSOP. This request provides an additional $101,135. Starting in FY 2012 all TSOP projects will include a before and after evaluation component.

Recommended by: This project is recommended by MAG staff and the MAG ITS Committee.

Mission/Goal Statement: The goal of this program is to ensure that the traffic signal operations in the region are efficient, safe, and minimize the impact on the environment, and helps achieve the overall goals of the MAG RTP.

Resources Required: $400,000

Approximate time frame for project completion: August 2011-March 2012

Expected Outcome: The key outcomes from TSOP projects are improved traffic operations and reduced vehicular emissions. Some improvements to traffic operations also lead to secondary benefits in terms of safety improvements. National studies have found that signal optimization projects, such as these, produce benefit to cost ratios as high as 40 to one.

Benefit to MAG Member Agencies:

1. Ability to adjust signal timing to keep up with changes in traffic patterns due to new developments and traffic growth.
2. Ability to delay the need for costly long-term road capacity improvements by improving traffic flow and reducing congestion through fine adjustments to traffic signal operations.

Benefit to the Public: Reduced motorist frustration and unsafe driving by reducing overall stops and delay. Improved traffic flow through a group of signals, thereby reducing emissions and fuel consumption.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: 2012 Transportation Planning Services On-Call

Brief Description: Initiated in FY 2009, the Transportation Planning Services On-Call has allowed for expediting the delivery of consultant services in the following five service areas: civil engineering, transportation planning, transportation operations, policy and finance, and public involvement. The selection process occurred in FY2010 where 37 firms submitted Statements of Qualifications for the agreement, and six were selected. The six agreements are good for a two-year period that would conclude in calendar year 2012.

Recommended by: This project is recommended by MAG staff.

Mission/Goal Statement: On-Call Consultant Services programs enable MAG to deliver information, data, and projects within a relatively short time-frame. The On-Call nature of the program affords the opportunity to engage a qualified consultant in a matter of weeks with a task order versus a considerably longer conventional procurement process that is followed for much larger project engagements. This program also increases the Transportation Division capabilities to provide rapid and strategic responses to critical issues that periodically face MAG.

Resources Required: $250,000

Approximate time frame for project completion: July 1, 2011-December 31, 2012

Expected Outcome: MAG presently uses On-Call Services contracts to supplement staff capabilities with expertise in varying specialized areas. These contracts have been successfully integrated into the delivery of studies and programs for transportation planning. The expected outcome of this effort will be to further this particular program, begun in FY 2009, with expedited delivery of consultant services in transportation planning at MAG. This provides MAG with information, data, project results, and recommendations within a relatively short time frame, and allows for more effective decision-making by policy makers on critical transportation matters.

Benefit to MAG Member Agencies: The added capabilities Transportation Planning Services On-Call program ensures that MAG receives information to move forward the initiatives of the overall transportation planning program. Data received from the task orders will be used in current and future projects. This program will be implemented in a manner that is consistent with other On-Call Consultant Services programs that are presently being administered by MAG, including the current program from FY 2009 and FY 2010.

Benefit to the Public: Timely regional transportation planning and analyses provide the public and policy makers with accurate information upon which to make decisions.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: Access Management Outreach On-Call

Brief Description: Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway. The purpose of access management is to provide vehicular access to land development in a manner that preserves the safety and efficiency of the transportation system.

By managing access, government agencies can increase public safety, extend the life of major roadways, reduce traffic congestion through improved traffic flow, support alternative transportation modes, and improve the appearance and quality of the built environment. When implemented effectively, access management provides a cost-effective approach to meeting transportation needs. Results of successful implementation of access management techniques include:

- Allowing motorists to operate vehicles with fewer delays, fewer emissions, and less fuel consumption.
- Providing reasonable access to properties.
- Maintaining the functional integrity and efficiency of the roadway.
- Protecting investments in infrastructure.
- Coordinating transportation and land use decisions.

Inadequate access management can be costly for government agencies, taxpayers, and businesses. As road conditions deteriorate, cities and towns are forced to build new roads or rehabilitate and retrofit existing roadways. Reconstructing major roadways is costly and disruptive to the public, abutting homes, and businesses. Access management programs slow the deterioration of roadways and protect taxpayer investments in infrastructure. Programs seek to limit and consolidate access along major roadways, while promoting a supporting street system and unified access and circulation systems for development. When implemented effectively, access management provides a cost-effective approach for accomplishing transportation goals, which benefits the general public as well as government agencies and taxpayers.

Recommended by: This project is recommended by MAG staff.

Mission/Goal Statement: To inform member agencies on the principles and benefits of managing access at the local and regional level; to provide member agency staff with a broader understanding on the concepts of access management and methods to improve access within each jurisdiction; and to provide MAG member agencies with tools and resources to successfully implement access management.

Resources Required: $30,000

Approximate time frame for project completion: July 2011-June 2012

Expected Outcome: The result of the project will be outreach materials to provide a solid understanding of factors that impact access and mobility. The materials will inform member agencies on access management principles and benefits as well as provide a broader understanding of concepts and methods to improve access within each jurisdiction.

Benefit to MAG Member Agencies: Access management education and outreach activities will allow MAG to facilitate the implementation of access management practices and policies in the region. Through the implementation of effective access management practices and policies, member agencies can reduce congestion, improve public safety, promote the use of alternative modes of transportation, and reduce commute times, fuel consumption, and vehicular emissions.

Benefit to the Public: Members of the public will benefit from reduced commute times and fuel emissions as well as a safer transportation system. In addition, members of the public and private sectors will benefit from a reduction in the number of capacity improvements needed in the MAG region.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: 2012 Bicycle Education Program

Brief Description: The MAG FY 2011-2015 Transportation Improvement Program includes $165,000 of federal highway funds for bicycle education. MAG is proposing that this funding be used for the following four (4) bicycle education efforts.

Bicycle Education for Law Enforcement Agencies: This project will develop a modular educational program for at least 15 training sessions comprising six (6) modules with each module covering Arizona laws related to bicycling and dangerous riding and "do's and don'ts" for bicyclists. Each module is designed to be delivered in 5-10 minute segments to police officers during regular briefing meetings. Educational materials will contain content similar to materials already developed for bicyclists by ADOT, Valley Metro, and the League of American Bicyclists and will be reviewed by the staff attorney of the Coalition of Arizona Bicyclists. This project will also include an instructor/trainer manual to facilitate consistent presentations. Budget for instructor manuals (20 copies), participant materials (200 sets), assembly and review of content and pilot course presentations: $15,000.

Get Ready to Ride: This program will consist of a three to four hour combination of classroom, hands-on, and on-bike education and training, designed to better prepare novice to intermediate bicyclists to more confidently and safely ride a bicycle on the streets. Each course will be conducted by a League of American Bicyclists certified instructor. In addition to the instruction during the program, participants will be given materials covering safe bicycling techniques and Arizona laws related to bicycling. A total of 24 courses will be conducted at locations around the Valley to achieve broad geographic coverage. Courses may be staged at public facilities (parks, community centers) and/or bicycle shops. Budget for advertising/promotion, trainer compensation, and course materials: $24,000.

Bicycle and Pedestrian Count Project: According to the National Bicycle and Pedestrian Documentation Project, the lack of empirical data on demand and usage is one of the greatest challenges facing the non-motorized transportation field. Without accurate and consistent demand and usage figures, it is difficult to measure the benefits of investments on these modes. The MAG region needs an effective methodology to count bikes and determine trip generation, while taking into consideration the region's size, topography, and weather. The consultant will work with the MAG Bicycle and Pedestrian Committee members for this project. Budget for consultant services: $50,000.

Bicycle Education on Buses and Bus Shelters: This project will print and install bicycle education posters on buses in the various sizes for the back and side bus display panels. The posters will be displayed throughout the year on 353 buses. Each poster will run for one month. Budget for posters for buses: $76,000.

Recommended by: This project is recommended by MAG staff and the MAG Bicycle and Pedestrian Committee

Mission/Goal Statement: To inform the general public on the benefits of biking and walking and principles of safe riding.

Resources Required: $165,000

Approximate time frame for project completion: July 2011-June 30, 2013

Expected Outcome: An educational course for police officers; 24 educational/bicycle events for families; a bicycle and pedestrian count methodology and sample count; and bicycle promotion posters on buses and shelters.

Benefit to MAG Member Agencies: Member agencies will receive all elements of the bike education program. The bicycle and pedestrian count methodology will assist jurisdictions in determining the most cost effective approach for determining the number of bicyclist and pedestrians in their area.

Benefit to the Public: The public will benefit by receiving bicycle safety information.
Transportation Division

Project Name: Pedestrian and Bicycle Facilities Design Assistance Program

Brief Description: The Pedestrian and Bicycle Facilities Design Assistance program was initiated in 1996 to encourage the development of designs for bicycle and pedestrian facilities according to the *MAG Pedestrian Policies and Design Guidelines* and the *MAG Regional Bikeway Masterplan.* The intent of the program is to stimulate integration of bicycle and pedestrian facilities into the transportation infrastructure.

Requested by: This project is recommended by MAG staff and the MAG Bicycle and Pedestrian Committee

Mission/Goal Statement: Funding the design of bicycle and pedestrian projects in MAG member agencies fits into MAG's mission as stated in the Regional Transportation Plan to promote the development and expansion of all modes of transportation.

Resources Required: $300,000

Approximate time frame for project completion: July 2011-June 2012

Expected Outcome: Three to seven projects submitted by MAG member agencies will be designed by professional consultants using the *MAG Pedestrian Policies and Design Guidelines* and the *MAG Regional Bikeway Masterplan.* Using local consultants informs both the public and private sector about the importance of bicycle and pedestrian sensitive design.

Benefit to MAG Member Agencies: MAG member agencies obtain planning and design assistance for bicycle and pedestrian projects that may not be designed any other way. Designing projects in accordance with the *Guidelines* educates member agency staff and community stakeholders about best practices in design. Design projects through this program leverages additional funding for construction of the bicycle and pedestrian facilities.

Benefit to the Public: Designing bicycle and pedestrian facilities in accordance with the *Guidelines* results in safe, comfortable, and desirable facilities. Providing appropriate facilities encourages people to walk and bike, which reduce the negative impacts of motorized travel on air quality and congestion while simultaneously creating more economically viable and healthy communities.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: Southwest Valley Local Transit System Study

Brief Description: The study will identify opportunities and strategies for developing an integrated local transit system in the southwest valley. Recent transit circulator studies completed for the cities of Avondale and Goodyear will be incorporated into a larger subarea strategy to improve mobility options by connecting population and employment centers, existing and planned transit services and facilities, retail centers, and public facilities. Additional communities that may participate in the study are Litchfield Park, west Phoenix, Tolleson, and the surrounding portions of Maricopa County. Due to declining regional transit funding, the study will also explore opportunities to: 1) improve the efficiency of existing transit service; and 2) implement transit circulators as both an alternative and a supplement to planned "super-grid" bus service in the southwest valley.

Requested by. This project is requested by MAG staff, and the cities of Avondale and Goodyear.

Mission/Goal Statement: The goal for this study is to develop a coordinated strategy for implementing future local transit services in the southwest valley.

Resources Required: $280,000

Approximate time frame for project completion: November 30, 2012.

Expected Outcome: The study will provide a coordinated, comprehensive approach for implementing future local transit service in the southwest valley and how this local transit service can connect to the regional system. It is anticipated that the participating jurisdictions will consider implementing the recommended strategies at the completion of the study process.

Benefit to MAG Member Agencies: The study will provide the participating agencies with a clear understanding of the costs, benefits, and trade-offs associated with implementing local transit service in the southwest valley. In addition, the subarea study process could be applied to other subareas in the future.

Benefit to the Public: Local transit service can improve overall mobility by providing a cost effective, efficient connection to the regional transit system and by connecting key activity centers.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: DynusT Model Data Conversion Tool On-Call

Brief Description: The DynusT Regional Operations Planning Model needs to incorporate actual intersection traffic signal timing in order to improve its simulation accuracy. Traffic signal timing affects the travel time of travelers and hence the route choice decisions made by them. The signal timing in different local agencies are available in a number of different formats. Due to the size of the MAG region, the number of signalized intersections involved, and the number of timing plans used at each intersection, it is not feasible to manually enter all of this information in the regional DynusT model. This project will provide MAG with the capability of automatically importing the signal timing into the DynusT model from different timing files and formats obtained from MAG member agencies.

Recommended by: This project is recommended by MAG staff.

Mission/Goal Statement: Improve the accuracy of the DynusT Regional Operations Planning Model. Provide more accurate time and space dependent traffic volumes required as input for more detailed analyses and visualization of future traffic operations case studies.

Resources Required: $50,000

Approximate time frame for project completion: July, 2011-September, 2011

Expected Outcome: The ability to efficiently convert the signal timing information, obtained in various formats, for input into the Regional DynusT model.

Benefit to MAG Member Agencies: Accurate signal timing information will be readily available in the DynusT model when conducting future traffic operations analyses requested by member agencies. The signal timing conversion will provide an easy way for member agencies to update the signal timing in the DynusT Dynamic Traffic Assignment (DTA) model so that the analysis result is always up to date.

Benefit to the Public: Having a regional DTA model with current signal timing will help produce decisions that will also help the general public improve their overall travel experience.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: DynusT Regional Operations Planning Model Enhancements On-Call

Brief Description: The current DynusT model was developed through an in-house effort and has been calibrated for the morning peak period. The initial purpose of the in-house effort was to verify the reliability, efficiency, and usefulness of the DynusT model through a real-life crash scenario. Enhancements to the model are now needed to expand the current model and to be able to handle future investigations utilizing this model. One such enhancement is the ability to perform a thorough check of the transportation network coding based on the latest GIS map. Another enhancement is the ability to calibrate against observed truck and HOV traffic.

Recommended by: This project is recommended by MAG staff.

Mission/Goal Statement: Convert a GIS-based regional network into DynusT, thorough check of network coding including lane location, lane numbers, length, acceleration, deceleration lane, turn bays, link types, generation node, etc. Establish AM, PM, Mid-day, and Evening network or 24 hour network. Establish a calibration dataset and input the data into the model for AM, PM, Mid-day and evening time period, and 24 hour period.

Resources Required: $80,000

Approximate time frame for project completion: September, 2011-February, 2012

Expected Outcome:
1. An error-free Regional DynusT Operations Planning Model.
2. Ability to calibrate the Model against counts for all time periods and all vehicle classifications.

Benefit to MAG Member Agencies: Once the network and calibration data are ready, MAG can conduct the calibration for the entire network for all time periods and all vehicle classifications. The calibrated network will be available for performing regional operations planning, such as incident management, variable speed limits, ramp metering strategies, HOT (High Occupancy Toll) lanes, and other scenarios with regionwide impacts.

Benefit to the Public: The DynusT model applies decision rules that replicate driver route choice behavior. Better informed decisions will be made when using the DynusT model to investigate regional transportation issues.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: Evaluation of Adaptive Traffic Control Systems and Implementation Considerations On-Call

Brief Description: This study will gather information on proven Adaptive Traffic Control Systems (ATCS) that are installed and operational in various cities in the US and in other countries. The different systems will be reviewed and evaluated from a performance perspective and also for possible implementation by local agencies in the MAG region. The study will consider compatibility issues related to existing traffic signal system hardware and software, and also identify staff expertise and resource considerations pertinent to the operation and maintenance of these systems.

Recommended by: This project is recommended by MAG staff and the MAG ITS Committee.

Mission/Goal Statement: The goal of this study is to advance the current state-of-the-practice in arterial traffic management by helping implement adaptive traffic control systems and thus reduce traffic congestion and the resulting vehicular emissions.

Resources Required: $100,000

Approximate time frame for project completion: November 2011-October 2012

Expected Outcome: This study will produce a document that will summarize all available public knowledge on the overall performance of proven ATCSs. Related traffic signal infrastructure requirements for each ATCS will be clearly identified and compared with that existing in the signal systems in the MAG region.

Benefit to MAG Member Agencies: The document produced by this study will be a very useful reference to MAG member agencies as they consider the adoption of Adaptive Traffic Control Systems to improve street traffic operations.

Benefit to the Public: The benefits to the public will come indirectly through contributions that would be made by this study's findings toward better informed transportation system improvement decisions by local agencies.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: Mesoscopic to Microscopic Conversion Tool On-Call

Brief Description: This project will provide MAG with a tool that is capable of converting the output from the DynusT Regional Operations Planning Model for input to microscopic simulation tool VISSIM for more detailed analysis and visualization. Macroscopic, Mesoscopic, and Microscopic models all have their unique characteristics and perform at different levels of detail. Meso model is not sufficient in visualization and in depicting some of the difference in lane utilization. Micro model is not sufficient in deciding the time dependent volumes and considered less cost effective. Multi-resolution modeling utilizes specific model or combinations of models for specific problems we deal with. It can provide sufficient details for decision making and also not over commit limited resources. As a result, we can expand our planning capability and make more informed decisions about the future.

Recommended by: This project is recommended by MAG staff.

Mission/Goal Statement: Extend MAG's DynusT Regional Operations Planning Model capabilities to Multi-Resolution Modeling (MRM). Provide reliable time and space dependent volumes as input for more detailed analysis and visualization as required by the analysis performed.

Resources Required: $30,000

Approximate time frame for project completion: September, 2011-December, 2011

Expected Outcome:
1. Convert the network and analysis results from the DynusT model to the VISSIM model.
2. Verify the consistency between the DynusT model and the VISSIM model.
3. Obtain a conversion tool for future use at MAG.
4. Obtain training related to the conversion tool.

Benefit to MAG Member Agencies: With the DynusT model fully developed, MAG will be able to perform analyses of case studies related to regional transportation operations such as evaluating the impact of different freeway and arterial operational strategies; the impact of widening/narrowing streets; and the conversion of one-way streets. The mesoscopic to microscopic conversion will be useful when the issue analyzed calls for more detailed analysis and visualization for possible presentation to local decision makers and the general public.

Benefit to the Public: This project will produce indirect benefits to the public through more reliable and cost-efficient planning solutions generated through transportation operations planning.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: Gila Bend Small Area Transportation Study

Brief Description: The Gila Bend Small Area Transportation Study will formally accept and incorporate the recommended transportation framework identified in the MAG Interstates 8/10 Hidden Valley Transportation Framework Study as part of the Town of Gila Bend's transportation network. The study will also inventory current conditions, identify deficiencies, forecast needs, develop transportation policy, and identify and analyze alternative solutions that will increase mobility and access for commuters and freight throughout southwest Maricopa County.

Recommended by: This project is recommended by MAG staff and the Town of Gila Bend.

Mission/Goal Statement: Development of the study will set the framework for future transportation investment decisions to improve regional mobility and future transportation corridors proposed by the Regional Transportation Plan.

Total Resources Required: $70,000

Approximate Time Frame for Project Completion: 12 months is the estimated time for project completion.

Expected Outcome: The study will involve a comprehensive evaluation of the existing and future transportation network and will address system needs and issues in order to increase mobility and access for both commuters and freight.

Benefit to MAG member agencies: Developing a Small Area Transportation Study to incorporate the Hidden Valley Framework provides MAG with additional information for planning multimodal transportation corridors in Maricopa County. Of particular importance in this effort will be the evaluation of additional transportation connections along SR-85 and Interstate-8 (designated CANAMEX Corridor). This area of southwest Maricopa County is a gateway for the metropolitan Phoenix area to and from destinations in Southern California and the State of Sonora, Mexico.

Benefit to the Public: The study will address regional transportation needs and issues in order to increase mobility and access for commuters.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: 2012 MAG Airport Travel Model Update and Data Collection

Brief Description: The MAG Regional Travel Forecasting Model includes the Phoenix Sky Harbor International Airport sub-model that forecasts ground travel to the airport. The model is based on the 2005 airport ground survey. In order to update the model and insure currency of the forecast a new ground survey is required with the subsequent model update to the new datasets. This project will also collect data and update and improve the travel forecast for the Phoenix-Mesa Gateway Airport. The project is important for the overall quality of the regional transportation forecast and transit forecast in particular.

Recommended by: This project is recommended by MAG staff. The importance of the project was confirmed by the multi jurisdictional transit modeling workshop conducted by MAG in November 2010. City of Phoenix and City of Mesa staff have expressed interest in the new survey data as well and are prepared to provide in-kind support for the project.

Mission/Goal Statement: The project will ensure that MAG continues to maintain state-of-the-art regional travel forecasts and updates the required modeling tools in accordance with federal requirements and the planning needs of MAG member-agencies.

Resources Required: $400,000

Approximate time frame for project completion: December 2011-December 2012

Expected Outcome: Project deliverables will include:

- Surveys' datasets describing origins, destinations, mode of travel, and other travel and socio-demographic characteristics of air passengers, and airport meeters and greeters that are required for the travel demand forecasting model update.
- Enhanced, updated, and recalibrated airport sub-models in the regional travel forecasting model.

Benefit to MAG Member Agencies: The project deliverables will provide better travel forecast for the planning purposes of MAG member agencies. The updated MAG regional model will be applied in the FTA funding application processes and will provide high quality highway and transit travel forecast. The project contributes toward relevant federal requirements by ensuring currency of the regional forecast and sufficient level of details in the Regional Travel Demand Forecasting Model. The airport survey data will be a valuable tool for planning and marketing purposes for the involved MAG member agencies.

Benefit to the Public: The model updates will ensure that the MAG region continues to be competitive in terms of infrastructure planning decisions and required federal funding and provide relevant travel forecasts for regional planning purposes.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: Vehicle Occupancy Study

Brief Description: The MAG Regional Travel Forecasting Model requires periodic validation of the forecast with independent traffic data. The traffic data is also a crucial component required for the regional transportation system analysis and performance measurement. MAG has been conducting auto occupancy studies since 1973 with the last one performed in 2006. In order to update the occupancy profile, account for the recent socioeconomic changes in the region, and provide for continued comparison of the occupancy rates and analyze new trends and patterns, a new study is required. Another important set of study goals is related to the analysis and evaluation of HOV lanes performance in the region. The regional HOV network has expanded since the last study, as well as a new economic reality shaping different trends in terms of auto occupancy and mode of travel. The study will also collect vehicle classification data for model validation purposes.

Recommended by: This project is recommended by MAG staff.

Mission/Goal Statement: The project will ensure that MAG continues to maintain state-of-the-art regional travel forecast and updates required modeling tools in accordance with federal requirements and planning needs of MAG member-agencies.

Resources Required: $200,000

Approximate time frame for project completion: December 2011-December 2012

Expected Outcome: Project deliverables will include:

- Vehicle occupancy, vehicle classification, and other traffic data required for the model validation and system analysis purposes as appropriate for the project scope.
- Analytical report that will summarize findings of the study.

Benefit to MAG Member Agencies: The project deliverables will provide a better travel forecast for the planning purposes of MAG member agencies as well as deliver data and analysis that can be directly used for planning and performance measurement tasks.

Benefit to the Public: The collected data and analysis will provide a valuable input for transportation planning decisions in the region and will contribute to the relevance of travel forecasts provided for regional planning purposes.

Draft MAG FY 2012 Work Program
Proposed New Projects

Transportation Division

Project Name: Transit Accessibility Study

Brief Description: Transit usage in the MAG region is primarily through pedestrian access. However, very little federal funding is currently utilized toward promoting the comfort and ease of access for the pedestrian transit user. This would be a "TOD-lite"(Transit Oriented Development) research project in that it will focus on local and regional bus services and not high capacity transit. Another way of looking at the study would be increasing accessibility to housing, goods, services, and recreation for the pedestrian transit user. While high capacity transit may not yet be an option for an area or corridor, a development pattern that is geared toward pedestrian and not automobile access can serve as a measure toward high capacity transit.

Recommended by: This project is recommended by MAG staff.

Mission/Goal Statement: The goal would be a set of practices that increase the accessibility of pedestrian users to transit by surveying peer cities and recommending "best practices" for land use design, zoning codes, and traffic engineering practices.

Resources Required: $200,000

Approximate time frame for project completion: October 2011-September 2012

Expected Outcome: A practical set of land use design guidelines that takes into account the existing land use form and policies in the region. A practical guide that can be adopted by cities and member jurisdictions that may not have the resources to implement TOD-type codes. A reference guide for jurisdictions that have or are planning to implement or encourage TOD land use development.

Benefit to MAG Member Agencies: A set of design guidelines that can be used by local jurisdictions to be used toward improving transit access and as a means to retrofit the existing land form.

Benefit to the Public: Resources that can encourage increased variety in development patterns and mobility options.